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Part 2: Vocabulary

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Partie 2: Vocabulaire

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights. Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 184, *Automation systems and integration*, Subcommittee SC 4, *Industrial data*.

A list of all parts in the ISO 10303 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

The ISO 10303 series of International Standards describe the computer-interpretable representation of product information and product data. The objective is to provide a neutral mechanism capable of describing products throughout their life cycle. This mechanism is suitable not only for neutral file exchange, but also as a basis for implementing and sharing product databases, and as a basis for archiving.

This document provides a listing of concepts, including terms and EXPRESS entity type definitions required to understand the ISO 10303 series. When a concept is used in more than one industrial domain, each usage includes a domain-specific definition of the concept. This document does not include all relevant concepts, yet. Future editions of this document will add concepts from recently published parts of ISO 10303. Due to the dynamic nature of the vocabulary of the ISO 10303 series, future editions of this document will be published as a standard in database form.

By providing a single source of concepts across the ISO 10303 series, this document facilitates concept reference and encourages standards developers, also those outside of the ISO 10303 series or outside of ISO/TC 184/SC 4, to reuse existing EXPRESS entity types.

The electronic insert, as described in Annex A, provides all concepts of the document that can be used to populate vocabulary dictionaries, to perform analysis on, and as a basis for development of architectural models and applications.

NOTE This document uses bold type to distinguish EXPRESS construct names from the generic concept being represented by that concept.

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Industrial automation systems and integration — Product data representation and exchange —

Part 2: Vocabulary

1 Scope

This document specifies the vocabulary for the ISO 10303 series.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org

3.1 General terms

3.1.1
ISO 10303 application module
concrete syntax used to specify the domain of the entry included in an application module

3.1.2
application construct
collection of entities, types, functions, rules and references that are based on resource constructs and that specialize those resource constructs as necessary to define a valid description of an aspect of product data for specific application areas

3.1.3
saved view
stored and retrievable specific orientation and magnification factor of a model

3.1.4
subassembly
constituent that is an assembly

3.1.5
supplemental geometry
geometric elements included in product definition data to communicate design requirements but not intended to represent a portion of the manufactured product

3.1.6
proxy
object that acts in the role of another object defined in an external data set

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3.1.7
activity
action that has taken place, is taking place, or is expected to take place in the future

3.1.8
port
access mechanism

3.1.9
notional solid
cube of which edges have a unit-size length and are aligned to the coordinate axes

3.1.10
bounding box
cuboid as an envelope of the shape, whose edges are aligned to the coordinate axes

3.1.11
centroid
volumetric center of the shape

3.1.12
product definition information
definition of the product requirements and attributes

3.1.13
application context
subset of an application activity model

3.1.14
product operational information
procedures and technical information derived from the product definition information for use by operators and support personnel in the operation, maintenance and disposal of the product

3.1.15
product configuration information
combination of product definition and operational information

3.1.16
configuration status accounting
process of managing the capture and maintenance of product configuration information necessary to account for the configuration of a product throughout the products life cycle

3.1.17
solid model
complete 3D representation of the nominal shape of a product so that any point in space can be determined to be inside, on the boundary, or outside the solid model

3.1.18
attachment slot
position in which a part is or can be attached to an assembly, when it is necessary to record the history of usage of that attachment slot

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3.1.19
integrated circuit
miniature die of substrate material that is etched or imprinted with a complex of electronic components and their interconnections

3.1.20
chemical compound
substance formed from two or more chemical elements, with a fixed ratio determining the composition

3.1.21
chemical element
type of substance that cannot be divided or changed into different substances by ordinary chemical methods

3.1.22
physical particle
type of substance from physics covering radiation and all kinds of subatomic and elementary particles

3.1.23
substance
idealized representation of pure matter that possesses definite properties or characteristics

3.1.24
application data planning model
ADPM
model that describes the primary concepts of an application domain and the relationships among the concepts

3.1.25
condition
definition of the precedent that must be fulfilled before a statement or relationship becomes valid

3.1.26
element
general term for portion or aspect of something

3.1.27
shape element
feature
general term for any aspect or element of a shape which need not lie on the boundary nor even within the material of the shape

3.1.28
integral shape element
integral feature
portion of the shape that lies entirely on the surface of the shape

3.1.29
derived shape element
shape element that is related to an *integral shape element* (3.1.28)

3.1.30

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document
information and its support medium

3.1.31
envelope
wrapper for a message providing addressee and acknowledgement information

3.1.32
experience
knowledge or skill acquired over time through practical contact with and observation of facts or events

3.1.33
class library
managed collection of class definitions

3.1.34
external class library
class library whose content is specified separately to any data exchange file

3.1.35
agree
to state that all the partners of product data exchange or sharing reach the same understanding of the quality, its measurement and assessment of transferred or shared data

3.1.36
agreement
result of negotiations between the partners of product data exchange or sharing that ensures that all of them have the same understanding of the quality, its measurement and assessment of transferred or shared data

3.1.37
B-stage
intermediate stage in the reaction of a thermosetting resin in which the material melts when heated and dissolves in certain solvents

3.1.38
conformal coat
protective, dielectric coating designed to conform to the surface of a PWA or PCA

3.1.39
C-stage
final stage of the curing of a thermosetting resin in which the material has become infusible and insoluble in common solvents

3.1.40
glue mask
rigid plate with a pattern of voids to create glue patterns during a manufacturing process

3.1.41
laminate
product made by bonding together two or more layers of material or materials

3.1.42

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paste mask
rigid plate with a pattern of voids used to create solder paste patterns during a manufacturing process

Note 1 to entry: Solder paste is deposited only where there are voids in the plate.

3.1.43
silkscreen
material layer realized by transferring an image to a surface by forcing suitable media through a stencil screen with a squeegee

3.1.44
solder mask
insulating layer of a printed circuit board (PCB) or printed wiring board (PWB) that exposes only the areas to be soldered

3.1.45
application interpreted construct
AIC
logical grouping of interpreted constructs that supports a specific function for the usage of product data across multiple application contexts

Note 1 to entry: See also *interpretation* (3.1.230).

3.1.46
solder paste
specially blended paste consisting of carefully graded solder powder particles, and a flux medium designed to give the paste particular printing and reflow characteristics

3.1.47
preimpregnated
combination of mat, fabric, nonwoven material, or roving with resin, usually advanced to the B-stage, ready for curing

3.1.48
semi-cured
B-stage

3.1.49
semi-fluid
material flow properties intermediate between liquids and solids

3.1.50
stratum
layer of material in the sequence of materials that compose a printed circuit board (PCB)

Note 1 to entry: A stratum usually has an aspect ratio that is very large, typically 1,000:1.

3.1.51
insulating substrate material
material with a high resistance to the flow of electrical current that is used as a base for the formation of conductive patterns

3.1.52

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physical quantity instance
aspect of a physical thing that can be observed or measured, or deduced from observations or measurements

3.1.53
information right
permitted type of usage applicable to a piece of information

3.1.54
printed circuit board layout
geometric patterns and layered configurations of a bare printed circuit board

3.1.55
interface
product attributes that exist at a common boundary of two or more products

3.1.56
application interpreted model
AIM
information model that includes the application constructs necessary to satisfy the requirements of an application reference model

3.1.57
life cycle
generic term for the phases in the life of a product from concept to disposal

3.1.58
issue
record of a misgiving, objection, or complaint referred to an appropriate authority that it may be resolved

3.1.59
breakout
conductive pattern whose purpose is to provide a transition from a tightly arranged conductive pattern that mates with a component to the circuit routing areas on a printed circuit board (PCB)

3.1.60
cutout
void or passage in a printed circuit board (PCB) that penetrates the entire PCB from top to bottom and whose projected shape is usually non-circular

3.1.61
keepout
area on a printed circuit board (PCB) or internal to a PCB inside of which components or patterns might be prohibited from being placed

3.1.62
double-sided printed circuit board
printed circuit board (PCB) with a conductive pattern on both of its sides

3.1.63
flexible printed circuit board
printed circuit board (PCB) that utilizes flexible insulating substrate materials with or without flexible insulating cover layers

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3.1.64
multi-layer printed circuit board
printed circuit board (PCB) that consists of rigid or flexible insulation materials and with three or more alternate printed wiring or printed circuit layers that have been bonded together and electrically interconnected

3.1.65
rigid-flex printed circuit board
printed circuit board (PCB) that utilizes both rigid and flexible insulating substrate materials

3.1.66
rigid printed circuit board
printed circuit board (PCB) that utilizes only rigid insulating substrate materials

3.1.67
application module
AM
reusable collection of a scope statement, information requirements, mappings and module interpreted model that supports a specific usage of product data across multiple application contexts

3.1.68
single-sided printed circuit board
printed circuit board (PCB) with a conductive pattern on only one side

3.1.69
printed component
part manufactured during printed circuit board (PCB) fabrication

3.1.70
message
collection of information recorded at a particular date and time with the intent of sending it to a third party

3.1.71
functional object
type of product design representation described as an assembly of functions or implied function

3.1.72
functionality
degree to which an object is designed or adapted to a particular function or use

3.1.73
hierarchical decomposition
collection of related items where the graph that represents the collection is a directed acyclic graph in which a node has one or more parent nodes

3.1.74
structural domain
domain in which each model explicitly states only one type of relationship between model elements

3.1.75
observation
historical record about a product or how it is designed, manufactured or supported, and whose scope is outside of predefined reports or records

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3.1.76
white-box model
model of an item for which there is some internal physical structure available to support detailed thermal or mechanical evaluation but insufficient detail for manufacture

3.1.77
black-box model
model of an item for which there is not internal physical structure available to support detailed thermal or mechanical evaluation or manufacture

3.1.78
application object
AO
atomic element of an application reference model that defines a unique concept of the application and contains attributes specifying the data elements of the object

3.1.79
non-countable material
material the components of which cannot be counted or do not need to be counted

3.1.80
part
discrete object that can come into existence as a consequence of a manufacturing process

3.1.81
raw material
crude or partially processed material needed to initiate a manufacturing transformation process

3.1.82
connected
joined, related or associated

3.1.83
connection
state of being connected

3.1.84
connectivity
state of being connected

3.1.85
component
product that is not subject to decomposition from the perspective of a specific application

3.1.86
microwave structure
geometric patterns applied to specific material stackup structure in order to achieve a specific function at Microwave frequencies

3.1.87
probability
chance that a particular event or set of events will occur expressed on a linear scale from 0, indicating impossibility to 1, indicating certainty, also expressed as a percentage between 0 and 100 percent

3.1.88

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probability distribution
general term for a function that relates all possible outcomes of an observation on a given system with the probability of their occurring

3.1.89
application programming interface
API
set of standard software interrupts, calls, functions, and data formats that can be used by an application program to access network services, devices, or operating systems

3.1.90
random variable
quantity observed to vary randomly

3.1.91
individual product
existing or potential future artefact that is an actual or planned product whose properties can only be known by observation or by derivation from observations

3.1.92
actual product
realized product
existing artefact that is an actual product whose properties can only be known by observation or by derivation from observations

3.1.93
planned product
potential future artefact that is a product that is planned to be made for which properties may be predicted

3.1.94
breakdown
partitioning of a product into a set of related elements to support engineering, analysis and other activities that can be performed in relation to the product

3.1.95
revision
result of a change made on a product or on a characterization of a product, of an activity or of any concept related to a product or an activity

3.1.96
no-word string
sequence of text characters that contains either no character or only control or space characters

3.1.97
product structure
characterization of the composition of a product which can be a hierarchical representation where all assembly relationships are explicit or a partly implicit one where some nodes are not related to a product but to a family of products with relationships conditioned by boolean expressions

3.1.98
physical_quantity space
set of all instances or magnitudes for a physical phenomenon

3.1.99

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resource
something that is needed in order to achieve a specified objective

3.1.100
application programming interface implementation
API implementation
<ISO 10303> implementation of ISO 10303 that supplies the services of the application programming interface, in contrast to an implementation of this standard that uses the API implementation

3.1.101
resource event
event or activity that can alter the amount of a resource

3.1.102
scheme
systematic plan or arrangement for a task or activity

3.1.103
scheme entry
item in a scheme

3.1.104
unclassified
classification level for which no security restriction applies

3.1.105
confidential
classification level for which the disclosure of information would cause damage to national or organizational security

3.1.106
selected item
product information identified as being significant for configuration management purposes

3.1.107
nomenclature
list of unique string types

3.1.108
system
element with a well defined boundary with respect to all other elements, outside of it and in the domain of interest, with which it interacts

3.1.109
task method
method for a possible or intended activity

3.1.110
backshell
connector accessory that is closing a connector from the back side and guide the wires and cables

3.1.111
ISO 10303 resource
concrete syntax used to specify the domain of the entry of an ISO 10303 resource

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3.1.112
application programming interface instance
API instance
individual execution context and state of an application programming interface implementation

Note 1 to entry: The notion of "execution context" in ISO 10303 is the same as in ECMAScript as defined in ECMA-262.

3.1.113
cable fixing device
fixing device for a cable on a structure

3.1.114
cavity plug
plug for a connector cavity for the purpose of sealing

3.1.115
connector cavity
cavity in a connector, connector housing or insert intended to receive a connector contact or multi-contact

3.1.116
connector contact
contact member that is intended to be contained in a connector

3.1.117
connector kit
collection of connector parts that are intended to be assembled together and that contain at least one connector housing and that may contain alternative parts that may or may not be used in the final assembly

3.1.118
electrified backshell
backshell that is intended to be conductive

3.1.119
EMI connector housing
connector housing that shields against electromagnetic interference

3.1.120
fishnet
material made from fibers woven or otherwise produced in a grid-like structure with fixed mesh size

3.1.121
harness node
element of the topological structure of a wiring harness for the representation of a topological vertex in which one or several harness segments ends and to which a connector or terminal may be associated

3.1.122
harness topology
topological structure of a wiring harness consisting of harness segments for the edges and harness nodes for the vertices

3.1.123

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application programming interface signature
APIS
description of the set of functions, protocols, and tools that programmers can use to enhance applications to access network services, devices, or operating systems

3.1.124
harness segment
element of the topological structure of a wiring harness for the representation of a topological edge and that contains wires or cables that may be enwrapped by a sheath

3.1.125
label
part that is intended to attach written information to other parts

3.1.126
overbraid
sheath that is also a braid

3.1.127
seal
mechanical object that helps join other mechanical objects together by preventing leakage, containing pressure, or excluding contamination

3.1.128
stick line drawing
drawing of a wiring harness that represents the harness topology with arbitrary scale factors and proportions

3.1.129
formboard drawing
drawing of a wiring harness that represents the harness topology in real size

3.1.130
connector slot
opening in a connector housing to receive a connector insert

3.1.131
strain relief accessory
connector accessory to guide and provide strain relief to wires and cables

3.1.132
wiring harness
assembly with a harness topology, consisting of cables or wires to enable electrical or optical connectivity, grouped together in one or more harness segments, each between two harness nodes in which the cables or wires either switch to other harness nodes or in which the cables and wires ends in connectors, contact members or terminal lugs

3.1.133
set
class
number of things considered together

3.1.134
application protocol
AP

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<ISO 10303> part of ISO 10303 that specifies an application interpreted model or an application domain model satisfying the scope and information requirements for a specific application

Note 1 to entry: This definition differs from the definition used in ISO 7498-2 because the protocols address different contexts of use.

3.1.135
curve swept solid shape representation
shape representation containing solids defined by sweeping a planar area along a directrix curve

3.1.136
ruled surface
surface generated by a family of straight lines joining points with corresponding parameter values on two edge curves

3.1.137
ruled surface swept area solid
solid created by sweeping a planar area along a directrix curve drawn on a ruled surface

3.1.138
callout
depiction of requirements and information about a product

3.1.139
draughting
activity of selecting and configuring appropriate representations of product data for the human-interpretable presentation in the form of a drawing

3.1.140
drawing sheet
subdivision of a drawing having the same identifier as the drawing and its own sheet number

3.1.141
baseline
theoretical line on which the lowest points of the text characters lie, excluding descenders

3.1.142
draughting shape model
graphical representation of a product shape that is used to create a drawing

3.1.143
predefined
explicit description of the definition and physical representation specified within the standard that defines a data model

3.1.144
subfigure
combination of geometric and annotation elements defined in a coordinate system unique to the combination

3.1.145
application reference model
ARM
information model that describes the information requirements and constraints of an application within an application protocol or module

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3.1.146
symbol
combination of annotation elements that, as a collection, represents a distinct concept

3.1.147
dimension value
representation of the numerical value of a dimension that describes the magnitude of the dimension

3.1.148
annotated 3D model data
three dimensional shape data together with product and manufacturing information (PMI) data

3.1.149
product and manufacturing information
PMI
non-geometric attributes in 3D CAD and Collaborative Product Development systems necessary for manufacturing product components and assemblies

3.1.150
product data equivalence
equivalence for its purpose of the comparing product data and the compared product data

3.1.151
product data equivalence criterion
requirement for detecting a non-equivalence defect between two sets of product data compared, whose presence can be judged by a logical test or a numerical test

3.1.152
product data equivalence inspection result
data representing the result of inspection for the specified product data equivalence criterion

3.1.153
base
link which is fixed to the ground or whose motion is prescribed along a defined path

3.1.154
frame
coordinate system used in kinematic representations

3.1.155
ground
immobile part of a mechanical product in the world coordinate system

3.1.156
application resource
integrated resource whose contents are related to a group of application contexts

3.1.157
joint
topological aspect of an ordered connection or motion constraint between two and only two links

3.1.158
kinematics
description of movable mechanical structures consisting of joints and links including the number, location, and orientation of the joints

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3.1.159
kinematic chain
sequence of kinematic links connected by joints

3.1.160
linear flexible link
link whose shape can bend in one direction

3.1.161
link
<kinematics> rigid kinematic object whose motion is constrained by one or more joints

3.1.162
link frame
local coordinate system of a link, implicitly defined as the geometric context of the link, with respect to which all geometric definitions of the link are defined

3.1.163
loop
part of a mechanical structure whose joints and links together form a closed kinematic chain

3.1.164
mechanism
mechanical product whose motion is constrained by joints

3.1.165
motion
change of position and orientation of a rigid body

3.1.166
pair
geometric aspect of either an ordered connection or motion constraint between two and only two links

3.1.167
assembly
product that is decomposable into a set of components or other assemblies from the perspective of a specific application

3.1.168
pair frame
coordinate system of a link that is defined relatively to the link frame, used to establish the geometric relationship of a pair

3.1.169
pair actuation
assignment of a pair value to a kinematic pair by an application

3.1.170
placement
location and orientation of a frame

3.1.171
rigid link
link with a fixed shape that is not deforming in use or where the deformation can be neglected

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3.1.172
transform
representation of a placement that is specified with respect to an independent reference frame

3.1.173
SU-parameters
parameters that specify the placement between a pair of frames

3.1.174
world coordinate system
initial coordinate system from which all other frames are defined

3.1.175
yaw
angle of rotation about the z-axis

3.1.176
connected face subset
set of arcwise connected faces whose domain is a portion of the domain of an existing connected face set

3.1.177
manifold subsurface shape representation
shape representation containing connected face sub sets in the form of open shells

3.1.178
atomic element
single irreducible unit or component

3.1.179
subedge
edge whose domain is a connected portion of the domain of another edge

3.1.180
subface
face whose domain is a connected portion of the domain of another face

3.1.181
idealisation
representation of one thing by another thing that in a particular context is both simpler than, and an approximation to, the first thing

3.1.182
persistent identification
mechanism to assign unambiguous identification to an element of an explicit shape model in terms of the procedural operations used to generate that element

3.1.183
accuracy
convergence accuracy
specification to control the convergence condition of an approximate solution

3.1.184
data quality defect
product data quality defect

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characteristic of product model data, where the characteristic does not fulfil an applicable requirement according to a threshold specified by a user

3.1.185
Hausdorff distance
HH
distance that measures how far apart are the two sets of points A and B in:

$$H(A,B) = \max\{h(A,B), h(B,A)\} \quad (1)$$

where

$h(A,B)$ is the directed Hausdorff distance from A to B , $\max_{a\in A}\{\min_{b\in B}\{d(a,b)\}\}$

A $\{a_1, \dots, a_m\}$

B $\{b_1, \dots, b_m\}$

$d(a,b)$ is the Euclidean distance between the points a and b

3.1.186
inspection
product data quality inspection
check of the quality of product data by application software against criteria that take account of thresholds specified by a user

3.1.187
inspection result
product data quality inspection result
result of *inspection* (3.1.186) to determine whether or not product data contain data quality defects

3.1.188
location of extreme value
location in inspected model data where a measured value exceeds an allowable tolerance range specified by a user

3.1.189
business object model
single integrated information model for the scope of an AP

3.1.190
measurement requirement
specification of the necessary conditions for a measurement to be capable of ensuring that a quality criterion holds

3.1.191
product data quality
PDQ
degree to which a set of inherent characteristics of product data fulfils requirements

3.1.192
product data quality criterion
requirement that is the basis for detecting a data quality defect in product data and can be judged by a logical or a numerical test

3.1.193

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product shape data
data representing product shape with geometric and topological information

3.1.194
quality criterion
criterion for evaluating product data quality

3.1.195
threshold
reference value used for the assessment of a measured value of product data quality by numerical test

3.1.196
state
mode of being

3.1.197
URI
Uniform Resource Identifier
compact sequence of characters that identifies an abstract or physical resource

[SOURCE: ISO/IEC 12785-1:2009, 3.23]

3.1.198
common resources
collection of information models, that can be reused to specify application-specific information models within the domain of industrial data

Note 1 to entry: The resource constructs defined by an application module are those defined in its module interpreted model schema.

Note 2 to entry: The term does not specify a specific part of the ISO 10303 series.

3.1.199
ISO 10303 resource entity
concrete syntax used to specify the domain of a declaration included in an ISO 10303 resource

3.1.200
conformance assessment
analysis of conformance testing results to determine conformance to a particular application protocol's conformance class or option

3.1.201
conformance class
subset of an application protocol for which conformance can be claimed

3.1.202
conformance option requirement
incremental subset of an application protocol for which conformance can be claimed in addition to the conformance claimed for one or more conformance classes

3.1.203
conformance
precise, text definition of a characteristic required to be present in a conforming implementation

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3.1.204
conformance testing
testing of a conforming implementation by evaluating its data for the specific characteristics required

3.1.205
core model
CM
complete and comprehensive information model, shared by all ISO 10303 *application domain models* (3.31.1), representing the product data through its entire life cycle

3.1.206
core technical capability
CTC
set of objects and relationships in the *core model* (3.1.205) that may be reused in, or customised by, any application domain model

3.1.207
data
representation of information in a formal manner suitable for communication, interpretation, or processing by human beings or computers

3.1.208
data access
machine to machine sharing of data

Note 1 to entry: The ISO 10303 series separates the representation of product information from the implementation methods used for product data exchange, product data access, and product data archival.

3.1.209
data archival
persistent storage of machine-interpretable data and associated defining schema

Note 1 to entry: The ISO 10303 series separates the representation of product information from the implementation methods used for product data exchange, product data access, and product data archival.

3.1.210
STEP
ISO 10303 series which describes the computer-interpretable representation of product information and product data

Note 1 to entry: STEP is an abbreviation for "STandard for the Exchange of Product model data".

3.1.211
abstract test case
ATC
specification, encapsulating at least one test purpose, that provides the formal basis from which executable test cases are derived and that is independent of both the implementation and the values

3.1.212
data exchange
exchange of machine-interpretable files

Note 1 to entry: The ISO 10303 series separates the representation of product information from the implementation methods used for product data exchange, product data access, and product data archival.

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3.1.213
data mapping language
computer interpretable language that specifies how one information set relates to another

3.1.214
data planning object
atomic element of an *application data planning model* (3.1.24) that defines a primary concept of an application domain

3.1.215
data specification language
set of rules for defining data and their relationships suitable for communication, interpretation, or processing by computers

3.1.216
description method
systematic procedure for specifying elements of a domain

EXAMPLE ISO 10303-11 is a description method that specifies the elements of the EXPRESS language.

3.1.217
domain
area of knowledge, influence, or activity

3.1.218
domain practise standard
industry or national or international standard that provides primary source of data exchange requirements for a data exchange standard

EXAMPLE ISO 1101 is a geometrical product specification standard that provides requirements on how practitioners represent geometrical tolerancing in drawings. An AP doesn't specify these requirements verbatim, but it provides information model elements required to unambiguously represent that information.

3.1.219
exchange agreement
document that formalizes an additional layer of information requirements for data exchange beyond that provided by an application protocol

Note 1 to entry: This may be considered as an enterprise to enterprise exchange layer above the application layer definded in the OSI stack.

3.1.220
exchange structure
computer-interpretable format used for storing, accessing, transferring, sharing, and archiving data

3.1.221
abstract test method
ATM
description of how an implementation is tested, given at the appropriate level of abstraction to make the description independent of any specific implementation of testing tools or procedures, but with sufficient detail to enable these tools and procedures to be produced

3.1.222
externally defined
explicit identification of the definition given within another source

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Note 1 to entry: That source provides all the information necessary to unambiguously recreate the element; the information can be referenced rather than recreated.

3.1.223
generic resource
integrated resource whose contents are independent of a specific application

EXAMPLE ISO 10303-42 is a generic resource.

3.1.224
implementation
instantiation of an algorithm by a computer system

Note 1 to entry: In STEP an implementation refers to an implementation of a pre-processor or post-processor in an exchange scenario, or a client or server in a services scenario.

3.1.225
implementation method
<ISO 10303> part of ISO 10303 that specifies a technique used by computer systems to exchange product data

3.1.226
implementation under test
IUT
part of an application that is studied under testing

Note 1 to entry: This is normally an implementation of one or more characteristics of the standard(s) based on a given implementation method.

3.1.227
information
facts, concepts, or instructions

3.1.228
information model
formal model of information

EXAMPLE ISO 10303-242 provides an information model.

Note 1 to entry: In ISO 10303, an information model is based on the object-relationship modeling technique that organizes the product data as represented in different system aspects.

Note 2 to entry: In ISO 10303, information models are developed using EXPRESS or SysML.

3.1.229
integrated resource
IR
<ISO 10303> part of ISO 10303 that defines a group of resource constructs used as the basis for product data

EXAMPLE 1 ISO 10303-42 is an integrated generic resource.

EXAMPLE 2 ISO 10303-104 is an integrated application resource.

Note 1 to entry: An integrated resource is classified into two types of resource parts: generic resources and application resources.

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Note 2 to entry: The 4x to 6x numbering is reserved for integrated generic resources and the 1xx numbering is reserved for integrated application resources.

3.1.230
interpretation
process of adapting a resource construct to satisfy an application-specific requirement of an application protocol

Note 1 to entry: The interpretation process can involve the addition of restrictions on attributes, the addition of constraints, and the addition of assignments.

3.1.231
module interpreted model
MIM
information model that uses the common resources necessary to satisfy the information requirements and constraints of an application reference model, within an application module

EXAMPLE Three-dimensional geometry information models are common resources used in many MIMs. However, an application module describing colour will not use three-dimensional geometry information models as a resource.

Note 1 to entry: The term common resources is not meant to imply that all such information models are required to be used in a module interpreted model regardless of domain or application.

3.1.232
abstract test suite
ATS
<ISO 10303> part of ISO 10303 that contains the set of abstract test cases necessary for conformance testing of an implementation of an application protocol

3.1.233
neutral
independent of a specific computer system

3.1.234
presentation
recognizable visual representation of product data intended for use by humans

3.1.235
product
thing or substance or information produced by a process

EXAMPLE A computer-interpretable model.

Note 1 to entry: In ISO 10303, it is common to include a product that is not a physical thing or substance, but that is information.

3.1.236
product data
data that is a representation of product information

3.1.237
product information
information about a product

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Note 1 to entry: In ISO 10303, it is common to describe product information with respect to a specific industrial domain.

3.1.238
product information model
formal model of product information

3.1.239
protocol implementation conformance statement
PICS
statement of which capabilities and options are supported within an implementation of a given standard

Note 1 to entry: This statement is produced by completing a PICS proforma.

3.1.240
protocol implementation conformance statement proforma
PICS proforma
standardized document in the form of a questionnaire, which, when completed for a specific implementation, becomes the protocol implementation conformance statement

3.1.241
syntax-compliant recommended practice
document that provides instantiation patterns that are verified by an independent agent to be in compliance with the formally defined syntax of the standard

3.1.242
rules-compliant recommended practice
document that provides instantiation patterns that are verified by an independent agent to be in compliance with the formally declared rules of the standard

Note 1 to entry: The formally declared rules of the standard may not completely control the universe of discourse of the standard.

3.1.243
agreement of common understanding
result of discussions between the partners of product *data exchange* (3.1.212), that ensures that all of them have the same understanding of the transferred or shared information

3.1.244
semantics-compliant recommended practice
document that provides instantiation patterns that are verified by an independent agent to be in compliance with the formally declared semantics of the standard

Note 1 to entry: The formally declared semantics of the standard completely controls the universe of discourse of the standard and includes the rules and syntax requirements as well as the semantic requirements

3.1.245
non-compliant recommended practice
document that provides instantiation patterns that are found by an independent agent to not be in compliance with one or more of the formally declared (syntax, rules, semantics) requirements of the standard

3.1.246

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reference data
RD
data that represents information about classes or individuals which are common to many users

Note 1 to entry: Reference Data provides a tailorable structured vocabulary that extends an information model with business specific semantics.

Note 2 to entry: This is a generic version of the definition provided in ISO 15926-1:2004, 3.1.18.

3.1.247
reference data library
RDL
managed collection of reference data

3.1.248
resource construct
collection of entities, types, functions, rules and references that together define a valid description of an aspect of product data

3.1.249
short name
abbreviation for an entity name in the EXPRESS-based implementation namespace in ISO 10303

Note 1 to entry: Short names are registered in a database controlled by ISO TC 184/SC 4 to prevent an abbreviation from being used for more than one entity name.

3.1.250
short-to-long-form generation; SHTOLO
transformation process of generating an EXPRESS schema that does not contain interfaces, taking as input any EXPRESS schema or schemata compliant with any version of ISO 10303-11

Note 1 to entry: The original implementation methods included in the ISO 10303 series presupposed a data model consisting of a single schema, termed the longform schema.

Note 2 to entry: The algorithm that defines the transformation process is specified in ISO 10303-11.

3.1.251
standard data access interface
SDAI
abstract API to work on application data according to a given data model defined in EXPRESS

Note 1 to entry: SDAI, which is specified in ISO 10303-22, is intended to be independent of programming language used.

3.1.252
STEP modules and resource library
SMRL
collection of application modules, domain models, and integrated resources intended to support one or more application protocols

3.1.253
STEP framework
integrated development and publishing environment for STEP

3.1.254

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application
one or more processes creating or using product data

3.1.255
STEPlib
STEP library
data and tools needed for the development and publication of the components of the STEP extended architecture

Note 1 to entry: STEPlib allows users to:

— manage the SysML models during the development of the models;

— prepare content to be fed into STEPmod: AntPub;

— implement the SysML to XSD binding: AntImp;

— transform the ARM EXPRESS model into the ARM-in-SysML model to build the SysML mappings from SysML models to EXPRESS models: Reeper;

— check the quality of the SysML source content: CheckXMI.

STEPlib does not deprecate STEPmod. This document assumes that STEPmod is a stable development and publication environment.

STEPlib has the sole purpose of managing the development of the models and producing the associated documentation subsets which will be assembled in STEPmod for ISO publication.

STEPlib is also the name of the top-level model of the SysML model tree used for all the STEP APs.

3.1.256
STEPmod
STEP modules repository
collection of XML building blocks for developing standards from information models defined in EXPRESS

Note 1 to entry: An integral part of the repository's XML vocabulary is its representation of EXPRESS language constructs, i.e. its EXPRESS model. This specification shall refer to this EXPRESS model portion of the repository's XML vocabulary as STEPmod EXPRESS. The STEPmod Specification Reference is available at

3.1.257
structural data mapping language
language elements that allow an unambiguous specification of a relationship between two schemas

Note 1 to entry: The two schemas both conform to the same schema definition language.

Note 2 to entry: The language elements of the structural data mapping language reference language elements of the schema definition language.

3.1.258
structure
set of interrelated parts of any complex thing, and the relationships between them

3.1.259
test purpose
precise description of an objective which an abstract test case is designed to achieve

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3.1.260
unit of functionality
UOF
collection of application objects and their relationships that defines one or more concepts within the application context such that removal of any component would render the concepts incomplete or ambiguous

3.1.261
usage of product data
subset of the information flows in an application activity model

3.1.262
usage guide
specification that is a recommendation on applying an application protocol for a specific application domain within the scope of that application protocol

3.1.263
verdict
test verdict
statement of "pass", "fail", or "inconclusive" concerning conformance of an implementation under test with respect to an executable test case and the abstract test case from which it was derived

3.1.264
verdict criteria
information defined within an abstract test case which enables the testing laboratory to assign a verdict

3.1.265
application activity model
AAM
model that describes an application in terms of its processes and information flows

3.1.266
class of activity
class that has only *individual activity* (3.1.268) as members

3.1.267
class of product
class that has only *individual products* (3.1.91) as members

3.1.268
individual activity
something that happens

3.1.269
process plant
assembly that is intended to perform a physical, chemical or transport process, or a process that is a combination of these, upon fluids or upon streams of solid material

3.1.270
schematic
schematic drawing
one or more drawing sheets that contains symbols which stand for things, where the forms of the symbols and the spatial relationships between the symbols presents information about the things

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3.1.271
decoration project
interior design
information that specifies the placement of furniture products into a room space including evaluation for manufacturing

3.1.272
furniture product definition
information that constitutes a specification sufficient for the evaluation of a furniture catalog in order to completely understand all the features, rules and restrictions involved

3.1.273
programmes of products in catalog
subset of products in a catalog that share some specific features, rules or restrictions

3.1.274
design phase
period during which the engineering representation of a product is dynamic

3.1.275
mechanical part
physical object which can be formed from material into a static shape

3.1.276
configuration management
activity that establishes and maintains consistency of a product with its requirements and configuration information throughout its life cycle

Note 1 to entry: Adapted from ANSI/EIA 649A-2004.

3.1.277
core model object
atomic element of the Core model that defines a unique concept of the Core model and contains attributes specifying the data elements of the object

3.1.278
data sharing
the making of data accessible to others, where the data is structured by a schema

3.2 Terms related to the EXPRESS language

3.2.1
EXPRESS
data specification language that consists of language elements that allow an unambiguous data definition and specification of constraints on the data defined

Note 1 to entry: The elements of the EXPRESS language are specified in ISO 10303-11.

3.2.2
defined data type
data type declared by the user with an identifier

3.2.3
local rule
domain rule (3.2.8) on the domain of every entity data type instance

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3.2.4
global rule
domain rule on entity data type instances belonging to one or more entity data types

Note 1 to entry: A rule declaration permits the definition of constraints that apply collectively to the entire domain of an entity data type, or to instances of more than one entity data type.

3.2.5
uniqueness rule
domain rule of an entity attribute or a combination of entity attributes

3.2.6
simple uniqueness rule
domain rule that specifies a value for an attribute where no more than one entity data type instance shall exist in the domain

3.2.7
joint uniqueness rule
domain rule that specifies values for the combination of two or more attributes where no more than one entity data type instance shall exist in the domain

3.2.8
domain rule
rule
where rule
declaration that contains a definition of constraints that apply to one or more entity data types within the scope of a schema

3.2.9
entity
class of information defined by common properties

3.2.10
entity data type
representation of an entity

Note 1 to entry: An entity data type establishes a domain of values defined by common attributes and constraints.

3.2.11
entity data type instance
entity instance
named *entity data type value* (3.2.20)

Note 1 to entry: The name of an entity instance is used for referencing the instance.

3.2.12
enumeration data type
data type that has as its domain a set of names

3.2.13
interface specification
construct which enables an item declared in one schema to be visible in another

Note 1 to entry: There are two interface specifications (use and reference), both of which enable item visibility.

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3.2.14
primary schema
schema of interest in a group of interrelated schemas that form a, possibly cyclic, directed graph

Note 1 to entry: There can be one or more primary schemas within the graph, where the other schemas in the graph are only there to support the primary schema.

Note 2 to entry: The primary schema has a special role in the conversion of a shortform schema into a longform schema.

3.2.15
root schema
schema where all the other schemas can be reached from, in a group of interrelated schemas that form a, possibly cyclic, directed graph, that is not the target of any *interface specification* (3.2.13)

Note 1 to entry: The root schema can be considered to be representative of the graph.

Note 2 to entry: The root schema has a special role in the conversion of a shortform schema into a longform schema.

3.2.16
schema
definition of a common namespace for a collection of related entities and other data type declarations

EXAMPLE Geometry may be the name of a schema that contains declarations of points, curves, surfaces, and other related data types.

Note 1 to entry: For schemas defined in the ISO 10303 series, the use of an information object identifier is specified that includes a version identifier.

Note 2 to entry: If two schemas with the same name have different schema version identifiers, they will nevertheless be treated as the same schema.

3.2.17
select data type
data type that enables a choice among several *named data types* (3.2.25)

3.2.18
simple data type
data type that defines the domains of the *atomic data units* (3.2.34)

Note 1 to entry: The simple data types are number, real, integer, string, boolean, logical, and binary.

3.2.19
EXPRESS-driven data
set of *entity data type instances* (3.2.11) based on an *EXPRESS* (3.2.1) *schema* (3.2.16)

3.2.20
single entity data type value
entity data type value
single entity value
entity value
unit of data which represents a unit of information within the class defined by an entity data type

Note 1 to entry: The single entity data type value is a member of the domain established by this entity data type.

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3.2.21
instance
named value

3.2.22
multi-leaf complex entity data type
multi-leaf complex entity
complex entity data type that consists of more than one entity data types that do not have further subtypes within this complex entity data type

3.2.23
multi-leaf complex entity data type instance
multi-leaf complex entity instance
named *multi-leaf complex entity data type value* (3.2.24)

Note 1 to entry: The name of a multi-leaf complex data type entity instance is used for referencing the instance.

3.2.24
multi-leaf complex entity data type value
multi-leaf complex entity value
unit of data that represents a unit of information within the class defined by a *multi-leaf complex entity data type* (3.2.22)

Note 1 to entry: The multi-leaf complex entity data type value is a member of the domain established by this multi-leaf complex entity data type.

3.2.25
named data type
data type that may be declared in a formal specification

Note 1 to entry: There are two kinds of named data types: entity data types and *defined data types* (3.2.2).

3.2.26
partial complex entity data type
grouping of entity data types within a subtype/supertype graph which may form part or all of a complex entity data type

Note 1 to entry: A partial complex entity data type is a potential representation of an entity.

3.2.27
partial complex entity value
value of a *partial complex entity data type* (3.2.26)

Note 1 to entry: The partial complex entity value has no meaning on its own and must be combined with other partial complex entity values and a name to form a *complex entity instance* (3.2.36).

3.2.28
population
collection of entity data type instances

3.2.29
simple entity data type instance
simple entity instance
named unit of data which represents a unit of information within the class defined by an entity

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Note 1 to entry: The simple entity data type instance is a member of the domain established by a single entity data type.

3.2.30
aggregation data type
data type (3.2.39) that has as its domain collections of *values* (3.2.33) of a given base data type

Note 1 to entry: These base data type values are called elements of the aggregation collection.

3.2.31
subtype/supertype graph
declared collection of entity data types

Note 1 to entry: The entity data types declared within a subtype/super-type graph are related via the subtype statement. A subtype/supertype graph defines one or more complex entity data types.

3.2.32
token
non-decomposable lexical element of a language

3.2.33
value
unit of data

3.2.34
atomic data unit
data units that cannot be further subdivided into elements recognized in EXPRESS

3.2.35
complex entity data type
representation of an *entity* (3.2.9)

Note 1 to entry: A complex *entity data type* (3.2.10) establishes a domain of values defined by the common attributes and constraints of an allowed combination of entity data types within particular *subtype/supertype graph* (3.2.31).

3.2.36
complex entity data type instance
complex entity instance
named *complex entity data type value* (3.2.37)

Note 1 to entry: The name of a complex entity instance is used for referencing the instance.

3.2.37
complex entity data type value
complex entity value
unit of data that represents a unit of information within the class defined by a *complex entity data type* (3.2.35)

Note 1 to entry: The complex entity data type value is a member of the domain established by this complex entity data type.

3.2.38
constant
named unit of data from a specified domain with a constraint that the value cannot be modified

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3.2.39
data type
domain of values

3.3 Terms related to the EXPRESS-X language

3.3.1
binding extent
set of binding instances constructed from instances in source entity data type extents and view extents

3.3.2
source data set
collection of entity data type instances governed by an EXPRESS schema and serving as an origin of mapping

3.3.3
source extent
view extent or entity data type extent drawn on to create a binding extent

3.3.4
target data set
collection of entity instances produced by means of mapping

3.3.5
view
alternative organization of the information in an EXPRESS schema

3.3.6
view data type
representation of a view

3.3.7
view data type instance
named unit of information established by evaluation of a view

3.3.8
view extent
aggregate of view data type instances that contains all instances that can be constructed from the qualified binding extent

3.3.9
binding instance
collection of references to entity data type instances and view data type instances associated with a view or map.

3.3.10
entity data type extent
collection of instances of a given entity data type

3.3.11
EXPRESS-X parser
tool capable of parsing a specification stated in the EXPRESS-X language

3.3.12

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EXPRESS-X mapping engine
tool that performs structural information mapping based on a specification stated in the EXPRESS-X language

3.3.13
map
declaration of a relationship between data of one or more source entity data types or source view data types and data of one or more target entity data types

3.3.14
network mapping
mapping to many target entity instances

3.3.15
qualified binding extent
subset of a binding extent consisting of binding instances satisfying a set of selection criteria

Note 1 to entry: A set of selection criteria is satisfied if each selection criterion individually is satisfied.

3.3.16
selection criterion
logical expression, the criterion being satisfied only if the expression evaluates to the value TRUE

3.4 Terms related to SysML

3.4.1
resulting XSD
XSD based on the transformation specification

3.4.2
resulting CXMI
CXMI based on the transformation specification

3.4.3
context schema
EXPRESS schema, possibly including EXPRESS interface specifications, that defines the scope of the mapping into UML

3.5 Terms related to standard data access interfaces

3.5.1
application schema
information model, defined using EXPRESS, describing the data of interest in a particular context or domain

Note 1 to entry: The schemas defined in the ISO 10303 application protocol series would be considered application schemas.

3.5.2
native schema
EXPRESS schema, with all interfaced items resolved, upon which a schema instance or SDAI-model may be based

3.5.3

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repository
identifiable data storage facility

3.5.4
schema instance
logical association of related SDAI-models establishing a domain of entity instances

Note 1 to entry: This domain is the limit for references between entity instances and is the domain over which global rule validation occurs.

3.5.5
SDAI-model
container within which related entity instances exist

3.5.6
SDAI language binding
SDAI functionality specified in a particular computing language

3.5.7
SDAI schema
EXPRESS schema that is defined within ISO 10303-22

3.5.8
session
operations that occur between the initiation and termination of the use of an SDAI implementation by one application

3.5.9
validation
process of checking that instances satisfy the constraints specified in the schema that describe their structure, values, and relationships

3.5.10
concurrent access
ability for more than one computer application to manipulate data in a repository at the same time

3.5.11
constraint
limitation, defined using EXPRESS, imposed on data against which the data may be evaluated to determine whether the data is valid within a particular context

3.5.12
current schema
EXPRESS schema into which items from other schemas are made visible via the EXPRESS interface specification

3.5.13
external schema
EXPRESS schema, with all interfaced items resolved, containing data types that are defined as domain equivalent with data types in a native schema

Note 1 to entry: ISO 10303-22:1998, A.1.1 describes the process for resolving interfaced items.

3.5.14

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foreign schema
EXPRESS schema other than the current schema from which items are made visible in the current schema via the EXPRESS interface specification

3.5.15
identifier
implementation-dependent name by which entity instances and aggregate instances are uniquely known within an SDAI session

3.5.16
implementation class
specification of an implementable subset of the functionality defined in this document to which an implementation may conform

3.5.17
iterator
mechanism that allows an application program to traverse the contents of an instance of an aggregate

3.5.18
attribute data block
<Standard data access interface C binding> C structure containing both a value and the data type of the value that is accessed through a handle

3.5.19
function
<Standard data access interface C binding> C language late binding specific interpretation of an SDAI operation, a combination of several SDAI operations or an operation unique to this binding

3.5.20
function prototype
<Standard data access interface C binding> definition of a C programming language function in an include file

3.5.21
handle C type
<Standard data access interface C binding> function parameter that is a C language pointer type containing the address of a datum or a structured data

3.5.22
aggregate class
<Standard data access interface Java binding> Java class representing an aggregation data type

3.5.23
select-dependent
<Standard data access interface Java binding> base type of an entity attribute or an aggregation type is **select-dependent** if the aggregate value, returned by the EXPRESS **`TypeOf`** function for this base type contains the name of a defined type whose underlying type is a `SELECT`data type

3.5.24
select path
<Standard data access interface Java binding> sequence of defined data types needed to specify a value of a select data type as defined in the technical corrigendum of ISO 10303-21:2016, 11.1.8

3.5.25

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session class
<Standard data access interface Java binding> specialized Java class for a session entity

3.5.26
session entity
<Standard data access interface Java binding> entity declared in the `SDAI_session_schema` or the `SDAI_population_schema`

3.5.27
aggregate-dependent
<Standard data access interface Java binding> base type of an entity attribute or an aggregation type is aggregate-dependent if the aggregate value, returned by the EXPRESS `TypeOf` function for this base type contains the name of a defined type whose underlying type is an aggregation data type or if the base type is directly an aggregation type

3.5.28
application entity
<Standard data access interface Java binding> entity declared in an application schema

3.5.29
dictionary entity
<Standard data access interface Java binding> entity declared in the `sdai_dictionary_schema`

3.5.30
entity class
<Standard data access interface Java binding> Java class representing a complex or single entity data type of an application schema or the `sdai_dictionary_schema`

3.5.31
entity interface
<Standard data access interface Java binding> Java interface representing an entity data type of an application schema or the`sdai_dictionary_schema`

3.5.32
persistent label
<Standard data access interface Java binding> string by which an entity instance can be uniquely identified within a SDAI repository

3.5.33
receiver
<Standard data access interface Java binding> Java object upon which a specified member method is invoked

3.5.34
SDAI method
<Standard data access interface Java binding> Java method representing an SDAI operation

3.6 Terms related to XML representations of EXPRESS schemas and data

3.6.1
accessor attribute
XML attribute (of an XML element representing an entity instance) that represents an EXPRESS attribute and its value (cf. accessor element)

3.6.2

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deepest underlying type
for an aggregation data type that contains nested aggregation data types, first encountered base-type at some level of nesting that is not an anonymous aggregation type, a defined data type whose underlying type is an aggregation type, or a SELECT type whose working select list contains a single defined data type whose underlying type is an aggregation type

3.6.3
default mapping
for a given EXPRESS Schema, XML schema that is derived as specified in this document, using the default values of all configuration directives and no additional configuration directives

3.6.4
derived XML schema
XML schema derived from the EXPRESS schema corresponding to the given EXPRESS schema and the given configuration file

3.6.5
independent element
instance element that appears as an immediate child of the `uos` element

3.6.6
instance element
XML element that represents a value of an EXPRESS data type

3.6.7
list-of-values
XML representation of an aggregate value that consists of a single character string in which the encodings of the component values appear in order, separated by SPACE characters (cf. sequence-of-elements)

3.6.8
nested aggregation data type
EXPRESS aggregation data type that appears as the base-type of another aggregation data type

3.6.9
sequence-of-elements
XML representation of an aggregate value that consists of a sequence of XML elements in which the content of each element is the encoding of a single component value (cf. list-of-values)

3.6.10
uncharacterized entity instance
entity instance for which no single entity data type in the context schema has all the properties needed to represent the entity instance

3.6.11
unit of serialization; uos
XML representation of a schema instance that is a collection of EXPRESS entity instances, together with all of their attribute values, that are described by a single exchange schema

3.6.12
accessor element
XML element that represents an EXPRESS attribute and its value (cf. accessor attribute)

3.6.13

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aggregate value
value of an EXPRESS aggregation data type, or a value of a defined data type whose fundamental type is an EXPRESS aggregation data type

3.6.14
base-type
for an EXPRESS aggregation data type, data type of the component values

3.6.15
by-reference instance element
instance element that has no XML content but includes a reference to a by-value instance element whose content is a representation of the value

3.6.16
by-value instance element
instance element whose content is the representation of a data value, or the complete representation of an EXPRESS entity instance

3.6.17
characterized entity instance
EXPRESS entity instance for which there is one EXPRESS entity data type in the context schema that is declared to have or inherit all of the properties that are present in the instance

3.6.18
context schema
governing schema, noun
for a uos element, EXPRESS schema that contains the model of the data contained in that element

3.6.19
deepest base-type
for an aggregation data type that contains nested aggregation data types, base-type at some level of nesting whose values are used as the component values in the XML representation of the (possibly multi-dimensional) aggregate values

3.7 Terms related to conformance testing methodology and framework

3.7.1
capability tests
tests performed to determine the capabilities of an IUT, designed to determine whether an implementation conforms to a particular feature of an application protocol as described in the test purpose

3.7.2
certificate of conformity
certificate of conformance
document issued under the rules of a certification system indicating that adequate confidence is provided that an IUT is in conformity with a specific standard or technical specification as determined through use of a specified test method

3.7.3
certification body
impartial body possessing the necessary competence and reliability to operate a certification system, and in which the interests of all parties concerned with the function of the system are represented

Note 1 to entry: The certification body may decentralise its activities and rights to certify conformity.

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3.7.4
certification mark
certification body's sign, symbol, or letter that identifies a product(s) or service(s) as being certified

3.7.5
certification of conformity
action by a third party demonstrating that adequate confidence is provided that an identified IUT is in conformity with a specific standard or other normative document.

Note 1 to entry: Compare with declaration of conformity and attestation of conformity.

3.7.6
certification system
procedural and managerial system for carrying out certification of conformity that is overseen by a certification body

Note 1 to entry: Certification systems may be operated at the national, regional or international level

3.7.7
client
client of a testing laboratory
organisation that submits an implementation for conformance testing

3.7.8
comparability
comparability of results
characteristic of conformance assessment processes such that execution on the same SUT, in different testing laboratories, leads to the same overall summary

3.7.9
conformance assessment process
process of accomplishing the conformance testing activities necessary to determine the conformance of an implementation to an application protocol

3.7.10
conformance log
record of information produced as a result of a test campaign, that is sufficient to make and verify the assignment of test verdicts

3.7.11
abstract test group
named set of related abstract test cases

3.7.12
conformance test report
test report
document written at the end of the conformance assessment process, that provides the overall summary of the conformance of the IUT to the standard for which conformance testing was carried out, and that gives the details of the testing

3.7.13
conforming implementation
implementation which satisfies the conformance requirements, consistent with the capabilities stated in the PICS

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3.7.14
conformity
conformance
fulfilment by an implementation of all requirements specified

3.7.15
control board
impartial body possessing the necessary competence and reliability to approve and maintain proficient test suites for the testing programme, and in which the interests of all parties concerned with the function of the tests are represented

3.7.16
declaration of conformity
declaration of conformance
manufacturer's declaration of conformance
statement by a supplier claiming under his sole responsibility that an IUT is in conformity with a specific standard or other normative document

Note 1 to entry: Compare with attestation of conformity and certification of conformity.

Note 2 to entry: The term "self certification" should not be used, in order to avoid any confusion with the concept of certification which should imply the involvement of a third party.

3.7.17
executable test case
instantiation of an abstract test case with values

3.7.18
executable test suite
set of executable test cases necessary to perform conformance testing of an implementation against a standard or group of standards

3.7.19
fail
fail verdict
test verdict given when the observed test outcome demonstrates nonconformance with respect to either the test purpose or at least one of the conformance requirements in the relevant standard(s)

3.7.20
falsification testing
test method developed to find errors in the implementation

Note 1 to entry: If errors are found, one can correctly deduce the implementation does not conform to the standard; however, the absence of errors does not necessarily imply the converse. Falsification testing can only demonstrate non-conformance.

Note 2 to entry: Compare with verification testing.

3.7.21
abstract test method
description of how an implementation is to be tested, given at the appropriate level of abstraction to make the description independent of any particular implementation of testing tools or procedures, but with sufficient detail to enable these tools and procedures to be produced

3.7.22

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implementation under test
IUT
that part, of a product which is to be studied under testing, which should be an implementation of one or more characteristics of the standard(s) based on a given implementation method

3.7.23
inconclusive verdict
test verdict given when the observed test outcome is such that neither a pass nor a fail verdict can be given

3.7.24
in-house testing
testing undertaken by the client (of a testing laboratory) using the executable test suite supplied by the testing laboratory prior to submission for the formal phase of the service

3.7.25
means of testing
combination of equipment and procedures that perform the selection, assignment of parameter values, derivation and execution of test cases, in conformance with an abstract test suite, and that can produce a conformance log

Note 1 to entry: The means of testing is provided by test realisers who are responsible for producing the executable test suites, procedures and executable software from standardised abstract test suites and abstract test methods.

3.7.26
non-conformity
non-conformance
failure of an implementation to fulfil one or more requirements specified

3.7.27
pass
pass verdict
test verdict given when the observed test outcome gives evidence of conformance to the conformance requirement on which the test purpose is focused and is valid with respect to the relevant standard(s) and with respect to the PICS

3.7.28
PIXIT proforma
document, in the form of a questionnaire, written and provided by the testing laboratory which, when completed during the preparation for testing, becomes the PIXIT

3.7.29
postprocessor
software unit that translates product information from an independent public domain product data format to the internal format of a particular computer system

3.7.30
preprocessor
software unit that translates product information from the internal format of a particular computer system to an independent public domain product data format

3.7.31

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proficiency testing
determination of laboratory testing performance by means of inter-laboratory test comparisons or by testing systems for which the results have already been determined.

Note 1 to entry: This does not form part of conformance testing: see D.3.5.4.

3.7.32
accreditation
laboratory accreditation
formalised initial and continuing process of ensuring a testing laboratory is competent to carry out specific (types of) tests

Note 1 to entry: The term "laboratory accreditation" covers the recognition of both the technical competence and the impartiality of a testing laboratory.

Note 2 to entry: Accreditation is normally awarded following successful laboratory assessment and is followed by appropriate surveillance.

3.7.33
Protocol Implementation eXtra Information for Testing
PIXIT
statement made by the client which contains or references all of the information (in addition to that given in the PICS) related to the IUT and its corresponding SUT, which will enable the testing laboratory to run an appropriate test suite against that IUT

3.7.34
repeatability
repeatability of results
characteristic of an abstract test case and derived executable test case(s), such that repeated executions on the same system under test (SUT) under the same conditions lead to the same test verdict; and, by extension, a characteristic of an abstract test suite and derived executable test suite(s)

3.7.35
resolution tests
tests performed to determine in depth whether or not an implementation satisfies specific requirements

3.7.36
selected abstract test suite
set of abstract test cases selected using a specific PICS

3.7.37
selected executable test suite
set of executable test cases selected using a specific PICS

3.7.38
System Under Test
SUT
computer hardware, software and communication network required to support the IUT

3.7.39
test campaign
process of running the executable test suite for a particular IUT

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3.7.40
test case
abstract test case or executable test case

Note 1 to entry: A test case that is an abstract test case is not an executable test case.

Note 2 to entry: A test case that is an executable test case is not an abstract test case.

3.7.41
test case error
statement made with respect to an abstract test case when an error is detected in the abstract test case itself or its executable equivalent

3.7.42
accreditation body
body that conducts and administers laboratory accreditation and grants accreditation

3.7.43
test realiser
organisation which takes responsibility for providing, in a form independent of the clients of a testing laboratory and their IUTs, a means of testing IUTs

3.7.44
testing laboratory
organisation that carries out the conformance assessment process

Note 1 to entry: A testing laboratory can be a third party, a user organisation, an administrative organisation, or an identifiable part of a supplier organisation.

3.7.45
verification testing
process of proving mathematically whether an IUT is correct, consistent and complete

Note 1 to entry: Compare with falsification testing.

3.7.46
assessor
expert selected to conduct assessment during accreditation of a particular laboratory

3.7.47
attestation of conformity
action by a third-party testing laboratory, demonstrating that the specific IUT tested is in conformity with a specific standard or other normative document

Note 1 to entry: Compare with declaration of conformity and certification of conformity.

3.7.48
basic tests
limited tests performed to determine whether it is appropriate to perform thorough testing

3.7.49
capabilities of an IUT
set of functions and options in the relevant standard that is supported by the IUT

3.7.50

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test engine
<abstract test method: application protocol implementation> component of a test system that, by observing test case instructions, prepares, controls, observes, and analyses an IUT

3.7.51
test system
<abstract test method: application protocol implementation> hardware, software, and data used by a testing laboratory to execute a test method

3.7.52
abstract test operation
<abstract test method: SDAI implementation> function or procedure that encapsulate an SDAI operation to test its proper behaviour, including the possible error code and error base

Note 1 to entry: An abstract test operation is a verdict criterion operation.

3.7.53
executable test operation
<abstract test method: SDAI implementation> instantiation of an abstract test operation for a particular programming language and SDAI implementation

3.7.54
SDAI operation
<Standard data access interface> implementation language independent functional element of the SDAI

3.7.55
verdict criterion operation
<abstract test method: SDAI implementation> function or procedure defining a verdict criterion

3.7.56
application element
<abstract test method: application protocol implementation> application object, attribute, or assertion defining the information requirements in an application protocol

3.7.57
semantic analysis
<abstract test method: application protocol implementation> evaluation as to whether or not the information content of a schema instance was maintained during either preprocessing or postprocessing.

3.7.58
structure analysis
<abstract test method: application protocol implementation> evaluation as to whether or not an IUT schema instance conforms to the AIM and conformance requirements of the ISO 10303 application protocol of interest

3.7.59
SUT operator
<abstract test method: application protocol implementation> human or an automated component of the system under test that enables communication of instructions and query data between the test engine and the implementation under test

3.7.60

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syntax analysis
<abstract test method: application protocol implementation> evaluation as to whether or not an IUT schema instance is properly encoded in an exchange representation conforming to an implementation method of ISO 10303

3.7.61
test case report
<abstract test method: application protocol implementation> report covering the identifiers, data, results, and verdicts associated with the execution of a test case

3.7.62
test case verdict
<abstract test method: application protocol implementation> summarized verdict assigned to a test case derived from the individual verdicts assigned to the verdict criteria of a test case

3.8 Terms related to fundamentals of product description and support

3.8.1
annotated EXPRESS schema
EXPRESS schema for which a natural language definition is given with each CONSTANT, TYPE, ENTITY, RULE, FUNCTION or PROCEDURE construct

3.8.2
version
unique revision of an item

3.8.3
chain
path in which all nodes and links are distinct

3.8.4
class of products
set of all products satisfying a type of product; the elements of the set are referred to as members of the class

3.8.5
contract
binding agreement

3.8.6
degree of a node
number of direct connections to other nodes

3.8.7
management information
information required for proper control and handling of a specific product or item

3.8.8
path
sequence of nodes such that from each of its nodes there is an edge to the next node in the sequence

Note 1 to entry: A path has two terminal nodes (nodes that have degree 1), while all others (if any) have degree 2.

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Note 2 to entry: The first and last nodes in the path are different. No nodes are referenced more than once by a link.

3.8.9
real object
object that exists or did exist in the real world and that can or could be uniquely identified

3.8.10
type_of_product
predicate characterizing a collection of products; a product is of the type, or satisfies the type, if the predicate holds for that product

3.9 Terms related to geometric and topological representation

3.9.1
arcwise connected
connected
such that any pair of distinct points in the relevant domain may be connected by a continuous arc entirely contained within that domain

3.9.2
connected component
maximal connected subset of a domain

3.9.3
constructive solid geometry
CSG
type of geometric modelling in which a solid is defined as the result of a sequence of regularised Boolean operations operating on solid models

3.9.4
coordinate space
reference system that associates a unique set of n parameters with each point in an n-dimensional space

3.9.5
curve
set of mathematical points which is the image, in two- or three-dimensional space, of a continuous function defined over a connected subset of the real line R^1 , and which is not a single point

3.9.6
cycle
chain of alternating vertices and edges in a graph such that the first and last vertices are the same

3.9.7
d-manifold with boundary
domain which is the union of its d -dimensional interior and its boundary

3.9.8
dimensionality
number of independent coordinates in the parameter space of a geometric entity

3.9.9

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domain
<geometric and topological representation> mathematical point set in model space corresponding to an entity

3.9.10
euler equations
equations used to verify the topological consistency of objects

3.9.11
extent
measure of the domain of a geometric entity in units appropriate to the dimensionality of the entity

3.9.12
axi-symmetric
invariant under all rotations about a central axis

3.9.13
facet
planar triangle

3.9.14
finite
capable of being completely counted or measured

3.9.15
genus of a graph
integer-valued invariant defined algorithmically by the graph traversal algorithm

3.9.16
genus of a surface
number of handles that are added to a sphere to produce a surface homeomorphic to the surface in question

3.9.17
geometrically founded
having an associated coordinate space

3.9.18
geometrically related
related by being in the same geometric context

3.9.19
geometric coordinate system
underlying global rectangular Cartesian coordinate system to which all geometry refers

3.9.20
graph
set of vertices and edges

3.9.21
handle
structure distinguishing a torus from a sphere, which can be viewed as a tubular surface connecting two holes in a surface

3.9.22

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homeomorphic
in one to one correspondence

3.9.23
bounds
limits of a topological entity

3.9.24
inside
completely included within

3.9.25
interior
point set resulting from exclusion of all boundary points from a bounded point set

3.9.26
list
ordered homogeneous collection with possibly duplicate members

3.9.27
model space
space with dimensionality 2 or 3 in which the geometry of a representation of a physical object, or any of its elements, is defined

3.9.28
open curve
curve which has two distinct end points

3.9.29
open surface
surface which is a manifold with boundary, but is not closed

3.9.30
orientable
capable of being oriented in space

3.9.31
overlap
area or range shared in common by two or more geometric elements

3.9.32
parameter range
range of valid parameter values for a curve, surface, or volume

3.9.33
parameter space
one-dimensional space associated with a curve via its uniquely defined parameterisation, or the two-dimensional space associated with a surface

3.9.34
boundary
<geometric and topological representation> subset of the points x in a domain X having the property that any open ball U centred on x satisfies $U \cap X \neq U$

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Note 1 to entry: Any open ball centred on the boundary of the domain will contain both points inside the domain and points outside the domain.

3.9.35
parametric volume
bounded region of three dimensional model space with an associated parametric coordinate system such that every interior point is associated with a list (u, v, w) of parameter values

3.9.36
placement coordinate system
rectangular Cartesian coordinate system associated with the placement of a geometric entity in space

3.9.37
self-intersect
intersection of a geometric element with itself

3.9.38
self-loop
edge that has the same vertex at both ends

3.9.39
set
unordered collection in which no two members are equal

3.9.40
space dimensionality
number of parameters required to define the location of a point in the coordinate space

3.9.41
tessellated geometry
geometry composed of a large number of planar tiles, usually of triangular shape

3.9.42
surface
set of mathematical points which is the image of a continuous function defined over a connected subset of the plane R^2

3.9.43
topological sense
sense of a topological entity as derived from the order of its attributes

3.9.44
boundary representation solid model
B-rep
type of geometric model in which the size and shape of a solid is defined in terms of the faces, edges and vertices which make up its boundary

3.9.45
closed curve
curve such that both end points are the same

3.9.46
closed surface
connected 2-manifold that divides space into exactly two connected components, one of which is finite

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3.9.47
completion of a topological entity
set consisting of the entity in question together with all the faces, edges and vertices referenced, directly or indirectly, in the definition of the bounds of that entity

3.10 Terms related to foundation representation

3.10.1
context of representation
basis through which elements of a representation are related to each other

3.10.2
element of representation
data element that participates in the description of a representation, either directly or by describing other elements of representation

3.10.3
founded
property of an element of representation that results from its association, direct or indirect, with a context of representation

3.10.4
representation
organized collection of associated data elements, collected together for one or more specific uses

3.11 Terms related to product structure, concept and configuration

3.11.1
ancestor node
any node that can be reached from a given node, by successive traversals of links in the reverse direction

3.11.2
leaf node
node that has no children

3.11.3
link
<product structure configuration> uni-directional relationship from one node to another node within a directed acyclic graph

3.11.4
lot
batch
collection of distinct products that are treated as a single unit

3.11.5
node
element of a directed acyclic graph, connected to other such elements by links

3.11.6
parent node
node from which a link is initiated

3.11.7

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parts list data structure
graph of instances that depicts a parts list structure

3.11.8
parts list structure
description of the structure of a product in terms of a hierarchy of all distinct usages of its constituents

3.11.9
promissory use
intention to use a constituent in an assembly

3.11.10
root node
node that has no parents

3.11.11
tree
restricted type of directed acyclic graph in which there is only one root node, and in which each node has at most one parent

3.11.12
bill-of-material data structure
BOM data structure
graph of data elements that depict a bill-of-material structure

3.11.13
bill-of-material structure
BOM structure
description of the structure of a product in terms of its nested constituents

3.11.14
child node
node to which a link is pointing

3.11.15
configuration item
subdivision of a product, either a component or an assembly

3.11.16
descendant node
any node that can be reached from a given node, by successive traversals of links

3.11.17
directed acyclic graph
DAG
collection of nodes and links such that no node is an ancestor (or descendant) of itself

3.11.18
effectivity
characteristic that indicates whether a product is allowed, approved, or permitted to be used in another product

3.11.19

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form, fit, and function
collection of characteristics that include the shape of a product, the way it interfaces with other products, and the purpose that the product serves

3.12 Terms related to material and other engineering properties

3.12.1
material
substance or substances of which a product is composed or made

3.12.2
material property
characteristic of a product which depends on the material or materials comprising the product and on the process of measurement of the characteristic

3.12.3
material designation
identifier of a material which can be assigned by agreement

3.12.4
qualifier
item of additional information associated with a value

3.12.5
reliability
characteristic associated with either a quantitative or qualitative value that describes the confidence or assurance on which the value can depend

3.13 Terms related to visual presentation

3.13.1
annotation
text and/or symbology used for the purpose of communicating product information

3.13.2
synthetic camera model
model which describes the process of mapping product shape to two dimensions

3.13.3
visualization
process by which displayable product information and presentation information are used to produce a picture

3.13.4
displayable product information
facts, concepts, or instructions about a product that are displayed through the visualization process

3.13.5
layer
collection of displayable items for the purpose of controlling visibility and presentation style

3.13.6
picture
two-dimensional graphical presentation of product properties for human perception

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3.13.7
presentation information
information necessary to create a presentation of product information through visualization

3.13.8
realistic presentation of properties
type of visualization that makes use of physical laws and mathematical principles to produce lifelike images

3.13.9
state variable
variable which represents a quantity

3.13.10
symbol
mark or characters that are interpreted as the conventional sign of some object, idea, function, or process

3.13.11
symbolic presentation of properties
type of visualization that makes use of engineering conventions and practices to produce annotation

3.14 Terms related to shape tolerance

3.14.1
boundary
<shape variation tolerances> surface or surfaces that surround and enclose the physical mass of the product shape

3.14.2
form tolerance
geometrical tolerance applied to a feature or single feature element that only controls form

3.14.3
profile tolerance
geometric tolerance applied to one or more features (surfaces) defined as the true profile

3.14.4
plus-minus tolerance
tolerance that is defined by two values, which when added to or subtracted from a stated dimension value, yield the minimum and maximum limits of deviation for a feature or feature element

3.14.5
toleranced feature
identifiable portion of the product shape to which one or more tolerances are applied

3.15 Terms related to process

3.15.1
process
particular procedure for doing something involving one or more steps or operations

Note 1 to entry: The process may produce a product, a property of a product, or an aspect of a product.

3.15.2

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process plan
sequence of processes required to realize or produce a given product

3.15.3
resource
something that may be described in terms of a behavior, a capability, or a performance measure that is pertinent to the process

3.16 Terms related to mathematical concepts

3.16.1
actual function domain
mathematical space containing precisely the tuples of inputs to the function which are related to some tuple of outputs

Note 1 to entry: See the definitions for *mathematical function* (3.16.7) and *function domain* (3.16.4). See also ISO 10303-50:2002, 5.2.1 and ISO 10303-50:2002, 5.2.6.

3.16.2
function abstraction
quantifier operation which creates an expression denoting a mathematical function from another expression and a list of variables

Note 1 to entry: The variables become bound and identify the inputs to the function. The algorithm to be used to produce an output is implied by the expression. The "abstraction" comes from the change in the semantics of what the new expression denotes. The expression going into the operation denotes some object. The resulting expression denotes a higher-order object, namely a function which produces objects of the original type from inputs of the types associated with the variables named as inputs.

3.16.3
function application
operation which creates an expression by applying a function to appropriate inputs

Note 1 to entry: The resulting expression denotes the object which would be the first (and, usually, only) output of the function when it is applied to the given inputs and evaluated.

3.16.4
function domain
mathematical space specifying all nominally valid tuples of inputs to the mathematical function

Note 1 to entry: See the definitions for mathematical function and *actual function domain* (3.16.1). See also ISO 10303-50:2002, 5.2.1 and ISO 10303-50:2002, 5.2.6.

3.16.5
function evaluation
process of ascertaining either the outputs a function associates to given inputs, or an error indication if the function does not associate any outputs to the given inputs

Note 1 to entry: In the case of a computable function, the process amounts to carrying out the algorithm on the inputs to produce the outputs, or an error indication.

3.16.6
function range
mathematical space specifying all permissible tuples of outputs from the mathematical function

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Note 1 to entry: See the definitions for mathematical function and *actual function range* (3.16.15). See also ISO 10303-50:2002, 5.2.1 and ISO 10303-50:2002, 5.2.6.

3.16.7
mathematical function
relationship between tuples of mathematical objects called inputs and tuples of mathematical objects called outputs in which each tuple of inputs is related to at most one tuple of outputs, together with a mathematical space specifying the function domain and a mathematical space specifying the function range

Note 1 to entry: The phrase mathematical function implies a specification of the domain and range in addition to the pairing of inputs and outputs. See ISO 10303-50:2002, 5.2.1 and ISO 10303-50:2002, 5.2.3 for the reasons this definition was chosen for ISO 10303-50:2002.

3.16.8
mathematical object
mathematical value
abstract object from the domain of mathematics

Note 1 to entry: The terms mathematical object and mathematical value are formally synonymous in ISO 10303-50:2002. There is a tendency to favor the use of mathematical for simple objects like numbers, characters, and enumeration values, and to favor for complex objects like spaces, functions and expressions, but no formal distinction is being made.

3.16.9
mathematical space
mathematical set
instance of the fundamental aggregate object type in the domain of mathematics

Note 1 to entry: No topological, metric, ordering, or vector structure is implied or required. In ISO 10303-50:2002, mathematical space is synonymous with mathematical set. See ISO 10303-50:2002, 5.2.4.

3.16.10
matrix
table function whose domain contains pairs of integers

3.16.11
mesh-based numerical analysis
MBNA
numerical analysis based on structured or unstructured meshes

3.16.12
platform independent model
PIM
model of a software system or business system that is independent of the specific technological platform used to implement it

Note 1 to entry: The specific technological platform may be but not limited to, a programming language or a database.

3.16.13
platform specific model
PSM
model of a software system or business system linked to a specific technological platform

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Note 1 to entry: The specific technological platform may be but not limited to, a programming language, operating system, document file format or database.

3.16.14
table function
array function with the additional constraint that all the integer interval factor spaces of the domain either start at zero or at one

Note 1 to entry: The implication of the constraint is that only the relative values of the subscripts are significant. Hence, one can use pure relative positions (all subscript ranges start from zero), or pure ordinal positions (all subscript ranges start from one), depending on the usual practice in the application area.

3.16.15
actual function range
mathematical space containing precisely the tuples of outputs from the function which are related to some tuple of inputs

Note 1 to entry: See the definitions for mathematical function and *function range* (3.16.6). See also ISO 10303-50:2002, 5.2.1 and ISO 10303-50:2002, 5.2.6.

3.16.16
tuple
linearly ordered, aggregate mathematical object which has finitely many component mathematical objects

Note 1 to entry: A tuple contains a first component, a second component, et cetera, up to some maximum which is the length of the tuple. The tuple of zero length exists and has no components.

3.16.17
variable
atomic expression component which has the semantics of denoting an undetermined value from some space of possible values

Note 1 to entry: See *free variable* (3.16.27) and *bound variable* (3.16.19).

3.16.18
array function
function whose domain is either a Cartesian product of finite intervals of integers or the one-tuples from such a Cartesian product

Note 1 to entry: An element of such a domain is a subscript tuple. Evaluation of the function at such an element produces the "array entry" for that subscript tuple.

3.16.19
bound variable
variable which has been specifically referenced by a quantifier in a quantifier expression

EXAMPLE 1 The variable x in the statement $\forall x(x = x)$.

EXAMPLE 2 The variable x in the set declaration $\{x|x^2 = x\}$.

EXAMPLE 3 The variable x in the definite integral $\int_1^2 \ln(x)\, dx$.

EXAMPLE 4 The variable x in the function definition $f(x) \equiv x + 2$.

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Note 1 to entry: A bound variable is no longer available for substitution by a constant value. The semantics of the quantifier expression uses all possible values of the variable rather than one (perhaps undetermined) value.

3.16.20
BC
boundary-condition
mathematical constraint on the solution of an equation

3.16.21
Cartesian product space
mathematical space consisting of all ordered tuples whose components are members of the corresponding factor spaces of the product

Note 1 to entry: Some care must be taken to be explicit about which spaces are the factors entering into the Cartesian product. For example, $R^3 \times R^3$ is the space of ordered pairs of ordered triples from space R , not the space of ordered sextuples from space R . When the factor spaces of the explicit factors are to be treated as the factor spaces of the Cartesian product, that is, the member tuples are to be concatenated rather than entupled, a subscript ' a ' (indicating the "associative" product) is appended to the Cartesian product symbol. Thus, $R^3 \times_a R^3 \equiv R^6$.

3.16.22
compatible spaces
mathematical spaces whose intersection is not determined to be empty by the algorithm represented by the EXPRESS function **compatible_spaces**

Note 1 to entry: Two spaces are compatible if their intersection is not "obviously" empty. In practice, "obvious" is defined by what is detected by the algorithm. The purpose is to rule out some obvious nonsense while permitting ignorance.

3.16.23
computable function
mathematical function for which the relationship between tuples of inputs and tuples of outputs is expressible by means of an algorithm which takes the inputs and produces the related outputs

Note 1 to entry: All the mathematical functions of interest in the intended applications of ISO 10303-50 are computable. Nevertheless, the possibility of representing non-computable functions is not ruled out.

3.16.24
expression
language construct composed of constants, variables, operators, quantifiers, and grouping markers, organized in accordance with the language's grammar and denoting some object in the domain of the language

3.16.25
finite element analysis
FEA
use of calculations, models and simulations to predict and understand how an object might behave under various physical conditions

3.16.26
finite element method
FEM
general numerical method for solving partial differential equations in two or three space variables that involves separating a system into smaller parts that are called finite elements

3.16.27

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free variable
variable which has not been bound by a quantifier in the expression in which it is used

Note 1 to entry: A free variable denotes an undetermined member of some set of possible values. There is an implicit assumption that it may be substituted by any constant denoting one of those values.

3.17 Terms related to process structure and properties

3.17.1
cell
manifold of dimensionality one or higher that is a part of, or the whole of, a mesh

3.17.2
cell edge
one-dimensional manifold that is on the boundary of a cell and that joins two cell vertices

3.17.3
cell face
two-dimensional manifold that is on the boundary of a cell and that is enclosed by one or more cell edges

3.17.4
cell vertex
vertex that is at the end of one or more cell edges

3.17.5
mesh
arrangement of cells with connectivity between the cells defined by the possession of common cell faces or cell edges

3.17.6
topological region
point set with a single topological dimension

3.17.7
vertex
point within, or on the boundary of, a cell

Note 1 to entry: A vertex can, but need not, be a cell vertex.

Note 2 to entry: In some applications, particularly in finite element analysis, the word node is used as an equivalent term to vertex.

3.18 Terms related to procedural and hybrid representation

3.18.1
design rationale
logic underlying the methodology used in constructing the design

3.18.2
dual model
combination of a procedural or hybrid representation with an explicit representation, the second of which represents an example of the parametric class of models defined by the first

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3.19 Terms related to finite element analysis

3.19.1
2-D model
finite element model that has geometry restricted to a plane that is either swept around an axis of symmetry (axisymmetric model) or projected perpendicular to a plane (planar model) to create the third dimension of the volume

3.19.2
state definition
values of the analysis variables of a model that are calculated by or requested from a finite element analysis application

3.19.3
3-D model
finite element model that has one or more 3-D finite elements

3.19.4
analysis step
act of proceeding from an initial state to a new state in the analysis as required by a control process

3.19.5
control
operations that are carried out upon a model as a set of analysis steps

Note 1 to entry: A model may have one or more sets of control information.

3.19.6
control process
way in which a model is caused to depart from its initial state

Note 1 to entry: For linear analysis, a control process specifies a final state of the model.

3.19.7
h-version
method of hierarchically reducing elements in size to provide a finer analysis resolution, producing a larger number of smaller elements

3.19.8
p-version
method of parametrically increasing the order of the elements while the size and shape remains constant, to provide a finer analysis resolution

3.19.9
result
response of a model to a control as calculated by a finite element analysis application

3.19.10
state
aggregation of information about the analysis variables of a model that describes the model at an instant

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3.20 Terms related to parameterization and constraints for explicit geometric product models

3.20.1
auxiliary geometry
geometric elements such as centre-lines and centre-planes used for locational or tolerancing purposes, but excluding geometry used in the actual representation of a product shape

3.20.2
design intent
intentions of the designer of a model with regard to how it may be instantiated or modified

Note 1 to entry: The aspects of design intent relevant to ISO 10303-108 are concerned with the information represented in the parameters and constraints associated with a model. More generally, design intent also includes the procedural or construction history of a model, which is the subject of ISO 10303-55. All aspects of design intent influence the behaviour of a model under editing operations.

3.20.3
dimensional constraint
constraint on the value of a dimension in a shape model

EXAMPLE In two dimensions, the specification of a distance between two lines only makes sense if the lines are parallel. If this distance is formulated as a dimensional constraint, then any change in the value of the distance requires that the underlying logical relationship of parallelism between the lines is maintained.

Note 1 to entry: There is a semantic difference between a and a. A dimension specifies a fixed quantitative relationship between elements in a shape model. It captures a static characteristic of the model, and has no behavioural semantics. A dimensional constraint also specifies a quantitative relationship between model elements, in this case not necessarily a fixed one, with the additional significance that A dimensional constraint may specify a numerical value, or a mathematical relationship from which a numerical value may be calculated.

3.20.4
directed constraint
asymmetrical constraint
constraint defined with respect to one or more reference elements, which are not changed by the action of the constraint if it is invoked during the modification of a model

EXAMPLE 1 Suppose that Line 2 is constrained to be parallel to the reference element Line 1. However, Line 1 may be a constrained element in some other constraint. If the action of the second constraint causes a change in the direction of Line 1 then the first constraint should ensure that Line 2 changes correspondingly.

EXAMPLE 2 The undirected constraint corresponding to the first of the constraints in the previous example would simply assert that “Line 1 and Line 2 are parallel”.

Note 1 to entry: Following a model transfer, a directed constraint only allows the constrained elements to be modified in such a way that their specified relationship to the reference elements is maintained. On the other hand, modification of one or more reference elements (from the context of the constraint concerned) will lead to compatible changes in all the constrained elements it controls.

3.20.5
element
<ISO 10303-108> instance of a geometric entity data type that participates in a model or is involved in a constraint instance

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3.20.6
explicit constraint
declarative constraint
relationship between specific entity data type instances defined by a constraint instance in a populated EXPRESS schema

Note 1 to entry: The constraint relationship may be a one, whose semantics are specified descriptively, or it may be a one specified in terms of a mathematical equation or inequality.

3.20.7
explicit geometric constraint
specialized explicit constraint relating geometrical or topological elements occurring in a shape model, or auxiliary geometric elements associated with that model

Note 1 to entry: Examples of explicit geometric constraints include relationships between geometric elements of a model, such as parallelism or tangency.

3.20.8
explicit model
declarative model
evaluated model
model whose full details are immediately available without the need for any form of calculation

Note 1 to entry: In the case of product shape models, an explicit (or evaluated) shape model is a fully detailed model of the boundary representation or some related type, as defined in ISO 10303-42. More specifically, an explicit model is a model that is not of the procedural or hybrid type, which may contain little or no explicit geometry.

3.20.9
feature
local geometric configuration belonging to a product shape description, having significance in some application context associated with the product model

3.20.10
free-form constraint
constraint formulated by a system user for some specific purpose, expressed in terms of an explicit mathematical relationship between parameters

Note 1 to entry: A free form constraint needs to be defined for any relationship not covered by the defined constraints provided in applicable EXPRESS schemas.

3.20.11
hybrid model
model combining the use of both explicit and procedural representation methods

3.20.12
constrained elements
model elements that are controlled by a constraint if the model is edited following transfer into another system

3.20.13
implicit constraint
procedural constraint
constraint that is not explicitly represented but is inherent in the action of some constructional operation used in building a model

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EXAMPLE A hypothetical procedure `create_parallel_line` can be used in a procedural description of a model in two dimensions. Its input is Line 1 (assumed to exist before the procedure is used) and a distance. The output is Line 2, created by the procedure at the specified distance from Line 1. However, since Line 2 does not exist until after the procedure has been invoked (i.e. the model has been at least partially) the constraint is not explicit in the model defined purely in terms of the constructional procedure. It is merely implied by the nature of the procedure.

Note 1 to entry: An implicit constraint will be realized as a static relationship in the current result after the operation has been performed, but not generally recorded in the model as a corresponding explicit constraint.

Note 2 to entry: This term is defined to make an important distinction between two fundamental approaches to constraint representation. The present resource is intended to be compatible with other resources for the exchange of procedurally defined models containing implicit constraints.

3.20.14
imported geometry
points and curves imported into the plane of a two-dimensional *sketch* (3.20.23), but defined in terms of elements external to the sketch

EXAMPLE Examples of imported geometry are provided by projections of external points or curves onto the plane of a sketch. These elements are not subject to editing within the context of the sketch, since their defining elements lie outside it. Their purpose is to serve as reference elements for constraints on the sketch geometry.

Note 1 to entry: This definition applies only in the restricted context of ISO 10303-108; the concept of imported geometry may have a wider meaning in other application areas.

3.20.15
incidence
inclusion of one point set in another

Note 1 to entry: In the context of the explicit geometric constraint schema (see ISO 10303-108) the points sets are points, curves and surfaces. An incidence constraint may, for example, require a line to lie on a surface, or a curve to pass through a set of points.

3.20.16
logical constraint
constraint involving no dimensional value

Note 1 to entry: Logical geometric constraints include the assertion of such conditions as parallelism, perpendicularity and tangency. By contrast, dimensional constraints have associated numerical values.

3.20.17
model parameter
parameter
explicitly represented variable associated with some quantity in a model

EXAMPLE The dimensions of a generic block may be represented by model parameters L (length), W (width) and H (height). Individual members of the family of blocks are specified by assigning numerical values to the three parameters independently. Alternatively, relationships may be defined between the model parameters, such as $L = 2W, H = 0.5W$, to restrict the size of the family and define it in terms of the single independent model parameter W .

Note 1 to entry: Assignment of different values to model parameters generates different members of a family of models. Model parameters therefore express design freedom in a model, according to the parameterization scheme imposed by its creator. Limitations may be defined on the allowable ranges of model parameters.

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Note 2 to entry: Distinction must be made between the use of the word *parameter* (3.20.17) in ISO 10303-108, in ISO 10303-11:1994[1)], in ISO 10303-42 and in ISO 10303-50. In ISO 10303-11:1994 a parameter is used for the formal representation of an input to, or output from, a function or procedure defined in an EXPRESS schema. In ISO 10303-42 a parameter is a variable used to identify the position of a point on a curve or a surface, so that the parameter may be thought of as an input to a function whose output is a coordinate value. In ISO 10303-50 a parameter is defined as "a free variable in an expression". In ISO 10303-108 the term "model parameter" is used for a variable that controls dimensions or other gross characteristics of a model, for example the overall shape of a product model. A model parameter may be thought of as an input to a procedure, in this case a procedure that computes one instance of a family of shape models. It is unfortunate that the word "parameter" is in widespread current use for such a variety of purposes. Although at a broad conceptual level the usages within the ISO 10303 series are similar, there are significant differences in such matters as the way the functions or procedures are defined and in the scope of parameters in a model.

3.20.18
overconstrained
defined in terms of more constraints than are needed to determine a constraint solution

Note 1 to entry: In an overconstrained model, one or more of the constraints will be either redundant (i.e. consistent with all the others but not further limiting possible solutions) or inconsistent (i.e. not compatible with the others). An inconsistent constraint system has no solution. A designer may intentionally create redundant constraints in a model, but then care is necessary when editing the model to avoid introducing inconsistency.

3.20.19
point set
set of points in space

Note 1 to entry: The point set concept permits a unified abstract view of shape elements; for example, a line may be regarded as an infinite set of points all satisfying a specified relationship to each other, and curves and surfaces may be viewed in a similar manner.

3.20.20
procedural model
generative model
history-based model
model described in terms of the operation of a sequence of procedures (which may include the solution of constraint sets), as opposed to an explicit or evaluated model which captures the end result of applying those procedures

Note 1 to entry: Although procedural models are outside the scope of ISO 10303-108, they are defined to make an important distinction between two fundamentally different modelling approaches. The present resource is intended to be compatible with ISO 10303-55, which provides representations for the exchange of procedurally defined models.

3.20.21
reference element
model element to which constrained elements are related by a directed constraint

3.20.22
constraint
relationship between two or more elements in a model, which should be maintained in any modifications made subsequent to a model transfer

[1)] Cancelled and replaced by ISO 10303-11:2004.

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3.20.23
sketch
two-dimensional geometric construct used as input to certain three-dimensional modelling operations

Note 1 to entry: A sketch is made up of point and curve elements, which may be related by explicit constraints. Its elements may also be constrained with respect to *imported geometry* (3.20.14), which is invariant within the plane of the sketch. An example of a sketch is provided in ISO 10303-108.

Note 2 to entry: The definition given above is restricted to the context of CAD operations, but the representations provided for sketches in ISO 10303-108 are also suitable for the capture of parameterized drawings.

3.20.24
underconstrained
containing insufficiently many constraints to allow the determination of a specific constraint solution for a model

EXAMPLE The designer may create a design that (although fully constrained to meet functional requirements) leaves certain detail shape elements underconstrained. A manufacturing engineer can then use the remaining degrees of freedom to derive a final evaluated model by incorporating manufacturing constraints to minimize production costs.

Note 1 to entry: Essentially, one or more degrees of freedom still remain in an underconstrained model. This is a natural situation in the early stages of design where some decisions have been made and embodied in constraints, but not others. ISO 10303-108 is designed to allow the exchange of underconstrained models (together with a current result as a representative example). The remaining flexibility may then be used in the receiving system, following a model exchange, to optimize the model for its intended purpose.

3.20.25
undirected constraint
symmetrical constraint
constraint having no reference element, requiring the constrained condition to hold amongst all pairs of members of a set of constrained elements

Note 1 to entry: This term should not be confused with **symmetry_geometric_constraint**, which is a specific type of geometric constraint defined in ISO 10303-108:2005, 7.4.25.

3.20.26
unevaluated model
procedural model, hybrid model containing both explicit and procedural elements, or model containing constraint sets that have not yet been solved

3.20.27
variational
defined in terms of explicitly specified parameters and constraints, allowing variation by change of parameter values, subject to continued satisfaction of imposed constraints

EXAMPLE Consider a configuration of two distinct lines through a given fixed point, both tangent to a circle with a fixed centre, and suppose that a parameter is associated with the radius of the circle. The constraints in this configuration (apart from the invariance of the two fixed points) are

a) the requirement that both lines pass through the given point;

b) the requirement that both lines are tangent to the circle.

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If now the radius of the circle is changed by varying the parameter value, a new configuration should result in which the circle and the two lines are all different from the originals but the constraints continue to be satisfied. This is an example of a variational configuration.

3.20.28
well constrained
defined in terms of a set of constraints that are both necessary and sufficient to allow the determination of a unique constraint solution

Note 1 to entry: In the ideal situation, only one solution satisfies all the constraints. In practice multiple solutions often arise. In an ISO 10303 model transfer using the capabilities defined in this document, the current result may often be used to determine which solutions were chosen by the original designer. For example, in two dimensions the constraint "Line 2 is parallel to Line 1 at distance 3" has two solutions; Line 2 may lie 3 units either to the left or the right of Line 1. The choice of solution actually made in the sending system will be evident from the current model. Another method which can be used to distinguish chosen solutions of multi-solution constraints or constraint sets is the specification of "near-points". These may be used, for example, to indicate the approximate desired location of a point of tangency. Several of the explicit geometric constraints defined in ISO 10303-108:2005, Clause 7 provide for the specification of near-points.

3.20.29
constraint solution
solution of a system of one or more constraint relationships expressed as mathematical equations or inequalities

Note 1 to entry: Geometric constraint systems are often nonlinear, possessing multiple constraint solutions. The user may have to choose one of them to obtain a unique design.

3.20.30
constraint solver
software system for solving sets of equations that are mathematical representations of constraint relationships

Note 1 to entry: Methods used by constraint solvers for determining solutions are outside the scope of ISO 10303-108.

Note 2 to entry: In straightforward cases a constraint set will have the same number of unknowns as equations. Ideally, however, a constraint solver should also handle underconstrained and overconstrained constraint sets having, respectively, more unknowns and less unknowns than the number of equations. The specification of system response in such cases is also outside the scope of ISO 10303-108, but it can include the generation of diagnostic information or of partial solutions as appropriate.

3.20.31
construction geometry
geometry used as an aid in the construction of a shape that is not an element of the shape itself

EXAMPLE This concept may be illustrated by the case of a "spine" curve used in the generation of certain types of swept surfaces. A planar generating curve is defined, together with a reference point lying in its plane. The reference point is then swept along the spine curve, the plane of the generating curve being maintained normal to it. The generating curve sweeps out the desired surface. If the reference point does not lie on the generating curve the spine curve does not lie on the generated surface, and it is therefore classified as construction geometry.

3.20.32
current result
representative member of the family of models defined by a parametric model resulting from the assignment of their current values to all parameters

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Note 1 to entry: In the shape modelling context a current result may be an explicit model such as a wireframe, surface or boundary representation solid model. Alternatively, it may be a procedural or hybrid model in which the values of all parameters are regarded as fixed.

Note 2 to entry: Use of an explicit current result will be essential in the exchange of procedural or history-based models, though that is outside the scope of ISO 10303-108. In that case the current result will be transmitted as a secondary model of the boundary representation or some closely related type, and used to check the accuracy of the result of re-evaluating a transmitted procedural model in the receiving system.

Note 3 to entry: In the context of ISO 10303-108, the current result may indicate which choice of solution was made in the sending system in the case of multiple constraint solutions.

3.20.33
current value
specific value associated with a variable or parameter in a parameterized model, the value associated with the corresponding current result model

3.20.34
defined constraint
constraint whose semantics are assumed to be understood by both the sending and receiving system so that its mathematical details do not need to be transmitted explicitly

Note 1 to entry: Collections of defined constraints may be created for use in specific application areas. The explicit geometric constraints specified in ISO 10303-108:2005, Clause 7 are examples of defined constraints whose application area is shape modelling. They all define constraint relationships descriptively rather than algebraically.

3.21 Terms related to mesh-based computational fluid dynamics

3.21.1
BC patch
subrange of a face of a zone where a given boundary-condition is applied

3.21.2
computational fluid dynamics
CFD
set of knowledge and tools used to generate exact or approximate solutions to the mathematical equations governing the motion of a fluid (gas or liquid)

Note 1 to entry: The underlying knowledge is implemented in computing codes or application programs.

3.21.3
global BC data
boundary-condition data applied globally to a BC patch

EXAMPLE Specifying a uniform total pressure.

3.21.4
local BC data
boundary-condition data applied at each mesh point of a *BC patch* (3.21.1)

EXAMPLE Varying total pressure specified at each vertex of a BC patch.

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3.21.5
rind
one or more layers of cells on the boundary of a mesh

Note 1 to entry: Each cell in a rind has a thickness much less than a typical dimension within the mesh. The topology of the cells in a rind is defined by the topology of the boundary edges or faces of the mesh and by the layers of the rind. The geometry of the cells in a rind is defined by the positions of the vertices on the boundary and by cell properties.

Note 2 to entry: A rind is associated with external flow solution data in a fluid dynamics calculation.

3.22 Terms related to elements for the procedural modelling of solid shapes

3.22.1
track
continuous chain of edges

Note 1 to entry: The ISO 10303-42 entity **path** has a similar definition, but requires all the edges in the chain to be consistently oriented, which is not a requirement for a track.

3.23 Terms related to modelling commands for the exchange of procedurally represented 2D CAD models

3.23.1
sketch command
command for the creation of one or more sketch elements

3.24 Terms related to geometrically bounded surface

3.24.1
geometrically bounded
description for a geometric shape that uses only values in coordinate space to define its boundaries and connectivity, and no topological constructs

3.25 Terms related to non-manifold surface

3.25.1
2-manifold
shape where on any point of its boundary, typically consisting of faces and edges, one may create a sufficiently small sphere so that the interior of the sphere is divided into exactly two regions by this boundary

Note 1 to entry: This definition eliminates self-intersection of surfaces, surface intersections that are not along edges, and edges joining three or more faces.

3.25.2
non-manifold
surface model that uses topological constructs to define its boundaries and connectivity and that includes either at least two **connected_face_sets** sharing one *face* (4.31.12) or more than two faces sharing one *edge* (4.31.8)

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3.26 Terms related to topologically bounded surface

3.26.1
advanced face
face defined on a surface, where this face is a finite portion of the surface that has its boundaries fully defined using topological entities with associated geometric curves, and the surface geometry is required to be either an elementary surface, or a swept surface, or a B-spline surface

3.26.2
sculptured surface
bi-parametric free-form surface

Note 1 to entry: In ISO 10303-511, a sculptured surface is represented by a B-spline surface.

3.26.3
swept surface
surface obtained by translating or revolving a curve

3.26.4
twisted curve
parametric curve in three-dimensional space

Note 1 to entry: In ISO 10303-511, a twisted curve is represented by a B-spline curve.

3.27 Terms related to faceted boundary representation

3.27.1
faceted B-rep shape representation
shape representation made up of one or more manifold faceted B-reps

Note 1 to entry: Each constituent B-rep is required to have planar faces and implicitly defined edges.

3.27.2
manifold faceted B-rep
arcwise connected faceted solid such that, for a very small sphere, centred at any point on the boundary of the solid, the interior of the sphere is divided into precisely two regions

Note 1 to entry: One of these regions is inside the solid, the other is outside.

3.27.3
polyloop
loop on a planar face consisting of linear segments

Note 1 to entry: The edge geometry and topology is implicitly defined by a list of cartesian points.

3.28 Terms related to elementary boundary representation

3.28.1
elementary B-rep shape representation
shape representation made up of one or more manifold solid B-reps

Note 1 to entry: Each constituent B-rep is required to have its faces and edges defined by elementary geometry.

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3.28.2
elementary geometry
geometry composed of **line**s, **polyline**s, **conic**s and **elementary_surface**s

3.29 Terms related to advanced boundary representation

3.29.1
advanced B-rep shape representation
shape representation made up of one or more manifold solid B-reps

Note 1 to entry: Each constituent B-rep is required to have its faces and edges explicitly defined by elementary or free-form geometry.

3.29.2
manifold solid B-rep
arcwise connected solid, represented by its boundary, such that, for a very small sphere, centred at any point on the boundary of the solid, the interior of the sphere is divided into precisely two regions. One of these regions is inside the solid, the other is outside

3.30 Terms related to geometric tolerances

3.30.1
ideal feature
perfect shape feature defined by a type and characteristics

3.30.2
invariance class
group of ideal features defined by the same invariance degree

3.30.3
invariance degree of an ideal feature
displacement(s) of the ideal feature for which the feature is kept identical in the space

3.30.4
skin model
model of the physical interface of the workpiece with its environment

3.30.5
revolute surface feature
surface of invariance class revolute, helical, cylindrical, or spherical

3.31 Terms related to domain model

3.31.1
application domain model
ADM
information model that describes information requirements and constraints of an application and that includes the application of constructs necessary to satisfy those requirements

3.31.2
domain object
atomic element of an application domain model that defines a unique concept of the application domain and contains attributes specifying the data elements of the object

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3.31.3
ARM in SysML
application reference model transformed from EXPRESS to SysML

3.31.4
application reference model object
atomic element of an application reference model that defines a unique concept of the application and contains attributes specifying the data elements of the object

3.31.5
life cycle
evolution of a system, product, service, project or other human-made entity, from conception through retirement

[SOURCE: ISO/IEC/IEEE 15288:2015]

3.31.6
maintenance
process of modifying a system or component after delivery to correct flaws, improve performance or other attributes, or adapt to a changed environment

[SOURCE: ISO/IEC 21827:2008]

3.31.7
operational product
engineered asset providing functional capability for an operator or a service provider

EXAMPLE A train, a process plant, an aircraft, a communication system or a software system are examples of operational products.

3.31.8
product individual
individual
individual with given characteristics specified from the type description

Note 1 to entry: Individuals are typically defined by a specific combination (configuration) of parts and components.

[SOURCE: ISO/TS 21308-4:2007]

3.31.9
product life cycle
time of the entire life cycle of a product from inception, through design and manufacture, to service and disposal

[SOURCE: ISO/TS 22163:2017]

3.31.10
product life cycle context
the data that can be used to identify a point in the lifecycle of a product

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3.31.11
product needing support
set of operational products or related items on which work can be done at a given support opportunity

3.31.12
related item
item needed to operate or support an operational product, which, although not part of the operational product, can itself require support

Note 1 to entry: This can include ground support equipment, tests equipment, transportation containers, storage facilities or tools.

3.31.13
support
product support
set of activities necessary to ensure that an operational system or component fulfils its original requirements and any subsequent modifications to those requirements

EXAMPLE software or hardware maintenance, user training

[SOURCE: ISO/IEC/IEEE 24765:2017]

3.31.14
support driver
requirement for support activity linked to the source from which it arose

EXAMPLE Leakage of starboard isolating valve, linked to the state definition of that fault.

3.31.15
support elements
hardware and software products, together with the necessary human resources, which are essential to enable the system to achieve its required performance from delivery to disposal

EXAMPLE Electrical ground support equipment

Note 1 to entry: Some items, during different phases of the project, can start as part of the system and later, modified as necessary, become support elements.

[SOURCE: ISO 16091:2018]

3.31.16
support opportunity
occasion when work can be done on a product needing support

3.31.17
technical standard
standard used to structure model data

3.31.18
traceability
providing the structured links to, from, or between data

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3.31.19
application domain model object
atomic element of an application domain model that defines a unique concept of the application domain and contains attributes specifying the data elements of the object

4 ISO 10303 resource entity data types

4.1 action_schema

4.1.1
action
<resource: action_schema> *entity data type* (3.2.10) that represents the action *entity* (3.2.9)

Note 1 to entry: An **action** is the identification of the occurrence of an activity and a description of its result.

4.1.2
action_directive
<resource: action_schema> *entity data type* (3.2.10) that represents the action directive *entity* (3.2.9)

Note 1 to entry: An **action_directive** is an authoritative instrument that provides directions to achieve the specified results.

4.1.3
action_method
<resource: action_schema> *entity data type* (3.2.10) that represents the action method *entity* (3.2.9)

Note 1 to entry: An **action_method** is the definition of an activity.

4.1.4
action_method_relationship
<resource: action_schema> *entity data type* (3.2.10) that represents the action method relationship *entity* (3.2.9)

Note 1 to entry: An **action_method_relationship** is a relationship between two instances of the entity data type *action_method* (4.1.3) and provides an identification and description of this relationship.

4.1.5
action_relationship
<resource: action_schema> *entity data type* (3.2.10) that represents the action relationship *entity* (3.2.9)

Note 1 to entry: An **action_relationship** is a relationship between two instances of the entity data type *action* (4.1.1) and provides an identification and description of this relationship.

4.1.6
action_request_solution
<resource: action_schema> *entity data type* (3.2.10) that represents the action request solution *entity* (3.2.9)

Note 1 to entry: An **action_request_solution** is an association between a *versioned_action_request* (4.1.15) and an *action_method* (4.1.3) that is a potential solution for the request.

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4.1.7
action_request_status
<resource: action_schema> *entity data type* (3.2.10) that represents the action request status *entity* (3.2.9)

Note 1 to entry: An **action_request_status** is the association of a status with a *versioned_action_request* (4.1.15).

4.1.8
action_resource
<resource: action_schema> *entity data type* (3.2.10) that represents the action resource *entity* (3.2.9)

Note 1 to entry: An **action_resource** is a thing that is identified as being needed to carry out an action.

4.1.9
action_resource_relationship
<resource: action_schema> *entity data type* (3.2.10) that represents the action resource relationship *entity* (3.2.9)

Note 1 to entry: An **action_resource_relationship** is a relationship between two instances of the entity data type *action_resource* (4.1.8) and provides an identification and description of this relationship.

4.1.10
action_resource_type
<resource: action_schema> *entity data type* (3.2.10) that represents the action resource type *entity* (3.2.9)

Note 1 to entry: An **action_resource_type** is the identification of the kind of *action_resource* (4.1.8) needed to carry out an action.

4.1.11
action_status
<resource: action_schema> *entity data type* (3.2.10) that represents the action status *entity* (3.2.9)

Note 1 to entry: An **action_status** is the association of a status with an *executed_action* (4.1.14).

4.1.12
directed_action
<resource: action_schema> *entity data type* (3.2.10) that is a type of *executed_action* (4.1.14) that represents the directed action *entity* (3.2.9)

Note 1 to entry: A **directed_action** is a type of executed_action that is governed by an *action_directive* (4.1.2).

4.1.13
directed_action_assignment
<resource: action_schema> *entity data type* (3.2.10) that represents the directed action assignment *entity* (3.2.9)

Note 1 to entry: A **directed_action_assignment** is an association of a *directed_action* (4.1.12) with product data.

4.1.14
executed_action
<resource: action_schema> *entity data type* (3.2.10) that is a type of *action* (4.1.1) that represents the executed action *entity* (3.2.9)

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Note 1 to entry: An **executed_action** is a type of action that is completed, partially completed, or just identified.

4.1.15
versioned_action_request
<resource: action_schema> *entity data type* (3.2.10) that represents the versioned action request *entity* (3.2.9)

Note 1 to entry: A **versioned_action_request** is a specification of a desired result.

4.1.16
versioned_action_request_relationship
<resource: action_schema> *entity data type* (3.2.10) that represents the versioned action request relationship *entity* (3.2.9)

Note 1 to entry: A **versioned_action_request_relationship** is a relationship between two *versioned_action_request* (4.1.15) objects.

4.1.17
action_directive_relationship
<resource: action_schema> *entity data type* (3.2.10) that represents the action directive relationship *entity* (3.2.9)

Note 1 to entry: An **action_directive_relationship** is a relationship between two *action_directive* (4.1.2) objects.

4.2 application_context_schema

4.2.1
application_context
<resource: application_context_schema> *entity data type* (3.2.10) that represents the application context *entity* (3.2.9)

Note 1 to entry: An **application_context**, as defined in ISO 10303-1, is a context in which product data is defined and has meaning.

4.2.2
application_context_element
<resource: application_context_schema> *entity data type* (3.2.10) that represents the application context element *entity* (3.2.9)

Note 1 to entry: An **application_context_element** is an aspect of an application context that contains information about the context in which product data is defined.

4.2.3
application_context_relationship
<resource: application_context_schema> *entity data type* (3.2.10) that represents the application context relationship *entity* (3.2.9)

Note 1 to entry: An **application_context_relationship** is a relationship between two instances of *application_context* (4.2.1) and provides a description of their relationship.

4.2.4
application_protocol_definition
<resource: application_context_schema> *entity data type* (3.2.10) that represents the application protocol definition *entity* (3.2.9)

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Note 1 to entry: An **application_protocol_definition** is the identification of an application protocol.

4.2.5
library_context
<resource: application_context_schema> *entity data type* (3.2.10) that is a type of *application_context_element* (4.2.2) that represents the library context *entity* (3.2.9)

Note 1 to entry: A **library_context** is a type of application_context_element that defines a context for elements of a library.

4.2.6
product_concept_context
<resource: application_context_schema> *entity data type* (3.2.10) that is a type of *application_context_element* (4.2.2) that represents the product concept context *entity* (3.2.9)

Note 1 to entry: A **product_concept_context** is a type of application_context_element that defines a context for a *product_concept* (4.24.5) (see ISO 10303-44).

4.2.7
product_context
<resource: application_context_schema> *entity data type* (3.2.10) that is a type of *application_context_element* (4.2.2) that represents the product context *entity* (3.2.9)

Note 1 to entry: A **product_context** is a type of application_context_element that represents life cycle independent information about a *product* (4.18.4).

4.2.8
product_definition_context
<resource: application_context_schema> *entity data type* (3.2.10) that is a type of *application_context_element* (4.2.2) that represents the product definition context *entity* (3.2.9)

Note 1 to entry: A **product_definition_context** is a type of application_context_element that represents information about the stage in the product life cycle for which a *product_definition* (4.18.7) is created or used.

4.2.9
dependent_product_definition_exchange_context
<resource: application_context_schema> *entity data type* (3.2.10) that is a type of *product_definition_context* (4.2.8) that represents the dependent product definition exchange context *entity* (3.2.9)

Note 1 to entry: A **dependent_product_definition_exchange_context** is a type of product_definition_context and is an abstract entity that describes a specific context for exchange.

4.2.10
identification_dependent_product_definition_exchange_context
<resource: application_context_schema> *entity data type* (3.2.10) that is a type of *dependent_product_definition_exchange_context* (4.2.9) that represents the identification dependent product definition exchange context *entity* (3.2.9)

Note 1 to entry: An **identification_dependent_product_definition_exchange_context** is a type of dependent_product_definition_exchange_context that establishes the context of the *product_definition* (4.18.7) exchange.

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4.2.11
language_dependent_product_definition_exchange_context
<resource: application_context_schema> *entity data type* (3.2.10) that is a type of *dependent_product_definition_exchange_context* (4.2.9) that represents the language dependent product definition exchange context *entity* (3.2.9)

Note 1 to entry: A **language_dependent_product_definition_exchange_context** is a type of dependent_product_definition_exchange_context that establishes the specified language of the *product_definition* (4.18.7) exchange context.

4.3 approval_schema

4.3.1
approval
<resource: approval_schema> *entity data type* (3.2.10) that represents the approval *entity* (3.2.9)

Note 1 to entry: An **approval** is a confirmation of the product data for its intended use.

4.3.2
approval_date_time
<resource: approval_schema> *entity data type* (3.2.10) that represents the approval date time *entity* (3.2.9)

Note 1 to entry: An **approval_date_time** is an association between an *approval* (4.3.1) and a date, time, or date and time.

4.3.3
approval_person_organization
<resource: approval_schema> *entity data type* (3.2.10) that represents the approval person organization *entity* (3.2.9)

Note 1 to entry: An **approval_person_organization** is an association between an *approval* (4.3.1) and a given person, organization or person in the context of an organization.

4.3.4
approval_relationship
<resource: approval_schema> *entity data type* (3.2.10) that represents the approval relationship *entity* (3.2.9)

Note 1 to entry: An **approval_relationship** is a relationship between two instances of the entity data type *approval* (4.3.1) with a description of their relationship.

4.3.5
approval_role
<resource: approval_schema> *entity data type* (3.2.10) that represents the approval role *entity* (3.2.9)

Note 1 to entry: An **approval_role** is a definition of a function.

4.3.6
approval_status
<resource: approval_schema> *entity data type* (3.2.10) that represents the approval status *entity* (3.2.9)

Note 1 to entry: An **approval_status** specifies the state of an *approval* (4.3.1).

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4.4 basic_attribute_schema

4.4.1
aggregate_id_attribute
<resource: basic_attribute_schema> *entity data type* (3.2.10) that represents the aggregate id attribute *entity* (3.2.9)

Note 1 to entry: An **aggregate_id_attribute** is used for the case where there is more than one product data element for a specific identifier.

4.4.2
description_attribute
<resource: basic_attribute_schema> *entity data type* (3.2.10) that represents the description attribute *entity* (3.2.9)

Note 1 to entry: A **description_attribute** is the assignment of a descriptive text string to product data.

4.4.3
generic_attribute
<resource: basic_attribute_schema> *entity data type* (3.2.10) that represents the generic attribute *entity* (3.2.9)

Note 1 to entry: A **generic_attribute** is the declaration of a named attribute as a text string to enable it to be associated with product data.

4.4.4
generic_attribute_assignment
<resource: basic_attribute_schema> *entity data type* (3.2.10) that represents the generic attribute assignment *entity* (3.2.9)

Note 1 to entry: A **generic_attribute_assignment** is the assignment of a generic attribute to element of product data.

4.4.5
generic_attribute_list_assignment
<resource: basic_attribute_schema> *entity data type* (3.2.10) that represents the generic attribute list assignment *entity* (3.2.9)

Note 1 to entry: A **generic_attribute_list_assignment** is the assignment of a named list of generic attributes to element of product data.

4.4.6
id_attribute
<resource: basic_attribute_schema> *entity data type* (3.2.10) that represents the id attribute *entity* (3.2.9)

Note 1 to entry: An **id_attribute** is the assignment of an identifier to product data.

4.4.7
name_attribute
<resource: basic_attribute_schema> *entity data type* (3.2.10) that represents the name attribute *entity* (3.2.9)

Note 1 to entry: A **name_attribute** is the assignment of a label by which the product data is known.

4.4.8

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object_role
<resource: basic_attribute_schema> *entity data type* (3.2.10) that represents the object role *entity* (3.2.9)

Note 1 to entry: An **object_role** is a specification of a role for the association of management type data with other aspects of product data and a description of that role.

4.4.9
role_association
<resource: basic_attribute_schema> *entity data type* (3.2.10) that represents the role association *entity* (3.2.9)

Note 1 to entry: A **role_association** is the assignment of an *object_role* (4.4.8) to an association of management type data with other aspects of product data.

4.5 certification_schema

4.5.1
certification
<resource: certification_schema> *entity data type* (3.2.10) that represents the certification *entity* (3.2.9)

Note 1 to entry: A **certification** is an assertion of facts.

4.5.2
certification_type
<resource: certification_schema> *entity data type* (3.2.10) that represents the certification type *entity* (3.2.9)

Note 1 to entry: A **certification_type** is the kind of *certification* (4.5.1) granted.

4.6 contract_schema

4.6.1
contract
<resource: contract_schema> *entity data type* (3.2.10) that represents the contract *entity* (3.2.9)

Note 1 to entry: A **contract** is a binding agreement.

4.6.2
contract_relationship
<resource: contract_schema> *entity data type* (3.2.10) that represents the contract relationship *entity* (3.2.9)

Note 1 to entry: A **contract_relationship** is a relationship between two instances of the entity data type *contract* (4.6.1).

4.6.3
contract_type
<resource: contract_schema> *entity data type* (3.2.10) that represents the contract type *entity* (3.2.9)

Note 1 to entry: A **contract_type** is the kind of information that an instance of *contract* (4.6.1) conveys.

4.7 date_time_schema

4.7.1

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calendar_date
<resource: date_time_schema> *entity data type* (3.2.10) that is a type of *date* (4.7.3) that represents the calendar date *entity* (3.2.9)

Note 1 to entry: A **calendar_date** is a type of date defined as a day in a month of a year as defined in ISO 8601.

4.7.2
coordinated_universal_time_offset
<resource: date_time_schema> *entity data type* (3.2.10) that represents the coordinated universal time offset *entity* (3.2.9)

Note 1 to entry: A **coordinated_universal_time_offset** is the oriented offset (specified in hours and possibly minutes) from the coordinated universal time.

4.7.3
date
<resource: date_time_schema> *entity data type* (3.2.10) that represents the date *entity* (3.2.9)

Note 1 to entry: A **date** is the identification of a day or week or month in a year.

4.7.4
date_and_time
<resource: date_time_schema> *entity data type* (3.2.10) that represents the date and time *entity* (3.2.9)

Note 1 to entry: A **date_and_time** is a moment of time on a particular day.

4.7.5
date_role
<resource: date_time_schema> *entity data type* (3.2.10) that represents the date role *entity* (3.2.9)

Note 1 to entry: A **date_role** is a role for a *date* (4.7.3) A **date_role** is an incompletely modeled concept and requires population related entity data types to form a complete **date_role**.

4.7.6
date_time_role
<resource: date_time_schema> *entity data type* (3.2.10) that represents the date time role *entity* (3.2.9)

Note 1 to entry: A **date_time_role** a role for for a moment of time on a particular day.

4.7.7
event_occurrence
<resource: date_time_schema> *entity data type* (3.2.10) that represents the event occurrence *entity* (3.2.9)

Note 1 to entry: An **event_occurrence** is the fact of a transition between states at some point in time.

4.7.8
event_occurrence_context_role
<resource: date_time_schema> *entity data type* (3.2.10) that represents the event occurrence context role *entity* (3.2.9)

Note 1 to entry: An **event_occurrence_context_role** establishes a context for an *event_occurrence_assignment* (4.15.23).

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4.7.9
event_occurrence_relationship
<resource: date_time_schema> *entity data type* (3.2.10) that represents the event occurrence relationship *entity* (3.2.9)

Note 1 to entry: An **event_occurrence_relationship** is a relationship between two *event_occurrence* (4.7.7) instances with a description of their relationship.

4.7.10
event_occurrence_role
<resource: date_time_schema> *entity data type* (3.2.10) that represents the event occurrence role *entity* (3.2.9)

Note 1 to entry: An **event_occurrence_role** establishes a role for an **event_occurrence**.

4.7.11
local_time
<resource: date_time_schema> *entity data type* (3.2.10) that represents the local time *entity* (3.2.9)

Note 1 to entry: A **local_time** is an instance of time represented on a 24-hour clock by hour, minute, and second.

4.7.12
ordinal_date
<resource: date_time_schema> *entity data type* (3.2.10) that is a type of *date* (4.7.3) that represents the ordinal date *entity* (3.2.9)

Note 1 to entry: An **ordinal_date** is a type of date defined as a day of a year.

4.7.13
relative_event_occurrence
<resource: date_time_schema> *entity data type* (3.2.10) that is a type of *event_occurrence* (4.7.7) that represents the relative event occurrence *entity* (3.2.9)

Note 1 to entry: A **relative_event_occurrence** is a type of event_occurrence that takes place with an offset to an event_occurrence.

4.7.14
time_interval
<resource: date_time_schema> *entity data type* (3.2.10) that represents the time interval *entity* (3.2.9)

Note 1 to entry: A **time_interval** is the identification of an interval of time.

4.7.15
time_interval_relationship
<resource: date_time_schema> *entity data type* (3.2.10) that represents the time interval relationship *entity* (3.2.9)

Note 1 to entry: A **time_interval_relationship** is a relationship between two *time_interval* (4.7.14) instances with a description of their relationship.

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4.7.16
time_interval_role
<resource: date_time_schema> *entity data type* (3.2.10) that represents the time interval role *entity* (3.2.9)

Note 1 to entry: A **time_interval_role** is a role that may be assigned to a **time_interval** and includes a description of that role.

4.7.17
time_interval_with_bounds
<resource: date_time_schema> *entity data type* (3.2.10) that is a type of *time_interval* (4.7.14) that represents the time interval with bounds *entity* (3.2.9)

4.7.18
time_role
<resource: date_time_schema> *entity data type* (3.2.10) that represents the time role *entity* (3.2.9)

Note 1 to entry: A **time_role** is a definition of a role for a **local_time**.

4.7.19
week_of_year_and_day_date
<resource: date_time_schema> *entity data type* (3.2.10) that is a type of *date* (4.7.3) that represents the week of year and day date *entity* (3.2.9)

Note 1 to entry: A **week_of_year_and_day_date** is a type of date defined by identifying the week within a year and the day within that particular week.

4.7.20
year_month
<resource: date_time_schema> *entity data type* (3.2.10) that is a type of *date* (4.7.3) that represents the year month *entity* (3.2.9)

Note 1 to entry: A **year_month** is a type of date defined as a month of a year.

4.8 document_schema

4.8.1
document
<resource: document_schema> *entity data type* (3.2.10) that represents the document *entity* (3.2.9)

Note 1 to entry: A **document** is an identification of a collection of information.

4.8.2
document_product_association
<resource: document_schema> *entity data type* (3.2.10) that represents the document product association *entity* (3.2.9)

Note 1 to entry: A **document_product_association** is an association between a *document* (4.8.1) and a *product* (4.18.4), between a document and a *product_definition_formation* (4.18.11), or between a document and a *product_definition* (4.18.7).

4.8.3
document_relationship
<resource: document_schema> *entity data type* (3.2.10) that represents the document relationship *entity* (3.2.9)

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Note 1 to entry: A **document_relationship** is a relationship between two instances of the entity data type *document* (4.8.1) and provides a description of their relationship.

4.8.4
document_representation_type
<resource: document_schema> *entity data type* (3.2.10) that represents the document representation type *entity* (3.2.9)

Note 1 to entry: A **document_representation_type** is a specification of the way a *document* (4.8.1) is represented.

4.8.5
document_type
<resource: document_schema> *entity data type* (3.2.10) that represents the document type *entity* (3.2.9)

Note 1 to entry: A **document_type** is the kind of data that a formal standard or document may provide information about.

4.8.6
document_usage_constraint
<resource: document_schema> *entity data type* (3.2.10) that represents the document usage constraint *entity* (3.2.9)

Note 1 to entry: A **document_usage_constraint** is an identification of a specific subject area or aspect from within a document and gives the relevant information or text that applies.

4.8.7
document_with_class
<resource: document_schema> *entity data type* (3.2.10) that is a type of *document* (4.8.1) that represents the document with class *entity* (3.2.9)

Note 1 to entry: A **document_with_class** is a type of document for which a classification is specified.

4.9 effectivity_schema

4.9.1
condition
<resource: effectivity_schema> *entity data type* (3.2.10) that is a type of *action_method* (4.1.3) that represents the condition *entity* (3.2.9)

Note 1 to entry: A **condition** is a type of action_method that must be fulfilled before a statement or relationship becomes valid.

4.9.2
conditional_effectivity
<resource: effectivity_schema> *entity data type* (3.2.10) that is a type of *condition* (4.9.1) and *effectivity* (4.9.5) that represents the conditional effectivity *entity* (3.2.9)

Note 1 to entry: A **conditional_effectivity** is a type of condition or effectivity for which the domain of applicability is defined by an explicit condition.

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4.9.3
conditional_configuration
<resource: effectivity_schema> *entity data type* (3.2.10) that is a type of *conditional_effectivity* (4.9.2) that represents the conditional configuration *entity* (3.2.9)

Note 1 to entry: A **conditional_configuration** is a type of conditional_effectivity and represents an association of a *product_concept_feature_association* (4.24.7) object with a design or process in order to define a valid usage of it in the context of a certain *product_class* (5.97.6).

4.9.4
dated_effectivity
<resource: effectivity_schema> *entity data type* (3.2.10) that is a type of *effectivity* (4.9.5) that represents the dated effectivity *entity* (3.2.9)

Note 1 to entry: A **dated_effectivity** is a type of effectivity for which the domain of applicability is defined as a possibly open-ended interval of time.

4.9.5
effectivity
<resource: effectivity_schema> *entity data type* (3.2.10) that represents the effectivity *entity* (3.2.9)

Note 1 to entry: An **effectivity** is the identification of a domain of applicability for product data.

4.9.6
effectivity_relationship
<resource: effectivity_schema> *entity data type* (3.2.10) that represents the effectivity relationship *entity* (3.2.9)

Note 1 to entry: An **effectivity_relationship** is a relationship between two instances of the entity data type *effectivity* (4.9.5) with a description of their relationship.

4.9.7
lot_effectivity
<resource: effectivity_schema> *entity data type* (3.2.10) that is a type of *effectivity* (4.9.5) that represents the lot effectivity *entity* (3.2.9)

Note 1 to entry: A **lot_effectivity** is a type of effectivity for which the domain of applicability is defined as a given batch of items.

4.9.8
serial_numbered_effectivity
<resource: effectivity_schema> *entity data type* (3.2.10) that is a type of *effectivity* (4.9.5) that represents the serial numbered effectivity *entity* (3.2.9)

Note 1 to entry: A **serial_numbered_effectivity** is a type of effectivity for which the domain of applicability is defined as a possibly open-ended interval of serial numbers.

4.9.9
time_interval_based_effectivity
<resource: effectivity_schema> *entity data type* (3.2.10) that is a type of *effectivity* (4.9.5) that represents the time interval based effectivity *entity* (3.2.9)

Note 1 to entry: A **time_interval_based_effectivity** is a type of effectivity for which the domain of applicability is defined as a *time_interval* (4.7.14).

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4.10 experience_schema

4.10.1
experience
<resource: experience_schema> *entity data type* (3.2.10) that represents the experience *entity* (3.2.9)

Note 1 to entry: An **experience** is an episode of practice, undertaken by a person or organization, that contributes to the accumulation of knowledge or a skill.

4.10.2
experience_relationship
<resource: experience_schema> *entity data type* (3.2.10) that represents the experience relationship *entity* (3.2.9)

Note 1 to entry: An **experience_relationship** is a relationship between two instances of the *experience* (4.10.1) entity data type and provides for the identification, naming, and description of that relationship.

4.10.3
experience_type
<resource: experience_schema> *entity data type* (3.2.10) that represents the experience type *entity* (3.2.9)

Note 1 to entry: An **experience_type** is a category of experience.

4.10.4
experience_type_relationship
<resource: experience_schema> *entity data type* (3.2.10) that represents the experience type relationship *entity* (3.2.9)

Note 1 to entry: An **experience_type_relationship** is a relationship between two instances of the *experience_type* (4.10.3) entity data type and provides for the identification, naming, and description of that relationship.

4.11 external_reference_schema

4.11.1
external_source
<resource: external_reference_schema> *entity data type* (3.2.10) that represents the external source *entity* (3.2.9)

Note 1 to entry: An **external_source** is the identification of a source of product data that is not the EXPRESS schema to which the exchange conforms.

4.11.2
external_source_relationship
<resource: external_reference_schema> *entity data type* (3.2.10) that represents the external source relationship *entity* (3.2.9)

Note 1 to entry: An **external_source_relationship** is a relationship between two instances of the entity data type *external_source* (4.11.1) with a description of their relationship.

4.11.3
externally_defined_item
<resource: external_reference_schema> *entity data type* (3.2.10) that represents the externally defined item *entity* (3.2.9)

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Note 1 to entry: An **externally_defined_item** is the identification of information that is not explicitly represented in a given exchange and that is not defined in the annotated EXPRESS schema to which the exchange conforms.

4.11.4
externally_defined_item_relationship
<resource: external_reference_schema> *entity data type* (3.2.10) that represents the externally defined item relationship *entity* (3.2.9)

Note 1 to entry: An **externally_defined_item_relationship** is a relationship between two instances of the entity data type *externally_defined_item* (4.11.3) with an identification and description of their relationship.

4.11.5
externally_defined_item_with_multiple_references
<resource: external_reference_schema> *entity data type* (3.2.10) that is a type of *externally_defined_item* (4.11.3) that represents the externally defined item with multiple references *entity* (3.2.9)

Note 1 to entry: An **externally_defined_item_with_multiple_references** is a type of externally_defined_item that allows to define additional references providing information on the context and location of the target item within the source.

4.11.6
pre_defined_item
<resource: external_reference_schema> *entity data type* (3.2.10) that represents the pre defined item *entity* (3.2.9)

Note 1 to entry: A **pre_defined_item** is the identification of information that is not explicitly represented in a given exchange but that is defined in the annotated EXPRESS schema to which the exchange conforms.

4.12 group_schema

4.12.1
group
<resource: group_schema> *entity data type* (3.2.10) that represents the group *entity* (3.2.9)

Note 1 to entry: A **group** is an identification of a collection of elements.

4.12.2
group_relationship
<resource: group_schema> *entity data type* (3.2.10) that represents the group relationship *entity* (3.2.9)

Note 1 to entry: A **group_relationship** is a relationship between two instances of the entity data type *group* (4.12.1) with a description of their relationship.

4.13 language_schema

4.13.1
language
<resource: language_schema> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the language *entity* (3.2.9)

Note 1 to entry: A **language** is a type of group that is a specification of the language in which an information is given.

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4.14 location_schema

4.14.1
location
<resource: location_schema> *entity data type* (3.2.10) that represents the location *entity* (3.2.9)

Note 1 to entry: A **location** is a place or position in space at which something can take place or exist.

4.14.2
location_relationship
<resource: location_schema> *entity data type* (3.2.10) that represents the location relationship *entity* (3.2.9)

Note 1 to entry: A **location_relationship** is a relationship between two instances of the *location* (4.14.1) entity data type and provides for the identification, naming, and description of that relationship.

4.15 management_resources_schema

4.15.1
action_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the action assignment *entity* (3.2.9)

Note 1 to entry: An **action_assignment** is an association of an *action* (4.1.1) with product data.

4.15.2
action_method_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the action method assignment *entity* (3.2.9)

Note 1 to entry: An **action_method_assignment** is an association of an *action_method* (4.1.3) with product data.

4.15.3
action_method_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the action method role *entity* (3.2.9)

Note 1 to entry: An **action_method_role** is a definition of a role for an *action_method* (4.1.3) and a description of that role.

4.15.4
action_request_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the action request assignment *entity* (3.2.9)

Note 1 to entry: An **action_request_assignment** is an association of a *versioned_action_request* (4.1.15) with product data.

4.15.5
approval_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the approval assignment *entity* (3.2.9)

Note 1 to entry: An **approval_assignment** is an association of an *approval* (4.3.1) with product data.

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4.15.6
assignment_object_relationship
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the assignment object relationship *entity* (3.2.9)

4.15.7
attribute_classification_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the attribute classification assignment *entity* (3.2.9)

Note 1 to entry: An **attribute_classification_assignment** is an association of a class to an attribute of an existing entity in order to characterize it further.

4.15.8
attribute_value_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the attribute value assignment *entity* (3.2.9)

Note 1 to entry: An **attribute_value_assignment** is an extendion of the cardinality of a string valued attribute in an entity data type by one.

4.15.9
attribute_value_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the attribute value role *entity* (3.2.9)

Note 1 to entry: An **attribute_value_role** is a description of the purpose of an additional value assigned to an attribute of an entity.

4.15.10
certification_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the certification assignment *entity* (3.2.9)

Note 1 to entry: A **certification_assignment** is an association of a *certification* (4.5.1) with product data.

4.15.11
classification_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the classification assignment *entity* (3.2.9)

Note 1 to entry: A **classification_assignment** is an association of a class to product data.

4.15.12
classification_assignment_relationship
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the classification assignment relationship *entity* (3.2.9)

Note 1 to entry: A **classification_assignment_relationship** is a relationship between two *classification_assignment* (4.15.11) objects.

4.15.13
classification_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the classification role *entity* (3.2.9)

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Note 1 to entry: A **classification_role** is a specified purpose for including product data in an exchange and a description of that purpose.

4.15.14
contract_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the contract assignment *entity* (3.2.9)

Note 1 to entry: A **contract_assignment** is an association of a *contract* (4.6.1) with product data.

4.15.15
date_and_time_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the date and time assignment *entity* (3.2.9)

Note 1 to entry: A **date_and_time_assignment** is an association of a *date_and_time* (4.7.4) with product data.

4.15.16
date_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the date assignment *entity* (3.2.9)

Note 1 to entry: A **date_assignment** is an association of a *date* (4.7.3) with product data.

4.15.17
document_reference
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the document reference *entity* (3.2.9)

Note 1 to entry: A **document_reference** is an association of a *document* (4.8.1) with product data.

4.15.18
document_usage_constraint_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the document usage constraint assignment *entity* (3.2.9)

Note 1 to entry: A **document_usage_constraint_assignment** is an association of a *document_usage_constraint* (4.8.6) with product data.

4.15.19
document_usage_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the document usage role *entity* (3.2.9)

Note 1 to entry: A **document_usage_role** is a specified purpose for including product data in an exchange and a description of that purpose.

4.15.20
effectivity_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the effectivity assignment *entity* (3.2.9)

Note 1 to entry: An **effectivity_assignment** is an association of an *effectivity* (4.9.5) with product data.

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4.15.21
effectivity_context_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the effectivity context assignment *entity* (3.2.9)

Note 1 to entry: An **effectivity_context_assignment** is an assignment of a purpose to an *effectivity_assignment* (4.15.20).

4.15.22
effectivity_context_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the effectivity context role *entity* (3.2.9)

Note 1 to entry: An **effectivity_context_role** is a specified purpose and the product data that is the context for an *effectivity_context_assignment* (4.15.21) and a description of that purpose.

4.15.23
event_occurrence_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the event occurrence assignment *entity* (3.2.9)

Note 1 to entry: An **event_occurrence_assignment** is an association of an *event_occurrence* (4.7.7) with product data.

4.15.24
event_occurrence_context_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the event occurrence context assignment *entity* (3.2.9)

Note 1 to entry: An **event_occurrence_context_assignment** is an identification of a context for the association of an *event_occurrence_assignment* (4.15.23) with product data.

4.15.25
experience_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the experience assignment *entity* (3.2.9)

Note 1 to entry: An **experience_assignment** is a mechanism for associating an *experience* (4.10.1) with product data.

4.15.26
experience_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the experience role *entity* (3.2.9)

Note 1 to entry: An **experience_role** is a specified purpose for an *experience* (4.10.1) and the description of the purpose.

4.15.27
experience_type_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the experience type assignment *entity* (3.2.9)

Note 1 to entry: An **experience_type_assignment** is a mechanism for associating an *experience_type* (4.10.3) with product data.

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4.15.28
experience_type_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the experience type role *entity* (3.2.9)

Note 1 to entry: An **experience_type_role** is a specified purpose for an *experience_type* (4.10.3) and a description of the purpose.

4.15.29
external_identification_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that is a type of *identification_assignment* (4.15.33) that represents the external identification assignment *entity* (3.2.9)

Note 1 to entry: An **external_identification_assignment** is a type of identification_assignment that is defined in the context of an *external_source* (4.11.1).

4.15.30
external_identification_assignment_relationship
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the external identification assignment relationship *entity* (3.2.9)

Note 1 to entry: An **external_identification_assignment_relationship** is a relationship between two *external_identification_assignment* (4.15.29) objects.

4.15.31
external_referent_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the external referent assignment *entity* (3.2.9)

Note 1 to entry: An **external_referent_assignment** is an identification of product data referenced in outside sources.

4.15.32
group_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the group assignment *entity* (3.2.9)

Note 1 to entry: A **group_assignment** is an association of a *group* (4.12.1) with product data.

4.15.33
identification_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the identification assignment *entity* (3.2.9)

Note 1 to entry: An **identification_assignment** is an association of an identification with product data.

4.15.34
identification_assignment_relationship
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the identification assignment relationship *entity* (3.2.9)

Note 1 to entry: An **identification_assignment_relationship** is a relationship between two instances of the entity data type *identification_assignment* (4.15.33) and provides an identification and description of their relationship.

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4.15.35
identification_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the identification role *entity* (3.2.9)

Note 1 to entry: An **identification_role** is a purpose for identifying an item of product data and includes identification and description of the purpose.

4.15.36
library_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that is a type of *external_referent_assignment* (4.15.31) that represents the library assignment *entity* (3.2.9)

Note 1 to entry: A **library_assignment** is a type of external_referent_assignment that assigns a *library_context* (4.2.5) to product data.

4.15.37
location_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the location assignment *entity* (3.2.9)

Note 1 to entry: A **location_assignment** is a mechanism for associating a *location* (4.14.1) with product data.

4.15.38
location_representation_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the location representation assignment *entity* (3.2.9)

Note 1 to entry: A **location_representation_assignment** is a mechanism for associating a *location* (4.14.1) with its representation.

4.15.39
location_representation_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the location representation role *entity* (3.2.9)

Note 1 to entry: A **location_representation_role** is a purpose for a representation of a location and provides identification and description of the purpose.

4.15.40
location_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the location role *entity* (3.2.9)

Note 1 to entry: A **location_role** is the purpose for a location in the context of product data an provides identification and description of the purpose.

4.15.41
name_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the name assignment *entity* (3.2.9)

Note 1 to entry: A **name_assignment** is an identification of a name used to designate product data.

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4.15.42
organization_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the organization assignment *entity* (3.2.9)

Note 1 to entry: An **organization_assignment** is an association of an *organization* (4.17.2) with product data.

4.15.43
organization_type_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the organization type assignment *entity* (3.2.9)

Note 1 to entry: An **organization_type_assignment** is a mechanism for associating an *organization_type* (4.17.5) with product data.

4.15.44
organization_type_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the organization type role *entity* (3.2.9)

Note 1 to entry: An **organization_type_role** is a purpose for an **organization_type** and provides identification and description of the purpose.

4.15.45
organizational_project_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the organizational project assignment *entity* (3.2.9)

Note 1 to entry: An **organizational_project_assignment** is an association of an *organizational_project* (4.17.8) with product data.

4.15.46
organizational_project_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the organizational project role *entity* (3.2.9)

Note 1 to entry: An **organizational_project_role** is a purpose for an **organizational_project** and provides identification and description of the purpose.

4.15.47
person_and_organization_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the person and organization assignment *entity* (3.2.9)

Note 1 to entry: A **person_and_organization_assignment** is an association of a *person_and_organization* (4.17.11) with product data.

4.15.48
person_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the person assignment *entity* (3.2.9)

Note 1 to entry: A **person_assignment** is the association of a *person* (4.17.10) with product data.

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4.15.49
person_type_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the person type assignment *entity* (3.2.9)

Note 1 to entry: A **person_type_assignment** is a mechanism for associating a *person_type* (4.17.14) with product data.

4.15.50
person_type_definition_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the person type definition assignment *entity* (3.2.9)

Note 1 to entry: A **person_type_definition_assignment** is a mechanism for associating a *person_type_definition* (4.17.15) with product data.

4.15.51
person_type_definition_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the person type definition role *entity* (3.2.9)

Note 1 to entry: A **person_type_definition_role** is a purpose for a **person_type_definition** and provides identification and description of the purpose.

4.15.52
person_type_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the person type role *entity* (3.2.9)

Note 1 to entry: A **person_type_role** is a purpose for a **person_type** and provides identification and description of the purpose.

4.15.53
position_in_organization_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the position in organization assignment *entity* (3.2.9)

Note 1 to entry: A **position_in_organization_assignment** is a mechanism for associating a *position_in_organization* (4.17.19) with product data.

4.15.54
position_in_organization_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the position in organization role *entity* (3.2.9)

Note 1 to entry: A **position_in_organization_role** is a purpose for a **position_in_organization** and provides identification and description of the purpose

4.15.55
position_in_organization_type_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the position in organization type assignment *entity* (3.2.9)

Note 1 to entry: A **position_in_organization_type_assignment** is a mechanism for associating a *position_in_organization_type* (4.17.21) with product data.

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4.15.56
position_in_organization_type_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the position in organization type role *entity* (3.2.9)

Note 1 to entry: A **position_in_organization_type_role** is a purpose for a **position_in_organization_type** and provides identification and description of the purpose.

4.15.57
qualification_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the qualification assignment *entity* (3.2.9)

Note 1 to entry: A **qualification_assignment** is a mechanism for associating a *qualification* (4.21.1) with product data.

4.15.58
qualification_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the qualification role *entity* (3.2.9)

Note 1 to entry: A **qualification_role** is a purpose for a qualification and provides identification and description of the purpose.

4.15.59
qualification_type_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the qualification type assignment *entity* (3.2.9)

Note 1 to entry: A **qualification_type_assignment** is a mechanism for associating a *qualification_type* (4.21.3) with product data.

4.15.60
qualification_type_role
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the qualification type role *entity* (3.2.9)

Note 1 to entry: A **qualification_type_role** is a purpose for a **qualification_type** and provides identification and description of the purpose.

4.15.61
security_classification_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the security classification assignment *entity* (3.2.9)

Note 1 to entry: A **security_classification_assignment** is an association of a *security_classification* (4.22.1) with product data.

4.15.62
time_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the time assignment *entity* (3.2.9)

Note 1 to entry: A **time_assignment** is an association of a *local_time* (4.7.11) with product data.

4.15.63

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time_interval_assignment
<resource: management_resources_schema> *entity data type* (3.2.10) that represents the time interval assignment *entity* (3.2.9)

Note 1 to entry: A **time_interval_assignment** is an association of a *time_interval* (4.7.14) with product data.

4.16 measure_schema

4.16.1
absorbed_dose_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the absorbed dose measure with unit *entity* (3.2.9)

Note 1 to entry: An **absorbed_dose_measure_with_unit** is a type of measure_with_unit in which the physical quantity is an absorbed dose of radiation as defined in ISO 31.

4.16.2
absorbed_dose_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the absorbed dose unit *entity* (3.2.9)

Note 1 to entry: An **absorbed_dose_unit** is a type of derived_unit in which the absorbed dose is expressed.

4.16.3
si_absorbed_dose_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *absorbed_dose_unit* (4.16.2) and *si_unit* (4.16.83) that represents the si absorbed dose unit *entity* (3.2.9)

Note 1 to entry: A **si_absorbed_dose_unit** is a type of absorbed_dose_unit and a type of si_unit in which the absorbed dose is expressed in SI units.

4.16.4
acceleration_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the acceleration measure with unit *entity* (3.2.9)

Note 1 to entry: An **acceleration_measure_with_unit** is a type of measure_with_unit in which the physical quantity is an acceleration.

4.16.5
acceleration_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the acceleration unit *entity* (3.2.9)

Note 1 to entry: An **acceleration_unit** is a type of derived_unit in which the acceleration of an object is expressed.

4.16.6
radioactivity_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the radioactivity measure with unit *entity* (3.2.9)

Note 1 to entry: A **radioactivity_measure_with_unit** is a type of measure_with_unit in which the physical quantity is radioactivity as defined in ISO 31.

4.16.7

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radioactivity_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the radioactivity unit *entity* (3.2.9)

Note 1 to entry: A **radioactivity_unit** is a type of derived_unit in which the radioactivity is expressed.

4.16.8
si_radioactivity_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *radioactivity_unit* (4.16.7) and *si_unit* (4.16.83) that represents the si radioactivity unit *entity* (3.2.9)

Note 1 to entry: A **si_radioactivity_unit** is a type of radioactivity_unit and a type of si_unit in which the radioactivity is expressed in SI units.

4.16.9
amount_of_substance_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the amount of substance measure with unit *entity* (3.2.9)

4.16.10
amount_of_substance_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *named_unit* (4.16.68) that represents the amount of substance unit *entity* (3.2.9)

Note 1 to entry: An **amount_of_substance_unit** is a type of named_unit in which the number of elementary entities of a substance as compared to the number of atoms in 0.012 kilograms of carbon-12 is expressed.

4.16.11
area_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the area measure with unit *entity* (3.2.9)

Note 1 to entry: An **area_measure_with_unit** is a type of measure_with_unit in which the physical quantity is an area as defined in ISO 31.

4.16.12
area_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the area unit *entity* (3.2.9)

Note 1 to entry: An **area_unit** is a type of derived_unit used to measure the extent of a surface.

4.16.13
celsius_temperature_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the celsius temperature measure with unit *entity* (3.2.9)

Note 1 to entry: A **celsius_temperature_measure_with_unit** is a type of measure_with_unit in which the physical quantity is a Celsius temperature as defined in ISO 31-4.

4.16.14
context_dependent_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *named_unit* (4.16.68) that represents the context dependent unit *entity* (3.2.9)

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Note 1 to entry: A **context_dependent_unit** is a type of named_unit that is not related to the system of units defined in this document.

4.16.15
conversion_based_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *named_unit* (4.16.68) that represents the conversion based unit *entity* (3.2.9)

Note 1 to entry: A **conversion_based_unit** is a type of named_unit that defines a unit on the basis of a *measure_with_unit* (4.16.67).

4.16.16
derived_unit
<resource: measure_schema> *entity data type* (3.2.10) that represents the derived unit *entity* (3.2.9)

Note 1 to entry: A **derived_unit** is an expression of units.

4.16.17
derived_unit_element
<resource: measure_schema> *entity data type* (3.2.10) that represents the derived unit element *entity* (3.2.9)

Note 1 to entry: A **derived_unit_element** is the association of a *named_unit* (4.16.68) with an exponent.

4.16.18
dimensional_exponents
<resource: measure_schema> *entity data type* (3.2.10) that represents the dimensional exponents *entity* (3.2.9)

Note 1 to entry: A **dimensional_exponents** is a definition of the powers of the dimensions of the seven base quantities.

4.16.19
capacitance_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the capacitance unit *entity* (3.2.9)

Note 1 to entry: A **capacitance_unit** is a type of derived_unit in which the capacitance is expressed.

4.16.20
capacitance_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the capacitance measure with unit *entity* (3.2.9)

Note 1 to entry: A **capacitance_measure_with_unit** is a type of measure_with_unit in which the physical quantity is an electric capacitance as defined in ISO 31.

4.16.21
si_capacitance_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *capacitance_unit* (4.16.19) and *si_unit* (4.16.83) that represents the si capacitance unit *entity* (3.2.9)

Note 1 to entry: A **si_capacitance_unit** is a type of capacitance_unit and a type of si_unit in which the electric capacitance is expressed in SI units.

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4.16.22
dose_equivalent_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the dose equivalent measure with unit *entity* (3.2.9)

Note 1 to entry: A **dose_equivalent_measure_with_unit** is a type of measure_with_unit in which the physical quantity is a radiation dose equivalent as defined in ISO 31.

4.16.23
dose_equivalent_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the dose equivalent unit *entity* (3.2.9)

Note 1 to entry: A **dose_equivalent_unit** is a type of derived_unit in which the radiation dose equivalent is expressed.

4.16.24
si_dose_equivalent_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *dose_equivalent_unit* (4.16.23) and *si_unit* (4.16.83) that represents the si dose equivalent unit *entity* (3.2.9)

Note 1 to entry: A **si_dose_equivalent_unit** is a type of dose_equivalent_unit and a type of si_unit in which the radiation dose equivalent is expressed in SI units.

4.16.25
electric_charge_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the electric charge unit *entity* (3.2.9)

Note 1 to entry: An **electric_charge_unit** is a type of derived_unit in which the electric charge is expressed.

4.16.26
electric_charge_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the electric charge measure with unit *entity* (3.2.9)

Note 1 to entry: An **electric_charge_measure_with_unit** is a type of measure_with_unit in which the physical quantity is an electric charge as defined in ISO 31.

4.16.27
si_electric_charge_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *electric_charge_unit* (4.16.25) and *si_unit* (4.16.83) that represents the si electric charge unit *entity* (3.2.9)

Note 1 to entry: A **si_electric_charge_unit** is a type of electric_charge_unit and a type of si_unit in which the electric charge is expressed in SI units.

4.16.28
electric_current_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the electric current measure with unit *entity* (3.2.9)

Note 1 to entry: An **electric_current_measure_with_unit** is a type of measure_with_unit in which the physical quantity is an electric current as defined in ISO 31.

4.16.29

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electric_current_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *named_unit* (4.16.68) that represents the electric current unit *entity* (3.2.9)

Note 1 to entry: An **electric_current_unit** is a type of named_unit in which the movement of electrically charged particles is expressed.

4.16.30
conductance_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the conductance unit *entity* (3.2.9)

Note 1 to entry: A **conductance_unit** is a type of derived_unit in which the electrical conductance is expressed.

4.16.31
conductance_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the conductance measure with unit *entity* (3.2.9)

Note 1 to entry: A **conductance_measure_with_unit** is a type of measure_with_unit in which the physical quantity is a conductance as defined in ISO 31.

4.16.32
si_conductance_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *conductance_unit* (4.16.30) and *si_unit* (4.16.83) that represents the si conductance unit *entity* (3.2.9)

Note 1 to entry: A **si_conductance_unit** is a type of conductance_unit and a type of si_unit in which the electrical conductance is expressed in SI units.

4.16.33
electric_potential_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the electric potential unit *entity* (3.2.9)

Note 1 to entry: An **electric_potential_unit** is a type of derived_unit in which the electric potential is expressed.

4.16.34
electric_potential_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the electric potential measure with unit *entity* (3.2.9)

Note 1 to entry: An **electric_potential_measure_with_unit** is a type of measure_with_unit in which the physical quantity is an electric potential as defined in ISO 31.

4.16.35
si_electric_potential_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *electric_potential_unit* (4.16.33) and *si_unit* (4.16.83) that represents the si electric potential unit *entity* (3.2.9)

Note 1 to entry: A **si_electric_potential_unit** is a type of electric_potential_unit and a type of si_unit in which the electric potential is expressed in SI units.

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4.16.36
energy_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the energy unit *entity* (3.2.9)

Note 1 to entry: An **energy_unit** is a type of derived_unit in which the energy is expressed.

4.16.37
energy_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the energy measure with unit *entity* (3.2.9)

Note 1 to entry: An **energy_measure_with_unit** is a type of measure_with_unit in which the physical quantity is energy as defined in ISO 31.

4.16.38
si_energy_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *energy_unit* (4.16.36) and *si_unit* (4.16.83) that represents the si energy unit *entity* (3.2.9)

Note 1 to entry: A **si_energy_unit** is a type of energy_unit and a type of si_unit in which the energy is expressed in SI units.

4.16.39
magnetic_flux_density_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the magnetic flux density unit *entity* (3.2.9)

Note 1 to entry: A **magnetic_flux_density_unit** is a type of derived_unit in which the magnetic flux density is expressed.

4.16.40
magnetic_flux_density_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the magnetic flux density measure with unit *entity* (3.2.9)

Note 1 to entry: A **magnetic_flux_density_measure_with_unit** is a type of measure_with_unit in which the physical quantity is magnetic flux density as defined in ISO 31.

4.16.41
si_magnetic_flux_density_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *magnetic_flux_density_unit* (4.16.39) and *si_unit* (4.16.83) that represents the si magnetic flux density unit *entity* (3.2.9)

Note 1 to entry: A **si_magnetic_flux_density_unit** is a type of magnetic_flux_density_unit and a type of si_unit in which the magnetic flux density is expressed in SI units.

4.16.42
force_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the force unit *entity* (3.2.9)

Note 1 to entry: A **force_unit** is a type of derived_unit in which the force is expressed.

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4.16.43
force_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the force measure with unit *entity* (3.2.9)

Note 1 to entry: A **force_measure_with_unit** is a type of measure_with_unit in which the physical quantity is force as defined in ISO 31.

4.16.44
si_force_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *force_unit* (4.16.42) and *si_unit* (4.16.83) that represents the si force unit *entity* (3.2.9)

Note 1 to entry: A **si_force_unit** is a type of force_unit and a type of si_unit in which the force is expressed in SI units.

4.16.45
frequency_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the frequency unit *entity* (3.2.9)

Note 1 to entry: A **frequency_unit** is a type of derived_unit in which the frequency is expressed.

4.16.46
frequency_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the frequency measure with unit *entity* (3.2.9)

Note 1 to entry: A **frequency_measure_with_unit** is a type of measure_with_unit in which the quantity measured is a frequency as defined in ISO 31.

4.16.47
si_frequency_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *frequency_unit* (4.16.45) and *si_unit* (4.16.83) that represents the si frequency unit *entity* (3.2.9)

Note 1 to entry: A **si_frequency_unit** is a type of frequency_unit and a type of si_unit in which the frequency is expressed in SI units.

4.16.48
global_unit_assigned_context
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *representation_context* (4.41.14) that represents the global unit assigned context *entity* (3.2.9)

4.16.49
illuminance_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the illuminance unit *entity* (3.2.9)

Note 1 to entry: An **illuminance_unit** is a type of derived_unit in which the illuminance is expressed.

4.16.50
illuminance_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the illuminance measure with unit *entity* (3.2.9)

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Note 1 to entry: An **illuminance_measure_with_unit** is a type of measure_with_unit in which the quantity measured is an illuminance as defined in ISO 31.

4.16.51
si_illuminance_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *illuminance_unit* (4.16.49) and *si_unit* (4.16.83) that represents the si illuminance unit *entity* (3.2.9)

Note 1 to entry: A **si_illuminance_unit** is a type of illuminance_unit and a type of si_unit in which the illuminance is expressed in SI units.

4.16.52
inductance_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the inductance unit *entity* (3.2.9)

Note 1 to entry: An **inductance_unit** is a type of derived_unit in which the inductance is expressed.

4.16.53
inductance_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the inductance measure with unit *entity* (3.2.9)

Note 1 to entry: An **inductance_measure_with_unit** is a type of measure_with_unit in which the quantity measured is an inductance as defined in ISO 31.

4.16.54
si_inductance_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *inductance_unit* (4.16.52) and *si_unit* (4.16.83) that represents the si inductance unit *entity* (3.2.9)

Note 1 to entry: A **si_inductance_unit** is a type of inductance_unit and a type of si_unit in which the inductance is expressed in SI units.

4.16.55
length_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the length measure with unit *entity* (3.2.9)

Note 1 to entry: A **length_measure_with_unit** is a type of measure_with_unit in which the physical quantity is a length as defined in ISO 31.

4.16.56
positive_length_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *length_measure_with_unit* (4.16.55) that represents the positive length measure with unit *entity* (3.2.9)

Note 1 to entry: A **positive_length_measure_with_unit** is a type of length_measure_with_unit of which the value is positive.

4.16.57
length_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *named_unit* (4.16.68) that represents the length unit *entity* (3.2.9)

Note 1 to entry: A **length_unit** is a type of named_unit in which distances are expressed.

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4.16.58
luminous_flux_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *named_unit* (4.16.68) that represents the luminous flux unit *entity* (3.2.9)

Note 1 to entry: A **luminous_flux_unit** is a type of named_unit in which the luminous flux is expressed.

4.16.59
luminous_flux_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the luminous flux measure with unit *entity* (3.2.9)

Note 1 to entry: A **luminous_flux_measure_with_unit** is a type of measure_with_unit in which the quantity measured is a luminous flux as defined in ISO 31.

4.16.60
luminous_intensity_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the luminous intensity measure with unit *entity* (3.2.9)

Note 1 to entry: A **luminous_intensity_measure_with_unit** is a type of measure_with_unit in which the physical quantity is a luminous intensity as defined in ISO 31.

4.16.61
luminous_intensity_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *named_unit* (4.16.68) that represents the luminous intensity unit *entity* (3.2.9)

Note 1 to entry: A **luminous_intensity_unit** is a type of named_unit in which the brightness of a body is expressed.

4.16.62
magnetic_flux_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the magnetic flux unit *entity* (3.2.9)

Note 1 to entry: A **magnetic_flux_unit** is a type of derived_unit in which the magnetic flux is expressed.

4.16.63
magnetic_flux_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the magnetic flux measure with unit *entity* (3.2.9)

Note 1 to entry: A **magnetic_flux_measure_with_unit** is a type of measure_with_unit in which the quantity measured is a magnetic flux as defined in ISO 31.

4.16.64
si_magnetic_flux_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *magnetic_flux_unit* (4.16.62) and *si_unit* (4.16.83) that represents the si magnetic flux unit *entity* (3.2.9)

Note 1 to entry: A **si_magnetic_flux_unit** is a type of magnetic_flux_unit and a type of si_unit in which the magnetic flux is expressed in SI units.

4.16.65

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mass_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the mass measure with unit *entity* (3.2.9)

Note 1 to entry: A **mass_measure_with_unit** is a type of measure_with_unit in which the physical quantity is a mass as defined in ISO 31.

4.16.66
mass_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *named_unit* (4.16.68) that represents the mass unit *entity* (3.2.9)

Note 1 to entry: A **mass_unit** is a type of named_unit in which the amount of matter that a body contains is expressed.

4.16.67
measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that represents the measure with unit *entity* (3.2.9)

Note 1 to entry: A **measure_with_unit** is the specification of a physical quantity as defined in ISO 31.

4.16.68
named_unit
<resource: measure_schema> *entity data type* (3.2.10) that represents the named unit *entity* (3.2.9)

Note 1 to entry: A **named_unit** is a unit quantity.

4.16.69
plane_angle_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the plane angle measure with unit *entity* (3.2.9)

Note 1 to entry: A **plane_angle_measure_with_unit** is a type of measure_with_unit in which the physical quantity is a plane angle as defined in ISO 31.

4.16.70
positive_plane_angle_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *plane_angle_measure_with_unit* (4.16.69) that represents the positive plane angle measure with unit *entity* (3.2.9)

Note 1 to entry: A **positive_plane_angle_measure_with_unit** is a type of plane_angle_measure_with_unit of which the value is positive.

4.16.71
plane_angle_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *named_unit* (4.16.68) that represents the plane angle unit *entity* (3.2.9)

Note 1 to entry: A **plane_angle_unit** is a type of named_unit in which angles in planes are expressed.

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4.16.72
power_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the power unit *entity* (3.2.9)

Note 1 to entry: A **power_unit** is a type of derived_unit in which the power is expressed.

4.16.73
power_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the power measure with unit *entity* (3.2.9)

Note 1 to entry: A **power_measure_with_unit** is a type of measure_with_unit in which the quantity measured is a power as defined in ISO 31.

4.16.74
si_power_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *power_unit* (4.16.72) and *si_unit* (4.16.83) that represents the si power unit *entity* (3.2.9)

Note 1 to entry: A **si_power_unit** is a type of power_unit and a type of si_unit in which the power is expressed in SI units.

4.16.75
pressure_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the pressure unit *entity* (3.2.9)

Note 1 to entry: A **pressure_unit** is a type of derived_unit in which the pressure is expressed.

4.16.76
pressure_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the pressure measure with unit *entity* (3.2.9)

Note 1 to entry: A **pressure_measure_with_unit** is a type of measure_with_unit in which the quantity measured is a pressure as defined in ISO 31.

4.16.77
si_pressure_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *pressure_unit* (4.16.75) and *si_unit* (4.16.83) that represents the si pressure unit *entity* (3.2.9)

Note 1 to entry: A **si_pressure_unit** is a type of pressure_unit and a type of si_unit in which the pressure is expressed in SI units.

4.16.78
ratio_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the ratio measure with unit *entity* (3.2.9)

Note 1 to entry: A **ratio_measure_with_unit** is a type of measure_with_unit in which the physical quantity is a ratio as defined in ISO 31.

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4.16.79
ratio_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *named_unit* (4.16.68) that represents the ratio unit *entity* (3.2.9)

Note 1 to entry: A **ratio_unit** is a type of named_unit in which the ratio between two physical quantities of the same kind is expressed.

4.16.80
resistance_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the resistance unit *entity* (3.2.9)

Note 1 to entry: A **resistance_unit** is a type of derived_unit in which the electrical resistance is expressed.

4.16.81
resistance_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the resistance measure with unit *entity* (3.2.9)

Note 1 to entry: A **resistance_measure_with_unit** is a type of measure_with_unit in which the quantity measured is an electrical resistance as defined in ISO 31.

4.16.82
si_resistance_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *resistance_unit* (4.16.80) and *si_unit* (4.16.83) that represents the si resistance unit *entity* (3.2.9)

Note 1 to entry: A **si_resistance_unit** is a type of resistance_unit and a type of si_unit in which the resistance is expressed in SI units.

4.16.83
si_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *named_unit* (4.16.68) that represents the si unit *entity* (3.2.9)

Note 1 to entry: An **si_unit** is a type of named_unit that defines a unit with respect to the system of units defined in ISO 80000.

4.16.84
solid_angle_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the solid angle measure with unit *entity* (3.2.9)

Note 1 to entry: A **solid_angle_measure_with_unit** is a type of measure_with_unit in which the physical quantity is a solid angle as defined in ISO 31.

4.16.85
solid_angle_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *named_unit* (4.16.68) that represents the solid angle unit *entity* (3.2.9)

Note 1 to entry: A **solid_angle_unit** is a type of named_unit in which solid angles are expressed.

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4.16.86
thermodynamic_temperature_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the thermodynamic temperature measure with unit *entity* (3.2.9)

Note 1 to entry: A **thermodynamic_temperature_measure_with_unit** is a type of measure_with_unit in which the physical quantity is a thermodynamic temperature as defined in ISO 31.

4.16.87
thermodynamic_temperature_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *named_unit* (4.16.68) that represents the thermodynamic temperature unit *entity* (3.2.9)

Note 1 to entry: A **thermodynamic_temperature_unit** is a type of named_unit in which the degree of heat of a body is expressed.

4.16.88
time_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the time measure with unit *entity* (3.2.9)

Note 1 to entry: A **time_measure_with_unit** is a type of measure_with_unit in which the physical quantity is a time as defined in ISO 31.

4.16.89
time_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *named_unit* (4.16.68) that represents the time unit *entity* (3.2.9)

Note 1 to entry: A **time_unit** is a type of named_unit in which the duration of periods is expressed.

4.16.90
velocity_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the velocity measure with unit *entity* (3.2.9)

Note 1 to entry: A **velocity_measure_with_unit** is a type of measure_with_unit in which the quantity measured is a velocity.

4.16.91
velocity_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the velocity unit *entity* (3.2.9)

Note 1 to entry: A **velocity_unit** is a type of derived_unit in which the velocity is expressed.

4.16.92
volume_measure_with_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the volume measure with unit *entity* (3.2.9)

Note 1 to entry: A **volume_measure_with_unit** is a type of measure_with_unit in which the physical quantity is a volume as defined in ISO 31.

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4.16.93
volume_unit
<resource: measure_schema> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the volume unit *entity* (3.2.9)

Note 1 to entry: A **volume_unit** is a type of derived_unit used to measure the extent of a solid.

4.17 person_organization_schema

4.17.1
address
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the address *entity* (3.2.9)

Note 1 to entry: An **address** is the information necessary for communicating, using one or more communication methods.

4.17.2
organization
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the organization *entity* (3.2.9)

Note 1 to entry: An **organization** is an administrative structure.

4.17.3
organization_relationship
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the organization relationship *entity* (3.2.9)

Note 1 to entry: An **organization_relationship** is a relationship between two instances of the entity data type *organization* (4.17.2) with a description of their relationship.

4.17.4
organization_role
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the organization role *entity* (3.2.9)

Note 1 to entry: An **organization_role** is a purpose for an **organization** and provides identification and description of the purpose.

4.17.5
organization_type
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the organization type *entity* (3.2.9)

Note 1 to entry: An **organization_type** is a recognized kind of organization.

4.17.6
organization_type_relationship
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the organization type relationship *entity* (3.2.9)

Note 1 to entry: An **organization_type_relationship** is a relationship between two instances of the *organization_type* (4.17.5) entity data type and provides for the identification, naming, and description of that relationship.

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4.17.7
organizational_address
<resource: person_organization_schema> *entity data type* (3.2.10) that is a type of *address* (4.17.1) that represents the organizational address *entity* (3.2.9)

Note 1 to entry: An **organizational_address** is an address for one or more organizations.

4.17.8
organizational_project
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the organizational project *entity* (3.2.9)

Note 1 to entry: An **organizational_project** is a project for which one or more *organization* (4.17.2) entity data types are responsible.

4.17.9
organizational_project_relationship
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the organizational project relationship *entity* (3.2.9)

Note 1 to entry: An **organizational_project_relationship** is a relationship between two instances of the entity data type *organizational_project* (4.17.8) with an identification and description of their relationship.

4.17.10
person
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the person *entity* (3.2.9)

Note 1 to entry: A **person** is an individual human being.

4.17.11
person_and_organization
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the person and organization *entity* (3.2.9)

Note 1 to entry: A **person_and_organization** is a person in an organization.

4.17.12
person_and_organization_role
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the person and organization role *entity* (3.2.9)

Note 1 to entry: A **person_and_organization_role** is a purpose for a **person_and_organization** and provides identification and description of the purpose.

4.17.13
person_role
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the person role *entity* (3.2.9)

Note 1 to entry: A **person_role** is a purpose for a person and provides identification and description of the purpose.

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4.17.14
person_type
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the person type *entity* (3.2.9)

Note 1 to entry: A **person_type** is a category of people having common characteristics.

4.17.15
person_type_definition
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the person type definition *entity* (3.2.9)

Note 1 to entry: A **person_type_definition** is a characterization of type of person.

4.17.16
person_type_definition_formation
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the person type definition formation *entity* (3.2.9)

Note 1 to entry: A **person_type_definition_formation** is a collector of definitions of a type of person.

4.17.17
person_type_definition_relationship
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the person type definition relationship *entity* (3.2.9)

Note 1 to entry: A **person_type_definition_relationship** is a relationship between two instances of the *person_type_definition* (4.17.15) entity data type and provides for the identification, naming, and description of that relationship.

4.17.18
personal_address
<resource: person_organization_schema> *entity data type* (3.2.10) that is a type of *address* (4.17.1) that represents the personal address *entity* (3.2.9)

Note 1 to entry: A **personal_address** is a type of address, which is an address for one or more persons.

4.17.19
position_in_organization
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the position in organization *entity* (3.2.9)

Note 1 to entry: A **position_in_organization** is a specific function or job performed by a person in a particular organization.

4.17.20
position_in_organization_relationship
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the position in organization relationship *entity* (3.2.9)

Note 1 to entry: A **position_in_organization_relationship** is a relationship between two instances of the *position_in_organization* (4.17.19) entity data type and provides for the identification, naming, and description of that relationship.

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4.17.21
position_in_organization_type
<resource: person_organization_schema> *entity data type* (3.2.10) that represents the position in organization type *entity* (3.2.9)

Note 1 to entry: A **position_in_organization_type** is a generic function or job that is performed in organizations.

4.18 product_definition_schema

4.18.1
alternative_solution_relationship
<resource: product_definition_schema> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the alternative solution relationship *entity* (3.2.9)

Note 1 to entry: An **alternative_solution_relationship** is a product_definition_formation_relationship that specifies the type of the relationship.

4.18.2
characterized_product
<resource: product_definition_schema> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product* (4.18.4) that represents the characterized product *entity* (3.2.9)

Note 1 to entry: A **characterized_product** is a type of characterized_object and a type of product for the purpose of characterizing a product.

4.18.3
generic_product_definition_reference
<resource: product_definition_schema> *entity data type* (3.2.10) that represents the generic product definition reference *entity* (3.2.9)

Note 1 to entry: A **generic_product_definition_reference** is a reference to an externally defined *product_definition* (4.18.7) that may or may not have a local representation.

4.18.4
product
<resource: product_definition_schema> *entity data type* (3.2.10) that represents the product *entity* (3.2.9)

Note 1 to entry: A **product** is a representation of a product or a type of product

4.18.5
product_category
<resource: product_definition_schema> *entity data type* (3.2.10) that represents the product category *entity* (3.2.9)

Note 1 to entry: A **product_category** is a classification that applies to products.

4.18.6
product_category_relationship
<resource: product_definition_schema> *entity data type* (3.2.10) that represents the product category relationship *entity* (3.2.9)

Note 1 to entry: A **product_category_relationship** is a hierarchical relationship of one category with another and provides a description of their relationship.

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4.18.7
product_definition
<resource: product_definition_schema> *entity data type* (3.2.10) that represents the product definition *entity* (3.2.9)

Note 1 to entry: A **product_definition** is a representation of an aspect of a product, or of a class of products, for an identified life cycle stage.

4.18.8
product_definition_context_association
<resource: product_definition_schema> *entity data type* (3.2.10) that represents the product definition context association *entity* (3.2.9)

Note 1 to entry: A **product_definition_context_association** is an association of a *product_definition_context* (4.2.8) with a *product_definition* (4.18.7), and specifies the meaning of this association.

4.18.9
product_definition_context_role
<resource: product_definition_schema> *entity data type* (3.2.10) that represents the product definition context role *entity* (3.2.9)

Note 1 to entry: A **product_definition_context_role** is a specification of the purpose of a *product_definition_context* (4.2.8).

4.18.10
product_definition_effectivity
<resource: product_definition_schema> *entity data type* (3.2.10) that is a type of *effectivity* (4.9.5) that represents the product definition effectivity *entity* (3.2.9)

4.18.11
product_definition_formation
<resource: product_definition_schema> *entity data type* (3.2.10) that represents the product definition formation *entity* (3.2.9)

Note 1 to entry: A **product_definition_formation** is a collector of definitions of a product.

4.18.12
final_solution
<resource: product_definition_schema> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) that represents the final solution *entity* (3.2.9)

Note 1 to entry: A **final_solution** is a type of product_definition_formation and is a set of additional sensual characteristics that can be applied to an occurrence that represents a neutral part in order to complete its definition.

4.18.13
product_definition_formation_relationship
<resource: product_definition_schema> *entity data type* (3.2.10) that represents the product definition formation relationship *entity* (3.2.9)

Note 1 to entry: A **product_definition_formation_relationship** is a relationship between two instances of the entity data type *product_definition_formation* (4.18.11) and provides an identification and description of this relationship.

4.18.14

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product_definition_formation_with_specified_source
<resource: product_definition_schema> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) that represents the product definition formation with specified source *entity* (3.2.9)

Note 1 to entry: A **product_definition_formation_with_specified_source** is a type of product_definition_formation whose source is identified to be either manufactured within an organization, bought, or the fact that this information is not known.

4.18.15
product_definition_relationship
<resource: product_definition_schema> *entity data type* (3.2.10) that represents the product definition relationship *entity* (3.2.9)

Note 1 to entry: A **product_definition_relationship** is a relationship between two instances of the entity data type *product_definition* (4.18.7) or *generic_product_definition_reference* (4.18.3) and provides an identification and description of this relationship.

4.18.16
product_definition_relationship_relationship
<resource: product_definition_schema> *entity data type* (3.2.10) that represents the product definition relationship relationship *entity* (3.2.9)

Note 1 to entry: A **product_definition_relationship_relationship** is a relationship between two instances of the entity data type *product_definition_relationship* (4.18.15) and provides an identification and description of this relationship.

4.18.17
product_definition_reference
<resource: product_definition_schema> *entity data type* (3.2.10) that is a type of *generic_product_definition_reference* (4.18.3) that represents the product definition reference *entity* (3.2.9)

Note 1 to entry: A **product_definition_reference** is a type of generic_product_definition_reference that identifies the externally defined *product_definition* (4.18.7) by providing the key attributes necessary to unambiguously identify it and the associated *product_definition_formation* (4.18.11), *product* (4.18.4) and organization that owns the product id.

4.18.18
product_definition_reference_with_local_representation
<resource: product_definition_schema> *entity data type* (3.2.10) that is a type of *generic_product_definition_reference* (4.18.3) and *product_definition* (4.18.7) that represents the product definition reference with local representation *entity* (3.2.9)

Note 1 to entry: A **product_definition_reference_with_local_representation** is a type of generic_product_definition_reference that represents an externally defined product_definition by a local product_definition.

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4.18.19
product_definition_substitute
<resource: product_definition_schema> *entity data type* (3.2.10) that represents the product definition substitute *entity* (3.2.9)

Note 1 to entry: A **product_definition_substitute** is an association of a *product_definition* (4.18.7) with a *product_definition_relationship* (4.18.15).

4.18.20
product_definition_with_associated_documents
<resource: product_definition_schema> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the product definition with associated documents *entity* (3.2.9)

Note 1 to entry: A **product_definition_with_associated_documents** is a type of product_definition in which the associated documents participate in the definition of the product.

4.18.21
product_related_product_category
<resource: product_definition_schema> *entity data type* (3.2.10) that is a type of *product_category* (4.18.5) that represents the product related product category *entity* (3.2.9)

Note 1 to entry: A **product_related_product_category** is a type of product category that identifies products that satisfy the type identified by the category.

4.18.22
product_relationship
<resource: product_definition_schema> *entity data type* (3.2.10) that represents the product relationship *entity* (3.2.9)

Note 1 to entry: A **product_relationship** is a relationship between two instances of the entity data type *product* (4.18.4) and provides an identification and description of their relationship.

4.19 product_property_definition_schema

4.19.1
characterized_object
<resource: product_property_definition_schema> *entity data type* (3.2.10) that represents the characterized object *entity* (3.2.9)

Note 1 to entry: A **characterized_object** is the identification of an item that has associated property information.

4.19.2
characterized_object_relationship
<resource: product_property_definition_schema> *entity data type* (3.2.10) that represents the characterized object relationship *entity* (3.2.9)

Note 1 to entry: A **characterized_object_relationship** is a relationship between two instances of the entity data type *characterized_object* (4.19.1) and provides an identification and description of this relationship.

4.19.3
component_path_shape_aspect
<resource: product_property_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the component path shape aspect *entity* (3.2.9)

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Note 1 to entry: A **component_path_shape_aspect** is a type of shape_aspect that identifies a portion of a shape of an assembly by referencing a shape_aspect that represents a portion of the shape of an occurrence of a part within this assembly.

4.19.4
constituent_shape_aspect
<resource: product_property_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the constituent shape aspect *entity* (3.2.9)

Note 1 to entry: A **constituent_shape_aspect** is a type of shape_aspect that identifies a portion of a shape_aspect.

4.19.5
general_property
<resource: product_property_definition_schema> *entity data type* (3.2.10) that represents the general property *entity* (3.2.9)

Note 1 to entry: A **general_property** is an identification of a type of property.

4.19.6
general_property_association
<resource: product_property_definition_schema> *entity data type* (3.2.10) that represents the general property association *entity* (3.2.9)

4.19.7
general_property_relationship
<resource: product_property_definition_schema> *entity data type* (3.2.10) that represents the general property relationship *entity* (3.2.9)

Note 1 to entry: A **general_property_relationship** is a relationship between two instances of the entity data type *general_property* (4.19.5) and provides an identification and description of this relationship.

4.19.8
product_definition_shape
<resource: product_property_definition_schema> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) that represents the product definition shape *entity* (3.2.9)

4.19.9
property_definition
<resource: product_property_definition_schema> *entity data type* (3.2.10) that represents the property definition *entity* (3.2.9)

Note 1 to entry: A **property_definition** is a property that characterizes a single object.

4.19.10
shape_aspect
<resource: product_property_definition_schema> *entity data type* (3.2.10) that represents the shape aspect *entity* (3.2.9)

Note 1 to entry: A **shape_aspect** is an identified element of the shape of an object or is part of another **shape_aspect**.

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4.19.11
shape_aspect_occurrence
<resource: product_property_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the shape aspect occurrence *entity* (3.2.9)

Note 1 to entry: A **shape_aspect_occurrence** is a type of shape_aspect that is defined by another shape_aspect or a *characterized_object* (4.19.1).

4.19.12
shape_aspect_relationship
<resource: product_property_definition_schema> *entity data type* (3.2.10) that represents the shape aspect relationship *entity* (3.2.9)

Note 1 to entry: A **shape_aspect_relationship** is a relationship between two instances of the entity data type *shape_aspect* (4.19.10) and provides an identification and description of their relationship.

4.20 product_property_representation_schema

4.20.1
chain_based_item_identified_representation_usage
<resource: product_property_representation_schema> *entity data type* (3.2.10) that is a type of *item_identified_representation_usage* (4.20.5) that represents the chain based item identified representation usage *entity* (3.2.9)

Note 1 to entry: A **chain_based_item_identified_representation_usage** is a type of item_identified_representation_usage that represents a chain of representations in a graph of representations, where the undirected links in the graph can be instances of entity data types *representation_context* (4.41.14), *representation_relationship* (4.41.20), or *mapped_item* (4.41.11).

4.20.2
characterized_chain_based_item_within_representation
<resource: product_property_representation_schema> *entity data type* (3.2.10) that is a type of *characterized_item_within_representation* (4.20.3) that represents the characterized chain based item within representation *entity* (3.2.9)

Note 1 to entry: A **characterized_chain_based_item_within_representation** is a type of characterized_item_within_representation that represents a chain of representations in a graph of representations, where the undirected links in the graph can be instances of entity data types *representation_context* (4.41.14), *representation_relationship* (4.41.20), or *mapped_item* (4.41.11).

4.20.3
characterized_item_within_representation
<resource: product_property_representation_schema> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) that represents the characterized item within representation *entity* (3.2.9)

Note 1 to entry: A **characterized_item_within_representation** is a type of characterized_object that provides the characterization of a *representation_item* (4.41.16) within a specified *representation* (4.41.13).

4.20.4
context_dependent_shape_representation
<resource: product_property_representation_schema> *entity data type* (3.2.10) that represents the context dependent shape representation *entity* (3.2.9)

Note 1 to entry: A **context_dependent_shape_representation** is the association of a *shape_representation_relationship* (4.20.10) with a *product_definition_relationship* (4.18.15).

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4.20.5
item_identified_representation_usage
<resource: product_property_representation_schema> *entity data type* (3.2.10) that represents the item identified representation usage *entity* (3.2.9)

Note 1 to entry: An **item_identified_representation_usage** is an identification of a single or a set or a list of *representation_item* (4.41.16)(s) within a *representation* (4.41.13) as being the element(s) that describes a particular component or part of the property that is described by the representation.

4.20.6
property_definition_representation
<resource: product_property_representation_schema> *entity data type* (3.2.10) that represents the property definition representation *entity* (3.2.9)

Note 1 to entry: A **property_definition_representation** is an association between a *property_definition* (4.19.9) and a representation of the property.

4.20.7
shape_definition_representation
<resource: product_property_representation_schema> *entity data type* (3.2.10) that is a type of *property_definition_representation* (4.20.6) that represents the shape definition representation *entity* (3.2.9)

4.20.8
shape_representation
<resource: product_property_representation_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the shape representation *entity* (3.2.9)

Note 1 to entry: A **shape_representation** is a type of representation that represents a shape.

4.20.9
shape_representation_reference
<resource: product_property_representation_schema> *entity data type* (3.2.10) that is a type of *representation_reference* (4.41.19) that represents the shape representation reference *entity* (3.2.9)

Note 1 to entry: A **shape_representation_reference** is a type of representation_reference in which the referenced data type is a *shape_representation* (4.20.8).

4.20.10
shape_representation_relationship
<resource: product_property_representation_schema> *entity data type* (3.2.10) that is a type of *representation_relationship* (4.41.20) that represents the shape representation relationship *entity* (3.2.9)

Note 1 to entry: A **shape_representation_relationship** is a type of representation_relationship in which at least one of the instances of the entity data type *representation* (4.41.13) is a *shape_representation* (4.20.8) or *shape_representation_reference* (4.20.9).

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4.20.11
specified_occurrence_context_dependent_shape_representation
<resource: product_property_representation_schema> *entity data type* (3.2.10) that is a type of *context_dependent_shape_representation* (4.20.4) that represents the specified occurrence context dependent shape representation *entity* (3.2.9)

Note 1 to entry: A **specified_occurrence_context_dependent_shape_representation** is a type of context_dependent_shape_representation that established a relation for a hierarchical product structure using *product_definition_specified_occurrence* (4.25.13).

4.21 qualifications_schema

4.21.1
qualification
<resource: qualifications_schema> *entity data type* (3.2.10) that represents the qualification *entity* (3.2.9)

Note 1 to entry: A **qualification** is a particular instance of the formal identification of a capability or aptitude in a specific person or organization.

4.21.2
qualification_relationship
<resource: qualifications_schema> *entity data type* (3.2.10) that represents the qualification relationship *entity* (3.2.9)

Note 1 to entry: A **qualification_relationship** is a relationship between two instances of the *qualification* (4.21.1) entity data type and provides for the identification, naming, and description of that relationship.

4.21.3
qualification_type
<resource: qualifications_schema> *entity data type* (3.2.10) that represents the qualification type *entity* (3.2.9)

Note 1 to entry: An **qualification_type** is the formal identification of a capability or aptitude.

4.21.4
qualification_type_relationship
<resource: qualifications_schema> *entity data type* (3.2.10) that represents the qualification type relationship *entity* (3.2.9)

Note 1 to entry: A **qualification_type_relationship** is a relationship between two instances of the *qualification_type* (4.21.3) entity data type and provides for the identification, naming, and description of that relationship.

4.22 security_classification_schema

4.22.1
security_classification
<resource: security_classification_schema> *entity data type* (3.2.10) that represents the security classification *entity* (3.2.9)

Note 1 to entry: A **security_classification** is the level of confidentiality that is required for the purpose of product data protection.

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4.22.2
security_classification_level
<resource: security_classification_schema> *entity data type* (3.2.10) that represents the security classification level *entity* (3.2.9)

Note 1 to entry: A **security_classification_level** is a category of security required for product data protection.

4.23 configuration_management_schema

4.23.1
configurable_item
<resource: configuration_management_schema> *entity data type* (3.2.10) that is a type of *configuration_item* (4.23.4) that represents the configurable item *entity* (3.2.9)

Note 1 to entry: A **configurable_item** is a type of configuration_item that is characterized by a set of *product_concept_feature* (4.24.6) that have been identified for use in a *product_concept* (4.24.5).

4.23.2
configuration_design
<resource: configuration_management_schema> *entity data type* (3.2.10) that represents the configuration design *entity* (3.2.9)

Note 1 to entry: A **configuration_design** is a relationship that relates a configuration item and a product design intended to implement that item.

4.23.3
configuration_effectivity
<resource: configuration_management_schema> *entity data type* (3.2.10) that is a type of *product_definition_effectivity* (4.18.10) that represents the configuration effectivity *entity* (3.2.9)

4.23.4
configuration_item
<resource: configuration_management_schema> *entity data type* (3.2.10) that represents the configuration item *entity* (3.2.9)

Note 1 to entry: A **configuration_item** is an identification of an idea of a product or any of the discrete portions of a product, that is designated for configuration management and treated as a single unit in the configuration management process.

4.23.5
configuration_item_relationship
<resource: configuration_management_schema> *entity data type* (3.2.10) that represents the configuration item relationship *entity* (3.2.9)

Note 1 to entry: A **configuration_item_relationship** is an association between two *configuration_item* (4.23.4).

4.24 product_concept_schema

4.24.1
concept_feature_operator
<resource: product_concept_schema> *entity data type* (3.2.10) that represents the concept feature operator *entity* (3.2.9)

Note 1 to entry: A **concept_feature_operator** is a definition of an operation that is used to constrain the relationship between two *product_concept_feature* (4.24.6).

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4.24.2
concept_feature_relationship
<resource: product_concept_schema> *entity data type* (3.2.10) that represents the concept feature relationship *entity* (3.2.9)

Note 1 to entry: A **concept_feature_relationship** is an association between two *product_concept_feature* (4.24.6).

4.24.3
concept_feature_relationship_with_condition
<resource: product_concept_schema> *entity data type* (3.2.10) that is a type of *concept_feature_relationship* (4.24.2) that represents the concept feature relationship with condition *entity* (3.2.9)

4.24.4
conditional_concept_feature
<resource: product_concept_schema> *entity data type* (3.2.10) that is a type of *product_concept_feature* (4.24.6) that represents the conditional concept feature *entity* (3.2.9)

Note 1 to entry: A **conditional_concept_feature** is a type of product_concept_feature that is the combination of two product_concept_feature constrained by an operator.

4.24.5
product_concept
<resource: product_concept_schema> *entity data type* (3.2.10) that represents the product concept *entity* (3.2.9)

Note 1 to entry: A **product_concept** is a type of product as specified in ISO 10303-41 that is defined by a producer to satisfy potential or actual customer requirements.

4.24.6
product_concept_feature
<resource: product_concept_schema> *entity data type* (3.2.10) that represents the product concept feature *entity* (3.2.9)

Note 1 to entry: A **product_concept_feature** is a characteristic intended to be used to distinguish variations among the products of one or more *product_concept* (4.24.5).

4.24.7
product_concept_feature_association
<resource: product_concept_schema> *entity data type* (3.2.10) that represents the product concept feature association *entity* (3.2.9)

Note 1 to entry: A **product_concept_feature_association** is a relationship, that relates a *product_concept_feature* (4.24.6) to a *product_concept* (4.24.5).

4.24.8
product_concept_relationship
<resource: product_concept_schema> *entity data type* (3.2.10) that represents the product concept relationship *entity* (3.2.9)

Note 1 to entry: A **product_concept_relationship** is an association between two *product_concept* (4.24.5).

4.25 product_structure_schema

4.25.1

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alternate_product_relationship
<resource: product_structure_schema> *entity data type* (3.2.10) that represents the alternate product relationship *entity* (3.2.9)

Note 1 to entry: An **alternate_product_relationship** is an association between two products whereby one product, the alternate product, may be used in place of another product, the base product.

4.25.2
assembly_component_usage
<resource: product_structure_schema> *entity data type* (3.2.10) that is a type of *product_definition_usage* (4.25.14) that represents the assembly component usage *entity* (3.2.9)

Note 1 to entry: An **assembly_component_usage** is a type of product_definition_usage that should be used to establish a relationship between *product_definition* (4.18.7) within one of the following three product structures:

— bill-of-material (BOM) structure;

— parts list structure;

— promissory use structure.

4.25.3
assembly_component_usage_substitute
<resource: product_structure_schema> *entity data type* (3.2.10) that represents the assembly component usage substitute *entity* (3.2.9)

Note 1 to entry: An **assembly_component_usage_substitute** is a specification of that one constituent can be used as a substitute for another within the context of a given assembly.

4.25.4
assembly_component_usage_substitute_with_ranking
<resource: product_structure_schema> *entity data type* (3.2.10) that is a type of *assembly_component_usage_substitute* (4.25.3) that represents the assembly component usage substitute with ranking *entity* (3.2.9)

Note 1 to entry: An **assembly_component_usage_substitute_with_ranking** is a type of assembly_component_usage_substitute that specifies a relative preference value for the usage of a particular constituent as a substitute for another among all substitutes within the context of a given assembly.

4.25.5
make_from_usage_option
<resource: product_structure_schema> *entity data type* (3.2.10) that is a type of *product_definition_usage* (4.25.14) that represents the make from usage option *entity* (3.2.9)

Note 1 to entry: A **make_from_usage_option** is a type of product_definition_usage in which one product is the result of applying a process to another product.

4.25.6
make_from_usage_option_group
<resource: product_structure_schema> *entity data type* (3.2.10) that represents the make from usage option group *entity* (3.2.9)

Note 1 to entry: A **make_from_usage_option_group** is a collection of *make_from_usage_option* (4.25.5) instances that defines one possible combination of *product_definition* (4.18.7) that can be made from another single product_definition.

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4.25.7
multi_level_reference_designator
<resource: product_structure_schema> *entity data type* (3.2.10) that is a type of *assembly_component_usage* (4.25.2) that represents the multi level reference designator *entity* (3.2.9)

Note 1 to entry: A **multi_level_reference_designator** is a type of assembly_component_usage that specifies the relationship between an assembly and a constituent if the assembly is not the immediate parent for the constituent and there are several hierarchical levels between the assembly and the constituent.

4.25.8
next_assembly_usage_occurrence
<resource: product_structure_schema> *entity data type* (3.2.10) that is a type of *assembly_component_usage* (4.25.2) that represents the next assembly usage occurrence *entity* (3.2.9)

Note 1 to entry: A **next_assembly_usage_occurrence** is a type of assembly_component_usage that specifies the relationship between a child constituent and its immediate parent assembly in a product structure.

4.25.9
product_definition_occurrence
<resource: product_structure_schema> *entity data type* (3.2.10) that represents the product definition occurrence *entity* (3.2.9)

Note 1 to entry: A **product_definition_occurrence** is an identified occurrence of a *product_definition* (4.18.7) or a *generic_product_definition_reference* (4.18.3) or another **product_definition_occurrence** in one or several product structures.

4.25.10
product_definition_occurrence_reference
<resource: product_structure_schema> *entity data type* (3.2.10) that is a type of *product_definition_reference* (4.18.17) that represents the product definition occurrence reference *entity* (3.2.9)

Note 1 to entry: A **product_definition_occurrence_reference** is a type of product_definition_reference that represents an externally defined *product_definition_occurrence* (4.25.9) by a local product_definition_occurrence.

4.25.11
product_definition_occurrence_reference_with_local_representation
<resource: product_structure_schema> *entity data type* (3.2.10) that is a type of *product_definition_occurrence* (4.25.9) and *generic_product_definition_reference* (4.18.3) that represents the product definition occurrence reference with local representation *entity* (3.2.9)

Note 1 to entry: A **product_definition_occurrence_reference_with_local_representation** is a type of product_definition_occurrence and of type generic_product_definition_reference that represents an externally defined product_definition_occurrence by a local product_definition.

4.25.12
product_definition_occurrence_relationship
<resource: product_structure_schema> *entity data type* (3.2.10) that represents the product definition occurrence relationship *entity* (3.2.9)

4.25.13
product_definition_specified_occurrence
<resource: product_structure_schema> *entity data type* (3.2.10) that is a type of *product_definition_occurrence* (4.25.9) that represents the product definition specified occurrence *entity* (3.2.9)

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Note 1 to entry: A **product_definition_specified_occurrence** is a type of product_definition_occurrence that is defined by another product_definition_occurrence or *product_definition_occurrence_reference* (4.25.10) in the context of a higher-level product_definition_occurrence.

4.25.14
product_definition_usage
<resource: product_structure_schema> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the product definition usage *entity* (3.2.9)

4.25.15
product_definition_usage_relationship
<resource: product_structure_schema> *entity data type* (3.2.10) that is a type of *product_definition_relationship_relationship* (4.18.16) that represents the product definition usage relationship *entity* (3.2.9)

4.25.16
promissory_usage_occurrence
<resource: product_structure_schema> *entity data type* (3.2.10) that is a type of *assembly_component_usage* (4.25.2) that represents the promissory usage occurrence *entity* (3.2.9)

4.25.17
quantified_assembly_component_usage
<resource: product_structure_schema> *entity data type* (3.2.10) that is a type of *assembly_component_usage* (4.25.2) that represents the quantified assembly component usage *entity* (3.2.9)

Note 1 to entry: A **quantified_assembly_component_usage** is a type of assembly_component_usage that establishes the relationship between an assembly and one of its constituents if there is a need to specify the quantity of the child constituent used in the assembly.

4.25.18
specified_higher_usage_occurrence
<resource: product_structure_schema> *entity data type* (3.2.10) that is a type of *assembly_component_usage* (4.25.2) that represents the specified higher usage occurrence *entity* (3.2.9)

Note 1 to entry: A **specified_higher_usage_occurrence** is a type of assembly_component_usage that specifies the relationship between a constituent and an assembly if the assembly is not the immediate parent for the constituent.

4.26 explicit_geometric_constraint_schema

4.26.1
explicit_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *defined_constraint* (4.83.2) and *geometric_representation_item* (4.28.2) that represents the explicit geometric constraint *entity* (3.2.9)

4.26.2
fixed_element_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the fixed element geometric constraint *entity* (3.2.9)

4.26.3

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parallel_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the parallel geometric constraint *entity* (3.2.9)

4.26.4
pgc_with_dimension
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *parallel_geometric_constraint* (4.26.3) that represents the pgc with dimension *entity* (3.2.9)

4.26.5
point_distance_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the point distance geometric constraint *entity* (3.2.9)

4.26.6
pdgc_with_dimension
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *point_distance_geometric_constraint* (4.26.5) that represents the pdgc with dimension *entity* (3.2.9)

4.26.7
skew_line_distance_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the skew line distance geometric constraint *entity* (3.2.9)

4.26.8
near_point_relationship
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *representation_item_relationship* (4.41.17) that represents the near point relationship *entity* (3.2.9)

4.26.9
curve_distance_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the curve distance geometric constraint *entity* (3.2.9)

4.26.10
cdgc_with_dimension
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *curve_distance_geometric_constraint* (4.26.9) that represents the cdgc with dimension *entity* (3.2.9)

4.26.11
surface_distance_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the surface distance geometric constraint *entity* (3.2.9)

4.26.12
sdgc_with_dimension
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *surface_distance_geometric_constraint* (4.26.11) that represents the sdgc with dimension *entity* (3.2.9)

4.26.13

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radius_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the radius geometric constraint *entity* (3.2.9)

4.26.14
rgc_with_dimension
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *radius_geometric_constraint* (4.26.13) that represents the rgc with dimension *entity* (3.2.9)

4.26.15
curve_length_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the curve length geometric constraint *entity* (3.2.9)

4.26.16
clgc_with_dimension
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *curve_length_geometric_constraint* (4.26.15) that represents the clgc with dimension *entity* (3.2.9)

4.26.17
parallel_offset_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the parallel offset geometric constraint *entity* (3.2.9)

4.26.18
pogc_with_dimension
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *parallel_offset_geometric_constraint* (4.26.17) that represents the pogc with dimension *entity* (3.2.9)

4.26.19
angle_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the angle geometric constraint *entity* (3.2.9)

4.26.20
agc_with_dimension
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *angle_geometric_constraint* (4.26.19) that represents the agc with dimension *entity* (3.2.9)

4.26.21
perpendicular_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the perpendicular geometric constraint *entity* (3.2.9)

4.26.22
incidence_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the incidence geometric constraint *entity* (3.2.9)

4.26.23

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coaxial_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the coaxial geometric constraint *entity* (3.2.9)

4.26.24
tangent_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the tangent geometric constraint *entity* (3.2.9)

4.26.25
symmetry_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the symmetry geometric constraint *entity* (3.2.9)

4.26.26
swept_point_curve_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the swept point curve geometric constraint *entity* (3.2.9)

4.26.27
swept_curve_surface_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the swept curve surface geometric constraint *entity* (3.2.9)

4.26.28
curve_segment_set
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the curve segment set *entity* (3.2.9)

4.26.29
curve_smoothness_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the curve smoothness geometric constraint *entity* (3.2.9)

4.26.30
surface_patch_set
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the surface patch set *entity* (3.2.9)

4.26.31
surface_smoothness_geometric_constraint
<resource: explicit_geometric_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_geometric_constraint* (4.26.1) that represents the surface smoothness geometric constraint *entity* (3.2.9)

4.27 geometric_model_schema

4.27.1
solid_model
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the solid model *entity* (3.2.9)

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Note 1 to entry: A **solid_model** is a type of geometric_representation_item which is a complete representation of the nominal shape of a product such that all points in the interior are connected.

4.27.2
manifold_solid_brep
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *solid_model* (4.27.1) that represents the manifold solid brep *entity* (3.2.9)

Note 1 to entry: A **manifold_solid_brep** is a type of solid_model which is is a finite, arcwise connected volume bounded by one or more surfaces, each of which is a connected, oriented, finite, closed 2-manifold.

4.27.3
brep_with_voids
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *manifold_solid_brep* (4.27.2) that represents the brep with voids *entity* (3.2.9)

Note 1 to entry: A **brep_with_voids** is a type of manifold_solid_brep which contains one or more voids in its interior.

4.27.4
faceted_brep
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *manifold_solid_brep* (4.27.2) that represents the faceted brep *entity* (3.2.9)

Note 1 to entry: A **faceted_brep** is a type of manifold_solid_brep which is a simple form of boundary representation model in which all faces are planar and all edges are straight lines.

4.27.5
brep_2d
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *solid_model* (4.27.1) that represents the brep 2d *entity* (3.2.9)

Note 1 to entry: A **brep_2d** is a type of solid_model which is a bounded two-dimensional region defined by a face.

4.27.6
csg_solid
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *solid_model* (4.27.1) that represents the csg solid *entity* (3.2.9)

Note 1 to entry: A **csg_solid** is a type of solid_model which is a solid represented as a CSG model defined by a collection of so-called primitive solids, combined using regularised boolean operations.

4.27.7
boolean_result
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the boolean result *entity* (3.2.9)

Note 1 to entry: A **boolean_result** is a type of geometric_representation_item which is the result of a regularised operation on two solids to create a new solid.

4.27.8
block
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the block *entity* (3.2.9)

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Note 1 to entry: A **block** is a type of geometric_representation_item which is a solid rectangular parallelepiped, defined with a location and placement coordinate system.

4.27.9
right_angular_wedge
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the right angular wedge *entity* (3.2.9)

Note 1 to entry: A **right_angular_wedge** is a type of geometric_representation_item which can be envisioned as the result of intersecting a block with a plane perpendicular to one of its faces.

4.27.10
rectangular_pyramid
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the rectangular pyramid *entity* (3.2.9)

Note 1 to entry: A **rectangular_pyramid** is a type of geometric_representation_item which is a solid pyramid with a rectangular base.

4.27.11
faceted_primitive
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the faceted primitive *entity* (3.2.9)

Note 1 to entry: A **faceted_primitive** is a type of geometric_representation_item which is a type of CSG primitive with planar faces.

4.27.12
tetrahedron
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *faceted_primitive* (4.27.11) that represents the tetrahedron *entity* (3.2.9)

Note 1 to entry: A **tetrahedron** is a type of faceted_primitive with 4 vertices and 4 triangular faces.

4.27.13
convex_hexahedron
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *faceted_primitive* (4.27.11) that represents the convex hexahedron *entity* (3.2.9)

Note 1 to entry: A **convex_hexahedron** is a type of faceted_primitive primitive with 8 vertices and 6 four-sided faces.

4.27.14
sphere
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the sphere *entity* (3.2.9)

Note 1 to entry: A **sphere** is a type of geometric_representation_item which is a CSG primitive with a spherical shape defined by a centre and a radius.

4.27.15
right_circular_cone
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the right circular cone *entity* (3.2.9)

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Note 1 to entry: A **right_circular_cone** is a type of geometric_representation_item which is a CSG primitive in the form of a cone which may be truncated.

4.27.16
right_circular_cylinder
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the right circular cylinder *entity* (3.2.9)

Note 1 to entry: A **right_circular_cylinder** is a type of geometric_representation_item which is a CSG primitive in the form of a solid cylinder of finite height.

4.27.17
eccentric_cone
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the eccentric cone *entity* (3.2.9)

Note 1 to entry: A **eccentric_cone** is a type of geometric_representation_item which is a CSG primitive which is a generalisation of the *right_circular_cone* (4.27.15) .

4.27.18
torus
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the torus *entity* (3.2.9)

Note 1 to entry: A **torus** is a type of geometric_representation_item which is a solid primitive defined by sweeping the area of a circle (the generatrix) about a larger circle (the directrix).

4.27.19
ellipsoid
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the ellipsoid *entity* (3.2.9)

Note 1 to entry: A **ellipsoid** is a type of geometric_representation_item which is a type of CSG primitive in the form of a solid ellipsoid.

4.27.20
cyclide_segment_solid
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the cyclide segment solid *entity* (3.2.9)

Note 1 to entry: A **cyclide_segment_solid** is a type of geometric_representation_item which is a partial Dupin cyclide solid (see *dupin_cyclide_surface* (4.28.65)).

4.27.21
half_space_solid
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the half space solid *entity* (3.2.9)

Note 1 to entry: A **half_space_solid** is a type of geometric_representation_item which is defined by the half space which is the regular subset of the domain which lies on one side of an unbounded surface.

4.27.22
boxed_half_space
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *half_space_solid* (4.27.21) that represents the boxed half space *entity* (3.2.9)

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Note 1 to entry: A **boxed_half_space** is a type of half_space_solid that is trimmed by a surrounding rectangular box.

4.27.23
box_domain
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the box domain *entity* (3.2.9)

Note 1 to entry: A **box_domain** is a type of founded_item which is an orthogonal box oriented parallel to the axes of the geometric coordinate system which may be used to limit the domain of a *half_space_solid* (4.27.21) .

4.27.24
primitive_2d
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the primitive 2d *entity* (3.2.9)

Note 1 to entry: A **primitive_2d** is a type of geometric_representation_item which is a two dimensional CSG primitive represented as either a *circular_area* (4.27.25) , *elliptic_area* (4.27.26) , *rectangular_area* (4.27.27) , *polygonal_area* (4.27.28) , or *half_space_2d* (4.27.30) .

4.27.25
circular_area
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *primitive_2d* (4.27.24) that represents the circular area *entity* (3.2.9)

Note 1 to entry: A **circular_area** is a type of primitive_2d which has the form of a circular disk.

4.27.26
elliptic_area
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *primitive_2d* (4.27.24) that represents the elliptic area *entity* (3.2.9)

Note 1 to entry: A **elliptic_area** is a type of primitive_2d which has an ellipse as outer boundary.

4.27.27
rectangular_area
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *primitive_2d* (4.27.24) that represents the rectangular area *entity* (3.2.9)

Note 1 to entry: A **rectangular_area** is a type of primitive_2d with a rectangular shape.

4.27.28
polygonal_area
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *primitive_2d* (4.27.24) that represents the polygonal area *entity* (3.2.9)

Note 1 to entry: A **polygonal_area** is a type of primitive_2d with straight edges.

4.27.29
area_with_outer_boundary
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *half_space_2d* (4.27.30) that represents the area with outer boundary *entity* (3.2.9)

Note 1 to entry: An **area_with_outer_boundary** is a type of half_space_2d which is the finite interior of a closed curve.

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4.27.30
half_space_2d
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *primitive_2d* (4.27.24) that represents the half space 2d *entity* (3.2.9)

Note 1 to entry: A **half_space_2d** is a type of primitive_2d which is a partially bounded region of two-dimensional space.

4.27.31
rectangled_half_space
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *half_space_2d* (4.27.30) that represents the rectangled half space *entity* (3.2.9)

Note 1 to entry: A **rectangled_half_space** is a type of half_space_2d which is trimmed by a surrounding rectangle.

4.27.32
rectangle_domain
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the rectangle domain *entity* (3.2.9)

Note 1 to entry: A **rectangle_domain** is a type of founded_item which is a rectangular area in two-dimensional space with its edges parallel to the coordinate axes.

4.27.33
swept_face_solid
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *solid_model* (4.27.1) that represents the swept face solid *entity* (3.2.9)

Note 1 to entry: A **swept_face_solid** is a type of solid_model which collects the entities which are defined procedurally by a sweeping action on planar figures.

4.27.34
extruded_face_solid
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *swept_face_solid* (4.27.33) that represents the extruded face solid *entity* (3.2.9)

Note 1 to entry: A **extruded_face_solid** is a type of swept_face_solid which is a solid defined by sweeping a planar *face_surface* (4.31.16) .

4.27.35
revolved_face_solid
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *swept_face_solid* (4.27.33) that represents the revolved face solid *entity* (3.2.9)

Note 1 to entry: A **revolved_face_solid** is a type of swept_face_solid which is a solid of revolution formed by revolving a planar *face* (4.31.12) about an axis.

4.27.36
surface_curve_swept_face_solid
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *swept_face_solid* (4.27.33) that represents the surface curve swept face solid *entity* (3.2.9)

Note 1 to entry: A **surface_curve_swept_face_solid** is a type of swept_face_solid which is the result of sweeping a face along a **directrix** lying on a **reference_surface**.

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4.27.37
swept_area_solid
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *solid_model* (4.27.1) that represents the swept area solid *entity* (3.2.9)

Note 1 to entry: A **swept_area_solid** is a type of solid_model which collects the entities which are defined procedurally by a sweeping action on planar bounded surfaces.

4.27.38
extruded_area_solid
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *swept_area_solid* (4.27.37) that represents the extruded area solid *entity* (3.2.9)

Note 1 to entry: A **extruded_area_solid** is a type of swept_area_solid which is a solid defined by sweeping a bounded planar surface.

4.27.39
revolved_area_solid
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *swept_area_solid* (4.27.37) that represents the revolved area solid *entity* (3.2.9)

Note 1 to entry: A **revolved_area_solid** is a type of swept_area_solid which is a solid formed by revolving a planar bounded surface about an axis.

4.27.40
surface_curve_swept_area_solid
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *swept_area_solid* (4.27.37) that represents the surface curve swept area solid *entity* (3.2.9)

Note 1 to entry: A **surface_curve_swept_area_solid** is a type of swept_area_solid which is the result of sweeping a face along a **directrix** lying on a **reference_surface**.

4.27.41
swept_disk_solid
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *solid_model* (4.27.1) that represents the swept disk solid *entity* (3.2.9)

Note 1 to entry: A **swept_disk_solid** is a type of *swept_area_solid* (4.27.37) which is the solid produced by sweeping a circular disk along a three dimensional curve.

4.27.42
trimmed_volume
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *solid_model* (4.27.1) that represents the trimmed volume *entity* (3.2.9)

Note 1 to entry: A **trimmed_volume** is a type of solid_model for which the boundaries are the 6 constant parameter surfaces *u = u1, u = u2, v = v1, v = v2, w = w1,* and *w = w2* , of the **basis_volume**.

4.27.43
solid_replica
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *solid_model* (4.27.1) that represents the solid replica *entity* (3.2.9)

Note 1 to entry: A **solid_replica** is a type of solid_model which is a copy of another solid at a new location.

4.27.44

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shell_based_surface_model
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the shell based surface model *entity* (3.2.9)

Note 1 to entry: A **shell_based_surface_model** is a type of geometric_representation_item which is described by a set of open or closed shells of dimensionality 2.

4.27.45
face_based_surface_model
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the face based surface model *entity* (3.2.9)

Note 1 to entry: A **face_based_surface_model** is a type of geometric_representation_item which is described by a set of *connected_face_set* (4.31.4) s of dimensionality 2.

4.27.46
shell_based_wireframe_model
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the shell based wireframe model *entity* (3.2.9)

Note 1 to entry: A **shell_based_wireframe_model** is a type of geometric_representation_item which is described by a graph of edges and vertices embedded in R^3.

4.27.47
edge_based_wireframe_model
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the edge based wireframe model *entity* (3.2.9)

Note 1 to entry: An **edge_based_wireframe_model** is a type of geometric_representation_item which is described by a graph of edges and vertices embedded in R^3.

4.27.48
geometric_set
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the geometric set *entity* (3.2.9)

Note 1 to entry: A **geometric_set** is a type of geometric_representation_item which is intended for the transfer of models when a topological structure is not available.

4.27.49
geometric_curve_set
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_set* (4.27.48) that represents the geometric curve set *entity* (3.2.9)

Note 1 to entry: An **geometric_curve_set** is a type of geometric_set which is a collection of two- or three-dimensional *point* (4.28.3) s and *curve* (4.28.23) s.

4.27.50
sectioned_spine
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_curve_set* (4.27.49) that represents the sectioned spine *entity* (3.2.9)

Note 1 to entry: An **sectioned_spine** is a type of geometric_curve_set which is a representation of the shape of a three dimensional object composed of a spine curve and a number of planar **cross_sections**.

4.27.51

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geometric_set_replica
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_set* (4.27.48) that represents the geometric set replica *entity* (3.2.9)

Note 1 to entry: An **geometric_set_replica** is a type of geometric_set which defines a replica of a geometric_set in a different location.

4.27.52
tessellated_shape_representation
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the tessellated shape representation *entity* (3.2.9)

Note 1 to entry: A **tessellated_shape_representation** is a type of shape_representation in which the geometry is approximately represented by a tessellated model with planar facets.

4.27.53
tessellated_shape_representation_with_accuracy_parameters
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_shape_representation* (4.27.52) that represents the tessellated shape representation with accuracy parameters *entity* (3.2.9)

Note 1 to entry: A **tessellated_shape_representation_with_accuracy_parameters** is a type of tessellated_shape_representation which has additional parameters to define the accuracy of the tessellated approximation to the corresponding exact geometric shape.

4.27.54
tessellated_item
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the tessellated item *entity* (3.2.9)

Note 1 to entry: A **tessellated_item** is a type of geometric_representation_item used in the description of a tessellated shape.

4.27.55
repositioned_tessellated_item
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_item* (4.27.54) that represents the repositioned tessellated item *entity* (3.2.9)

Note 1 to entry: A **repositioned_tessellated_item** is a type of tessellated_item which has been re-postioned by defining the coordinates with respect to a new axis system.

4.27.56
tessellated_structured_item
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_item* (4.27.54) that represents the tessellated structured item *entity* (3.2.9)

Note 1 to entry: A **tessellated_structured_item** is a type of *geometric_set* (4.27.48) which has a topological structure.

4.27.57
coordinates_list
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_item* (4.27.54) that represents the coordinates list *entity* (3.2.9)

Note 1 to entry: A **coordinates_list** is a type of tessellated_item that defines the coordinate values for points used in a *tessellated_shape_representation* (4.27.52) .

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4.27.58
tessellated_vertex
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_structured_item* (4.27.56) that represents the tessellated vertex *entity* (3.2.9)

Note 1 to entry: A **tessellated_vertex** is a type of tessellated_structured_item and is a single vertex in a tessellated model.

4.27.59
tessellated_edge
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_structured_item* (4.27.56) that represents the tessellated edge *entity* (3.2.9)

4.27.60
tessellated_connecting_edge
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_edge* (4.27.59) that represents the tessellated connecting edge *entity* (3.2.9)

4.27.61
cubic_bezier_tessellated_edge
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_edge* (4.27.59) that represents the cubic bezier tessellated edge *entity* (3.2.9)

Note 1 to entry: A **cubic_bezier_tessellated_edge** is a type of tessellated_edge which takes the form of a piecewise cubic bezier curve.

4.27.62
cubic_tessellated_connecting_edge
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *cubic_bezier_tessellated_edge* (4.27.61) that represents the cubic tessellated connecting edge *entity* (3.2.9)

Note 1 to entry: A **cubic_tessellated_connecting_edge** is a type of cubic_bezier_tessellated_edge which takes the form of a cubic curve and connects two *cubic_bezier_triangulated_face* (4.27.66) instances.

4.27.63
tessellated_face
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_structured_item* (4.27.56) that represents the tessellated face *entity* (3.2.9)

Note 1 to entry: A **tessellated_face** is a type of tessellated_structured_item that represents a face of a tessellated model.

4.27.64
triangulated_face
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_face* (4.27.63) that represents the triangulated face *entity* (3.2.9)

Note 1 to entry: A **triangulated_face** is a type of tessellated_face that has its geometry defined by a set of triangles.

4.27.65
complex_triangulated_face
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_face* (4.27.63) that represents the complex triangulated face *entity* (3.2.9)

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Note 1 to entry: A **complex_triangulated_face** is a type of tessellated_face defining the geometry as a set of triangles arranged in strips and fans.

4.27.66
cubic_bezier_triangulated_face
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_face* (4.27.63) that represents the cubic bezier triangulated face *entity* (3.2.9)

Note 1 to entry: A **cubic_bezier_triangulated_face** is a type of tessellated_face that has its geometry defined by a set of curved triangles.

4.27.67
tessellated_solid
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_item* (4.27.54) that represents the tessellated solid *entity* (3.2.9)

Note 1 to entry: A **tessellated_solid** is a type of tessellated_item that is a tessellated representation of a solid model.

4.27.68
tessellated_shell
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_item* (4.27.54) that represents the tessellated shell *entity* (3.2.9)

Note 1 to entry: A **tessellated_shell** is a type of tessellated_item that is a tessellated representation of a shell.

4.27.69
tessellated_wire
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_item* (4.27.54) that represents the tessellated wire *entity* (3.2.9)

Note 1 to entry: A **tessellated_wire** is a type of tessellated_item that is a tessellated representation of a collection of bounded curves joined end to end.

4.27.70
tessellated_surface_set
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_item* (4.27.54) that represents the tessellated surface set *entity* (3.2.9)

Note 1 to entry: A **tessellated_surface_set** is a type of tessellated_item that is a tessellated representation of a collection of surfaces.

4.27.71
triangulated_surface_set
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_surface_set* (4.27.70) that represents the triangulated surface set *entity* (3.2.9)

Note 1 to entry: A **triangulated_surface_set** is a type of tessellated_surface_set defining the geometry of the surface set as a set of triangles.

4.27.72
complex_triangulated_surface_set
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_surface_set* (4.27.70) that represents the complex triangulated surface set *entity* (3.2.9)

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Note 1 to entry: A **complex_triangulated_surface_set** is a type of tessellated_surface_set defining the geometry by a set of triangles arranged in strips and fans.

4.27.73
tessellated_curve_set
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_item* (4.27.54) that represents the tessellated curve set *entity* (3.2.9)

Note 1 to entry: A **tessellated_curve_set** is a type of tessellated_item that is a tessellated representation of a collection of curves.

4.27.74
tessellated_geometric_set
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_item* (4.27.54) that represents the tessellated geometric set *entity* (3.2.9)

Note 1 to entry: A **tessellated_geometric_set** is a type of tessellated_item that is a collection of *geometric_set* (4.27.48) s.

4.27.75
tessellated_point_set
<resource: geometric_model_schema> *entity data type* (3.2.10) that is a type of *tessellated_item* (4.27.54) that represents the tessellated point set *entity* (3.2.9)

Note 1 to entry: A **tessellated_point_set** is a type of tessellated_item that is a collection of points used to define tessellated geometry.

4.28 geometry_schema

4.28.1
geometric_representation_context
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *representation_context* (4.41.14) that represents the geometric representation context *entity* (3.2.9)

Note 1 to entry: A **geometric_representation_context** is a type of representation_context in which *geometric_representation_item* (4.28.2) s are geometrically founded.

4.28.2
geometric_representation_item
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the geometric representation item *entity* (3.2.9)

Note 1 to entry: A **geometric_representation_item** is a type of representation_item that has the additional meaning of having geometric position or orientation or both.

4.28.3
point
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the point *entity* (3.2.9)

Note 1 to entry: A **point** is a type of geometric_representation_item and is a location in some real Cartesian coordinate space R^m, for m = 1 2 or 3.

4.28.4

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cartesian_point
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *point* (4.28.3) that represents the cartesian point *entity* (3.2.9)

Note 1 to entry: A **cartesian_point** is a type of point defined by its coordinates in a rectangular Cartesian coordinate system, or in a parameter space.

4.28.5
cylindrical_point
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *cartesian_point* (4.28.4) that represents the cylindrical point *entity* (3.2.9)

Note 1 to entry: A **cylindrical_point** is a type of cartesian_point which uses a cylindrical polar coordinate system, centred at the origin of the corresponding Cartesian coordinate system, to define its location.

4.28.6
spherical_point
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *cartesian_point* (4.28.4) that represents the spherical point *entity* (3.2.9)

Note 1 to entry: A **spherical_point** is a type of cartesian_point which uses a spherical polar coordinate system, centred at the origin of the corresponding Cartesian coordinate system, to define its location.

4.28.7
polar_point
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *cartesian_point* (4.28.4) that represents the polar point *entity* (3.2.9)

Note 1 to entry: A **polar_point** is a type of cartesian_point which uses a two dimensional polar coordinate system, centred at the origin of the corresponding Cartesian coordinate system, to define its location.

4.28.8
point_on_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *point* (4.28.3) that represents the point on curve *entity* (3.2.9)

Note 1 to entry: A **point_on_curve** is a type of point which lies on a *curve* (4.28.23) .

4.28.9
point_on_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *point* (4.28.3) that represents the point on surface *entity* (3.2.9)

Note 1 to entry: A **point_on_surface** is a type of point which lies on a *surface* (4.28.57) .

4.28.10
point_in_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *point* (4.28.3) that represents the point in volume *entity* (3.2.9)

Note 1 to entry: A **point_in_volume** is a type of point which lies inside, or on the the surface of, a point .

4.28.11
point_replica
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *point* (4.28.3) that represents the point replica *entity* (3.2.9)

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Note 1 to entry: A **point_replica** is a type of point that defines a replica of an existing point (the parent) in a different location.

4.28.12
degenerate_pcurve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *point* (4.28.3) that represents the degenerate pcurve *entity* (3.2.9)

Note 1 to entry: A **degenerate_pcurve** is a type of point that is defined as a parameter space curve, but in three-dimensional model space it collapses to a single point.

4.28.13
evaluated_degenerate_pcurve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *degenerate_pcurve* (4.28.12) that represents the evaluated degenerate pcurve *entity* (3.2.9)

Note 1 to entry: A **evaluated_degenerate_pcurve** is a type of degenerate_pcurve which gives the result of evaluating the *pcurve* (4.28.47) and associates it with the corresponding *cartesian_point* (4.28.4) .

4.28.14
direction
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the direction *entity* (3.2.9)

Note 1 to entry: A **direction** is a type of geometric_representation_item that defines a general direction vector in two or three dimensional space.

4.28.15
vector
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the vector *entity* (3.2.9)

Note 1 to entry: A **vector** is a type of geometric_representation_item that defines a vector in terms of the direction and the magnitude of the vector.

4.28.16
placement
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the placement *entity* (3.2.9)

Note 1 to entry: A **placement** is a type of geometric_representation_item that locates a geometric item with respect to the coordinate system of its geometric context.

4.28.17
axis1_placement
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *placement* (4.28.16) that represents the axis1 placement *entity* (3.2.9)

Note 1 to entry: A **axis1_placement** is a type of placement , that represents the direction and location in three-dimensional space of a single axis.

4.28.18
axis2_placement_2d
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *placement* (4.28.16) that represents the axis2 placement 2d *entity* (3.2.9)

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Note 1 to entry: A **axis2_placement_2d** is a type of placement that represents the location and orientation in two-dimensional space of two mutually perpendicular axes.

4.28.19
axis2_placement_3d
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *placement* (4.28.16) that represents the axis2 placement 3d *entity* (3.2.9)

Note 1 to entry: A **axis2_placement_3d** is a type of placement that represents the location and orientation in three-dimensional space of two mutually perpendicular axes.

4.28.20
cartesian_transformation_operator
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) and *functionally_defined_transformation* (4.41.8) that represents the cartesian transformation operator *entity* (3.2.9)

Note 1 to entry: A **cartesian_transformation_operator** is a type of geometric_representation_item and functionally_defined_transformation , that defines a geometric transformation composed of translation, rotation, mirroring and uniform scaling.

4.28.21
cartesian_transformation_operator_3d
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *cartesian_transformation_operator* (4.28.20) that represents the cartesian transformation operator 3d *entity* (3.2.9)

Note 1 to entry: A **cartesian_transformation_operator_3d** is a type of cartesian_transformation_operator, that defines a geometric transformation in three-dimensional space composed of translation, rotation, mirroring and uniform scaling.

4.28.22
cartesian_transformation_operator_2d
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *cartesian_transformation_operator* (4.28.20) that represents the cartesian transformation operator 2d *entity* (3.2.9)

Note 1 to entry: A **cartesian_transformation_operator_2d** is a type of cartesian_transformation_operator, that defines a geometric transformation in two-dimensional space composed of translation, rotation, mirroring and uniform scaling.

4.28.23
curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the curve *entity* (3.2.9)

Note 1 to entry: A **curve** is a type of geometric_representation_item, that can be envisioned as the path of a point moving in its coordinate space.

4.28.24
line
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *curve* (4.28.23) that represents the line *entity* (3.2.9)

Note 1 to entry: A **line** is a type of curve, that is an unbounded with constant tangent direction.

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4.28.25
conic
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *curve* (4.28.23) that represents the conic *entity* (3.2.9)

Note 1 to entry: A **conic** is a type of curve, that is a planar curve which can be produced by intersecting a plane with a cone.

4.28.26
circle
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *conic* (4.28.25) that represents the circle *entity* (3.2.9)

Note 1 to entry: A **circle** is a type of conic, section defined by a radius and the location and orientation of the **circle**.

4.28.27
ellipse
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *conic* (4.28.25) that represents the ellipse *entity* (3.2.9)

Note 1 to entry: An **ellipse** is a type of conic, section defined by the lengths of the semi-major and semi-minor diameters and the position (center or mid point of the line joining the foci) and orientation of the curve.

4.28.28
hyperbola
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *conic* (4.28.25) that represents the hyperbola *entity* (3.2.9)

Note 1 to entry: An **hyperbola** is a type of conic, section defined by the lengths of the major and minor radii and the position (mid-point of the line joining two foci) and orientation of the curve.

4.28.29
parabola
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *conic* (4.28.25) that represents the parabola *entity* (3.2.9)

Note 1 to entry: A **parabola** is a type of conic, section defined by its focal length, position (apex), and orientation.

4.28.30
clothoid
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *curve* (4.28.23) that represents the clothoid *entity* (3.2.9)

Note 1 to entry: A **clothoid** is a type of curve, and is a planar curve in the form of a spiral.

4.28.31
circular_involute
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *curve* (4.28.23) that represents the circular involute *entity* (3.2.9)

Note 1 to entry: A **circular_involute** is a type of curve, and is the involute of a circle.

4.28.32

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bounded_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *curve* (4.28.23) that represents the bounded curve *entity* (3.2.9)

Note 1 to entry: A **bounded_curve** is a type of curve of finite arc length with identifiable end points.

4.28.33
polyline
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *bounded_curve* (4.28.32) that represents the polyline *entity* (3.2.9)

Note 1 to entry: A **polyline** is a type of bounded_curve with *(n-1)* linear segments, defined by a list of *n cartesian_point* (4.28.4) s,

P_1, P_2, ….. , P_n.

4.28.34
b_spline_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *bounded_curve* (4.28.32) that represents the b spline curve *entity* (3.2.9)

Note 1 to entry: A **b_spline_curve** is a type of bounded_curve, it is a piecewise parametric polynomial or rational curve described in terms of control points and basis functions.

4.28.35
b_spline_curve_with_knots
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *b_spline_curve* (4.28.34) that represents the b spline curve with knots *entity* (3.2.9)

Note 1 to entry: A **b_spline_curve_with_knots** is a type of b_spline_curve, for which the knot values are explicitly given.

4.28.36
uniform_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *b_spline_curve* (4.28.34) that represents the uniform curve *entity* (3.2.9)

Note 1 to entry: A **uniform_curve** is a type of b_spline_curve, in which the knots are evenly spaced.

4.28.37
quasi_uniform_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *b_spline_curve* (4.28.34) that represents the quasi uniform curve *entity* (3.2.9)

Note 1 to entry: A **quasi_uniform_curve** is a type of b_spline_curve, in which the knots are evenly spaced, and except for the first and last, have multiplicity 1.

4.28.38
bezier_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *b_spline_curve* (4.28.34) that represents the bezier curve *entity* (3.2.9)

Note 1 to entry: A **bezier_curve** is a type of b_spline_curve, that represents in the most general case a piecewise Bézier curve.

4.28.39

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rational_b_spline_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *b_spline_curve* (4.28.34) that represents the rational b spline curve *entity* (3.2.9)

Note 1 to entry: A **rational_b_spline_curve** is a type of b_spline_curve, that is a piecewise parametric rational curve described in terms of control points and basis functions.

4.28.40
local_b_spline
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the local b spline *entity* (3.2.9)

Note 1 to entry: A **local_b_spline** is a type of representation_item that is polynomial B-spline of degree d in one parameter defined over a list of knot values with associated multiplicities.

4.28.41
locally_refined_spline_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *bounded_curve* (4.28.32) that represents the locally refined spline curve *entity* (3.2.9)

Note 1 to entry: A **locally_refined_spline_curve** is a type of bounded_curve that is a piecewise parametric polynomial or rational curve described in terms of control points and local B-spline functions.

4.28.42
rational_locally_refined_spline_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *locally_refined_spline_curve* (4.28.41) that represents the rational locally refined spline curve *entity* (3.2.9)

Note 1 to entry: A **rational_locally_refined_spline_curve** is a type of locally_refined_spline_curve that is a piecewise parametric rational curve described in terms of control points and local B-spline functions.

4.28.43
trimmed_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *bounded_curve* (4.28.32) that represents the trimmed curve *entity* (3.2.9)

Note 1 to entry: A **trimmed_curve** is a type of bounded_curve, which is created by taking a selected portion, between two identified points, of the associated basis curve.

4.28.44
composite_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *bounded_curve* (4.28.32) that represents the composite curve *entity* (3.2.9)

Note 1 to entry: A **composite_curve** is a type of bounded_curve, that is a collection of curves joined end-to-end.

4.28.45
composite_curve_segment
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the composite curve segment *entity* (3.2.9)

Note 1 to entry: A **composite_curve_segment** is a type of *composite_curve* (4.28.44), and is a bounded curve together with transition information which is used to construct a composite_curve.

4.28.46

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reparametrised_composite_curve_segment
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *composite_curve_segment* (4.28.45) that represents the reparametrised composite curve segment *entity* (3.2.9)

Note 1 to entry: A **reparametrised_composite_curve_segment** is a type of composite_curve_segment, which provides the capability to re-define its parametric length without changing its geometry.

4.28.47
pcurve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *curve* (4.28.23) that represents the pcurve *entity* (3.2.9)

Note 1 to entry: A **pcurve** is a type of curve, that is a 3D curve defined by means of a 2D curve in the parameter space of a surface.

4.28.48
bounded_pcurve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *pcurve* (4.28.47) and *bounded_curve* (4.28.32) that represents the bounded pcurve *entity* (3.2.9)

Note 1 to entry: A **bounded_pcurve** is a type of pcurve, which also has the properties of a bounded_curve.

4.28.49
surface_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *curve* (4.28.23) that represents the surface curve *entity* (3.2.9)

Note 1 to entry: A **surface_curve** is a type of curve, that is a curve on a surface.

4.28.50
intersection_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *surface_curve* (4.28.49) that represents the intersection curve *entity* (3.2.9)

Note 1 to entry: A **intersection_curve** is a type of surface_curve, which results from the intersection of two surfaces.

4.28.51
seam_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *surface_curve* (4.28.49) that represents the seam curve *entity* (3.2.9)

Note 1 to entry: A **seam_curve** is a type of surface_curve, that is a curve on a closed parametric surface which has two distinct representations as constant parameter curves at the two extremes of the parameter range for the surface.

4.28.52
bounded_surface_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *surface_curve* (4.28.49) and *bounded_curve* (4.28.32) that represents the bounded surface curve *entity* (3.2.9)

Note 1 to entry: A **bounded_surface_curve** is a type of surface_curve, which also has the properties of a bounded_curve.

4.28.53

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composite_curve_on_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *composite_curve* (4.28.44) that represents the composite curve on surface *entity* (3.2.9)

Note 1 to entry: A **composite_curve_on_surface** is a type of composite_curve, that is a collection of segments which are curves on a surface.

4.28.54
offset_curve_2d
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *curve* (4.28.23) that represents the offset curve 2d *entity* (3.2.9)

Note 1 to entry: A **offset_curve_2d** is a type of curve, at a constant distance from a basis curve in two-dimensional space.

4.28.55
offset_curve_3d
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *curve* (4.28.23) that represents the offset curve 3d *entity* (3.2.9)

Note 1 to entry: A **offset_curve_3d** is a type of curve, at a constant distance from a basis curve in three-dimensional space.

4.28.56
curve_replica
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *curve* (4.28.23) that represents the curve replica *entity* (3.2.9)

Note 1 to entry: A **curve_replica** is a type of curve, and is a replica of a curve in a different location.

4.28.57
surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the surface *entity* (3.2.9)

Note 1 to entry: A **surface** is a type of geometric_representation_item, that can be envisioned as a set of connected points in 3-dimensional space which is always locally 2-dimensional, but need not be a manifold.

4.28.58
elementary_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *surface* (4.28.57) that represents the elementary surface *entity* (3.2.9)

Note 1 to entry: A **elementary_surface** is a type of surface, that is a simple analytic surface with defined parametric representation.

4.28.59
plane
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *elementary_surface* (4.28.58) that represents the plane *entity* (3.2.9)

Note 1 to entry: A **plane** is a type of elementary_surface, that is an unbounded surface with a constant normal.

4.28.60

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cylindrical_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *elementary_surface* (4.28.58) that represents the cylindrical surface *entity* (3.2.9)

Note 1 to entry: A **cylindrical_surface** is a type of elementary_surface, that is a surface at a constant distance (the **radius**)from a straight line.

4.28.61
conical_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *elementary_surface* (4.28.58) that represents the conical surface *entity* (3.2.9)

Note 1 to entry: A **conical_surface** is a type of elementary_surface, which can be produced by revolving a line in 3-dimensional space about any intersecting line.

4.28.62
spherical_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *elementary_surface* (4.28.58) that represents the spherical surface *entity* (3.2.9)

Note 1 to entry: A **spherical_surface** is a type of elementary_surface, which is at a constant distance (the **radius**) from a central point.

4.28.63
toroidal_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *elementary_surface* (4.28.58) that represents the toroidal surface *entity* (3.2.9)

Note 1 to entry: A **toroidal_surface** is a type of elementary_surface, which can be produced by revolving a circle about a line in its plane.

4.28.64
degenerate_toroidal_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *toroidal_surface* (4.28.63) that represents the degenerate toroidal surface *entity* (3.2.9)

Note 1 to entry: A **degenerate_toroidal_surface** is a type of toroidal_surface, in which the **minor_radius** is greater than the **major_radius**.

4.28.65
dupin_cyclide_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *elementary_surface* (4.28.58) that represents the dupin cyclide surface *entity* (3.2.9)

Note 1 to entry: A **dupin_cyclide_surface** is a type of elementary_surface, that is a generalisation of a *toroidal_surface* (4.28.63) in which the radius of the generatrix varies as it is swept around the directrix, passing through a maximum and a minimum value.

4.28.66
swept_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *surface* (4.28.57) that represents the swept surface *entity* (3.2.9)

Note 1 to entry: A **swept_surface** is a type of surface, that is constructed by sweeping a curve along another curve.

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4.28.67
surface_of_linear_extrusion
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *swept_surface* (4.28.66) that represents the surface of linear extrusion *entity* (3.2.9)

Note 1 to entry: A **surface_of_linear_extrusion** is a type of swept_surface, or a generalised cylinder obtained by sweeping a curve in a given direction.

4.28.68
surface_of_revolution
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *swept_surface* (4.28.66) that represents the surface of revolution *entity* (3.2.9)

Note 1 to entry: A **surface_of_revolution** is a type of swept_surface, obtained by rotating a curve one complete revolution about an axis.

4.28.69
surface_curve_swept_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *swept_surface* (4.28.66) that represents the surface curve swept surface *entity* (3.2.9)

Note 1 to entry: A **surface_curve_swept_surface** is a type of swept_surface, which is the result of sweeping a curve along a **directrix** curve lying on the **reference_surface**.

4.28.70
fixed_reference_swept_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *swept_surface* (4.28.66) that represents the fixed reference swept surface *entity* (3.2.9)

Note 1 to entry: A **fixed_reference_swept_surface** is a type of swept_surface, which is the result of sweeping a curve along a **directrix**.

4.28.71
bounded_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *surface* (4.28.57) that represents the bounded surface *entity* (3.2.9)

Note 1 to entry: A **bounded_surface** is a type of surface of finite area with identifiable boundaries.

4.28.72
b_spline_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *bounded_surface* (4.28.71) that represents the b spline surface *entity* (3.2.9)

Note 1 to entry: A **b_spline_surface** is a type of bounded_surface, and is a general form of rational or polynomial parametric surface which is represented by control points, basis functions, and possibly, weights.

4.28.73
b_spline_surface_with_knots
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *b_spline_surface* (4.28.72) that represents the b spline surface with knots *entity* (3.2.9)

Note 1 to entry: A **b_spline_surface_with_knots** is a type of b_spline_surface, in which the knot values are explicitly given.

4.28.74

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uniform_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *b_spline_surface* (4.28.72) that represents the uniform surface *entity* (3.2.9)

Note 1 to entry: A **uniform_surface** is a type of b_spline_surface, in which the knots are evenly spaced.

4.28.75
quasi_uniform_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *b_spline_surface* (4.28.72) that represents the quasi uniform surface *entity* (3.2.9)

Note 1 to entry: A **quasi_uniform_surface** is a type of b_spline_surface, in which the knots are evenly spaced, and except for the first and last, have multiplicity 1.

4.28.76
bezier_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *b_spline_surface* (4.28.72) that represents the bezier surface *entity* (3.2.9)

Note 1 to entry: A **bezier_surface** is a type of b_spline_surface, in which the knots are evenly spaced and have high multiplicities.

4.28.77
rational_b_spline_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *b_spline_surface* (4.28.72) that represents the rational b spline surface *entity* (3.2.9)

Note 1 to entry: A **rational_b_spline_surface** is a type of b_spline_surface, which is a piecewise parametric rational surface described in terms of control points, associated weight values and basis functions.

4.28.78
locally_refined_spline_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *bounded_surface* (4.28.71) that represents the locally refined spline surface *entity* (3.2.9)

Note 1 to entry: A **locally_refined_spline_surface** is a type of bounded_surface that is a piecewise parametric polynomial or rational surface described in terms of control points and local B-spline functions.

4.28.79
rational_locally_refined_spline_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *locally_refined_spline_surface* (4.28.78) that represents the rational locally refined spline surface *entity* (3.2.9)

Note 1 to entry: A **rational_locally_refined_spline_surface** is a type of locally_refined_spline_surface that is a piecewise parametric rational surface described in terms of control points and local B-spline functions.

4.28.80
rectangular_trimmed_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *bounded_surface* (4.28.71) that represents the rectangular trimmed surface *entity* (3.2.9)

Note 1 to entry: A **rectangular_trimmed_surface** is a type of bounded_surface, in which the boundaries are the constant parametric lines $u_1 = u1$, $u_2 = u2$, $v_1 = v1$ and $v_2 = v2$.

4.28.81

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curve_bounded_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *bounded_surface* (4.28.71) that represents the curve bounded surface *entity* (3.2.9)

Note 1 to entry: A **curve_bounded_surface** is a type of bounded_surface, and is a parametric surface with curved boundaries defined by one or more *boundary_curve* (4.28.82) instances or *degenerate_pcurve* (4.28.12) instances.

4.28.82
boundary_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *composite_curve_on_surface* (4.28.53) that represents the boundary curve *entity* (3.2.9)

Note 1 to entry: A **boundary_curve** is a type of composite_curve_on_surface suitable for the definition of a surface boundary.

4.28.83
outer_boundary_curve
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *boundary_curve* (4.28.82) that represents the outer boundary curve *entity* (3.2.9)

Note 1 to entry: An **outer_boundary_curve** is a type of boundary_curve which has the additional semantics of defining an outer boundary of a surface.

4.28.84
rectangular_composite_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *bounded_surface* (4.28.71) that represents the rectangular composite surface *entity* (3.2.9)

Note 1 to entry: A **rectangular_composite_surface** is a type of bounded_surface composed of a rectangular array of **n_u** by **n_v** segments or patches.

4.28.85
surface_patch
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the surface patch *entity* (3.2.9)

Note 1 to entry: A **surface_patch** is a type of founded_item and is a bounded surface with additional transition and sense information which is used to define a *rectangular_composite_surface* (4.28.84).

4.28.86
offset_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *surface* (4.28.57) that represents the offset surface *entity* (3.2.9)

Note 1 to entry: A **offset_surface** is a type of surface and is a procedural definition of a simple offset surface at a normal distance from the originating surface.

4.28.87
oriented_surface
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *surface* (4.28.57) that represents the oriented surface *entity* (3.2.9)

Note 1 to entry: A **oriented_surface** is a type of surface for which the direction of the surface normal may be reversed.

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4.28.88
surface_replica
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *surface* (4.28.57) that represents the surface replica *entity* (3.2.9)

Note 1 to entry: A **surface_replica** is a type of surface which defines a replica of an existing surface in a different location.

4.28.89
volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the volume *entity* (3.2.9)

Note 1 to entry: A **volume** is a type of geometric_representation_item that is a three dimensional solid of finite volume with a tri-parametric representation.

4.28.90
block_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *volume* (4.28.89) that represents the block volume *entity* (3.2.9)

Note 1 to entry: A **block_volume** is a type of volume in the form of a solid rectangular parallelepiped, defined with a location and placement coordinate system.

4.28.91
wedge_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *volume* (4.28.89) that represents the wedge volume *entity* (3.2.9)

Note 1 to entry: A **wedge_volume** is a type of volume which can be envisioned as the result of intersecting a block with a plane perpendicular to one of its faces.

4.28.92
pyramid_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *volume* (4.28.89) that represents the pyramid volume *entity* (3.2.9)

Note 1 to entry: A **pyramid_volume** is a type of volume in the form of a solid pyramid with a rectangular base.

4.28.93
tetrahedron_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *volume* (4.28.89) that represents the tetrahedron volume *entity* (3.2.9)

Note 1 to entry: A **tetrahedron_volume** is a type of volume with 4 vertices and 4 triangular faces.

4.28.94
hexahedron_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *volume* (4.28.89) that represents the hexahedron volume *entity* (3.2.9)

Note 1 to entry: A **hexahedron_volume** is a type of volume with 8 vertices and 6 four-sided faces.

4.28.95

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spherical_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *volume* (4.28.89) that represents the spherical volume *entity* (3.2.9)

Note 1 to entry: A **spherical_volume** is a type of volume in the form of a sphere of radius *R*.

4.28.96
cylindrical_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *volume* (4.28.89) that represents the cylindrical volume *entity* (3.2.9)

Note 1 to entry: A **cylindrical_volume** is a type of volume in the form of a circular cylinder.

4.28.97
eccentric_conical_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *volume* (4.28.89) that represents the eccentric conical volume *entity* (3.2.9)

Note 1 to entry: A **eccentric_conical_volume** is a type of volume in the form of a skew cone.

4.28.98
toroidal_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *volume* (4.28.89) that represents the toroidal volume *entity* (3.2.9)

Note 1 to entry: A **toroidal_volume** is a type of volume which can be produced by revolving a circular face about a line in its plane.

4.28.99
ellipsoid_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *volume* (4.28.89) that represents the ellipsoid volume *entity* (3.2.9)

Note 1 to entry: A **ellipsoid_volume** is a type of volume in the form of a solid ellipsoid.

4.28.100
b_spline_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *volume* (4.28.89) that represents the b spline volume *entity* (3.2.9)

Note 1 to entry: A **b_spline_volume** is a type of volume that is a general form of tri-parametric volume field which is represented by control points and basis functions.

4.28.101
b_spline_volume_with_knots
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *b_spline_volume* (4.28.100) that represents the b spline volume with knots *entity* (3.2.9)

Note 1 to entry: A **b_spline_volume_with_knots** is a type of b_spline_volume in which the knot values are explicitly given.

4.28.102
bezier_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *b_spline_volume* (4.28.100) that represents the bezier volume *entity* (3.2.9)

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Note 1 to entry: A **bezier_volume** is a type of b_spline_volume in which the knots are evenly spaced and have high multiplicities.

4.28.103
uniform_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *b_spline_volume* (4.28.100) that represents the uniform volume *entity* (3.2.9)

Note 1 to entry: A **uniform_volume** is a type of b_spline_volume in which the knots are evenly spaced.

4.28.104
quasi_uniform_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *b_spline_volume* (4.28.100) that represents the quasi uniform volume *entity* (3.2.9)

Note 1 to entry: A **quasi_uniform_volume** is a type of b_spline_volume in which the knots are evenly spaced, and except for the first and last, have multiplicity 1.

4.28.105
rational_b_spline_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *b_spline_volume* (4.28.100) that represents the rational b spline volume *entity* (3.2.9)

Note 1 to entry: A **rational_b_spline_volume** is a type of b_spline_volume that is a piecewise parametric rational volume described in terms of control points, associated weight values and basis functions.

4.28.106
locally_refined_spline_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *volume* (4.28.89) that represents the locally refined spline volume *entity* (3.2.9)

Note 1 to entry: A **locally_refined_spline_volume** is a type of volume that is a piecewise parametric polynomial or rational volume described in terms of control points and local B-spline functions.

4.28.107
rational_locally_refined_spline_volume
<resource: geometry_schema> *entity data type* (3.2.10) that is a type of *locally_refined_spline_volume* (4.28.106) that represents the rational locally refined spline volume *entity* (3.2.9)

Note 1 to entry: A **rational_locally_refined_spline_volume** is a type of locally_refined_spline_volume that is a piecewise parametric rational volume described in terms of control points and local B-spline functions.

4.29 scan_data_3d_shape_model_schema

4.29.1
scan_data_shape_representation
<resource: scan_data_3d_shape_model_schema> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the scan data shape representation *entity* (3.2.9)

Note 1 to entry: A **scan_data_shape_representation** is a type of shape_representation in which the geometry of a 3D shape is approximately represented by a set of point cloud data produced by a scanner.

4.29.2
scanned_data_item
<resource: scan_data_3d_shape_model_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the scanned data item *entity* (3.2.9)

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Note 1 to entry: A **scanned_data_item** is a type of geometric_representation_item that represents an element of geometric data produced by a scanner.

4.29.3
point_cloud_dataset
<resource: scan_data_3d_shape_model_schema> *entity data type* (3.2.10) that is a type of *scanned_data_item* (4.29.2) that represents the point cloud dataset *entity* (3.2.9)

Note 1 to entry: A **point_cloud_dataset** is a type of scanned_data_item, and represents the geometry of a cloud of points produced by a scanner.

4.29.4
point_cloud_dataset_with_normals
<resource: scan_data_3d_shape_model_schema> *entity data type* (3.2.10) that is a type of *point_cloud_dataset* (4.29.3) that represents the point cloud dataset with normals *entity* (3.2.9)

Note 1 to entry: A **point_cloud_dataset_with_normals** is a type of point_cloud_dataset, which has a normal defined at each point of the dataset.

4.29.5
point_cloud_dataset_with_colours
<resource: scan_data_3d_shape_model_schema> *entity data type* (3.2.10) that is a type of *point_cloud_dataset* (4.29.3) that represents the point cloud dataset with colours *entity* (3.2.9)

Note 1 to entry: A **point_cloud_dataset_with_colours** is a type of point_cloud_dataset, which has a colour defined at each point of the dataset.

4.29.6
point_cloud_dataset_with_intensities
<resource: scan_data_3d_shape_model_schema> *entity data type* (3.2.10) that is a type of *point_cloud_dataset* (4.29.3) that represents the point cloud dataset with intensities *entity* (3.2.9)

Note 1 to entry: A **point_cloud_dataset_with_intensities** is a type of point_cloud_dataset, which has an intensity defined at each point of the dataset.

4.29.7
point_cloud_superdataset
<resource: scan_data_3d_shape_model_schema> *entity data type* (3.2.10) that is a type of *scanned_data_item* (4.29.2) that represents the point cloud superdataset *entity* (3.2.9)

Note 1 to entry: A **point_cloud_superdataset** is a type of scanned_data_item, which contains a list of *point_cloud_dataset* (4.29.3) instances.

4.29.8
triangulated_point_cloud_dataset
<resource: scan_data_3d_shape_model_schema> *entity data type* (3.2.10) that is a type of *scanned_data_item* (4.29.2) that represents the triangulated point cloud dataset *entity* (3.2.9)

Note 1 to entry: A **triangulated_point_cloud_dataset** is a type of scanned_data_item in which the points of the dataset are arranged into triangles.

4.29.9
scan_3d_model
<resource: scan_data_3d_shape_model_schema> *entity data type* (3.2.10) that is a type of *scanned_data_item* (4.29.2) that represents the scan 3d model *entity* (3.2.9)

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Note 1 to entry: A **scan_3d_model** is a type of scanned_data_item, which represents the data produced by scanning a 3D shape.

4.29.10
scanner_property
<resource: scan_data_3d_shape_model_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the scanner property *entity* (3.2.9)

Note 1 to entry: A **scanner_property** is a type of representation_item, which represents one or more properties of a scanner.

4.29.11
scanner_basic_properties
<resource: scan_data_3d_shape_model_schema> *entity data type* (3.2.10) that is a type of *scanner_property* (4.29.10) that represents the scanner basic properties *entity* (3.2.9)

Note 1 to entry: A **scanner_basic_properties** is a type of scanner_property, which represents the basic properties of a scanner.

4.30 sketch_schema

4.30.1
implicit_point_on_plane
<resource: sketch_schema> *entity data type* (3.2.10) that is a type of *point* (4.28.3) and *auxiliary_geometric_representation_item* (4.127.2) that represents the implicit point on plane *entity* (3.2.9)

4.30.2
implicit_planar_intersection_point
<resource: sketch_schema> *entity data type* (3.2.10) that is a type of *implicit_point_on_plane* (4.30.1) that represents the implicit planar intersection point *entity* (3.2.9)

4.30.3
implicit_planar_projection_point
<resource: sketch_schema> *entity data type* (3.2.10) that is a type of *implicit_point_on_plane* (4.30.1) that represents the implicit planar projection point *entity* (3.2.9)

4.30.4
implicit_planar_curve
<resource: sketch_schema> *entity data type* (3.2.10) that is a type of *curve* (4.28.23) and *auxiliary_geometric_representation_item* (4.127.2) that represents the implicit planar curve *entity* (3.2.9)

4.30.5
implicit_intersection_curve
<resource: sketch_schema> *entity data type* (3.2.10) that is a type of *implicit_planar_curve* (4.30.4) that represents the implicit intersection curve *entity* (3.2.9)

4.30.6
implicit_projected_curve
<resource: sketch_schema> *entity data type* (3.2.10) that is a type of *implicit_planar_curve* (4.30.4) that represents the implicit projected curve *entity* (3.2.9)

4.30.7

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implicit_model_intersection_curve
<resource: sketch_schema> *entity data type* (3.2.10) that is a type of *implicit_planar_curve* (4.30.4) that represents the implicit model intersection curve *entity* (3.2.9)

4.30.8
implicit_silhouette_curve
<resource: sketch_schema> *entity data type* (3.2.10) that is a type of *implicit_planar_curve* (4.30.4) that represents the implicit silhouette curve *entity* (3.2.9)

4.30.9
neutral_sketch_representation
<resource: sketch_schema> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the neutral sketch representation *entity* (3.2.9)

4.30.10
positioned_sketch
<resource: sketch_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the positioned sketch *entity* (3.2.9)

4.30.11
repositioned_neutral_sketch
<resource: sketch_schema> *entity data type* (3.2.10) that is a type of *mapped_item* (4.41.11) and *geometric_representation_item* (4.28.2) that represents the repositioned neutral sketch *entity* (3.2.9)

4.30.12
implicit_explicit_positioned_sketch_relationship
<resource: sketch_schema> *entity data type* (3.2.10) that is a type of *representation_item_relationship* (4.41.17) that represents the implicit explicit positioned sketch relationship *entity* (3.2.9)

4.30.13
subsketch
<resource: sketch_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the subsketch *entity* (3.2.9)

4.30.14
rigid_subsketch
<resource: sketch_schema> *entity data type* (3.2.10) that is a type of *subsketch* (4.30.13) that represents the rigid subsketch *entity* (3.2.9)

4.31 topology_schema

4.31.1
closed_shell
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *connected_face_set* (4.31.4) that represents the closed shell *entity* (3.2.9)

4.31.2
connected_edge_set
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *topological_representation_item* (4.31.29) that represents the connected edge set *entity* (3.2.9)

Note 1 to entry: A **connected_edge_set** is a type of topological_representation_item, and is a set of *edge* (4.31.8) instances such that the domain of the edges together with their bounding vertices is arcwise connected.

4.31.3

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connected_edge_sub_set
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *connected_edge_set* (4.31.2) that represents the connected edge sub set *entity* (3.2.9)

Note 1 to entry: A **connected_edge_sub_set** is a type of connected_edge_set, whose domain is a connected portion of the domain of an existing connected_edge_set.

4.31.4
connected_face_set
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *topological_representation_item* (4.31.29) that represents the connected face set *entity* (3.2.9)

Note 1 to entry: A **connected_face_set** is a type of topological_representation_item, which is a set of *face* (4.31.12) instances such that the domain of the faces together with their bounding edges and vertices is connected.

4.31.5
connected_face_sub_set
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *connected_face_set* (4.31.4) that represents the connected face sub set *entity* (3.2.9)

Note 1 to entry: A **connected_face_sub_set** is a type of connected_face_set, whose domain is a connected portion of the domain of an existing connected_face_set.

4.31.6
connected_volume_set
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *topological_representation_item* (4.31.29) that represents the connected volume set *entity* (3.2.9)

Note 1 to entry: A **connected_volume_set** is a type of topological_representation_item and is a set of *volume_with_faces* (4.31.33) such that the domain of the volumes together with their bounding faces, edges and vertices is connected.

4.31.7
connected_volume_sub_set
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *connected_volume_set* (4.31.6) that represents the connected volume sub set *entity* (3.2.9)

Note 1 to entry: A **connected_volume_sub_set** is a type of connected_volume_set whose domain is a connected portion of the domain of an existing connected_volume_set.

4.31.8
edge
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *topological_representation_item* (4.31.29) that represents the edge *entity* (3.2.9)

Note 1 to entry: An **edge** is a type of topological_representation_item, corresponding to the connection between two vertices.

4.31.9
subedge
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *edge* (4.31.8) that represents the subedge *entity* (3.2.9)

Note 1 to entry: A **subedge** is a type of edge, whose domain is a connected portion of the domain of an existing edge.

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4.31.10
edge_curve
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *edge* (4.31.8) and *geometric_representation_item* (4.28.2) that represents the edge curve *entity* (3.2.9)

Note 1 to entry: An **edge_curve** is a type of edge, which has its geometry fully defined.

4.31.11
edge_loop
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *loop* (4.31.17) and *path* (4.31.25) that represents the edge loop *entity* (3.2.9)

Note 1 to entry: An **edge_loop** is a type of loop, with nonzero extent.

4.31.12
face
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *topological_representation_item* (4.31.29) that represents the face *entity* (3.2.9)

Note 1 to entry: A **face** is a type of topological_representation_item, of dimensionality 2 corresponding to the intuitive notion of a piece of surface bounded by loops.

4.31.13
subface
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *face* (4.31.12) that represents the subface *entity* (3.2.9)

Note 1 to entry: A **subface** is a type of face, which is a portion of the domain of a face, or another **subface**.

4.31.14
face_bound
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *topological_representation_item* (4.31.29) that represents the face bound *entity* (3.2.9)

Note 1 to entry: A **face_bound** is a type of topological_representation_item, and is a loop which is intended to be used for bounding a face.

4.31.15
face_outer_bound
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *face_bound* (4.31.14) that represents the face outer bound *entity* (3.2.9)

Note 1 to entry: A **face_outer_bound** is a type of face_bound, which carries the additional semantics of defining an outer boundary on the face.

4.31.16
face_surface
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *face* (4.31.12) and *geometric_representation_item* (4.28.2) that represents the face surface *entity* (3.2.9)

Note 1 to entry: A **face_surface** is a type of face, in which the geometry is defined by an associated *surface* (4.28.57).

4.31.17

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loop
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *topological_representation_item* (4.31.29) that represents the loop *entity* (3.2.9)

Note 1 to entry: A **loop** is a type of topological_representation_item, constructed from a single vertex, or by stringing together connected (oriented) edges, or linear segments beginning and ending at the same vertex.

4.31.18
open_path
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *path* (4.31.25) that represents the open path *entity* (3.2.9)

Note 1 to entry: An **open_path** is a type of path, such that a traversal of the path visits each of its vertices exactly once.

4.31.19
open_shell
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *connected_face_set* (4.31.4) that represents the open shell *entity* (3.2.9)

4.31.20
oriented_closed_shell
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *closed_shell* (4.31.1) that represents the oriented closed shell *entity* (3.2.9)

Note 1 to entry: An **oriented_closed_shell** is a type of closed_shell, constructed from another closed_shell and contains a BOOLEAN direction flag to indicate whether or not the orientation of the constructed closed_shell agrees with the orientation of the original closed_shell.

4.31.21
oriented_edge
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *edge* (4.31.8) that represents the oriented edge *entity* (3.2.9)

Note 1 to entry: An **oriented_edge** is a type of edge, constructed from another edge and contains a BOOLEAN orientation flag to indicate whether or not the orientation of the constructed edge agrees with the orientation of the original edge.

4.31.22
oriented_face
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *face* (4.31.12) that represents the oriented face *entity* (3.2.9)

Note 1 to entry: An **oriented_face** is a type of face, which contains an additional orientation BOOLEAN flag to indicate whether, or not, the sense of the oriented face agrees with its sense as originally defined in the face element.

4.31.23
oriented_open_shell
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *open_shell* (4.31.19) that represents the oriented open shell *entity* (3.2.9)

Note 1 to entry: An **oriented_open_shell** is a type of open_shell, constructed from another open_shell and contains a BOOLEAN direction flag to indicate whether or not the orientation of the constructed open_shell agrees with the orientation of the original open_shell.

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4.31.24
oriented_path
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *path* (4.31.25) that represents the oriented path *entity* (3.2.9)

Note 1 to entry: An **oriented_path** is a type of path, constructed from another path and contains a BOOLEAN orientation flag to indicate whether or not the orientation of the constructed path agrees with the orientation of the original path.

4.31.25
path
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *topological_representation_item* (4.31.29) that represents the path *entity* (3.2.9)

4.31.26
subpath
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *path* (4.31.25) that represents the subpath *entity* (3.2.9)

Note 1 to entry: A **subpath** is a type of path, whose domain is a connected portion of the domain of an existing path.

4.31.27
poly_loop
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *loop* (4.31.17) and *geometric_representation_item* (4.28.2) that represents the poly loop *entity* (3.2.9)

Note 1 to entry: A **poly_loop** is a type of loop, with straight edges bounding a planar region in space.

4.31.28
seam_edge
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *oriented_edge* (4.31.21) that represents the seam edge *entity* (3.2.9)

Note 1 to entry: A **seam_edge** is a type of oriented_edge, which, additionally, identifies a corresponding *pcurve* (4.28.47).

4.31.29
topological_representation_item
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the topological representation item *entity* (3.2.9)

Note 1 to entry: A **topological_representation_item** is a type of representation_item that represents the topology, or connectivity, of entities which make up the representation of an object.

4.31.30
vertex
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *topological_representation_item* (4.31.29) that represents the vertex *entity* (3.2.9)

Note 1 to entry: A **vertex** is a type of topological_representation_item, and is the topological construct corresponding to a point.

4.31.31

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vertex_point
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *vertex* (4.31.30) and *geometric_representation_item* (4.28.2) that represents the vertex point *entity* (3.2.9)

Note 1 to entry: A **vertex_point** is a type of vertex, which has its geometry defined as a point.

4.31.32
vertex_loop
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *loop* (4.31.17) that represents the vertex loop *entity* (3.2.9)

Note 1 to entry: A **vertex_loop** is a type of loop, of zero genus consisting of a single *vertex* (4.31.30).

4.31.33
volume_with_faces
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) and *topological_representation_item* (4.31.29) that represents the volume with faces *entity* (3.2.9)

Note 1 to entry: A **volume_with_faces** is a type of topological_representation_item and an explicitly defined solid, in contrast to a boundary representation solid, which is implicitly defined by its boundaries.

4.31.34
volume_with_parametric_boundary
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *volume_with_faces* (4.31.33) that represents the volume with parametric boundary *entity* (3.2.9)

Note 1 to entry: A **volume_with_parametric_boundary** is a type of volume_with_faces where the boundary is specified by six faces.

4.31.35
volume_with_shell
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *volume_with_faces* (4.31.33) that represents the volume with shell *entity* (3.2.9)

Note 1 to entry: A **volume_with_shell** is a type of volume_with_faces where the boundary is specified by a *closed_shell* (4.31.1).

4.31.36
vertex_shell
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *topological_representation_item* (4.31.29) that represents the vertex shell *entity* (3.2.9)

4.31.37
wire_shell
<resource: topology_schema> *entity data type* (3.2.10) that is a type of *topological_representation_item* (4.31.29) that represents the wire shell *entity* (3.2.9)

4.32 material_property_definition_schema

4.32.1
generic_property_relationship
<resource: material_property_definition_schema> *entity data type* (3.2.10) that represents the generic property relationship *entity* (3.2.9)

4.32.2

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material_designation
<resource: material_property_definition_schema> *entity data type* (3.2.10) that represents the material designation *entity* (3.2.9)

Note 1 to entry: A **material_designation** is the association of a material designation with a product or a part of a product or with an unrealised product.

4.32.3
material_designation_characterization
<resource: material_property_definition_schema> *entity data type* (3.2.10) that represents the material designation characterization *entity* (3.2.9)

Note 1 to entry: A **material_designation_characterization** is the characterization of a material designation through its association with either a *material_property_representation* (4.33.3) or a *product_material_composition_relationship* (4.32.5).

4.32.4
material_property
<resource: material_property_definition_schema> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) that represents the material property *entity* (3.2.9)

Note 1 to entry: A **material_property** is a type of property_definition which shall have conditions that determine its validity when it specifies a property of a *product_definition* (4.18.7), *shape_aspect* (4.19.10), or *shape_aspect_relationship* (4.19.12).

4.32.5
product_material_composition_relationship
<resource: material_property_definition_schema> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the product material composition relationship *entity* (3.2.9)

4.32.6
property_definition_relationship
<resource: material_property_definition_schema> *entity data type* (3.2.10) that represents the property definition relationship *entity* (3.2.9)

Note 1 to entry: A **property_definition_relationship** is an association between two *property_definition* (4.19.9).

4.33 material_property_representation_schema

4.33.1
data_environment
<resource: material_property_representation_schema> *entity data type* (3.2.10) that represents the data environment *entity* (3.2.9)

Note 1 to entry: A **data_environment** is a set of *property_definition_representation* (4.20.6) which allows the conditions which relate to one or more properties to be grouped together.

4.33.2
data_environment_relationship
<resource: material_property_representation_schema> *entity data type* (3.2.10) that represents the data environment relationship *entity* (3.2.9)

Note 1 to entry: A **data_environment_relationship** is an association between two *data_environment* (4.33.1).

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4.33.3
material_property_representation
<resource: material_property_representation_schema> *entity data type* (3.2.10) that is a type of *property_definition_representation* (4.20.6) that represents the material property representation *entity* (3.2.9)

4.33.4
material_dimensional_characteristic_representation
<resource: material_property_representation_schema> *entity data type* (3.2.10) that is a type of *dimensional_characteristic_representation* (4.43.3) that represents the material dimensional characteristic representation *entity* (3.2.9)

4.34 qualified_measure_schema

4.34.1
descriptive_representation_item
<resource: qualified_measure_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the descriptive representation item *entity* (3.2.9)

4.34.2
expanded_uncertainty
<resource: qualified_measure_schema> *entity data type* (3.2.10) that is a type of *standard_uncertainty* (4.34.12) that represents the expanded uncertainty *entity* (3.2.9)

4.34.3
maths_value_qualification
<resource: qualified_measure_schema> *entity data type* (3.2.10) that represents the maths value qualification *entity* (3.2.9)

Note 1 to entry: A **maths_value_qualification** is an association of one or more qualifiers with a *maths_value_with_unit* (4.34.5).

4.34.4
maths_value_representation_item
<resource: qualified_measure_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) and *maths_value_with_unit* (4.34.5) that represents the maths value representation item *entity* (3.2.9)

Note 1 to entry: A **maths_value_representation_item** is a type of representation_item and maths_value_with_unit where a particular mathematical function is represented.

4.34.5
maths_value_with_unit
<resource: qualified_measure_schema> *entity data type* (3.2.10) that represents the maths value with unit *entity* (3.2.9)

Note 1 to entry: A **maths_value_with_unit** is a quantitative value to be specified by mathematical function and to have the unit defined.

4.34.6
measure_qualification
<resource: qualified_measure_schema> *entity data type* (3.2.10) that represents the measure qualification *entity* (3.2.9)

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Note 1 to entry: A **measure_qualification** is an association of one or more qualifiers with a *measure_with_unit* (4.16.67).

4.34.7
measure_representation_item
<resource: qualified_measure_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) and *measure_with_unit* (4.16.67) that represents the measure representation item *entity* (3.2.9)

Note 1 to entry: A **measure_representation_item** is a type of representation_item and measure_with_unit where a particular numerical value and its unit is represented.

4.34.8
maths_value_precision_qualifier
<resource: qualified_measure_schema> *entity data type* (3.2.10) that represents the maths value precision qualifier *entity* (3.2.9)

Note 1 to entry: A **maths_value_precision_qualifier** is an expression that describes the number of significant figures in the components of the representation of a value.

4.34.9
precision_qualifier
<resource: qualified_measure_schema> *entity data type* (3.2.10) that represents the precision qualifier *entity* (3.2.9)

Note 1 to entry: A **precision_qualifier** is the number of significant figures in the representation of a value.

4.34.10
qualified_representation_item
<resource: qualified_measure_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the qualified representation item *entity* (3.2.9)

Note 1 to entry: A **qualified_representation_item** is a type of representation_item for which qualifiers are defined to describe its reliability and/or uncertainty.

4.34.11
qualitative_uncertainty
<resource: qualified_measure_schema> *entity data type* (3.2.10) that is a type of *uncertainty_qualifier* (4.34.14) that represents the qualitative uncertainty *entity* (3.2.9)

4.34.12
standard_uncertainty
<resource: qualified_measure_schema> *entity data type* (3.2.10) that is a type of *uncertainty_qualifier* (4.34.14) that represents the standard uncertainty *entity* (3.2.9)

4.34.13
type_qualifier
<resource: qualified_measure_schema> *entity data type* (3.2.10) that represents the type qualifier *entity* (3.2.9)

Note 1 to entry: A **type_qualifier** is the specification of a type of a datum.

4.34.14
uncertainty_qualifier
<resource: qualified_measure_schema> *entity data type* (3.2.10) that represents the uncertainty qualifier *entity* (3.2.9)

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Note 1 to entry: An **uncertainty_qualifier** is the uncertainty of a value.

4.34.15
value_format_type_qualifier
<resource: qualified_measure_schema> *entity data type* (3.2.10) that represents the value format type qualifier *entity* (3.2.9)

Note 1 to entry: A **value_format_type_qualifier** is the specification of the length and pattern of the recommended presentation on media of a value, including exchange data explicit format.

4.35 mathematical_context_schema

4.35.1
compound_maths_space_context
<resource: mathematical_context_schema> *entity data type* (3.2.10) that is a type of *maths_space_context* (4.35.4) that represents the compound maths space context *entity* (3.2.9)

Note 1 to entry: A **compound_maths_space_context** is a type of maths_space_context that is defined by a list of other instances of maths_space_context.

4.35.2
defined_maths_space_context
<resource: mathematical_context_schema> *entity data type* (3.2.10) that is a type of *maths_space_context* (4.35.4) that represents the defined maths space context *entity* (3.2.9)

4.35.3
explicitly_enumerated_maths_space_context
<resource: mathematical_context_schema> *entity data type* (3.2.10) that is a type of *maths_space_context* (4.35.4) that represents the explicitly enumerated maths space context *entity* (3.2.9)

Note 1 to entry: An **explicitly_enumerated_maths_space_context** is a type of maths_space_context that is defined by specifying the instances of *maths_value_context* (4.35.5) that are members of the maths_space_context.

4.35.4
maths_space_context
<resource: mathematical_context_schema> *entity data type* (3.2.10) that represents the maths space context *entity* (3.2.9)

4.35.5
maths_value_context
<resource: mathematical_context_schema> *entity data type* (3.2.10) that represents the maths value context *entity* (3.2.9)

4.35.6
membership_of_maths_space_context
<resource: mathematical_context_schema> *entity data type* (3.2.10) that represents the membership of maths space context *entity* (3.2.9)

Note 1 to entry: A **membership_of_maths_space_context** is an association between a *maths_value_context* (4.35.5) and a *maths_space_context* (4.35.4) that indicates the maths_value_context is a member of the maths_space_context.

4.35.7

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normalized_maths_space_context
<resource: mathematical_context_schema> *entity data type* (3.2.10) that is a type of *defined_maths_space_context* (4.35.2) that represents the normalized maths space context *entity* (3.2.9)

Note 1 to entry: A **normalized_maths_space_context** is a type of defined_maths_space_context that is defined by a reference physical value.

4.35.8
representation_context_defined_maths_space_context
<resource: mathematical_context_schema> *entity data type* (3.2.10) that is a type of *defined_maths_space_context* (4.35.2) that represents the representation context defined maths space context *entity* (3.2.9)

Note 1 to entry: A **representation_context_defined_maths_space_context** is a type of defined_maths_space_context that specifies a coordinate system.

4.35.9
unit_defined_maths_space_context
<resource: mathematical_context_schema> *entity data type* (3.2.10) that is a type of *defined_maths_space_context* (4.35.2) that represents the unit defined maths space context *entity* (3.2.9)

Note 1 to entry: A **unit_defined_maths_space_context** is a type of defined_maths_space_context that is defined by a single unit of measure.

4.36 mathematical_description_of_distribution_schema

4.36.1
maths_space_context_relationship
<resource: mathematical_description_of_distribution_schema> *entity data type* (3.2.10) that represents the maths space context relationship *entity* (3.2.9)

Note 1 to entry: A **maths_space_context_relationship** is a relationship between two instances of *maths_space_context* (4.35.4).

4.36.2
maths_space_context_relationship_description
<resource: mathematical_description_of_distribution_schema> *entity data type* (3.2.10) that represents the maths space context relationship description *entity* (3.2.9)

4.36.3
normalized_property_distribution_description
<resource: mathematical_description_of_distribution_schema> *entity data type* (3.2.10) that represents the normalized property distribution description *entity* (3.2.9)

4.36.4
property_distribution_description
<resource: mathematical_description_of_distribution_schema> *entity data type* (3.2.10) that represents the property distribution description *entity* (3.2.9)

4.37 presentation_appearance_schema

4.37.1

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approximation_tolerance
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the approximation tolerance *entity* (3.2.9)

4.37.2
approximation_tolerance_deviation
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the approximation tolerance deviation *entity* (3.2.9)

4.37.3
approximation_tolerance_parameter
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the approximation tolerance parameter *entity* (3.2.9)

4.37.4
character_glyph_style_outline
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the character glyph style outline *entity* (3.2.9)

4.37.5
character_glyph_style_outline_with_characteristics
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *character_glyph_style_outline* (4.37.4) that represents the character glyph style outline with characteristics *entity* (3.2.9)

Note 1 to entry: A **character_glyph_style_outline_with_characteristics** is a type of character_glyph_style_outline with additional characteristics to be applied to the regions of the character_glyph_style_outline.

4.37.6
character_glyph_style_stroke
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the character glyph style stroke *entity* (3.2.9)

4.37.7
context_dependent_invisibility
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *invisibility* (4.37.32) that represents the context dependent invisibility *entity* (3.2.9)

Note 1 to entry: A **context_dependent_invisibility** is a type of invisibility that is applied in the context of a picture or a layer.

4.37.8
context_dependent_over_riding_styled_item
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *over_riding_styled_item* (4.37.35) that represents the context dependent over riding styled item *entity* (3.2.9)

Note 1 to entry: A **context_dependent_over_riding_styled_item** is a type of over_riding_styled_item where the style assignment takes precedence over another assigned style based on a *representation* (4.41.13), *representation_item* (4.41.16), or combination of representation and representation_item in which the item being styled is used.

4.37.9

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curve_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the curve style *entity* (3.2.9)

4.37.10
curve_style_curve_pattern
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the curve style curve pattern *entity* (3.2.9)

4.37.11
curve_style_curve_pattern_set
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *curve_style_font* (4.37.12) and *geometric_representation_item* (4.28.2) that represents the curve style curve pattern set *entity* (3.2.9)

Note 1 to entry: A **curve_style_curve_pattern_set** is a type of curve_style_font and a type of geometric_representation_item.

4.37.12
curve_style_font
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the curve style font *entity* (3.2.9)

4.37.13
curve_style_font_and_scaling
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the curve style font and scaling *entity* (3.2.9)

4.37.14
curve_style_font_pattern
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the curve style font pattern *entity* (3.2.9)

4.37.15
curve_style_rendering
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that represents the curve style rendering *entity* (3.2.9)

Note 1 to entry: A **curve_style_rendering** is allowing the visualization of curves on a surface by application of rendering techniques.

4.37.16
curve_style_wide
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *curve_style_font* (4.37.12) that represents the curve style wide *entity* (3.2.9)

4.37.17
curve_style_with_ends_and_corners
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *curve_style* (4.37.9) that represents the curve style with ends and corners *entity* (3.2.9)

Note 1 to entry: A **curve_style_with_ends_and_corners** is a type of curve_style which specifies the visual appearance of the ends and corners of a curve.

4.37.18

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curve_style_with_extension
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *curve_style* (4.37.9) that represents the curve style with extension *entity* (3.2.9)

Note 1 to entry: A **curve_style_with_extension** is a type of curve_style that indicates how the curve ends shall appear when presented, either extended or shortened.

4.37.19
draughting_pre_defined_curve_font
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *pre_defined_curve_font* (4.37.38) that represents the draughting pre defined curve font *entity* (3.2.9)

Note 1 to entry: A **draughting_pre_defined_curve_font** is a type of pre_defined_curve_font that is identified by name.

4.37.20
externally_defined_curve_font
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *externally_defined_item* (4.11.3) that represents the externally defined curve font *entity* (3.2.9)

4.37.21
externally_defined_hatch_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *externally_defined_item* (4.11.3) and *geometric_representation_item* (4.28.2) that represents the externally defined hatch style *entity* (3.2.9)

Note 1 to entry: An **externally_defined_hatch_style** is a type of externally_defined_item and a type of geometric_representation_item.

4.37.22
externally_defined_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *externally_defined_item* (4.11.3) and *founded_item* (4.41.7) that represents the externally defined style *entity* (3.2.9)

Note 1 to entry: An **externally_defined_style** is a type of externally_defined_item and a type of founded_item.

4.37.23
externally_defined_tile
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *externally_defined_item* (4.11.3) that represents the externally defined tile *entity* (3.2.9)

4.37.24
externally_defined_tile_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *externally_defined_item* (4.11.3) and *geometric_representation_item* (4.28.2) that represents the externally defined tile style *entity* (3.2.9)

Note 1 to entry: An **externally_defined_tile_style** is a type of externally_defined_item and a type of geometric_representation_item.

4.37.25
fill_area_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the fill area style *entity* (3.2.9)

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4.37.26
fill_area_style_colour
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that represents the fill area style colour *entity* (3.2.9)

Note 1 to entry: A **fill_area_style_colour** is a definition of a colour to be used for solid fill of visible curve segments, annotation fill areas, or surfaces.

4.37.27
fill_area_style_hatching
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the fill area style hatching *entity* (3.2.9)

4.37.28
fill_area_style_tile_coloured_region
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the fill area style tile coloured region *entity* (3.2.9)

4.37.29
fill_area_style_tile_curve_with_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the fill area style tile curve with style *entity* (3.2.9)

4.37.30
fill_area_style_tile_symbol_with_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the fill area style tile symbol with style *entity* (3.2.9)

4.37.31
fill_area_style_tiles
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the fill area style tiles *entity* (3.2.9)

4.37.32
invisibility
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that represents the invisibility *entity* (3.2.9)

Note 1 to entry: An **invisibility** is specifying that a collection of one or more *styled_item* (4.37.51), elements assigned to a layer by *presentation_style_assignment* (4.37.46), or elements of a *presentation_representation* (4.39.26) shall not be presented.

4.37.33
occlusion_precedence
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that represents the occlusion precedence *entity* (3.2.9)

Note 1 to entry: An **occlusion_precedence** is a relationship between two entities that can hide or blank out other entities.

4.37.34

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one_direction_repeat_factor
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the one direction repeat factor *entity* (3.2.9)

4.37.35
over_riding_styled_item
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *styled_item* (4.37.51) that represents the over riding styled item *entity* (3.2.9)

Note 1 to entry: An **over_riding_styled_item** is a type of styled_item where the style assignment takes precedence over another assigned style.

4.37.36
point_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the point style *entity* (3.2.9)

4.37.37
pre_defined_character_spacing
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *pre_defined_item* (4.11.6) that represents the pre defined character spacing *entity* (3.2.9)

4.37.38
pre_defined_curve_font
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *pre_defined_item* (4.11.6) that represents the pre defined curve font *entity* (3.2.9)

4.37.39
pre_defined_hatch_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *pre_defined_item* (4.11.6) and *geometric_representation_item* (4.28.2) that represents the pre defined hatch style *entity* (3.2.9)

Note 1 to entry: A **pre_defined_hatch_style** is a type of geometric_representation_item and a type of pre_defined_item.

4.37.40
pre_defined_marker
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *pre_defined_item* (4.11.6) that represents the pre defined marker *entity* (3.2.9)

4.37.41
pre_defined_presentation_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) and *pre_defined_item* (4.11.6) that represents the pre defined presentation style *entity* (3.2.9)

Note 1 to entry: A **pre_defined_presentation_style** is a type of founded_item and a type of pre_defined_item.

4.37.42
pre_defined_size
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *pre_defined_item* (4.11.6) that represents the pre defined size *entity* (3.2.9)

4.37.43

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pre_defined_surface_side_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *pre_defined_item* (4.11.6) that represents the pre defined surface side style *entity* (3.2.9)

4.37.44
pre_defined_tile
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *pre_defined_item* (4.11.6) that represents the pre defined tile *entity* (3.2.9)

4.37.45
pre_defined_tile_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *pre_defined_item* (4.11.6) and *geometric_representation_item* (4.28.2) that represents the pre defined tile style *entity* (3.2.9)

Note 1 to entry: A **pre_defined_tile_style** is a type of geometric_representation_item and a type of pre_defined_item.

4.37.46
presentation_style_assignment
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the presentation style assignment *entity* (3.2.9)

4.37.47
presentation_style_by_context
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *presentation_style_assignment* (4.37.46) that represents the presentation style by context *entity* (3.2.9)

Note 1 to entry: A **presentation_style_by_context** is a type of presentation_style_assignment which is assigned to a *representation_item* (4.41.16) and is applicable only in a specified presentation context.

4.37.48
symbol_colour
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that represents the symbol colour *entity* (3.2.9)

Note 1 to entry: A **symbol_colour** is the presentation style that specifies the colour of *annotation_symbol* (4.38.7).

4.37.49
symbol_element_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the symbol element style *entity* (3.2.9)

4.37.50
symbol_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the symbol style *entity* (3.2.9)

4.37.51
styled_item
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the styled item *entity* (3.2.9)

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Note 1 to entry: A **styled_item** is a type of representation_item with associated presentation style.

4.37.52
styled_tessellated_item_with_colours
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *styled_item* (4.37.51) that represents the styled tessellated item with colours *entity* (3.2.9)

Note 1 to entry: A **styled_tessellated_item_with_colours** is a type of styled_item that assigns colour values to the vertices of tessellated surfaces.

4.37.53
surface_rendering_properties
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that represents the surface rendering properties *entity* (3.2.9)

Note 1 to entry: A **surface_rendering_properties** is a definition of those properties of a surface which are required to compute a realistic visualization of surfaces by use of rendering techniques.

4.37.54
surface_side_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the surface side style *entity* (3.2.9)

4.37.55
surface_style_boundary
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the surface style boundary *entity* (3.2.9)

4.37.56
surface_style_control_grid
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the surface style control grid *entity* (3.2.9)

4.37.57
surface_style_fill_area
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the surface style fill area *entity* (3.2.9)

4.37.58
surface_style_parameter_line
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the surface style parameter line *entity* (3.2.9)

4.37.59
surface_style_reflectance_ambient
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that represents the surface style reflectance ambient *entity* (3.2.9)

Note 1 to entry: A **surface_style_reflectance_ambient** is a specification of the ambient part of the reflectance behaviour of a surface.

4.37.60

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surface_style_reflectance_ambient_diffuse
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *surface_style_reflectance_ambient* (4.37.59) that represents the surface style reflectance ambient diffuse *entity* (3.2.9)

4.37.61
surface_style_reflectance_ambient_diffuse_specular
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *surface_style_reflectance_ambient_diffuse* (4.37.60) that represents the surface style reflectance ambient diffuse specular *entity* (3.2.9)

4.37.62
surface_style_rendering
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that represents the surface style rendering *entity* (3.2.9)

Note 1 to entry: A **surface_style_rendering** is the realistic visualization of surfaces by use of rendering techniques.

4.37.63
surface_style_rendering_with_properties
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *surface_style_rendering* (4.37.62) that represents the surface style rendering with properties *entity* (3.2.9)

4.37.64
surface_style_segmentation_curve
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the surface style segmentation curve *entity* (3.2.9)

4.37.65
surface_style_silhouette
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the surface style silhouette *entity* (3.2.9)

4.37.66
surface_style_transparent
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that represents the surface style transparent *entity* (3.2.9)

Note 1 to entry: A **surface_style_transparent** is the surface rendering property that specifies the degree of transparency of a surface.

4.37.67
surface_style_usage
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the surface style usage *entity* (3.2.9)

4.37.68
styled_tessellated_face_or_surface_with_single_texture
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *styled_item* (4.37.51) that represents the styled tessellated face or surface with single texture *entity* (3.2.9)

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Note 1 to entry: A **styled_tessellated_face_or_surface_with_single_texture** is a type of styled_item that assigns a visual texture to tessellated geometry, which may be either a *tessellated_face* (4.27.63) or a collection of tessellated faces defined in a *tessellated_surface_set* (4.27.70) .

4.37.69
text_style
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the text style *entity* (3.2.9)

4.37.70
text_style_for_defined_font
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that represents the text style for defined font *entity* (3.2.9)

Note 1 to entry: A **text_style_for_defined_font** is a part of the definition of a *text_style* (4.37.69), defining the colour in which a text to display.

4.37.71
text_style_with_box_characteristics
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *text_style* (4.37.69) that represents the text style with box characteristics *entity* (3.2.9)

Note 1 to entry: A **text_style_with_box_characteristics** is a type of text_style that specifies the characteristics of the character boxes within the text.

4.37.72
text_style_with_justification
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *text_style* (4.37.69) that represents the text style with justification *entity* (3.2.9)

Note 1 to entry: A **text_style_with_justification** is a type of text_style that specifies the justification of text.

4.37.73
text_style_with_mirror
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *text_style* (4.37.69) that represents the text style with mirror *entity* (3.2.9)

Note 1 to entry: A **text_style_with_mirror** is a type of text_style that has a mirroring axis defined for the characters.

4.37.74
text_style_with_spacing
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *text_style* (4.37.69) that represents the text style with spacing *entity* (3.2.9)

Note 1 to entry: A **text_style_with_spacing** is a type of text_style that has a spacing defined for the characters.

4.37.75
texture_style_specification
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the texture style specification *entity* (3.2.9)

Note 1 to entry: A **texture_style_specification** is a type of founded_item and is an abstract entity that defines a visual texture.

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4.37.76
texture_style_tessellation_specification
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *texture_style_specification* (4.37.75) that represents the texture style tessellation specification *entity* (3.2.9)

Note 1 to entry: A **texture_style_tessellation_specification** is a type of texture_style_specification an abstract entity that defines a visual texture to be assigned to tessellated geometry.

4.37.77
single_texture_style_tessellation_specification
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *texture_style_tessellation_specification* (4.37.76) that represents the single texture style tessellation specification *entity* (3.2.9)

Note 1 to entry: A **single_texture_style_tessellation_specification** is a type of texture_style_tessellation_specification that defines a visual texture.

4.37.78
two_direction_repeat_factor
<resource: presentation_appearance_schema> *entity data type* (3.2.10) that is a type of *one_direction_repeat_factor* (4.37.34) that represents the two direction repeat factor *entity* (3.2.9)

4.38 presentation_definition_schema

4.38.1
annotation_curve_occurrence
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *annotation_occurrence* (4.38.4) that represents the annotation curve occurrence *entity* (3.2.9)

4.38.2
annotation_fill_area
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the annotation fill area *entity* (3.2.9)

4.38.3
annotation_fill_area_occurrence
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *annotation_occurrence* (4.38.4) that represents the annotation fill area occurrence *entity* (3.2.9)

4.38.4
annotation_occurrence
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *styled_item* (4.37.51) that represents the annotation occurrence *entity* (3.2.9)

4.38.5
annotation_occurrence_relationship
<resource: presentation_definition_schema> *entity data type* (3.2.10) that represents the annotation occurrence relationship *entity* (3.2.9)

Note 1 to entry: An **annotation_occurrence_relationship** is the association of two *annotation_occurrence* (4.38.4).

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4.38.6
annotation_point_occurrence
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *annotation_occurrence* (4.38.4) that represents the annotation point occurrence *entity* (3.2.9)

Note 1 to entry: An **annotation_point_occurrence** is a type of annotation_occurrence An **annotation_point_occurrence** is a *point* (4.28.3) with a style assignment.

4.38.7
annotation_symbol
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *mapped_item* (4.41.11) that represents the annotation symbol *entity* (3.2.9)

4.38.8
annotation_symbol_occurrence
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *annotation_occurrence* (4.38.4) that represents the annotation symbol occurrence *entity* (3.2.9)

4.38.9
annotation_table
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *annotation_symbol* (4.38.7) that represents the annotation table *entity* (3.2.9)

4.38.10
annotation_table_occurrence
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *annotation_symbol_occurrence* (4.38.8) that represents the annotation table occurrence *entity* (3.2.9)

Note 1 to entry: An **annotation_table_occurrence** is a type of annotation_symbol_occurrence An **annotation_table_occurrence** is an *annotation_table* (4.38.9) with a style assignment or a *defined_table* (4.38.25) with a style assignment.

4.38.11
annotation_text
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *mapped_item* (4.41.11) that represents the annotation text *entity* (3.2.9)

4.38.12
annotation_text_character
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *mapped_item* (4.41.11) that represents the annotation text character *entity* (3.2.9)

4.38.13
annotation_text_occurrence
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *annotation_occurrence* (4.38.4) that represents the annotation text occurrence *entity* (3.2.9)

Note 1 to entry: An **annotation_text_occurrence** is a type of annotation_occurrence An **annotation_text_occurrence** is a *text_literal* (4.38.41), *annotation_text* (4.38.11), *annotation_text_character* (4.38.12), *defined_character_glyph* (4.38.23), or *composite_text* (4.38.18) with a style assignment.

4.38.14
annotation_text_with_associated_curves
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *annotation_text* (4.38.11) that represents the annotation text with associated curves *entity* (3.2.9)

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Note 1 to entry: An **annotation_text_with_associated_curves** is a type of annotation_text that contains one or more *curve* (4.28.23).

4.38.15
annotation_text_with_blanking_box
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *annotation_text* (4.38.11) that represents the annotation text with blanking box *entity* (3.2.9)

Note 1 to entry: An **annotation_text_with_blanking_box** is a type of annotation_text that contains a blanking box.

4.38.16
annotation_text_with_delineation
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *annotation_text* (4.38.11) that represents the annotation text with delineation *entity* (3.2.9)

Note 1 to entry: An **annotation_text_with_delineation** is a type of annotation_text that specifies the delineation of the text.

4.38.17
annotation_text_with_extent
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *annotation_text* (4.38.11) that represents the annotation text with extent *entity* (3.2.9)

Note 1 to entry: An **annotation_text_with_extent** is a type of annotation_text whose extent is explicitly specified.

4.38.18
composite_text
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the composite text *entity* (3.2.9)

4.38.19
composite_text_with_associated_curves
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *composite_text* (4.38.18) that represents the composite text with associated curves *entity* (3.2.9)

Note 1 to entry: A **composite_text_with_associated_curves** is a type of composite_text that contains one or more *curve* (4.28.23).

4.38.20
composite_text_with_blanking_box
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *composite_text* (4.38.18) that represents the composite text with blanking box *entity* (3.2.9)

Note 1 to entry: A **composite_text_with_blanking_box** is a type of composite_text that contains a blanking box.

4.38.21
composite_text_with_delineation
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *composite_text* (4.38.18) that represents the composite text with delineation *entity* (3.2.9)

Note 1 to entry: A **composite_text_with_delineation** is a type of composite_text that specifies the delineation of the text.

4.38.22

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composite_text_with_extent
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *composite_text* (4.38.18) that represents the composite text with extent *entity* (3.2.9)

Note 1 to entry: A **composite_text_with_extent** is a type of composite_text whose extent is explicitly specified.

4.38.23
defined_character_glyph
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the defined character glyph *entity* (3.2.9)

4.38.24
defined_symbol
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the defined symbol *entity* (3.2.9)

4.38.25
defined_table
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *defined_symbol* (4.38.24) that represents the defined table *entity* (3.2.9)

Note 1 to entry: A **defined_table** is a type of defined_symbol that specifies an implicit definition of a table.

4.38.26
externally_defined_character_glyph
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *externally_defined_item* (4.11.3) that represents the externally defined character glyph *entity* (3.2.9)

Note 1 to entry: An **externally_defined_character_glyph** is a type of externally_defined_item that makes an external reference to a character glyph.

4.38.27
externally_defined_symbol
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *externally_defined_item* (4.11.3) that represents the externally defined symbol *entity* (3.2.9)

Note 1 to entry: An **externally_defined_symbol** is a type of externally_defined_item that makes an external reference to a symbol.

4.38.28
pre_defined_character_glyph
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *pre_defined_item* (4.11.6) that represents the pre defined character glyph *entity* (3.2.9)

4.38.29
pre_defined_symbol
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *pre_defined_item* (4.11.6) that represents the pre defined symbol *entity* (3.2.9)

4.38.30
symbol_representation
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the symbol representation *entity* (3.2.9)

Note 1 to entry: A **symbol_representation** is a type of representation used in the assembly of a symbol.

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4.38.31
symbol_representation_map
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *representation_map* (4.41.18) that represents the symbol representation map *entity* (3.2.9)

Note 1 to entry: A **symbol_representation_map** is a type of representation_map which maps a *symbol_representation* (4.38.30) to an *annotation_symbol* (4.38.7).

4.38.32
symbol_representation_relationship
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *representation_relationship_with_transformation* (4.41.21) that represents the symbol representation relationship *entity* (3.2.9)

Note 1 to entry: A **symbol_representation_relationship** is a type of representation_relationship_with_transformation to relate *symbol_representation* (4.38.30) in a hierarchical order.

4.38.33
symbol_representation_with_blanking_box
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *symbol_representation* (4.38.30) that represents the symbol representation with blanking box *entity* (3.2.9)

Note 1 to entry: A **symbol_representation_with_blanking_box** is a type of symbol_representation that includes a box which blanks out all other elements in the box.

4.38.34
symbol_target
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the symbol target *entity* (3.2.9)

4.38.35
table_representation
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *symbol_representation* (4.38.30) that represents the table representation *entity* (3.2.9)

Note 1 to entry: A **table_representation** is a type of symbol_representation used for creating tables.

4.38.36
table_record_field_representation
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *symbol_representation* (4.38.30) that represents the table record field representation *entity* (3.2.9)

Note 1 to entry: A **table_record_field_representation** is a type of symbol_representation used for creating fields within records of a table.

4.38.37
table_record_field_representation_with_clipping_box
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *table_record_field_representation* (4.38.36) that represents the table record field representation with clipping box *entity* (3.2.9)

Note 1 to entry: A **table_record_field_representation_with_clipping_box** is a type of table_record_field_representation which includes a clipping box to blank out all elements outside of the box.

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4.38.38
table_record_representation
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *symbol_representation* (4.38.30) that represents the table record representation *entity* (3.2.9)

Note 1 to entry: A **table_record_representation** is a type of symbol_representation used for creating records within tables.

4.38.39
table_representation_relationship
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *symbol_representation_relationship* (4.38.32) that represents the table representation relationship *entity* (3.2.9)

Note 1 to entry: A **table_representation_relationship** is a type of symbol_representation_relationship used to relate *table_representation* (4.38.35), *table_record_representation* (4.38.38), and *table_record_field_representation* (4.38.36).

4.38.40
table_text_relationship
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *annotation_occurrence_relationship* (4.38.5) that represents the table text relationship *entity* (3.2.9)

Note 1 to entry: A **table_text_relationship** is a type of annotation_occurrence_relationship A **table_text_relationship** establishes a relationship between a field in an *annotation_table_occurrence* (4.38.10) and an *annotation_text_occurrence* (4.38.13).

4.38.41
text_literal
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the text literal *entity* (3.2.9)

4.38.42
text_literal_with_associated_curves
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *text_literal* (4.38.41) that represents the text literal with associated curves *entity* (3.2.9)

Note 1 to entry: A **text_literal_with_associated_curves** is a type of text_literal that contains one or more *curve* (4.28.23).

4.38.43
text_literal_with_blanking_box
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *text_literal* (4.38.41) that represents the text literal with blanking box *entity* (3.2.9)

Note 1 to entry: A **text_literal_with_blanking_box** is a type of text_literal that contains a blanking box.

4.38.44
text_literal_with_delineation
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *text_literal* (4.38.41) that represents the text literal with delineation *entity* (3.2.9)

Note 1 to entry: A **text_literal_with_delineation** is a type of text_literal that specifies the **delineation** of the text.

4.38.45

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text_literal_with_extent
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *text_literal* (4.38.41) that represents the text literal with extent *entity* (3.2.9)

Note 1 to entry: A **text_literal_with_extent** is a type of text_literal whose **extent** is explicitly specified.

4.38.46
text_string_representation
<resource: presentation_definition_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the text string representation *entity* (3.2.9)

Note 1 to entry: A **text_string_representation** is a type of representation which has a collection of text strings and characters to be mapped to an *annotation_text* (4.38.11) entity.

4.39 presentation_organization_schema

4.39.1
area_dependent_annotation_representation
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *presentation_representation* (4.39.26) that represents the area dependent annotation representation *entity* (3.2.9)

4.39.2
area_in_set
<resource: presentation_organization_schema> *entity data type* (3.2.10) that represents the area in set *entity* (3.2.9)

Note 1 to entry: An **area_in_set** is a relationship between a *presentation_area* (4.39.23) and a *presentation_set* (4.39.28).

4.39.3
background_colour
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *colour* (4.40.5) that represents the background colour *entity* (3.2.9)

4.39.4
camera_image
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *mapped_item* (4.41.11) that represents the camera image *entity* (3.2.9)

4.39.5
camera_image_2d_with_scale
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *camera_image* (4.39.4) that represents the camera image 2d with scale *entity* (3.2.9)

Note 1 to entry: A **camera_image_2d_with_scale** is a type of camera_image with a derived scale.

4.39.6
camera_image_3d_with_scale
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *camera_image* (4.39.4) that represents the camera image 3d with scale *entity* (3.2.9)

Note 1 to entry: A **camera_image_3d_with_scale** is a type of camera_image that projects three-dimensional geometry and has a derived scale.

4.39.7

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camera_model
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the camera model *entity* (3.2.9)

4.39.8
camera_model_d2
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *camera_model* (4.39.7) that represents the camera model d2 *entity* (3.2.9)

4.39.9
camera_model_d2_shape_clipping
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *camera_model_d2* (4.39.8) that represents the camera model d2 shape clipping *entity* (3.2.9)

Note 1 to entry: A **camera_model_d2_shape_clipping** is a type of camera_model_d2 with additional clipping specified for the mapped representation.

4.39.10
camera_model_d3
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *camera_model* (4.39.7) that represents the camera model d3 *entity* (3.2.9)

4.39.11
camera_model_d3_multi_clipping
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *camera_model_d3* (4.39.10) that represents the camera model d3 multi clipping *entity* (3.2.9)

4.39.12
camera_model_d3_multi_clipping_union
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the camera model d3 multi clipping union *entity* (3.2.9)

Note 1 to entry: A **camera_model_d3_multi_clipping_union** is a type of geometric_representation_item that defines an intermediate acceptance region for a *camera_model_d3_multi_clipping_intersection* (4.39.13) or a *camera_model_d3_multi_clipping* (4.39.11).

4.39.13
camera_model_d3_multi_clipping_intersection
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the camera model d3 multi clipping intersection *entity* (3.2.9)

Note 1 to entry: A **camera_model_d3_multi_clipping_intersection** is a type of geometric_representation_item that defines an intermediate acceptance region for a *camera_model_d3_multi_clipping_union* (4.39.12).

4.39.14
camera_model_d3_with_hlhsr
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *camera_model_d3* (4.39.10) that represents the camera model d3 with hlhsr *entity* (3.2.9)

Note 1 to entry: A **camera_model_d3_with_hlhsr** is a type of camera_model_d3 that indicates whether hidden line and hidden surface removal shall be performed.

4.39.15

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camera_model_with_light_sources
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *camera_model_d3* (4.39.10) that represents the camera model with light sources *entity* (3.2.9)

4.39.16
camera_usage
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *representation_map* (4.41.18) that represents the camera usage *entity* (3.2.9)

4.39.17
graphical_transformation
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *item_defined_transformation* (4.41.10) that represents the graphical transformation *entity* (3.2.9)

4.39.18
light_source
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the light source *entity* (3.2.9)

4.39.19
light_source_ambient
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *light_source* (4.39.18) that represents the light source ambient *entity* (3.2.9)

4.39.20
light_source_directional
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *light_source* (4.39.18) that represents the light source directional *entity* (3.2.9)

4.39.21
light_source_positional
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *light_source* (4.39.18) that represents the light source positional *entity* (3.2.9)

4.39.22
light_source_spot
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *light_source* (4.39.18) that represents the light source spot *entity* (3.2.9)

4.39.23
presentation_area
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *presentation_representation* (4.39.26) that represents the presentation area *entity* (3.2.9)

4.39.24
presentation_layer_assignment
<resource: presentation_organization_schema> *entity data type* (3.2.10) that represents the presentation layer assignment *entity* (3.2.9)

Note 1 to entry: A **presentation_layer_assignment** is assignment of an identifier to a set of *presentation_representation* (4.39.26) instances or *representation_item* (4.41.16) instances.

4.39.25

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presentation_layer_usage
<resource: presentation_organization_schema> *entity data type* (3.2.10) that represents the presentation layer usage *entity* (3.2.9)

Note 1 to entry: A **presentation_layer_usage** is a relationship between a *presentation_layer_assignment* (4.39.24) and a *presentation_representation* (4.39.26) in order to provide a context for the assignment of style and visibility to items assigned to a layer.

4.39.26
presentation_representation
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the presentation representation *entity* (3.2.9)

4.39.27
presentation_representation_relationship
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *representation_relationship_with_transformation* (4.41.21) that represents the presentation representation relationship *entity* (3.2.9)

4.39.28
presentation_set
<resource: presentation_organization_schema> *entity data type* (3.2.10) that represents the presentation set *entity* (3.2.9)

Note 1 to entry: A **presentation_set** is a collection of *presentation_area* (4.39.23) instances.

4.39.29
presentation_size
<resource: presentation_organization_schema> *entity data type* (3.2.10) that represents the presentation size *entity* (3.2.9)

Note 1 to entry: A **presentation_size** is used to define the size of a *presentation_area* (4.39.23) or *presentation_view* (4.39.30).

4.39.30
presentation_view
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *presentation_representation* (4.39.26) that represents the presentation view *entity* (3.2.9)

4.39.31
presented_item
<resource: presentation_organization_schema> *entity data type* (3.2.10) that represents the presented item *entity* (3.2.9)

Note 1 to entry: A **presented_item** is the identification of the subject of a picture.

4.39.32
presented_item_representation
<resource: presentation_organization_schema> *entity data type* (3.2.10) that represents the presented item representation *entity* (3.2.9)

Note 1 to entry: A **presented_item_representation** is the association of *presentation_representation* (4.39.26) or *presentation_set* (4.39.28) with the item for which it is a picture.

4.39.33

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product_data_representation_view
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *presentation_representation* (4.39.26) that represents the product data representation view *entity* (3.2.9)

4.39.34
representation_item_dependent_layer_assignment
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *presentation_layer_assignment* (4.39.24) that represents the representation item dependent layer assignment *entity* (3.2.9)

Note 1 to entry: A **representation_item_dependent_layer_assignment** is a type of presentation_layer_assignment that assigns a layer to a *presentation_representation* (4.39.26) or a styled *representation_item* (4.41.16) only as it participates in the definition of a representation_item.

4.39.35
view_dependent_annotation_representation
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *presentation_representation* (4.39.26) that represents the view dependent annotation representation *entity* (3.2.9)

4.39.36
view_volume
<resource: presentation_organization_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the view volume *entity* (3.2.9)

4.40 presentation_resource_schema

4.40.1
character_glyph_font_usage
<resource: presentation_resource_schema> *entity data type* (3.2.10) that represents the character glyph font usage *entity* (3.2.9)

Note 1 to entry: A **character_glyph_font_usage** is the participation of a *generic_character_glyph_symbol* (4.40.13) in a *text_font* (4.40.20).

4.40.2
character_glyph_symbol
<resource: presentation_resource_schema> *entity data type* (3.2.10) that is a type of *generic_character_glyph_symbol* (4.40.13) that represents the character glyph symbol *entity* (3.2.9)

4.40.3
character_glyph_symbol_outline
<resource: presentation_resource_schema> *entity data type* (3.2.10) that is a type of *character_glyph_symbol* (4.40.2) that represents the character glyph symbol outline *entity* (3.2.9)

Note 1 to entry: A **character_glyph_symbol_outline** is a type of character_glyph_symbol where the geometry of the glyph is described by a set of *annotation_fill_area* (4.38.2).

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4.40.4
character_glyph_symbol_stroke
<resource: presentation_resource_schema> *entity data type* (3.2.10) that is a type of *character_glyph_symbol* (4.40.2) that represents the character glyph symbol stroke *entity* (3.2.9)

Note 1 to entry: A **character_glyph_symbol_stroke** is a type of character_glyph_symbol where the geometry of the glyph is described by a set of curves.

4.40.5
colour
<resource: presentation_resource_schema> *entity data type* (3.2.10) that represents the colour *entity* (3.2.9)

Note 1 to entry: A **colour** is a basic appearance property of an element with respect to the light reflected by it.

4.40.6
colour_associated
<resource: presentation_resource_schema> *entity data type* (3.2.10) that is a type of *colour* (4.40.5) that represents the colour associated *entity* (3.2.9)

4.40.7
colour_association_table
<resource: presentation_resource_schema> *entity data type* (3.2.10) that represents the colour association table *entity* (3.2.9)

Note 1 to entry: A **colour_association_table** is a mapping of a one-dimensional state variable space into a colour space.

4.40.8
colour_rgb
<resource: presentation_resource_schema> *entity data type* (3.2.10) that is a type of *colour_specification* (4.40.9) that represents the colour rgb *entity* (3.2.9)

4.40.9
colour_specification
<resource: presentation_resource_schema> *entity data type* (3.2.10) that is a type of *colour* (4.40.5) that represents the colour specification *entity* (3.2.9)

4.40.10
draughting_pre_defined_colour
<resource: presentation_resource_schema> *entity data type* (3.2.10) that is a type of *pre_defined_colour* (4.40.16) that represents the draughting pre defined colour *entity* (3.2.9)

Note 1 to entry: A **draughting_pre_defined_colour** is a type of pre_defined_colour that is identified by name.

4.40.11
draughting_pre_defined_text_font
<resource: presentation_resource_schema> *entity data type* (3.2.10) that is a type of *pre_defined_text_font* (4.40.17) that represents the draughting pre defined text font *entity* (3.2.9)

Note 1 to entry: A **draughting_pre_defined_text_font** is a type of pre_defined_text_font that shall be defined by ISO 3098.

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4.40.12
externally_defined_text_font
<resource: presentation_resource_schema> *entity data type* (3.2.10) that is a type of *externally_defined_item* (4.11.3) that represents the externally defined text font *entity* (3.2.9)

4.40.13
generic_character_glyph_symbol
<resource: presentation_resource_schema> *entity data type* (3.2.10) that is a type of *symbol_representation* (4.38.30) that represents the generic character glyph symbol *entity* (3.2.9)

Note 1 to entry: A **generic_character_glyph_symbol** is a type of symbol_representation that contains the geometric representation of a character.

4.40.14
planar_box
<resource: presentation_resource_schema> *entity data type* (3.2.10) that is a type of *planar_extent* (4.40.15) that represents the planar box *entity* (3.2.9)

4.40.15
planar_extent
<resource: presentation_resource_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the planar extent *entity* (3.2.9)

4.40.16
pre_defined_colour
<resource: presentation_resource_schema> *entity data type* (3.2.10) that is a type of *pre_defined_item* (4.11.6) and *colour* (4.40.5) that represents the pre defined colour *entity* (3.2.9)

Note 1 to entry: A **pre_defined_colour** is a type of colour and a type of pre_defined_item.

4.40.17
pre_defined_text_font
<resource: presentation_resource_schema> *entity data type* (3.2.10) that is a type of *pre_defined_item* (4.11.6) that represents the pre defined text font *entity* (3.2.9)

4.40.18
presentation_scaled_placement
<resource: presentation_resource_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the presentation scaled placement *entity* (3.2.9)

Note 1 to entry: A **presentation_scaled_placement** is a type of geometric_representation_item provided to support the definition of *graphical_transformation* (4.39.17).

4.40.19
state_variable_with_colour
<resource: presentation_resource_schema> *entity data type* (3.2.10) that represents the state variable with colour *entity* (3.2.9)

Note 1 to entry: A **state_variable_with_colour** is an association of a single fixed state variable with a *colour_specification* (4.40.9).

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4.40.20
text_font
<resource: presentation_resource_schema> *entity data type* (3.2.10) that represents the text font *entity* (3.2.9)

Note 1 to entry: A **text_font** is the identification of a specific character font.

4.40.21
text_font_family
<resource: presentation_resource_schema> *entity data type* (3.2.10) that represents the text font family *entity* (3.2.9)

Note 1 to entry: A **text_font_family** is the identification of a related collection of *text_font* (4.40.20).

4.40.22
text_font_in_family
<resource: presentation_resource_schema> *entity data type* (3.2.10) that represents the text font in family *entity* (3.2.9)

Note 1 to entry: A **text_font_in_family** is the participation of a *text_font* (4.40.20) in a *text_font_family* (4.40.21).

4.41 representation_schema

4.41.1
binary_representation_item
<resource: representation_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the binary representation item *entity* (3.2.9)

Note 1 to entry: A **binary_representation_item** is a type of representation_item that specifies a binary value.

4.41.2
bytes_representation_item
<resource: representation_schema> *entity data type* (3.2.10) that is a type of *binary_representation_item* (4.41.1) that represents the bytes representation item *entity* (3.2.9)

Note 1 to entry: A **bytes_representation_item** is a type of binary_representation_item that specifies a byte value.

4.41.3
compound_representation_item
<resource: representation_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the compound representation item *entity* (3.2.9)

Note 1 to entry: A **compound_representation_item** is a type of representation_item that is defined by an aggregation of other instances of representation_item.

4.41.4
definitional_representation
<resource: representation_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the definitional representation *entity* (3.2.9)

Note 1 to entry: A **definitional_representation** is a type of representation that has a *parametric_representation_context* (4.41.12).

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4.41.5
definitional_representation_relationship
<resource: representation_schema> *entity data type* (3.2.10) that is a type of *representation_relationship* (4.41.20) that represents the definitional representation relationship *entity* (3.2.9)

4.41.6
definitional_representation_relationship_with_same_context
<resource: representation_schema> *entity data type* (3.2.10) that is a type of *definitional_representation_relationship* (4.41.5) that represents the definitional representation relationship with same context *entity* (3.2.9)

Note 1 to entry: A **definitional_representation_relationship_with_same_context** is a type of definitional_representation_relationship in which the related representations have the same context.

4.41.7
founded_item
<resource: representation_schema> *entity data type* (3.2.10) that represents the founded item *entity* (3.2.9)

Note 1 to entry: A **founded_item** is an entity data type that represents part of an element of representation.

4.41.8
functionally_defined_transformation
<resource: representation_schema> *entity data type* (3.2.10) that represents the functionally defined transformation *entity* (3.2.9)

Note 1 to entry: A **functionally_defined_transformation** is a transformation operator that helps to compose an explicit transformation function.

4.41.9
global_uncertainty_assigned_context
<resource: representation_schema> *entity data type* (3.2.10) that is a type of *representation_context* (4.41.14) that represents the global uncertainty assigned context *entity* (3.2.9)

Note 1 to entry: A **global_uncertainty_assigned_context** is a type of representation_context that specifies uncertainty for the elements of representation that are associated with it.

4.41.10
item_defined_transformation
<resource: representation_schema> *entity data type* (3.2.10) that represents the item defined transformation *entity* (3.2.9)

Note 1 to entry: An **item_defined_transformation** has two interpretations.

4.41.11
mapped_item
<resource: representation_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the mapped item *entity* (3.2.9)

Note 1 to entry: A **mapped_item** is a type of representation_item that specifies the mapping of a *representation* (4.41.13) as an element of the items of a second representation.

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4.41.12
parametric_representation_context
<resource: representation_schema> *entity data type* (3.2.10) that is a type of *representation_context* (4.41.14) that represents the parametric representation context *entity* (3.2.9)

Note 1 to entry: A **parametric_representation_context** is a type of representation_context in which instances of *representation_item* (4.41.16) are defined in a parametric space.

4.41.13
representation
<resource: representation_schema> *entity data type* (3.2.10) that represents the representation *entity* (3.2.9)

Note 1 to entry: A **representation** is a collection of one or more *representation_item* (4.41.16) instances that are related in a specified *representation_context* (4.41.14).

4.41.14
representation_context
<resource: representation_schema> *entity data type* (3.2.10) that represents the representation context *entity* (3.2.9)

Note 1 to entry: A **representation_context** is a context in which instances of *representation_item* (4.41.16) are related.

4.41.15
representation_context_reference
<resource: representation_schema> *entity data type* (3.2.10) that represents the representation context reference *entity* (3.2.9)

Note 1 to entry: A **representation_context_reference** is an identification based reference to a *representation_context* (4.41.14).

4.41.16
representation_item
<resource: representation_schema> *entity data type* (3.2.10) that represents the representation item *entity* (3.2.9)

Note 1 to entry: A **representation_item** is an element of representation.

4.41.17
representation_item_relationship
<resource: representation_schema> *entity data type* (3.2.10) that represents the representation item relationship *entity* (3.2.9)

Note 1 to entry: A **representation_item_relationship** is an association between two instances of *representation_item* (4.41.16).

4.41.18
representation_map
<resource: representation_schema> *entity data type* (3.2.10) that represents the representation map *entity* (3.2.9)

Note 1 to entry: A **representation_map** is the identification of a *representation* (4.41.13), and of a *representation_item* (4.41.16) that is an element within the context of the representation, for the purpose of mapping.

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4.41.19
representation_reference
<resource: representation_schema> *entity data type* (3.2.10) that represents the representation reference *entity* (3.2.9)

Note 1 to entry: A **representation_reference** is an identification based reference to a *representation* (4.41.13).

4.41.20
representation_relationship
<resource: representation_schema> *entity data type* (3.2.10) that represents the representation relationship *entity* (3.2.9)

4.41.21
representation_relationship_with_transformation
<resource: representation_schema> *entity data type* (3.2.10) that is a type of *representation_relationship* (4.41.20) that represents the representation relationship with transformation *entity* (3.2.9)

4.41.22
uncertainty_assigned_representation
<resource: representation_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the uncertainty assigned representation *entity* (3.2.9)

Note 1 to entry: An **uncertainty_assigned_representation** is a type of representation that specifies uncertainty with respect to the elements of representation that it collects.

4.41.23
uncertainty_measure_with_unit
<resource: representation_schema> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the uncertainty measure with unit *entity* (3.2.9)

Note 1 to entry: An **uncertainty_measure_with_unit** is a type of measure_with_unit that specifies the uncertainty that applies to a type of measure.

4.41.24
value_representation_item
<resource: representation_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the value representation item *entity* (3.2.9)

Note 1 to entry: A **value_representation_item** is a type of representation_item that specifies only a measure value.

4.42 shape_aspect_definition_schema

4.42.1
all_around_shape_aspect
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *continuous_shape_aspect* (4.42.9) that represents the all around shape aspect *entity* (3.2.9)

Note 1 to entry: An **all_around_shape_aspect** is a type of *composite_shape_aspect* (4.42.7) for a continuous, closed toleranced feature.

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4.42.2
apex
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *derived_shape_aspect* (4.42.18) that represents the apex *entity* (3.2.9)

Note 1 to entry: An **apex** is a type of derived_shape_aspect that defines the point corresponding to the common apex (the location where a plane and conical element intersect at a single point) of one or more conical *shape_aspect* (4.19.10) elements.

4.42.3
between_shape_aspect
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *continuous_shape_aspect* (4.42.9) that represents the between shape aspect *entity* (3.2.9)

Note 1 to entry: A **between_shape_aspect** is a type of continuous_shape_aspect where some of the composing members are marked as forming elements of the borders of the continuous region.

4.42.4
centre_of_symmetry
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *derived_shape_aspect* (4.42.18) that represents the centre of symmetry *entity* (3.2.9)

Note 1 to entry: A **centre_of_symmetry** is a type of derived_shape_aspect that defines the geometric centre of symmetry of one or more *symmetric_shape_aspect* (4.42.33).

4.42.5
common_datum
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *composite_shape_aspect* (4.42.7) and *datum* (4.42.10) that represents the common datum *entity* (3.2.9)

Note 1 to entry: A **common_datum** is a type of composite_shape_aspect and of datum that is established by two other *shape_aspect* (4.19.10) of type datum.

4.42.6
composite_group_shape_aspect
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *composite_shape_aspect* (4.42.7) that represents the composite group shape aspect *entity* (3.2.9)

4.42.7
composite_shape_aspect
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the composite shape aspect *entity* (3.2.9)

Note 1 to entry: A **composite_shape_aspect** is a type of shape_aspect that associates aspects of the product shape for a specific purpose.

4.42.8
contacting_feature
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the contacting feature *entity* (3.2.9)

Note 1 to entry: A **contacting_feature** is a type of shape_aspect used to establish a *datum* (4.42.10) The rules governing contacting features defined in ISO 5459 shall apply.

4.42.9

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continuous_shape_aspect
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *composite_shape_aspect* (4.42.7) that represents the continuous shape aspect *entity* (3.2.9)

Note 1 to entry: A **continuous_shape_aspect** is a type of composite_shape_aspect wherein the geometric elements associated with the underlying *shape_aspect* (4.19.10) members are touching and thus establish a continuous region.

4.42.10
datum
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the datum *entity* (3.2.9)

Note 1 to entry: A **datum** is a type of shape_aspect used to establish an origin for theoretically exact dimensions and geometrical tolerances.

4.42.11
datum_feature
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the datum feature *entity* (3.2.9)

Note 1 to entry: A **datum_feature** is a type of shape_aspect on the boundary of the product.

4.42.12
datum_reference
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that represents the datum reference *entity* (3.2.9)

Note 1 to entry: A **datum_reference** is the specification of the use of a *datum* (4.42.10).

4.42.13
datum_reference_compartment
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *general_datum_reference* (4.42.23) that represents the datum reference compartment *entity* (3.2.9)

Note 1 to entry: A **datum_reference_compartment** is a type of general_datum_reference that represents the compartment of either the primary, secondary or tertiary datum in a feature control frame.

4.42.14
datum_reference_element
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *general_datum_reference* (4.42.23) that represents the datum reference element *entity* (3.2.9)

Note 1 to entry: A **datum_reference_element** is a type of general_datum_reference that represents a single datum reference of a common datum with a *datum_reference_compartment* (4.42.13).

4.42.15
datum_reference_modifier_with_value
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that represents the datum reference modifier with value *entity* (3.2.9)

Note 1 to entry: A **datum_reference_modifier_with_value** is an association between a **modifier_type** and a **modifier_value** that defines the specific boundary size of the associated feature for establishing a datum.

4.42.16

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datum_system
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the datum system *entity* (3.2.9)

Note 1 to entry: A **datum_system** is a type of shape_aspect that represents the ordered collection of one to three datum reference compartments within a geometric tolerance frame.

4.42.17
datum_target
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the datum target *entity* (3.2.9)

Note 1 to entry: A **datum_target** is a type of shape_aspect that indicates a datum target on the boundary of a product shape.

4.42.18
derived_shape_aspect
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the derived shape aspect *entity* (3.2.9)

Note 1 to entry: A **derived_shape_aspect** is a type of shape_aspect that depends on the definition of one or more specific shapes.

4.42.19
dimensional_location_with_datum_feature
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *datum_feature* (4.42.11) and *dimensional_location* (4.43.4) that represents the dimensional location with datum feature *entity* (3.2.9)

Note 1 to entry: A **dimensional_location_with_datum_feature** is a type of datum_feature and of dimensional_location that shall be used when the datum is established from two opposing *shape_aspect* (4.19.10) instances that define a feature of size.

4.42.20
dimensional_size_with_datum_feature
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *datum_feature* (4.42.11) and *dimensional_size* (4.43.6) that represents the dimensional size with datum feature *entity* (3.2.9)

Note 1 to entry: A **dimensional_size_with_datum_feature** is a type of datum_feature and of dimensional_size.

4.42.21
extension
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *derived_shape_aspect* (4.42.18) that represents the extension *entity* (3.2.9)

Note 1 to entry: An **extension** is a type of derived_shape_aspect that corresponds to the extension of a curve or surface *shape_aspect* (4.19.10) element.

4.42.22
feature_definition
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) that represents the feature definition *entity* (3.2.9)

Note 1 to entry: A **feature_definition** is a type of characterized_object that is a preconceived form pattern.

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4.42.23
general_datum_reference
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the general datum reference *entity* (3.2.9)

Note 1 to entry: A **general_datum_reference** is a type of shape_aspect that represents the occurrence of a *datum* (4.42.10) within a *datum_system* (4.42.16).

4.42.24
geometric_alignment
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *derived_shape_aspect* (4.42.18) that represents the geometric alignment *entity* (3.2.9)

Note 1 to entry: A **geometric_alignment** is a type of derived_shape_aspect that defines a planar or linear feature that requires two or more features lying in the same plane or along the same line.

4.42.25
geometric_contact
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *derived_shape_aspect* (4.42.18) that represents the geometric contact *entity* (3.2.9)

Note 1 to entry: A **geometric_contact** is a type of derived_shape_aspect that represents the common contact region between two *shape_aspect* (4.19.10) instances.

4.42.26
geometric_intersection
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *derived_shape_aspect* (4.42.18) that represents the geometric intersection *entity* (3.2.9)

Note 1 to entry: A **geometric_intersection** is a type of derived_shape_aspect that is the common intersection of two or more *shape_aspect* (4.19.10) elements.

4.42.27
instanced_feature
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) and *shape_aspect* (4.19.10) that represents the instanced feature *entity* (3.2.9)

Note 1 to entry: An **instanced_feature** is a type of feature_definition and of a shape_aspect that is the identification of a preconceived form pattern on a *product_definition* (4.18.7).

4.42.28
parallel_offset
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *derived_shape_aspect* (4.42.18) that represents the parallel offset *entity* (3.2.9)

4.42.29
perpendicular_to
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *derived_shape_aspect* (4.42.18) that represents the perpendicular to *entity* (3.2.9)

Note 1 to entry: A **perpendicular_to** is a type of derived_shape_aspect that is oriented orthogonally to another *shape_aspect* (4.19.10).

4.42.30

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referenced_modified_datum
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *datum_reference* (4.42.12) that represents the referenced modified datum *entity* (3.2.9)

Note 1 to entry: A **referenced_modified_datum** is a type of datum_reference where the referenced datum may vary within the specified limits of size.

4.42.31
shape_aspect_deriving_relationship
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) that represents the shape aspect deriving relationship *entity* (3.2.9)

Note 1 to entry: A **shape_aspect_deriving_relationship** is a type of shape_aspect_relationship that defines the specific association between a *derived_shape_aspect* (4.42.18) and one or more *shape_aspect* (4.19.10).

4.42.32
shape_representation_with_parameters
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the shape representation with parameters *entity* (3.2.9)

4.42.33
symmetric_shape_aspect
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the symmetric shape aspect *entity* (3.2.9)

Note 1 to entry: A **symmetric_shape_aspect** is a type of shape aspect of a product that is symmetrical about a geometric element.

4.42.34
tangent
<resource: shape_aspect_definition_schema> *entity data type* (3.2.10) that is a type of *derived_shape_aspect* (4.42.18) that represents the tangent *entity* (3.2.9)

Note 1 to entry: A **tangent** is a type of derived_shape_aspect that contacts a curve or surface *shape_aspect* (4.19.10) at a single point or line.

4.43 shape_dimension_schema

4.43.1
angular_location
<resource: shape_dimension_schema> *entity data type* (3.2.10) that is a type of *dimensional_location* (4.43.4) that represents the angular location *entity* (3.2.9)

4.43.2
angular_size
<resource: shape_dimension_schema> *entity data type* (3.2.10) that is a type of *dimensional_size* (4.43.6) that represents the angular size *entity* (3.2.9)

4.43.3
dimensional_characteristic_representation
<resource: shape_dimension_schema> *entity data type* (3.2.10) that represents the dimensional characteristic representation *entity* (3.2.9)

Note 1 to entry: A **dimensional_characteristic_representation** is an association of an implicit dimension with an explicit non-geometric representation.

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4.43.4
dimensional_location
<resource: shape_dimension_schema> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) that represents the dimensional location *entity* (3.2.9)

4.43.5
dimensional_location_with_path
<resource: shape_dimension_schema> *entity data type* (3.2.10) that is a type of *dimensional_location* (4.43.4) that represents the dimensional location with path *entity* (3.2.9)

4.43.6
dimensional_size
<resource: shape_dimension_schema> *entity data type* (3.2.10) that represents the dimensional size *entity* (3.2.9)

Note 1 to entry: A **dimensional_size** is a spatial characteristic of a *shape_aspect* (4.19.10) that is represented by a measure.

4.43.7
dimensional_size_with_path
<resource: shape_dimension_schema> *entity data type* (3.2.10) that is a type of *dimensional_size* (4.43.6) that represents the dimensional size with path *entity* (3.2.9)

4.43.8
directed_dimensional_location
<resource: shape_dimension_schema> *entity data type* (3.2.10) that is a type of *dimensional_location* (4.43.4) that represents the directed dimensional location *entity* (3.2.9)

4.43.9
shape_dimension_representation
<resource: shape_dimension_schema> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the shape dimension representation *entity* (3.2.9)

4.44 shape_tolerance_schema

4.44.1
angularity_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance_with_datum_reference* (4.44.12) that represents the angularity tolerance *entity* (3.2.9)

4.44.2
circular_runout_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance_with_datum_reference* (4.44.12) that represents the circular runout tolerance *entity* (3.2.9)

4.44.3
coaxiality_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance_with_datum_reference* (4.44.12) that represents the coaxiality tolerance *entity* (3.2.9)

4.44.4

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concentricity_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance_with_datum_reference* (4.44.12) that represents the concentricity tolerance *entity* (3.2.9)

4.44.5
cylindricity_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance* (4.44.9) that represents the cylindricity tolerance *entity* (3.2.9)

4.44.6
dimension_related_tolerance_zone_element
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that represents the dimension related tolerance zone element *entity* (3.2.9)

Note 1 to entry: A **dimension_related_tolerance_zone_element** is an association of a tolerance zone definition with a locating dimension.

4.44.7
directed_tolerance_zone
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *tolerance_zone_with_datum* (4.44.43) that represents the directed tolerance zone *entity* (3.2.9)

Note 1 to entry: A **directed_tolerance_zone** is a type of tolerance_zone_with_datum that represents an "intersection plane" for a geometric tolerance as defined in ISO 1101.

4.44.8
flatness_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance* (4.44.9) that represents the flatness tolerance *entity* (3.2.9)

4.44.9
geometric_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that represents the geometric tolerance *entity* (3.2.9)

Note 1 to entry: A **geometric_tolerance** is the specification of the allowable range within which a geometrical property of a product may deviate.

4.44.10
geometric_tolerance_auxiliary_classification
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that represents the geometric tolerance auxiliary classification *entity* (3.2.9)

Note 1 to entry: A **geometric_tolerance_auxiliary_classification** is an additional classification applied to a *geometric_tolerance* (4.44.9).

4.44.11
geometric_tolerance_relationship
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that represents the geometric tolerance relationship *entity* (3.2.9)

Note 1 to entry: A **geometric_tolerance_relationship** is an association between two *geometric_tolerance* (4.44.9) instances.

4.44.12

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geometric_tolerance_with_datum_reference
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance* (4.44.9) that represents the geometric tolerance with datum reference *entity* (3.2.9)

Note 1 to entry: A **geometric_tolerance_with_datum_reference** is a type of geometric_tolerance that references one or more *datum* (4.42.10) for specifying the tolerance condition of a *shape_aspect* (4.19.10).

4.44.13
geometric_tolerance_with_defined_area_unit
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance_with_defined_unit* (4.44.14) that represents the geometric tolerance with defined area unit *entity* (3.2.9)

Note 1 to entry: A **geometric_tolerance_with_defined_area_unit** is a type of geometric_tolerance_with_defined_unit specified on a per area unit basis of the *shape_aspect* (4.19.10).

4.44.14
geometric_tolerance_with_defined_unit
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance* (4.44.9) that represents the geometric tolerance with defined unit *entity* (3.2.9)

Note 1 to entry: A **geometric_tolerance_with_defined_unit** is a type of geometric_tolerance specified on a per length unit basis of the *shape_aspect* (4.19.10).

4.44.15
geometric_tolerance_with_maximum_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance_with_modifiers* (4.44.16) that represents the geometric tolerance with maximum tolerance *entity* (3.2.9)

Note 1 to entry: A **geometric_tolerance_with_maximum_tolerance** is a type of geometric_tolerance_with_modifiers that limits the allowable maximum geometric tolerance in combination with a maximum material requirement or least material requirement modifier.

4.44.16
geometric_tolerance_with_modifiers
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance* (4.44.9) that represents the geometric tolerance with modifiers *entity* (3.2.9)

Note 1 to entry: A **geometric_tolerance_with_modifiers** is a type of geometric_tolerance that indicates additional properties of the tolerance.

4.44.17
gps_filtration_specification
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that represents the gps filtration specification *entity* (3.2.9)

Note 1 to entry: A **gps_filtration_specification** is a specification of the filtering of the toleranced feature.

4.44.18
gps_filter
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that represents the gps filter *entity* (3.2.9)

Note 1 to entry: A **gps_filter** is a specification of a filtering element of the toleranced feature.

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4.44.19
limits_and_fits
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that represents the limits and fits *entity* (3.2.9)

Note 1 to entry: A **limits_and_fits** is a pre-defined fit system for specifying the tolerances associated with the assembly of mating product features.

4.44.20
line_profile_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance* (4.44.9) that represents the line profile tolerance *entity* (3.2.9)

4.44.21
modified_geometric_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance* (4.44.9) that represents the modified geometric tolerance *entity* (3.2.9)

Note 1 to entry: A **modified_geometric_tolerance** is a type of geometric_tolerance with a material limit condition that applies to the *shape_aspect* (4.19.10) being toleranced.

4.44.22
non_uniform_zone_definition
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *tolerance_zone_definition* (4.44.41) that represents the non uniform zone definition *entity* (3.2.9)

Note 1 to entry: A **non_uniform_zone_definition** is a type of tolerance_zone_definition The boundaries of a **non_uniform_zone_definition** may have any shape.

4.44.23
oriented_tolerance_zone
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *tolerance_zone_with_datum* (4.44.43) that represents the oriented tolerance zone *entity* (3.2.9)

Note 1 to entry: A **oriented_tolerance_zone** is a type of tolerance_zone_with_datum that represents an "orientation plane" for a geometric tolerance as defined in ISO 1101.

4.44.24
parallelism_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance_with_datum_reference* (4.44.12) that represents the parallelism tolerance *entity* (3.2.9)

4.44.25
perpendicularity_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance_with_datum_reference* (4.44.12) that represents the perpendicularity tolerance *entity* (3.2.9)

4.44.26
plus_minus_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that represents the plus minus tolerance *entity* (3.2.9)

Note 1 to entry: A **plus_minus_tolerance** is the specification of the limits within which the value of a dimension may vary.

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4.44.27
position_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance* (4.44.9) that represents the position tolerance *entity* (3.2.9)

4.44.28
projected_zone_definition
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *tolerance_zone_definition* (4.44.41) that represents the projected zone definition *entity* (3.2.9)

4.44.29
projected_zone_definition_with_offset
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *projected_zone_definition* (4.44.28) that represents the projected zone definition with offset *entity* (3.2.9)

4.44.30
roundness_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance* (4.44.9) that represents the roundness tolerance *entity* (3.2.9)

4.44.31
runout_zone_definition
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *tolerance_zone_definition* (4.44.41) that represents the runout zone definition *entity* (3.2.9)

Note 1 to entry: A **runout_zone_definition** is a type of tolerance_zone_definition that is defined by the orientation of the measurement of the toleranced *shape_aspect* (4.19.10) to the *centre_of_symmetry* (4.42.4) of a *datum_feature* (4.42.11).

4.44.32
runout_zone_orientation
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that represents the runout zone orientation *entity* (3.2.9)

Note 1 to entry: A **runout_zone_orientation** is the specification of the orientation of the runout tolerance element to the centre of symmetry of a *datum_feature* (4.42.11).

4.44.33
runout_zone_orientation_reference_direction
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *runout_zone_orientation* (4.44.32) that represents the runout zone orientation reference direction *entity* (3.2.9)

Note 1 to entry: A **runout_zone_orientation_reference_direction** is a type of runout_zone_orientation that specifies the reference direction for the orientation of the angle.

4.44.34
statistical_distribution_for_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the statistical distribution for tolerance *entity* (3.2.9)

Note 1 to entry: A **statistical_distribution_for_tolerance** is a type of representation that is defined by a set of *measure_representation_item* (4.34.7) that provide the set of distribution parameters.

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4.44.35
straightness_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance* (4.44.9) that represents the straightness tolerance *entity* (3.2.9)

Note 1 to entry: A **straightness_tolerance** is a type of geometric_tolerance that applies either to the intersection curves between the surface and the planes parallel to the reference plane, or to the extracted median curve.

4.44.36
surface_profile_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance* (4.44.9) that represents the surface profile tolerance *entity* (3.2.9)

Note 1 to entry: A **surface_profile_tolerance** is a type of geometric_tolerance that applies to a surface.

4.44.37
symmetry_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance_with_datum_reference* (4.44.12) that represents the symmetry tolerance *entity* (3.2.9)

4.44.38
tolerance_value
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that represents the tolerance value *entity* (3.2.9)

Note 1 to entry: A **tolerance_value** is the representation of plus-minus tolerances for a dimension.

4.44.39
tolerance_with_statistical_distribution
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that represents the tolerance with statistical distribution *entity* (3.2.9)

Note 1 to entry: A **tolerance_with_statistical_distribution** is the allocation of a tolerance in terms of a probability distribution.

4.44.40
tolerance_zone
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the tolerance zone *entity* (3.2.9)

4.44.41
tolerance_zone_definition
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that represents the tolerance zone definition *entity* (3.2.9)

Note 1 to entry: A **tolerance_zone_definition** is a specification of the defining boundaries of a tolerance zone.

4.44.42
tolerance_zone_form
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that represents the tolerance zone form *entity* (3.2.9)

Note 1 to entry: A **tolerance_zone_form** is a description of the shape of the *tolerance_zone* (4.44.40).

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4.44.43
tolerance_zone_with_datum
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *tolerance_zone* (4.44.40) that represents the tolerance zone with datum *entity* (3.2.9)

Note 1 to entry: A **tolerance_zone_with_datum** is a type of tolerance_zone that includes direction or orientation classification with respect to referenced features.

4.44.44
total_runout_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance_with_datum_reference* (4.44.12) that represents the total runout tolerance *entity* (3.2.9)

4.44.45
unequally_disposed_geometric_tolerance
<resource: shape_tolerance_schema> *entity data type* (3.2.10) that is a type of *geometric_tolerance* (4.44.9) that represents the unequally disposed geometric tolerance *entity* (3.2.9)

Note 1 to entry: An **unequally_disposed_geometric_tolerance** is a type of geometric_tolerance whose tolerance zone is offset from the default value.

4.45 action_and_model_relationships_schema

4.45.1
action_view_relationship
<resource: action_and_model_relationships_schema> *entity data type* (3.2.10) that represents the action view relationship *entity* (3.2.9)

Note 1 to entry: An **action_view_relationship** is a relationship between:

— an idealisation of an action for analysis; and

— a discretised action analysis model

which indicates that the discretised action analysis model is a model of the idealised action created for the purpose of numerical analysis.

4.45.2
same_discretised_action_model
<resource: action_and_model_relationships_schema> *entity data type* (3.2.10) that represents the same discretised action model *entity* (3.2.9)

Note 1 to entry: A **same_discretised_action_model** is a relationship between records of a discretised action model, which states they each have the same meaning.

4.45.3
same_idealised_action
<resource: action_and_model_relationships_schema> *entity data type* (3.2.10) that represents the same idealised action *entity* (3.2.9)

Note 1 to entry: A **same_idealised_action** is a relationship between records of an idealisation of action for analysis, which states they each have the same meaning.

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4.46 aic_advanced_brep

4.46.1
advanced_brep_shape_representation
<resource: aic_advanced_brep> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the advanced brep shape representation *entity* (3.2.9)

4.47 aic_associative_draughting_elements

4.47.1
annotation_occurrence_associativity
<resource: aic_associative_draughting_elements> *entity data type* (3.2.10) that is a type of *annotation_occurrence_relationship* (4.38.5) that represents the annotation occurrence associativity *entity* (3.2.9)

Note 1 to entry: An **annotation_occurrence_associativity** is a type of annotation_occurrence_relationship that relates an element of annotation to the leader or projection curve which visually directs information in the drawing to the element or to the fill area whose boundary is derived from the element.

4.47.2
dimension_text_associativity
<resource: aic_associative_draughting_elements> *entity data type* (3.2.10) that is a type of *text_literal* (4.38.41) and *mapped_item* (4.41.11) that represents the dimension text associativity *entity* (3.2.9)

Note 1 to entry: A **dimension_text_associativity** is a type of mapped_item and text_literal that maps a *shape_dimension_representation* (4.43.9) onto the *draughting_callout* (4.80.17) which presents the measurement.

4.47.3
shape_aspect_associativity
<resource: aic_associative_draughting_elements> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) that represents the shape aspect associativity *entity* (3.2.9)

Note 1 to entry: A **shape_aspect_associativity** is a type of shape_aspect_relationship that relates an element of the *shape_representation* (4.20.8) to the leader or projection curve which visually directs information in the drawing to the element or to the fill area boundary that is derived from the element.

4.48 aic_csg

4.48.1
csg_shape_representation
<resource: aic_csg> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the csg shape representation *entity* (3.2.9)

Note 1 to entry: A **csg_shape_representation** is a type of shape_representation that is three-dimensional and that represents the shape of a product using constructive solid geometry operations and techniques.

4.49 aic_curve_swept_solid

4.49.1
curve_swept_solid_shape_representation
<resource: aic_curve_swept_solid> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the curve swept solid shape representation *entity* (3.2.9)

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Note 1 to entry: A **curve_swept_solid_shape_representation** is a type of shape_representation in which the shape of a product is represented by specialisations of *swept_area_solid* (4.27.37) or *swept_disk_solid* (4.27.41) entities.

4.49.2
ruled_surface_swept_area_solid
<resource: aic_curve_swept_solid> *entity data type* (3.2.10) that is a type of *surface_curve_swept_area_solid* (4.27.40) that represents the ruled surface swept area solid *entity* (3.2.9)

4.50 aic_draughting_annotation

4.50.1
annotation_subfigure_occurrence
<resource: aic_draughting_annotation> *entity data type* (3.2.10) that is a type of *annotation_symbol_occurrence* (4.38.8) that represents the annotation subfigure occurrence *entity* (3.2.9)

Note 1 to entry: An **annotation_subfigure_occurrence** is a type of annotation_symbol_occurrence An **annotation_subfigure_occurrence** is a grouping of annotation that is recognized as a subfigure.

4.50.2
draughting_annotation_occurrence
<resource: aic_draughting_annotation> *entity data type* (3.2.10) that is a type of *annotation_occurrence* (4.38.4) that represents the draughting annotation occurrence *entity* (3.2.9)

Note 1 to entry: A **draughting_annotation_occurrence** is a type of annotation_occurrence that specifies constraints within the context of draughting.

4.50.3
draughting_subfigure_representation
<resource: aic_draughting_annotation> *entity data type* (3.2.10) that is a type of *symbol_representation* (4.38.30) that represents the draughting subfigure representation *entity* (3.2.9)

Note 1 to entry: A **draughting_subfigure_representation** is a type of symbol_representation that collects *annotation_occurrence* (4.38.4) as the definition of a subfigure.

4.50.4
draughting_symbol_representation
<resource: aic_draughting_annotation> *entity data type* (3.2.10) that is a type of *symbol_representation* (4.38.30) that represents the draughting symbol representation *entity* (3.2.9)

Note 1 to entry: A **draughting_symbol_representation** is a type of symbol_representation that collects *annotation_curve_occurrence* (4.38.1), *annotation_symbol_occurrence* (4.38.8), *annotation_text_occurrence* (4.38.13), and *annotation_fill_area_occurrence* (4.38.3) as the definition of a symbol.

4.50.5
draughting_text_literal_with_delineation
<resource: aic_draughting_annotation> *entity data type* (3.2.10) that is a type of *text_literal_with_delineation* (4.38.44) that represents the draughting text literal with delineation *entity* (3.2.9)

4.51 aic_draughting_elements

4.51.1

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angular_dimension
<resource: aic_draughting_elements> *entity data type* (3.2.10) that is a type of *dimension_curve_directed_callout* (4.80.21) that represents the angular dimension *entity* (3.2.9)

Note 1 to entry: An **angular_dimension** is a type of dimension_curve_directed_callout directed by a dimension curve that presents a value of angular distance measure.

4.51.2
curve_dimension
<resource: aic_draughting_elements> *entity data type* (3.2.10) that is a type of *dimension_curve_directed_callout* (4.80.21) that represents the curve dimension *entity* (3.2.9)

Note 1 to entry: A **curve_dimension** is a type of dimension_curve_directed_callout directed by a dimension curve that presents a value of distance between two elements, measured along a curved path, or the length of a curved element.

4.51.3
datum_feature_callout
<resource: aic_draughting_elements> *entity data type* (3.2.10) that is a type of *draughting_callout* (4.80.17) that represents the datum feature callout *entity* (3.2.9)

Note 1 to entry: A **datum_feature_callout** is a type of draughting_callout that presents a datum.

4.51.4
datum_target_callout
<resource: aic_draughting_elements> *entity data type* (3.2.10) that is a type of *draughting_callout* (4.80.17) that represents the datum target callout *entity* (3.2.9)

Note 1 to entry: A **datum_target_callout** is a type of draughting_callout that presents a datum target.

4.51.5
diameter_dimension
<resource: aic_draughting_elements> *entity data type* (3.2.10) that is a type of *dimension_curve_directed_callout* (4.80.21) that represents the diameter dimension *entity* (3.2.9)

Note 1 to entry: A **diameter_dimension** is a type of dimension_curve_directed_callout directed by a dimension curve that presents a value of the diametrical size of a circular element.

4.51.6
dimension_callout_component_relationship
<resource: aic_draughting_elements> *entity data type* (3.2.10) that is a type of *draughting_callout_relationship* (4.80.18) that represents the dimension callout component relationship *entity* (3.2.9)

Note 1 to entry: A **dimension_callout_component_relationship** is a type of draughting_callout_relationship that identifies the association between a *structured_dimension_callout* (4.51.15) and a *draughting_callout* (4.80.17) that participates in its definition either as prefix information or suffix information.

4.51.7
dimension_callout_relationship
<resource: aic_draughting_elements> *entity data type* (3.2.10) that is a type of *draughting_callout_relationship* (4.80.18) that represents the dimension callout relationship *entity* (3.2.9)

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Note 1 to entry: A **dimension_callout_relationship** is a type of draughting_callout_relationship that relates the presentation of a dimension to the presentation of the dimension callout either as the primary callout or as the secondary callout.

4.51.8
dimension_pair
<resource: aic_draughting_elements> *entity data type* (3.2.10) that is a type of *draughting_callout_relationship* (4.80.18) that represents the dimension pair *entity* (3.2.9)

Note 1 to entry: A **dimension_pair** is a type of draughting_callout_relationship that identifies the relationship between dimensions that participate in a chained or parallel dimension sequence.

4.51.9
draughting_elements
<resource: aic_draughting_elements> *entity data type* (3.2.10) that is a type of *draughting_callout* (4.80.17) that represents the draughting elements *entity* (3.2.9)

Note 1 to entry: A **draughting_elements** is a type of draughting_callout that specifies constraints on the grouping of annotation within the context of draughting.

4.51.10
geometrical_tolerance_callout
<resource: aic_draughting_elements> *entity data type* (3.2.10) that is a type of *draughting_callout* (4.80.17) that represents the geometrical tolerance callout *entity* (3.2.9)

Note 1 to entry: A **geometrical_tolerance_callout** is a type of draughting_callout that presents a geometrical tolerance.

4.51.11
leader_directed_dimension
<resource: aic_draughting_elements> *entity data type* (3.2.10) that is a type of *leader_directed_callout* (4.80.19) that represents the leader directed dimension *entity* (3.2.9)

Note 1 to entry: A **leader_directed_dimension** is a type of leader_directed_callout directed by a leader curve that presents some dimension value.

4.51.12
linear_dimension
<resource: aic_draughting_elements> *entity data type* (3.2.10) that is a type of *dimension_curve_directed_callout* (4.80.21) that represents the linear dimension *entity* (3.2.9)

Note 1 to entry: A **linear_dimension** is a type of dimension_curve_directed_callout directed by a dimension curve that presents a value of distance between two elements, measured along a linear path, or the length of a linear element.

4.51.13
ordinate_dimension
<resource: aic_draughting_elements> *entity data type* (3.2.10) that is a type of *projection_directed_callout* (4.80.20) that represents the ordinate dimension *entity* (3.2.9)

Note 1 to entry: An **ordinate_dimension** is a type of projection_directed_callout directed by a projection curve that presents a dimension value.

4.51.14

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radius_dimension
<resource: aic_draughting_elements> *entity data type* (3.2.10) that is a type of *dimension_curve_directed_callout* (4.80.21) that represents the radius dimension *entity* (3.2.9)

Note 1 to entry: A **radius_dimension** is a type of dimension_curve_directed_callout directed by a dimension curve that presents a value of the radial size of a circular element.

4.51.15
structured_dimension_callout
<resource: aic_draughting_elements> *entity data type* (3.2.10) that is a type of *draughting_callout* (4.80.17) that represents the structured dimension callout *entity* (3.2.9)

Note 1 to entry: A **structured_dimension_callout** is a type of draughting_callout that presents information associated with a dimension, in which individual elements presenting different components of the dimensional information may be identified and distinguished.

4.52 aic_drawing_structure_and_administration

4.52.1
draughting_approval_assignment
<resource: aic_drawing_structure_and_administration> *entity data type* (3.2.10) that is a type of *approval_assignment* (4.15.5) that represents the draughting approval assignment *entity* (3.2.9)

4.52.2
draughting_contract_assignment
<resource: aic_drawing_structure_and_administration> *entity data type* (3.2.10) that is a type of *contract_assignment* (4.15.14) that represents the draughting contract assignment *entity* (3.2.9)

4.52.3
draughting_drawing_revision
<resource: aic_drawing_structure_and_administration> *entity data type* (3.2.10) that is a type of *drawing_revision* (4.81.2) that represents the draughting drawing revision *entity* (3.2.9)

4.52.4
draughting_organization_assignment
<resource: aic_drawing_structure_and_administration> *entity data type* (3.2.10) that is a type of *organization_assignment* (4.15.42) that represents the draughting organization assignment *entity* (3.2.9)

4.52.5
draughting_person_and_organization_assignment
<resource: aic_drawing_structure_and_administration> *entity data type* (3.2.10) that is a type of *person_and_organization_assignment* (4.15.47) that represents the draughting person and organization assignment *entity* (3.2.9)

4.52.6
draughting_person_assignment
<resource: aic_drawing_structure_and_administration> *entity data type* (3.2.10) that is a type of *person_assignment* (4.15.48) that represents the draughting person assignment *entity* (3.2.9)

4.52.7
draughting_presented_item
<resource: aic_drawing_structure_and_administration> *entity data type* (3.2.10) that is a type of *presented_item* (4.39.31) that represents the draughting presented item *entity* (3.2.9)

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4.52.8
draughting_security_classification_assignment
<resource: aic_drawing_structure_and_administration> *entity data type* (3.2.10) that is a type of *security_classification_assignment* (4.15.61) that represents the draughting security classification assignment *entity* (3.2.9)

4.52.9
draughting_specification_reference
<resource: aic_drawing_structure_and_administration> *entity data type* (3.2.10) that is a type of *document_reference* (4.15.17) that represents the draughting specification reference *entity* (3.2.9)

4.53 aic_edge_based_wireframe

4.53.1
edge_based_wireframe_shape_representation
<resource: aic_edge_based_wireframe> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the edge based wireframe shape representation *entity* (3.2.9)

4.54 aic_elementary_brep

4.54.1
elementary_brep_shape_representation
<resource: aic_elementary_brep> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the elementary brep shape representation *entity* (3.2.9)

4.55 aic_faceted_brep

4.55.1
faceted_brep_shape_representation
<resource: aic_faceted_brep> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the faceted brep shape representation *entity* (3.2.9)

4.56 aic_geometrically_bounded_2d_wireframe

4.56.1
geometrically_bounded_2d_wireframe_representation
<resource: aic_geometrically_bounded_2d_wireframe> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the geometrically bounded 2d wireframe representation *entity* (3.2.9)

Note 1 to entry: A **geometrically_bounded_2d_wireframe_representation** is a type of shape_representation that represents the shape of a product by two-dimensional wireframe geometry without topology.

4.57 aic_geometrically_bounded_surface

4.57.1
geometrically_bounded_surface_shape_representation
<resource: aic_geometrically_bounded_surface> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the geometrically bounded surface shape representation *entity* (3.2.9)

4.58 aic_geometrically_bounded_wireframe

4.58.1

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geometrically_bounded_wireframe_shape_representation
<resource: aic_geometrically_bounded_wireframe> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the geometrically bounded wireframe shape representation *entity* (3.2.9)

4.59 aic_manifold_subsurface

4.59.1
manifold_subsurface_shape_representation
<resource: aic_manifold_subsurface> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the manifold subsurface shape representation *entity* (3.2.9)

Note 1 to entry: A **manifold_subsurface_shape_representation** is a type of shape_representation in which the shape of a product is represented by specialisations of *connected_face_sub_set* (4.31.5) entities.

4.60 aic_manifold_surface

4.60.1
manifold_surface_shape_representation
<resource: aic_manifold_surface> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the manifold surface shape representation *entity* (3.2.9)

4.61 aic_mechanical_design_geometric_presentation

4.61.1
mechanical_design_geometric_presentation_area
<resource: aic_mechanical_design_geometric_presentation> *entity data type* (3.2.10) that is a type of *presentation_area* (4.39.23) that represents the mechanical design geometric presentation area *entity* (3.2.9)

4.61.2
mechanical_design_geometric_presentation_representation
<resource: aic_mechanical_design_geometric_presentation> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the mechanical design geometric presentation representation *entity* (3.2.9)

4.62 aic_mechanical_design_shaded_presentation

4.62.1
mechanical_design_shaded_presentation_area
<resource: aic_mechanical_design_shaded_presentation> *entity data type* (3.2.10) that is a type of *presentation_area* (4.39.23) that represents the mechanical design shaded presentation area *entity* (3.2.9)

4.62.2
mechanical_design_shaded_presentation_representation
<resource: aic_mechanical_design_shaded_presentation> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the mechanical design shaded presentation representation *entity* (3.2.9)

4.63 aic_non_manifold_surface

4.63.1

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non_manifold_surface_shape_representation
<resource: aic_non_manifold_surface> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the non manifold surface shape representation *entity* (3.2.9)

4.64 aic_shell_based_wireframe

4.64.1
shell_based_wireframe_shape_representation
<resource: aic_shell_based_wireframe> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the shell based wireframe shape representation *entity* (3.2.9)

4.65 aic_topologically_bounded_surface

4.65.1
advanced_face
<resource: aic_topologically_bounded_surface> *entity data type* (3.2.10) that is a type of *face_surface* (4.31.16) that represents the advanced face *entity* (3.2.9)

4.66 analysis_product_relationships_schema

4.66.1
idealisation_relationship
<resource: analysis_product_relationships_schema> *entity data type* (3.2.10) that represents the idealisation relationship *entity* (3.2.9)

Note 1 to entry: An *idealisation_relationship* (4.66.1) is a particular *temporal_spatial_domain* (4.105.8) that is an idealisation of a particular *product_definition* (4.18.7).

4.66.2
view_relationship
<resource: analysis_product_relationships_schema> *entity data type* (3.2.10) that represents the view relationship *entity* (3.2.9)

Note 1 to entry: A *view_relationship* (4.66.2) is a particular *numerical_model* (4.67.7) that is a view of a particular *temporal_spatial_domain* (4.105.8).

4.67 analysis_schema

4.67.1
behavioural_decomposition_of_numerical_model
<resource: analysis_schema> *entity data type* (3.2.10) that represents the behavioural decomposition of numerical model *entity* (3.2.9)

Note 1 to entry: A *behavioural_decomposition_of_numerical_model* (4.67.1) is a decomposition of a *numerical_model* (4.67.7) into differnet subbehaviours.

4.67.2
model_action_domain
<resource: analysis_schema> *entity data type* (3.2.10) that is a type of *numerical_model* (4.67.7) that represents the model action domain *entity* (3.2.9)

4.67.3
model_product_domain
<resource: analysis_schema> *entity data type* (3.2.10) that is a type of *numerical_model* (4.67.7) that represents the model product domain *entity* (3.2.9)

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Note 1 to entry: A *model_product_domain* (4.67.3) is a type of numerical_model that is only a spatial decomposition and that has an indefinite time dimension.

4.67.4
model_product_domain_with_mesh
<resource: analysis_schema> *entity data type* (3.2.10) that is a type of *model_product_domain* (4.67.3) that represents the model product domain with mesh *entity* (3.2.9)

Note 1 to entry: A *model_product_domain_with_mesh* (4.67.4) is a type of model_product_domain that has a mesh.

4.67.5
model_property_distribution
<resource: analysis_schema> *entity data type* (3.2.10) that represents the model property distribution *entity* (3.2.9)

Note 1 to entry: A *model_property_distribution* (4.67.5) is a function that has a *numerical_model* (4.67.7) and a property space as its range.

4.67.6
model_state_domain
<resource: analysis_schema> *entity data type* (3.2.10) that is a type of *numerical_model* (4.67.7) that represents the model state domain *entity* (3.2.9)

Note 1 to entry: A *model_state_domain* (4.67.6) is a type of numerical_model that has no time dimension.

4.67.7
numerical_model
<resource: analysis_schema> *entity data type* (3.2.10) that represents the numerical model *entity* (3.2.9)

Note 1 to entry: A *numerical_model* (4.67.7) is an aspect of a physical object relevant to a particular type of behavoir.

4.67.8
simulation_run
<resource: analysis_schema> *entity data type* (3.2.10) that represents the simulation run *entity* (3.2.9)

Note 1 to entry: A *simulation_run* (4.67.8) is an individual activity that simulates a *numerical_model* (4.67.7).

4.67.9
spatial_decomposition_of_numerical_model
<resource: analysis_schema> *entity data type* (3.2.10) that represents the spatial decomposition of numerical model *entity* (3.2.9)

Note 1 to entry: A **spatial_decomposition_of_numerical_model** is a decomposition of a *numerical_model* (4.67.7) into different subspaces.

4.67.10
temporal_decomposition_of_model_action
<resource: analysis_schema> *entity data type* (3.2.10) that represents the temporal decomposition of model action *entity* (3.2.9)

Note 1 to entry: A **temporal_decomposition_of_model_action** is a decomposition of a *model_action_domain* (4.67.2) into different time instants.

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4.68 annotated_3d_model_data_quality_criteria_schema

4.68.1
a3m_data_quality_criteria_representation
<resource: annotated_3d_model_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *data_quality_criteria_representation* (4.110.1) that represents the a3m data quality criteria representation *entity* (3.2.9)

Note 1 to entry: An **a3m_data_quality_criteria_representation** is a type of data_quality_criteria_representation that represents requirements on the quality of annotated 3d model data.

4.68.2
a3m_data_quality_criterion
<resource: annotated_3d_model_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *data_quality_criterion* (4.110.2) and *data_quality_measurement_requirement* (4.110.3) that represents the a3m data quality criterion *entity* (3.2.9)

Note 1 to entry: An **a3m_data_quality_criterion** is a type of data_quality_criterion and of data_quality_measurement_requirement that represents a criterion for annotated 3d model data quality of the target product data together with the necessary conditions for appropriate measurement(s) of the target product data.

4.68.3
a3m_data_quality_criterion_specific_applied_value
<resource: annotated_3d_model_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the a3m data quality criterion specific applied value *entity* (3.2.9)

Note 1 to entry: An **a3m_data_quality_criterion_specific_applied_value** is a type of representation_item used to assign a specific applied value to an *a3m_data_quality_criterion* (4.68.2).

4.68.4
a3m_data_quality_target_accuracy_association
<resource: annotated_3d_model_data_quality_criteria_schema> *entity data type* (3.2.10) that represents the a3m data quality target accuracy association *entity* (3.2.9)

4.68.5
a3m_detailed_report_request
<resource: annotated_3d_model_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *detailed_report_request_with_number_of_data* (4.110.11) that represents the a3m detailed report request *entity* (3.2.9)

Note 1 to entry: An **a3m_detailed_report_request** is a type of detailed_report_request_with_number_of_data that requests a detailed report including a representative value.

4.68.6
a3m_summary_report_request_with_representative_value
<resource: annotated_3d_model_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *summary_report_request* (4.110.9) that represents the a3m summary report request with representative value *entity* (3.2.9)

Note 1 to entry: An **a3m_summary_report_request_with_representative_value** is a type of summary_report_request that requests a summary report including a representative value.

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4.69 annotated_3d_model_data_quality_inspection_result_schema

4.69.1
a3m_data_quality_inspected_model_and_the_result
<resource: annotated_3d_model_data_quality_inspection_result_schema> *entity data type* (3.2.10) that represents the a3m data quality inspected model and the result *entity* (3.2.9)

Note 1 to entry: An **a3m_data_quality_inspected_model_and_the_result** is the assignment of an inspection result to a model that has been inspected.

4.69.2
a3m_data_quality_inspection_criterion_report_item
<resource: annotated_3d_model_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_quality_inspection_criterion_report_item* (4.112.6) that represents the a3m data quality inspection criterion report item *entity* (3.2.9)

4.69.3
a3m_data_quality_inspection_instance_report_item
<resource: annotated_3d_model_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_quality_inspection_instance_report_item* (4.112.8) that represents the a3m data quality inspection instance report item *entity* (3.2.9)

Note 1 to entry: An **a3m_data_quality_inspection_instance_report_item** is a type of data_quality_inspection_instance_report_item that provides detailed information on the result of inspection for a specific *a3m_data_quality_criterion* (4.68.2) together with a measured value.

4.69.4
a3m_data_quality_inspection_result
<resource: annotated_3d_model_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_quality_inspection_result_with_judgement* (4.112.3) that represents the a3m data quality inspection result *entity* (3.2.9)

4.69.5
a3m_data_quality_inspection_result_representation
<resource: annotated_3d_model_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_quality_inspection_result_representation* (4.112.1) that represents the a3m data quality inspection result representation *entity* (3.2.9)

4.69.6
a3m_extreme_instance
<resource: annotated_3d_model_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the a3m extreme instance *entity* (3.2.9)

Note 1 to entry: An **a3m_extreme_instance** is a type of representation_item that represents an extreme measured value and the location information where it was detected.

4.69.7
a3m_instance_report_item_with_extreme_instances
<resource: annotated_3d_model_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *a3m_data_quality_inspection_instance_report_item* (4.69.3) that represents the a3m instance report item with extreme instances *entity* (3.2.9)

Note 1 to entry: An **a3m_instance_report_item_with_extreme_instances** is a type of a3m_data_quality_inspection_instance_report_item and represents related **extreme_instances** for the a3m_data_quality_inspection_instance_report_item.

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4.69.8
adjacent_triangle_pair
<resource: annotated_3d_model_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *triangulated_face_element* (4.69.13) that represents the adjacent triangle pair *entity* (3.2.9)

Note 1 to entry: An **adjacent_triangle_pair** is a type of triangulated_face_element that specifies a pair of adjacent triangles in the *triangulated_face* (4.27.64).

4.69.9
adjacent_triangulated_face_pair
<resource: annotated_3d_model_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the adjacent triangulated face pair *entity* (3.2.9)

Note 1 to entry: An **adjacent_triangulated_face_pair** is a type of geometric_representation_item that specifies a pair of adjacent *triangulated_face* (4.27.64) instances.

4.69.10
representative_triangle
<resource: annotated_3d_model_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *triangulated_face_element* (4.69.13) that represents the representative triangle *entity* (3.2.9)

Note 1 to entry: A **representative_triangle** is a type of triangulated_face_element that specifies one triangle in the *triangulated_face* (4.27.64).

4.69.11
triangle_edge
<resource: annotated_3d_model_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *triangulated_face_element* (4.69.13) that represents the triangle edge *entity* (3.2.9)

Note 1 to entry: A **triangle_edge** is a type of triangulated_face_element that specifies an edge of the triangle specified in the *triangulated_face* (4.27.64).

4.69.12
triangle_vertex
<resource: annotated_3d_model_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *triangulated_face_element* (4.69.13) that represents the triangle vertex *entity* (3.2.9)

Note 1 to entry: A **triangle_vertex** is a type of triangulated_face_element that specifies a vertex of the triangle specified in the *triangulated_face* (4.27.64).

4.69.13
triangulated_face_element
<resource: annotated_3d_model_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the triangulated face element *entity* (3.2.9)

Note 1 to entry: A **triangulated_face_element** is a type of geometric_representation_item that is a supertype of entities for representing the constituents of the triangle specified in the *triangulated_face* (4.27.64).

4.70 annotated_3d_model_equivalence_criteria_schema

4.70.1

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a3m_equivalence_accuracy_association
<resource: annotated_3d_model_equivalence_criteria_schema> *entity data type* (3.2.10) that represents the a3m equivalence accuracy association *entity* (3.2.9)

4.70.2
a3m_equivalence_assessment_by_logical_test
<resource: annotated_3d_model_equivalence_criteria_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_assessment_specification* (4.107.2) that represents the a3m equivalence assessment by logical test *entity* (3.2.9)

Note 1 to entry: An **a3m_equivalence_assessment_by_logical_test** is a type of data_equivalence_assessment_specification that represents an assessment specification by a logical test.

4.70.3
a3m_equivalence_assessment_by_numerical_test
<resource: annotated_3d_model_equivalence_criteria_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_assessment_specification* (4.107.2) that represents the a3m equivalence assessment by numerical test *entity* (3.2.9)

Note 1 to entry: An **a3m_equivalence_assessment_by_numerical_test** is a type of data_equivalence_assessment_specification that represents an assessment specification by a numerical test.

4.70.4
a3m_equivalence_criteria_representation
<resource: annotated_3d_model_equivalence_criteria_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_criteria_representation* (4.107.3) that represents the a3m equivalence criteria representation *entity* (3.2.9)

Note 1 to entry: An **a3m_equivalence_criteria_representation** is a type of data_equivalence_criteria_representation that represents requirements on annotated 3d model equivalence for one pair of product data.

4.70.5
a3m_equivalence_criterion
<resource: annotated_3d_model_equivalence_criteria_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_criterion* (4.107.4) and *data_equivalence_inspection_requirement* (4.107.7) that represents the a3m equivalence criterion *entity* (3.2.9)

Note 1 to entry: An **a3m_equivalence_criterion** is a type of both data_equivalence_criterion and data_equivalence_inspection_requirement that represents a criterion that is an aspect of the requirements on annotated 3d model equivalence for a particular pair of product data together with an inspection requirement representing the necessary conditions for appropriate inspection(s) for the judgement of whether the criterion holds or not.

4.70.6
a3m_equivalence_criterion_with_specified_elements
<resource: annotated_3d_model_equivalence_criteria_schema> *entity data type* (3.2.10) that is a type of *a3m_equivalence_criterion* (4.70.5) that represents the a3m equivalence criterion with specified elements *entity* (3.2.9)

Note 1 to entry: An **a3m_equivalence_criterion_with_specified_elements** is a type of a3m_equivalence_criterion that enables identification of comparison target elements

4.70.7

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a3m_equivalence_inspection_requirement_with_values
<resource: annotated_3d_model_equivalence_criteria_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_inspection_requirement* (4.107.7) that represents the a3m equivalence inspection requirement with values *entity* (3.2.9)

Note 1 to entry: An **a3m_equivalence_inspection_requirement_with_values** is a type of data_equivalence_inspection_requirement having constraining information of inspection requirement such as maximum allowable tolerance for approximation and the tolerance for use in discretization.

4.70.8
a3m_equivalence_summary_report_request_with_representative_value
<resource: annotated_3d_model_equivalence_criteria_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_report_request* (4.107.8) that represents the a3m equivalence summary report request with representative value *entity* (3.2.9)

Note 1 to entry: An **a3m_equivalence_summary_report_request_with_representative_value** is a type of data_equivalence_report_request that requests a summary report including representative value.

4.71 annotated_3d_model_equivalence_inspection_result_schema

4.71.1
a3m_equivalence_criterion_report_item_with_measured_value
<resource: annotated_3d_model_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_inspection_criterion_report_item* (4.109.5) that represents the a3m equivalence criterion report item with measured value *entity* (3.2.9)

4.71.2
a3m_equivalence_inspection_instance_report_item
<resource: annotated_3d_model_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_inspection_instance_report_item* (4.109.7) that represents the a3m equivalence inspection instance report item *entity* (3.2.9)

Note 1 to entry: An **a3m_equivalence_inspection_instance_report_item** is a type of data_equivalence_inspection_instance_report_item and represents the detailed information on the result of inspection for a specific *a3m_equivalence_criterion* (4.70.5) together with a measured value.

4.71.3
a3m_equivalence_inspection_result_representation
<resource: annotated_3d_model_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_inspection_result_representation* (4.109.10) that represents the a3m equivalence inspection result representation *entity* (3.2.9)

4.71.4
a3m_inspected_model_and_inspection_result_relationship
<resource: annotated_3d_model_equivalence_inspection_result_schema> *entity data type* (3.2.10) that represents the a3m inspected model and inspection result relationship *entity* (3.2.9)

4.71.5
equivalence_instance_report_item_with_notable_instances
<resource: annotated_3d_model_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *a3m_equivalence_inspection_instance_report_item* (4.71.2) that represents the equivalence instance report item with notable instances *entity* (3.2.9)

Note 1 to entry: An **equivalence_instance_report_item_with_notable_instances** is a type of a3m_equivalence_inspection_instance_report_item and has the information on pairs of notable measured value and difference information.

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4.71.6
equivalence_notable_instance
<resource: annotated_3d_model_equivalence_inspection_result_schema> *entity data type* (3.2.10) that represents the equivalence notable instance *entity* (3.2.9)

Note 1 to entry: An **equivalence_notable_instance** is a difference information including notable measured value.

4.72 assembly_constraint_schema

4.72.1
assembly_geometric_constraint
<resource: assembly_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_constraint* (4.83.1) that represents the assembly geometric constraint *entity* (3.2.9)

4.72.2
binary_assembly_constraint
<resource: assembly_constraint_schema> *entity data type* (3.2.10) that is a type of *assembly_geometric_constraint* (4.72.1) and *representation_relationship_with_transformation* (4.41.21) that represents the binary assembly constraint *entity* (3.2.9)

4.72.3
fixed_constituent_assembly_constraint
<resource: assembly_constraint_schema> *entity data type* (3.2.10) that is a type of *assembly_geometric_constraint* (4.72.1) and *fixed_element_geometric_constraint* (4.26.2) that represents the fixed constituent assembly constraint *entity* (3.2.9)

4.72.4
parallel_assembly_constraint
<resource: assembly_constraint_schema> *entity data type* (3.2.10) that is a type of *binary_assembly_constraint* (4.72.2) and *parallel_geometric_constraint* (4.26.3) that represents the parallel assembly constraint *entity* (3.2.9)

4.72.5
parallel_assembly_constraint_with_dimension
<resource: assembly_constraint_schema> *entity data type* (3.2.10) that is a type of *parallel_assembly_constraint* (4.72.4) and *pgc_with_dimension* (4.26.4) that represents the parallel assembly constraint with dimension *entity* (3.2.9)

4.72.6
surface_distance_assembly_constraint_with_dimension
<resource: assembly_constraint_schema> *entity data type* (3.2.10) that is a type of *binary_assembly_constraint* (4.72.2) and *sdgc_with_dimension* (4.26.12) that represents the surface distance assembly constraint with dimension *entity* (3.2.9)

4.72.7
angle_assembly_constraint_with_dimension
<resource: assembly_constraint_schema> *entity data type* (3.2.10) that is a type of *binary_assembly_constraint* (4.72.2) and *agc_with_dimension* (4.26.20) that represents the angle assembly constraint with dimension *entity* (3.2.9)

4.72.8

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perpendicular_assembly_constraint
<resource: assembly_constraint_schema> *entity data type* (3.2.10) that is a type of *binary_assembly_constraint* (4.72.2) and *perpendicular_geometric_constraint* (4.26.21) that represents the perpendicular assembly constraint *entity* (3.2.9)

4.72.9
incidence_assembly_constraint
<resource: assembly_constraint_schema> *entity data type* (3.2.10) that is a type of *binary_assembly_constraint* (4.72.2) and *incidence_geometric_constraint* (4.26.22) that represents the incidence assembly constraint *entity* (3.2.9)

4.72.10
coaxial_assembly_constraint
<resource: assembly_constraint_schema> *entity data type* (3.2.10) that is a type of *binary_assembly_constraint* (4.72.2) and *coaxial_geometric_constraint* (4.26.23) that represents the coaxial assembly constraint *entity* (3.2.9)

4.72.11
tangent_assembly_constraint
<resource: assembly_constraint_schema> *entity data type* (3.2.10) that is a type of *binary_assembly_constraint* (4.72.2) and *tangent_geometric_constraint* (4.26.24) that represents the tangent assembly constraint *entity* (3.2.9)

4.73 assembly_feature_relationship_schema

4.73.1
shape_aspect_relationship_representation_association
<resource: assembly_feature_relationship_schema> *entity data type* (3.2.10) that represents the shape aspect relationship representation association *entity* (3.2.9)

4.73.2
representative_shape_representation
<resource: assembly_feature_relationship_schema> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the representative shape representation *entity* (3.2.9)

4.73.3
free_kinematic_motion_representation
<resource: assembly_feature_relationship_schema> *entity data type* (3.2.10) that is a type of *representation_relationship_with_transformation* (4.41.21) that represents the free kinematic motion representation *entity* (3.2.9)

4.73.4
constrained_kinematic_motion_representation
<resource: assembly_feature_relationship_schema> *entity data type* (3.2.10) that is a type of *representation_relationship_with_transformation* (4.41.21) that represents the constrained kinematic motion representation *entity* (3.2.9)

4.74 basis_schema

4.74.1
geometry_reference
<resource: basis_schema> *entity data type* (3.2.10) that represents the geometry reference *entity* (3.2.9)

4.74.2

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specified_general_property
<resource: basis_schema> *entity data type* (3.2.10) that is a type of *general_property* (4.19.5) that represents the specified general property *entity* (3.2.9)

4.74.3
specified_representation_context
<resource: basis_schema> *entity data type* (3.2.10) that is a type of *representation_context* (4.41.14) that represents the specified representation context *entity* (3.2.9)

4.75 classification_schema

4.75.1
class
<resource: classification_schema> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the class *entity* (3.2.9)

Note 1 to entry: A **class** is a type of group that is a set.

4.75.2
class_by_extension
<resource: classification_schema> *entity data type* (3.2.10) that is a type of *class* (4.75.1) that represents the class by extension *entity* (3.2.9)

Note 1 to entry: A **class_by_extension** is a type of class that is defined by enumerating all the members.

4.75.3
class_by_intension
<resource: classification_schema> *entity data type* (3.2.10) that is a type of *class* (4.75.1) that represents the class by intension *entity* (3.2.9)

Note 1 to entry: A **class_by_intension** is a type of class that is defined by means of criteria.

4.75.4
classification
<resource: classification_schema> *entity data type* (3.2.10) that is a type of *classification_assignment* (4.15.11) that represents the classification *entity* (3.2.9)

Note 1 to entry: A **classification** is a type of classification_assignment that is a relationship between

— set S, and

— thing x,

that indicates thing x is a member of set S.

4.75.5
complete_membership
<resource: classification_schema> *entity data type* (3.2.10) that is a type of *classification_assignment* (4.15.11) that represents the complete membership *entity* (3.2.9)

Note 1 to entry: A **complete_membership** is a type of classification_assignment that is a relationship between

— set S, and

— enumerated things x_i,

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that indicates set S contains each of the things x_i and nothing else.

4.75.6
complete_membership_of_empty_set
<resource: classification_schema> *entity data type* (3.2.10) that is a type of *complete_membership* (4.75.5) that represents the complete membership of empty set *entity* (3.2.9)

4.75.7
complete_membership_of_non_empty_set
<resource: classification_schema> *entity data type* (3.2.10) that is a type of *complete_membership* (4.75.5) that represents the complete membership of non empty set *entity* (3.2.9)

4.76 conditions_schema

4.76.1
elements_bc
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *mbna_bc* (4.76.7) that represents the elements bc *entity* (3.2.9)

4.76.2
fd_bc
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *mbna_bc* (4.76.7) that represents the fd bc *entity* (3.2.9)

4.76.3
fd_bc_dataset
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *mbna_bc_dataset* (4.76.11) that represents the fd bc dataset *entity* (3.2.9)

4.76.4
fd_zone_bc
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *mbna_zone_bc* (4.76.16) that represents the fd zone bc *entity* (3.2.9)

4.76.5
indexed_elements_bc
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *mbna_bc* (4.76.7) that represents the indexed elements bc *entity* (3.2.9)

4.76.6
indexed_points_bc
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *mbna_bc* (4.76.7) that represents the indexed points bc *entity* (3.2.9)

4.76.7
mbna_bc
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *mbna_condition* (4.76.12) that represents the mbna bc *entity* (3.2.9)

4.76.8
mbna_bc_data
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *mbna_condition* (4.76.12) that represents the mbna bc data *entity* (3.2.9)

4.76.9

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mbna_bc_data_global
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *mbna_bc_data* (4.76.8) that represents the mbna bc data global *entity* (3.2.9)

4.76.10
mbna_bc_data_local
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *mbna_bc_data* (4.76.8) that represents the mbna bc data local *entity* (3.2.9)

4.76.11
mbna_bc_dataset
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *mbna_condition* (4.76.12) that represents the mbna bc dataset *entity* (3.2.9)

4.76.12
mbna_condition
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *model_state_domain* (4.67.6) that represents the mbna condition *entity* (3.2.9)

4.76.13
mbna_Dirichlet_bc_dataset
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *mbna_bc_dataset* (4.76.11) that represents the mbna dirichlet bc dataset *entity* (3.2.9)

4.76.14
mbna_Neumann_bc_dataset
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *mbna_bc_dataset* (4.76.11) that represents the mbna neumann bc dataset *entity* (3.2.9)

4.76.15
mbna_reference_state
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *mbna_condition* (4.76.12) that represents the mbna reference state *entity* (3.2.9)

4.76.16
mbna_zone_bc
<resource: conditions_schema> *entity data type* (3.2.10) that is a type of *mbna_condition* (4.76.12) that represents the mbna zone bc *entity* (3.2.9)

4.77 counterbore_countersink_schema

4.77.1
basic_round_hole
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *round_hole* (4.94.47) that represents the basic round hole *entity* (3.2.9)

Note 1 to entry: A **basic_round_hole** is a type of round_hole that includes the data elements locally rather than in a separate representation as specified in the round_hole supertype.

4.77.2
basic_round_hole_occurrence
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *shape_aspect_occurrence* (4.19.11) that represents the basic round hole occurrence *entity* (3.2.9)

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Note 1 to entry: A **basic_round_hole_occurrence** is a type of shape_aspect_occurrence that is an application of a *basic_round_hole* (4.77.1) a design definition.

4.77.3
basic_round_hole_occurrence_in_assembly
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *basic_round_hole_occurrence* (4.77.2) that represents the basic round hole occurrence in assembly *entity* (3.2.9)

Note 1 to entry: A **basic_round_hole_occurrence_in_assembly** is a type of basic_round_hole_occurrence that is associated with a product definition that is an assembly.

4.77.4
explicit_round_hole
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *round_hole* (4.94.47) that represents the explicit round hole *entity* (3.2.9)

Note 1 to entry: An **explicit_round_hole** is a type of round_hole that includes the data elements locally rather than in a separate representation as specified in the round_hole supertype.

4.77.5
explicit_composite_hole
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *composite_hole* (4.94.9) that represents the explicit composite hole *entity* (3.2.9)

Note 1 to entry: An **explicit_composite_hole** is a type of composite_hole that includes the data elements locally rather than in a separate representation as specified in the composite_hole supertype.

4.77.6
counterbore_hole_definition
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *explicit_composite_hole* (4.77.5) that represents the counterbore hole definition *entity* (3.2.9)

Note 1 to entry: The **counterbore_hole_definition** is a type of explicit_composite_hole that defines a template structure that provides the parametric requirements for a counterbore hole in a design context.

4.77.7
simplified_counterbore_hole_definition
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *counterbore_hole_definition* (4.77.6) that represents the simplified counterbore hole definition *entity* (3.2.9)

Note 1 to entry: A **simplified_counterbore_hole_definition** is a type of counterbore_hole_definition that defines the location and direction of a hole from the drilled surface but does not provide explicit geometry.

4.77.8
counterbore_hole_occurrence
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *shape_aspect_occurrence* (4.19.11) that represents the counterbore hole occurrence *entity* (3.2.9)

Note 1 to entry: A **counterbore_hole_occurrence** is a type of shape_aspect_occurrence that is an application of a *counterbore_hole_definition* (4.77.6) in a design definition.

4.77.9

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counterbore_hole_occurrence_in_assembly
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *counterbore_hole_occurrence* (4.77.8) that represents the counterbore hole occurrence in assembly *entity* (3.2.9)

Note 1 to entry: A **counterbore_hole_occurrence_in_assembly** is a type of counterbore_hole_occurrence that is associated with a *product_definition* (4.18.7) that is an assembly.

4.77.10
countersink_hole_definition
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *explicit_composite_hole* (4.77.5) that represents the countersink hole definition *entity* (3.2.9)

Note 1 to entry: A **countersink_hole_definition** is a type of explicit_composite_hole that defines a template to structure the requirements for a countersink hole.

4.77.11
simplified_countersink_hole_definition
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *countersink_hole_definition* (4.77.10) that represents the simplified countersink hole definition *entity* (3.2.9)

Note 1 to entry: A **simplified_countersink_hole_definition** is a type of countersink_hole_definition that defines the location and direction of a hole from the drilled surface.

4.77.12
countersink_hole_occurrence
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *shape_aspect_occurrence* (4.19.11) that represents the countersink hole occurrence *entity* (3.2.9)

Note 1 to entry: A **countersink_hole_occurrence** is a type of shape_aspect_occurrence that is an application of a *countersink_hole_definition* (4.77.10) in a design definition.

4.77.13
countersink_hole_occurrence_in_assembly
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *countersink_hole_occurrence* (4.77.12) that represents the countersink hole occurrence in assembly *entity* (3.2.9)

Note 1 to entry: A **countersink_hole_occurrence_in_assembly** is a type of countersink_hole_occurrence that is associated with a product definition that is an assembly.

4.77.14
counterdrill_hole_definition
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *explicit_composite_hole* (4.77.5) that represents the counterdrill hole definition *entity* (3.2.9)

Note 1 to entry: A **counterdrill_hole_definition** is a type of explicit_composite_hole that defines a template to structure the requirements for a counterdrilled hole.

4.77.15
simplified_counterdrill_hole_definition
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *counterdrill_hole_definition* (4.77.14) that represents the simplified counterdrill hole definition *entity* (3.2.9)

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Note 1 to entry: A **simplified_counterdrill_hole_definition** is a type of counterdrill_hole_definition that defines the location and direction of a hole from the drilled surface but does not provide explicit geometry.

4.77.16
counterdrill_hole_occurrence
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *shape_aspect_occurrence* (4.19.11) that represents the counterdrill hole occurrence *entity* (3.2.9)

Note 1 to entry: A **counterdrill_hole_occurrence** is a type of shape_aspect_occurrence that is an application of a *counterdrill_hole_definition* (4.77.14) in a design definition.

4.77.17
counterdrill_hole_occurrence_in_assembly
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *counterdrill_hole_occurrence* (4.77.16) that represents the counterdrill hole occurrence in assembly *entity* (3.2.9)

Note 1 to entry: A **counterdrill_hole_occurrence_in_assembly** is a type of counterdrill_hole_occurrence that is associated with a product definition that is an assembly.

4.77.18
spotface_definition
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *explicit_round_hole* (4.77.4) that represents the spotface definition *entity* (3.2.9)

Note 1 to entry: A **spotface_definition** is a type of explicit_round_hole in which a radius is applied to the bottom surface of the outside diameter.

4.77.19
spotface_hole_definition
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *counterbore_hole_definition* (4.77.6) that represents the spotface hole definition *entity* (3.2.9)

Note 1 to entry: A **spotface_hole_definition** is a type of counterbore_hole_definition in which a radius is applied to the bottom surface of each bore.

4.77.20
simplified_spotface_hole_definition
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *spotface_hole_definition* (4.77.19) and *simplified_counterbore_hole_definition* (4.77.7) that represents the simplified spotface hole definition *entity* (3.2.9)

Note 1 to entry: A **simplified_spotface_hole_definition** is a type of spotface_hole_definition and simplified_counterbore_hole_definition that defines the location and direction of a hole from the drilled surface.

4.77.21
spotface_occurrence
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *counterbore_hole_occurrence* (4.77.8) that represents the spotface occurrence *entity* (3.2.9)

Note 1 to entry: A **spotface_occurrence** is a type of counterbore_hole_occurrence that is an application of a *spotface_hole_definition* (4.77.19) in a design definition.

4.77.22

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spotface_occurrence_in_assembly
<resource: counterbore_countersink_schema> *entity data type* (3.2.10) that is a type of *counterbore_hole_occurrence_in_assembly* (4.77.9) that represents the spotface occurrence in assembly *entity* (3.2.9)

Note 1 to entry: A **spotface_occurrence_in_assembly** is a type of counterbore_hole_occurrence_in_assembly that is associated with a product definition that is an assembly.

4.78 domain_schema

4.78.1
grid_coordinates
<resource: domain_schema> *entity data type* (3.2.10) that is a type of *model_property_distribution* (4.67.5) that represents the grid coordinates *entity* (3.2.9)

4.78.2
grid_coordinates_with_rind
<resource: domain_schema> *entity data type* (3.2.10) that is a type of *grid_coordinates* (4.78.1) that represents the grid coordinates with rind *entity* (3.2.9)

4.79 draughting_dimension_schema

4.79.1
dimension_callout
<resource: draughting_dimension_schema> *entity data type* (3.2.10) that is a type of *draughting_callout* (4.80.17) that represents the dimension callout *entity* (3.2.9)

4.79.2
dimension_graph
<resource: draughting_dimension_schema> *entity data type* (3.2.10) that is a type of *dimension_curve_directed_callout* (4.80.21) that represents the dimension graph *entity* (3.2.9)

4.79.3
dimension_graph_projection_curve_usage
<resource: draughting_dimension_schema> *entity data type* (3.2.10) that represents the dimension graph projection curve usage *entity* (3.2.9)

Note 1 to entry: A **dimension_graph_projection_curve_usage** is the relationship of a *projection_curve* (4.80.13) to a *dimension_graph* (4.79.2), where the projection_curve may participate in a similar relationship with one or more dimension_graph.

4.79.4
dimension_graph_sequence
<resource: draughting_dimension_schema> *entity data type* (3.2.10) that is a type of *draughting_callout_relationship* (4.80.18) that represents the dimension graph sequence *entity* (3.2.9)

4.80 draughting_element_schema

4.80.1
annotation_placeholder_leader_line
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the annotation placeholder leader line *entity* (3.2.9)

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Note 1 to entry: An **annotation_placeholder_leader_line** is a type of geometric_representation_item that relates an annotation to another annotation or to a product geometric model, either directly or indirectly through supplemental geometry or through dimension lines and dimension curves.

4.80.2
annotation_placeholder_occurrence_with_leader_line
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *annotation_placeholder_occurrence* (4.96.1) that represents the annotation placeholder occurrence with leader line *entity* (3.2.9)

Note 1 to entry: An **annotation_placeholder_occurrence_with_leader_line** is a type of annotation_placeholder_occurrence that provides a simplified representation of one or more leader lines in the annotation_placeholder_occurrence.

4.80.3
annotation_plane
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *annotation_occurrence* (4.38.4) and *geometric_representation_item* (4.28.2) that represents the annotation plane *entity* (3.2.9)

Note 1 to entry: An **annotation_plane** is a type of annotation_occurrence and a type of geometric_representation_item for the purpose of grouping annotation elements within a 3D coordinate space.

4.80.4
annotation_to_annotation_leader_line
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *annotation_placeholder_leader_line* (4.80.1) that represents the annotation to annotation leader line *entity* (3.2.9)

Note 1 to entry: An **annotation_to_annotation_leader_line** is a type of annotation_placeholder_leader_line that provides a simplified representation of the graphic visually connecting one annotation to another.

4.80.5
annotation_to_model_leader_line
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *annotation_placeholder_leader_line* (4.80.1) that represents the annotation to model leader line *entity* (3.2.9)

Note 1 to entry: An **annotation_to_model_leader_line** is a type of annotation_placeholder_leader_line that provides a simplified representation of the graphic visually connecting an annotation to the product model.

4.80.6
apll_point
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *cartesian_point* (4.28.4) that represents the apll point *entity* (3.2.9)

Note 1 to entry: An **apll_point** is a type of cartesian_point included to help compose a list of points that represent starting points, midpoints, and end points for a receiver to implement presentation information.

4.80.7
apll_point_with_surface
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *cartesian_point* (4.28.4) that represents the apll point with surface *entity* (3.2.9)

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Note 1 to entry: An **apll_point_with_surface** is a type of cartesian_point included to help compose a list of points that represent starting points, midpoints, and end points for a receiver to implement presentation information.

4.80.8
auxiliary_leader_line
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *annotation_placeholder_leader_line* (4.80.1) that represents the auxiliary leader line *entity* (3.2.9)

Note 1 to entry: An **auxiliary_leader_line** is a type of annotation_placeholder_leader_line that provides a simplified representation of the graphic visually connecting a leader line that is dependent on another leader line to construction geometry that is connected to a product model.

4.80.9
dimension_curve
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *annotation_curve_occurrence* (4.38.1) that represents the dimension curve *entity* (3.2.9)

4.80.10
draughting_model
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the draughting model *entity* (3.2.9)

Note 1 to entry: A **draughting_model** is a type of representation of the shape of a product for the purpose of draughting or other presentation forms.

4.80.11
draughting_model_item_association
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *item_identified_representation_usage* (4.20.5) that represents the draughting model item association *entity* (3.2.9)

4.80.12
leader_curve
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *annotation_curve_occurrence* (4.38.1) that represents the leader curve *entity* (3.2.9)

4.80.13
projection_curve
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *annotation_curve_occurrence* (4.38.1) that represents the projection curve *entity* (3.2.9)

4.80.14
terminator_symbol
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *annotation_symbol_occurrence* (4.38.8) that represents the terminator symbol *entity* (3.2.9)

4.80.15
dimension_curve_terminator
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *terminator_symbol* (4.80.14) that represents the dimension curve terminator *entity* (3.2.9)

4.80.16

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leader_terminator
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *terminator_symbol* (4.80.14) that represents the leader terminator *entity* (3.2.9)

4.80.17
draughting_callout
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the draughting callout *entity* (3.2.9)

4.80.18
draughting_callout_relationship
<resource: draughting_element_schema> *entity data type* (3.2.10) that represents the draughting callout relationship *entity* (3.2.9)

Note 1 to entry: A **draughting_callout_relationship** is a logical relationship between two annotation groups which appear on a drawing.

4.80.19
leader_directed_callout
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *draughting_callout* (4.80.17) that represents the leader directed callout *entity* (3.2.9)

Note 1 to entry: A **leader_directed_callout** is a type of draughting_callout which includes one or more leader lines to direct the eye of the reader from the other presented requirements and information to a place or places of interest on the drawing.

4.80.20
projection_directed_callout
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *draughting_callout* (4.80.17) that represents the projection directed callout *entity* (3.2.9)

Note 1 to entry: A **projection_directed_callout** is a type of draughting_callout which includes a projection line to direct the eye of the reader from the other presented requirements and information to the projected element of the product shape.

4.80.21
dimension_curve_directed_callout
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *draughting_callout* (4.80.17) that represents the dimension curve directed callout *entity* (3.2.9)

Note 1 to entry: A **dimension_curve_directed_callout** is a type of draughting_callout directed by a dimension line to a presented element of the product shape.

4.80.22
tessellated_annotation_occurrence
<resource: draughting_element_schema> *entity data type* (3.2.10) that is a type of *annotation_occurrence* (4.38.4) that represents the tessellated annotation occurrence *entity* (3.2.9)

Note 1 to entry: A **tessellated_annotation_occurrence** is a type of annotation_occurrence for tessellated geometry.

4.81 drawing_definition_schema

4.81.1

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drawing_definition
<resource: drawing_definition_schema> *entity data type* (3.2.10) that represents the drawing definition *entity* (3.2.9)

Note 1 to entry: A **drawing_definition** is an identification and categorization, by type, of a set of drawing versions.

4.81.2
drawing_revision
<resource: drawing_definition_schema> *entity data type* (3.2.10) that is a type of *presentation_set* (4.39.28) that represents the drawing revision *entity* (3.2.9)

4.81.3
drawing_revision_sequence
<resource: drawing_definition_schema> *entity data type* (3.2.10) that represents the drawing revision sequence *entity* (3.2.9)

Note 1 to entry: A **drawing_revision_sequence** is the successive relationship of one version to another for the same drawing.

4.81.4
drawing_sheet_revision
<resource: drawing_definition_schema> *entity data type* (3.2.10) that is a type of *presentation_area* (4.39.23) that represents the drawing sheet revision *entity* (3.2.9)

4.81.5
drawing_sheet_revision_sequence
<resource: drawing_definition_schema> *entity data type* (3.2.10) that is a type of *representation_relationship* (4.41.20) that represents the drawing sheet revision sequence *entity* (3.2.9)

4.81.6
drawing_sheet_revision_usage
<resource: drawing_definition_schema> *entity data type* (3.2.10) that is a type of *area_in_set* (4.39.2) that represents the drawing sheet revision usage *entity* (3.2.9)

4.81.7
draughting_title
<resource: drawing_definition_schema> *entity data type* (3.2.10) that represents the draughting title *entity* (3.2.9)

Note 1 to entry: A **draughting_title** is brief text describing the contents of the drawing or drawing sheet.

4.82 equations_schema

4.82.1
fd_diffusion_equation
<resource: equations_schema> *entity data type* (3.2.10) that is a type of *fd_governing_equation* (4.82.3) that represents the fd diffusion equation *entity* (3.2.9)

4.82.2
fd_diffusion_model
<resource: equations_schema> *entity data type* (3.2.10) that represents the fd diffusion model *entity* (3.2.9)

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4.82.3
fd_governing_equation
<resource: equations_schema> *entity data type* (3.2.10) that is a type of *mbna_governing_equation* (4.82.9) that represents the fd governing equation *entity* (3.2.9)

4.82.4
flow_equation_set
<resource: equations_schema> *entity data type* (3.2.10) that is a type of *mbna_equation_set* (4.82.8) that represents the flow equation set *entity* (3.2.9)

4.82.5
gas_model
<resource: equations_schema> *entity data type* (3.2.10) that is a type of *mbna_behaviour_model* (4.82.6) that represents the gas model *entity* (3.2.9)

4.82.6
mbna_behaviour_model
<resource: equations_schema> *entity data type* (3.2.10) that is a type of *mbna_equation* (4.82.7) that represents the mbna behaviour model *entity* (3.2.9)

4.82.7
mbna_equation
<resource: equations_schema> *entity data type* (3.2.10) that is a type of *model_product_domain* (4.67.3) that represents the mbna equation *entity* (3.2.9)

4.82.8
mbna_equation_set
<resource: equations_schema> *entity data type* (3.2.10) that is a type of *mbna_equation* (4.82.7) that represents the mbna equation set *entity* (3.2.9)

4.82.9
mbna_governing_equation
<resource: equations_schema> *entity data type* (3.2.10) that is a type of *mbna_equation* (4.82.7) that represents the mbna governing equation *entity* (3.2.9)

4.82.10
thermal_conductivity_model
<resource: equations_schema> *entity data type* (3.2.10) that is a type of *mbna_behaviour_model* (4.82.6) that represents the thermal conductivity model *entity* (3.2.9)

4.82.11
turbulence_closure
<resource: equations_schema> *entity data type* (3.2.10) that is a type of *mbna_behaviour_model* (4.82.6) that represents the turbulence closure *entity* (3.2.9)

4.82.12
turbulence_model
<resource: equations_schema> *entity data type* (3.2.10) that is a type of *mbna_behaviour_model* (4.82.6) that represents the turbulence model *entity* (3.2.9)

4.82.13
viscosity_model
<resource: equations_schema> *entity data type* (3.2.10) that is a type of *mbna_behaviour_model* (4.82.6) that represents the viscosity model *entity* (3.2.9)

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4.83 explicit_constraint_schema

4.83.1
explicit_constraint
<resource: explicit_constraint_schema> *entity data type* (3.2.10) that is a type of *variational_representation_item* (4.127.1) that represents the explicit constraint *entity* (3.2.9)

4.83.2
defined_constraint
<resource: explicit_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_constraint* (4.83.1) that represents the defined constraint *entity* (3.2.9)

4.83.3
equal_parameter_constraint
<resource: explicit_constraint_schema> *entity data type* (3.2.10) that is a type of *defined_constraint* (4.83.2) that represents the equal parameter constraint *entity* (3.2.9)

4.83.4
free_form_constraint
<resource: explicit_constraint_schema> *entity data type* (3.2.10) that is a type of *explicit_constraint* (4.83.1) that represents the free form constraint *entity* (3.2.9)

4.83.5
free_form_assignment
<resource: explicit_constraint_schema> *entity data type* (3.2.10) that is a type of *free_form_constraint* (4.83.4) that represents the free form assignment *entity* (3.2.9)

4.83.6
free_form_relation
<resource: explicit_constraint_schema> *entity data type* (3.2.10) that is a type of *free_form_constraint* (4.83.4) that represents the free form relation *entity* (3.2.9)

4.83.7
simultaneous_constraint_group
<resource: explicit_constraint_schema> *entity data type* (3.2.10) that is a type of *variational_representation_item* (4.127.1) that represents the simultaneous constraint group *entity* (3.2.9)

4.84 fea_definition_relationships_schema

4.84.1
element_topological_relationship
<resource: fea_definition_relationships_schema> *entity data type* (3.2.10) that represents the element topological relationship *entity* (3.2.9)

Note 1 to entry: An **element_topological_relationship** is a relationship between:

— an *element_representation* (4.124.20); and

— a *topological_representation_item* (4.31.29);

which indicates that the element_representation has the topological relationships of the topological_representation_item.

4.84.2

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fea_beam_section_idealisation_relationship
<resource: fea_definition_relationships_schema> *entity data type* (3.2.10) that represents the fea beam section idealisation relationship *entity* (3.2.9)

Note 1 to entry: An **fea_beam_section_idealisation_relationship** is a relationship between:

— a *general_property* (4.19.5) that is the structural behaviour of a cross section of a beam; and

— a *curve_element_section_definition* (4.124.144);

which indicates that the curve_element_section_definition is an idealisation of the general_property for the purpose of analysis.

4.84.3
fea_model_topological_relationship
<resource: fea_definition_relationships_schema> *entity data type* (3.2.10) that represents the fea model topological relationship *entity* (3.2.9)

Note 1 to entry: An **fea_model_topological_relationship** is a relationship between:

— an *fea_model* (4.124.1); and

— a mesh;

which indicates that the fea_model has the topological relationships of the mesh.

4.84.4
fea_shell_section_distribution_idealisation_relationship
<resource: fea_definition_relationships_schema> *entity data type* (3.2.10) that represents the fea shell section distribution idealisation relationship *entity* (3.2.9)

Note 1 to entry: An **fea_shell_section_distribution_idealisation_relationship** is a relationship between:

— the *property_definition* (4.19.9) that is the variation of structural behaviour from point to point over a shell; and

— a *surface_section_field* (4.124.132);

which indicates that the surface_section_field is an idealisation of the property_definition for the purpose of analysis.

4.84.5
fea_shell_section_idealisation_relationship
<resource: fea_definition_relationships_schema> *entity data type* (3.2.10) that represents the fea shell section idealisation relationship *entity* (3.2.9)

Note 1 to entry: An **fea_shell_section_idealisation_relationship** is a relationship between:

— a *general_property* (4.19.5) that is the structural behaviour at a point on a shell; and

— a *surface_section* (4.124.135);

which indicates that the surface_section is an idealisation of the general_property for the purpose of analysis.

4.84.6

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node_topological_relationship
<resource: fea_definition_relationships_schema> *entity data type* (3.2.10) that represents the node topological relationship *entity* (3.2.9)

Note 1 to entry: A **node_topological_relationship** is a relationship between:

— a *node_representation* (4.124.13); and

— *analysis_item_within_representation* (4.124.10)

which indicates that the node_representation has the topological relationships of the vertex.

4.85 fea_scalar_vector_tensor_schema

4.85.1
tensor_representation_item
<resource: fea_scalar_vector_tensor_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the tensor representation item *entity* (3.2.9)

4.86 finite_element_analysis_control_and_result_schema

4.86.1
control
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the control *entity* (3.2.9)

4.86.2
analysis_step
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the analysis step *entity* (3.2.9)

4.86.3
control_analysis_step
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *analysis_step* (4.86.2) that represents the control analysis step *entity* (3.2.9)

4.86.4
symmetry_control
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the symmetry control *entity* (3.2.9)

4.86.5
no_symmetry_control
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *symmetry_control* (4.86.4) that represents the no symmetry control *entity* (3.2.9)

4.86.6
cylindrical_symmetry_control
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *symmetry_control* (4.86.4) that represents the cylindrical symmetry control *entity* (3.2.9)

4.86.7
control_linear_static_analysis_step
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *control_analysis_step* (4.86.3) that represents the control linear static analysis step *entity* (3.2.9)

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4.86.8
control_linear_static_analysis_step_with_harmonic
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *control_linear_static_analysis_step* (4.86.7) that represents the control linear static analysis step with harmonic *entity* (3.2.9)

4.86.9
control_linear_modes_and_frequencies_analysis_step
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *control_analysis_step* (4.86.3) that represents the control linear modes and frequencies analysis step *entity* (3.2.9)

4.86.10
constraint_element
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the constraint element *entity* (3.2.9)

4.86.11
single_point_constraint_element
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *constraint_element* (4.86.10) that represents the single point constraint element *entity* (3.2.9)

4.86.12
linear_constraint_equation_element
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *constraint_element* (4.86.10) that represents the linear constraint equation element *entity* (3.2.9)

4.86.13
linear_constraint_equation_nodal_term
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the linear constraint equation nodal term *entity* (3.2.9)

4.86.14
freedom_and_coefficient
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the freedom and coefficient *entity* (3.2.9)

4.86.15
nodal_dof_reduction
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *constraint_element* (4.86.10) that represents the nodal dof reduction *entity* (3.2.9)

4.86.16
point_constraint
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *constraint_element* (4.86.10) that represents the point constraint *entity* (3.2.9)

4.86.17
curve_constraint
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *constraint_element* (4.86.10) that represents the curve constraint *entity* (3.2.9)

4.86.18

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surface_constraint
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *constraint_element* (4.86.10) that represents the surface constraint *entity* (3.2.9)

4.86.19
solid_constraint
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *constraint_element* (4.86.10) that represents the solid constraint *entity* (3.2.9)

4.86.20
control_process
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the control process *entity* (3.2.9)

4.86.21
control_linear_static_load_increment_process
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *control_process* (4.86.20) that represents the control linear static load increment process *entity* (3.2.9)

4.86.22
control_linear_modes_and_frequencies_process
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *control_process* (4.86.20) that represents the control linear modes and frequencies process *entity* (3.2.9)

4.86.23
element_sequence
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the element sequence *entity* (3.2.9)

4.86.24
node_sequence
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the node sequence *entity* (3.2.9)

4.86.25
result
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the result *entity* (3.2.9)

4.86.26
result_analysis_step
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *analysis_step* (4.86.2) that represents the result analysis step *entity* (3.2.9)

4.86.27
result_linear_static_analysis_sub_step
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *result_analysis_step* (4.86.26) that represents the result linear static analysis sub step *entity* (3.2.9)

4.86.28

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result_linear_modes_and_frequencies_analysis_sub_step
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *result_analysis_step* (4.86.26) that represents the result linear modes and frequencies analysis sub step *entity* (3.2.9)

4.86.29
control_result_relationship
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the control result relationship *entity* (3.2.9)

4.86.30
state
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the state *entity* (3.2.9)

4.86.31
state_with_harmonic
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state* (4.86.30) that represents the state with harmonic *entity* (3.2.9)

4.86.32
specified_state
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state* (4.86.30) that represents the specified state *entity* (3.2.9)

4.86.33
calculated_state
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state* (4.86.30) that represents the calculated state *entity* (3.2.9)

4.86.34
linearly_superimposed_state
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state* (4.86.30) that represents the linearly superimposed state *entity* (3.2.9)

4.86.35
state_component
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state* (4.86.30) that represents the state component *entity* (3.2.9)

4.86.36
output_request_state
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state* (4.86.30) that represents the output request state *entity* (3.2.9)

4.86.37
state_relationship
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the state relationship *entity* (3.2.9)

4.86.38
state_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the state definition *entity* (3.2.9)

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4.86.39
field_variable_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state_definition* (4.86.38) that represents the field variable definition *entity* (3.2.9)

4.86.40
field_variable_element_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_definition* (4.86.39) that represents the field variable element definition *entity* (3.2.9)

4.86.41
volume_3d_element_field_variable_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_element_definition* (4.86.40) that represents the volume 3d element field variable definition *entity* (3.2.9)

4.86.42
volume_3d_element_location_point_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_3d_element_field_variable_definition* (4.86.41) that represents the volume 3d element location point variable values *entity* (3.2.9)

4.86.43
volume_3d_element_value_and_location
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the volume 3d element value and location *entity* (3.2.9)

4.86.44
volume_3d_whole_element_variable_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_3d_element_field_variable_definition* (4.86.41) that represents the volume 3d whole element variable value *entity* (3.2.9)

4.86.45
volume_3d_element_constant_specified_variable_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_3d_element_field_variable_definition* (4.86.41) that represents the volume 3d element constant specified variable value *entity* (3.2.9)

4.86.46
volume_3d_element_nodal_specified_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_3d_element_field_variable_definition* (4.86.41) that represents the volume 3d element nodal specified variable values *entity* (3.2.9)

4.86.47
volume_3d_element_boundary_location_point_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_3d_element_field_variable_definition* (4.86.41) that represents the volume 3d element boundary location point variable values *entity* (3.2.9)

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volume_3d_element_boundary_whole_face_variable_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_3d_element_field_variable_definition* (4.86.41) that represents the volume 3d element boundary whole face variable value *entity* (3.2.9)

4.86.49
volume_3d_element_boundary_constant_specified_variable_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_3d_element_field_variable_definition* (4.86.41) that represents the volume 3d element boundary constant specified variable value *entity* (3.2.9)

4.86.50
volume_3d_element_boundary_nodal_specified_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_3d_element_field_variable_definition* (4.86.41) that represents the volume 3d element boundary nodal specified variable values *entity* (3.2.9)

4.86.51
volume_3d_element_boundary_edge_location_point_volume_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_3d_element_field_variable_definition* (4.86.41) that represents the volume 3d element boundary edge location point volume variable values *entity* (3.2.9)

4.86.52
volume_3d_element_boundary_edge_whole_edge_variable_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_3d_element_field_variable_definition* (4.86.41) that represents the volume 3d element boundary edge whole edge variable value *entity* (3.2.9)

4.86.53
volume_3d_element_boundary_edge_constant_specified_volume_variable_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_3d_element_field_variable_definition* (4.86.41) that represents the volume 3d element boundary edge constant specified volume variable value *entity* (3.2.9)

4.86.54
volume_3d_element_boundary_edge_nodal_specified_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_3d_element_field_variable_definition* (4.86.41) that represents the volume 3d element boundary edge nodal specified variable values *entity* (3.2.9)

4.86.55
volume_2d_element_field_variable_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_element_definition* (4.86.40) that represents the volume 2d element field variable definition *entity* (3.2.9)

4.86.56
volume_2d_element_location_point_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_2d_element_field_variable_definition* (4.86.55) that represents the volume 2d element location point variable values *entity* (3.2.9)

4.86.57

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volume_2d_element_value_and_location
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the volume 2d element value and location *entity* (3.2.9)

4.86.58
volume_2d_whole_element_variable_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_2d_element_field_variable_definition* (4.86.55) that represents the volume 2d whole element variable value *entity* (3.2.9)

4.86.59
volume_2d_element_constant_specified_variable_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_2d_element_field_variable_definition* (4.86.55) that represents the volume 2d element constant specified variable value *entity* (3.2.9)

4.86.60
volume_2d_element_nodal_specified_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_2d_element_field_variable_definition* (4.86.55) that represents the volume 2d element nodal specified variable values *entity* (3.2.9)

4.86.61
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<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_2d_element_field_variable_definition* (4.86.55) that represents the volume 2d element boundary location point variable values *entity* (3.2.9)

4.86.62
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<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_2d_element_field_variable_definition* (4.86.55) that represents the volume 2d element boundary whole face variable value *entity* (3.2.9)

4.86.63
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4.86.64
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<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_2d_element_field_variable_definition* (4.86.55) that represents the volume 2d element boundary nodal specified variable values *entity* (3.2.9)

4.86.65
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<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_2d_element_field_variable_definition* (4.86.55) that represents the volume 2d element boundary edge location point volume variable values *entity* (3.2.9)

4.86.66

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volume_2d_element_boundary_edge_whole_edge_variable_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_2d_element_field_variable_definition* (4.86.55) that represents the volume 2d element boundary edge whole edge variable value *entity* (3.2.9)

4.86.67
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4.86.68
volume_2d_element_boundary_edge_nodal_specified_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *volume_2d_element_field_variable_definition* (4.86.55) that represents the volume 2d element boundary edge nodal specified variable values *entity* (3.2.9)

4.86.69
surface_3d_element_field_variable_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_element_definition* (4.86.40) that represents the surface 3d element field variable definition *entity* (3.2.9)

4.86.70
surface_3d_element_location_point_volume_variable_values
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4.86.71
surface_3d_element_value_and_location
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the surface 3d element value and location *entity* (3.2.9)

4.86.72
surface_3d_element_value_and_volume_location
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the surface 3d element value and volume location *entity* (3.2.9)

4.86.73
surface_3d_element_location_point_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_3d_element_field_variable_definition* (4.86.69) that represents the surface 3d element location point variable values *entity* (3.2.9)

4.86.74
surface_3d_whole_element_variable_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_3d_element_field_variable_definition* (4.86.69) that represents the surface 3d whole element variable value *entity* (3.2.9)

4.86.75

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surface_3d_element_constant_specified_variable_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_3d_element_field_variable_definition* (4.86.69) that represents the surface 3d element constant specified variable value *entity* (3.2.9)

4.86.76
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<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_3d_element_field_variable_definition* (4.86.69) that represents the surface 3d element constant specified volume variable value *entity* (3.2.9)

4.86.77
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4.86.78
surface_3d_element_boundary_location_point_surface_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_3d_element_field_variable_definition* (4.86.69) that represents the surface 3d element boundary location point surface variable values *entity* (3.2.9)

4.86.79
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<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_3d_element_field_variable_definition* (4.86.69) that represents the surface 3d element boundary whole face variable value *entity* (3.2.9)

4.86.80
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<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_3d_element_field_variable_definition* (4.86.69) that represents the surface 3d element boundary constant specified surface variable value *entity* (3.2.9)

4.86.81
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4.86.82
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4.86.83
surface_3d_element_boundary_edge_location_point_surface_variable_values
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4.86.84

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surface_3d_element_boundary_edge_location_point_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_3d_element_field_variable_definition* (4.86.69) that represents the surface 3d element boundary edge location point variable values *entity* (3.2.9)

4.86.85
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4.86.86
surface_3d_element_boundary_edge_constant_specified_surface_variable_value
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4.86.87
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4.86.88
surface_3d_element_boundary_edge_nodal_specified_variable_values
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4.86.89
surface_2d_element_field_variable_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_element_definition* (4.86.40) that represents the surface 2d element field variable definition *entity* (3.2.9)

4.86.90
surface_2d_element_location_point_volume_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_2d_element_field_variable_definition* (4.86.89) that represents the surface 2d element location point volume variable values *entity* (3.2.9)

4.86.91
surface_2d_element_value_and_location
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the surface 2d element value and location *entity* (3.2.9)

4.86.92
surface_2d_element_value_and_volume_location
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surface_2d_element_location_point_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_2d_element_field_variable_definition* (4.86.89) that represents the surface 2d element location point variable values *entity* (3.2.9)

4.86.94
surface_2d_whole_element_variable_value
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4.86.95
surface_2d_element_constant_specified_variable_value
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4.86.96
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4.86.97
surface_2d_element_nodal_specified_variable_values
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4.86.98
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4.86.99
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<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_2d_element_field_variable_definition* (4.86.89) that represents the surface 2d element boundary whole face variable value *entity* (3.2.9)

4.86.100
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<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_2d_element_field_variable_definition* (4.86.89) that represents the surface 2d element boundary constant specified surface variable value *entity* (3.2.9)

4.86.101
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4.86.102

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surface_2d_element_boundary_nodal_specified_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_2d_element_field_variable_definition* (4.86.89) that represents the surface 2d element boundary nodal specified variable values *entity* (3.2.9)

4.86.103
surface_2d_element_boundary_edge_location_point_surface_variable_values
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4.86.104
surface_2d_element_boundary_edge_location_point_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_2d_element_field_variable_definition* (4.86.89) that represents the surface 2d element boundary edge location point variable values *entity* (3.2.9)

4.86.105
surface_2d_element_boundary_edge_whole_edge_variable_value
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4.86.106
surface_2d_element_boundary_edge_constant_specified_surface_variable_value
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4.86.107
surface_2d_element_boundary_edge_constant_specified_variable_value
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4.86.108
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4.86.109
curve_3d_element_field_variable_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_element_definition* (4.86.40) that represents the curve 3d element field variable definition *entity* (3.2.9)

4.86.110
curve_3d_element_location_point_volume_variable_values
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4.86.111

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curve_3d_element_value_and_location
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the curve 3d element value and location *entity* (3.2.9)

4.86.112
curve_3d_element_value_and_volume_location
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4.86.113
curve_3d_element_location_point_variable_values
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4.86.114
curve_3d_whole_element_variable_value
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4.86.115
curve_3d_element_constant_specified_variable_value
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4.86.116
curve_3d_element_constant_specified_volume_variable_value
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4.86.117
curve_3d_element_nodal_specified_variable_values
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4.86.118
curve_2d_element_field_variable_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_element_definition* (4.86.40) that represents the curve 2d element field variable definition *entity* (3.2.9)

4.86.119
curve_2d_element_location_point_volume_variable_values
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4.86.120
curve_2d_element_value_and_location
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4.86.121
curve_2d_element_value_and_volume_location
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the curve 2d element value and volume location *entity* (3.2.9)

4.86.122
curve_2d_element_location_point_variable_values
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4.86.123
curve_2d_whole_element_variable_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *curve_2d_element_field_variable_definition* (4.86.118) that represents the curve 2d whole element variable value *entity* (3.2.9)

4.86.124
curve_2d_element_constant_specified_variable_value
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4.86.125
curve_2d_element_constant_specified_volume_variable_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *curve_2d_element_field_variable_definition* (4.86.118) that represents the curve 2d element constant specified volume variable value *entity* (3.2.9)

4.86.126
field_variable_element_group_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_definition* (4.86.39) that represents the field variable element group value *entity* (3.2.9)

4.86.127
field_variable_whole_model_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_definition* (4.86.39) that represents the field variable whole model value *entity* (3.2.9)

4.86.128
field_variable_node_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_definition* (4.86.39) that represents the field variable node definition *entity* (3.2.9)

4.86.129
volume_3d_node_field_variable_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_node_definition* (4.86.128) that represents the volume 3d node field variable definition *entity* (3.2.9)

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4.86.130
volume_2d_node_field_variable_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_node_definition* (4.86.128) that represents the volume 2d node field variable definition *entity* (3.2.9)

4.86.131
surface_3d_node_field_variable_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_node_definition* (4.86.128) that represents the surface 3d node field variable definition *entity* (3.2.9)

4.86.132
surface_3d_node_field_section_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_3d_node_field_variable_definition* (4.86.131) that represents the surface 3d node field section variable values *entity* (3.2.9)

4.86.133
surface_3d_node_field_aggregated_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_3d_node_field_variable_definition* (4.86.131) that represents the surface 3d node field aggregated variable values *entity* (3.2.9)

4.86.134
surface_2d_node_field_variable_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_node_definition* (4.86.128) that represents the surface 2d node field variable definition *entity* (3.2.9)

4.86.135
surface_2d_node_field_section_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_2d_node_field_variable_definition* (4.86.134) that represents the surface 2d node field section variable values *entity* (3.2.9)

4.86.136
surface_2d_node_field_aggregated_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_2d_node_field_variable_definition* (4.86.134) that represents the surface 2d node field aggregated variable values *entity* (3.2.9)

4.86.137
curve_3d_node_field_variable_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_node_definition* (4.86.128) that represents the curve 3d node field variable definition *entity* (3.2.9)

4.86.138
curve_3d_node_field_section_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *curve_3d_node_field_variable_definition* (4.86.137) that represents the curve 3d node field section variable values *entity* (3.2.9)

4.86.139

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curve_3d_node_field_aggregated_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *curve_3d_node_field_variable_definition* (4.86.137) that represents the curve 3d node field aggregated variable values *entity* (3.2.9)

4.86.140
curve_2d_node_field_variable_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *field_variable_node_definition* (4.86.128) that represents the curve 2d node field variable definition *entity* (3.2.9)

4.86.141
curve_2d_node_field_section_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *curve_2d_node_field_variable_definition* (4.86.140) that represents the curve 2d node field section variable values *entity* (3.2.9)

4.86.142
curve_2d_node_field_aggregated_variable_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *curve_2d_node_field_variable_definition* (4.86.140) that represents the curve 2d node field aggregated variable values *entity* (3.2.9)

4.86.143
nodal_freedom_and_value_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state_definition* (4.86.38) that represents the nodal freedom and value definition *entity* (3.2.9)

4.86.144
nodal_freedom_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *nodal_freedom_and_value_definition* (4.86.143) that represents the nodal freedom values *entity* (3.2.9)

4.86.145
nodal_freedom_action_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *nodal_freedom_and_value_definition* (4.86.143) that represents the nodal freedom action definition *entity* (3.2.9)

4.86.146
element_nodal_freedom_actions
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state_definition* (4.86.38) that represents the element nodal freedom actions *entity* (3.2.9)

4.86.147
element_nodal_freedom_terms
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the element nodal freedom terms *entity* (3.2.9)

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4.86.148
point_freedom_and_value_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state_definition* (4.86.38) that represents the point freedom and value definition *entity* (3.2.9)

4.86.149
point_freedom_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *point_freedom_and_value_definition* (4.86.148) that represents the point freedom values *entity* (3.2.9)

4.86.150
point_freedom_action_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *point_freedom_and_value_definition* (4.86.148) that represents the point freedom action definition *entity* (3.2.9)

4.86.151
curve_freedom_and_value_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state_definition* (4.86.38) that represents the curve freedom and value definition *entity* (3.2.9)

4.86.152
curve_freedom_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *curve_freedom_and_value_definition* (4.86.151) that represents the curve freedom values *entity* (3.2.9)

4.86.153
curve_freedom_action_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *curve_freedom_and_value_definition* (4.86.151) that represents the curve freedom action definition *entity* (3.2.9)

4.86.154
surface_freedom_and_value_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state_definition* (4.86.38) that represents the surface freedom and value definition *entity* (3.2.9)

4.86.155
surface_freedom_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_freedom_and_value_definition* (4.86.154) that represents the surface freedom values *entity* (3.2.9)

4.86.156
surface_freedom_action_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *surface_freedom_and_value_definition* (4.86.154) that represents the surface freedom action definition *entity* (3.2.9)

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4.86.157
solid_freedom_and_value_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state_definition* (4.86.38) that represents the solid freedom and value definition *entity* (3.2.9)

4.86.158
solid_freedom_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *solid_freedom_and_value_definition* (4.86.157) that represents the solid freedom values *entity* (3.2.9)

4.86.159
solid_freedom_action_definition
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *solid_freedom_and_value_definition* (4.86.157) that represents the solid freedom action definition *entity* (3.2.9)

4.86.160
freedoms_list
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the freedoms list *entity* (3.2.9)

4.86.161
linear_constraint_equation_element_value
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state_definition* (4.86.38) that represents the linear constraint equation element value *entity* (3.2.9)

4.86.162
single_point_constraint_element_values
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state_definition* (4.86.38) that represents the single point constraint element values *entity* (3.2.9)

4.86.163
analysis_message
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *state_definition* (4.86.38) that represents the analysis message *entity* (3.2.9)

4.86.164
whole_model_analysis_message
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *analysis_message* (4.86.163) that represents the whole model analysis message *entity* (3.2.9)

4.86.165
whole_model_modes_and_frequencies_analysis_message
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *whole_model_analysis_message* (4.86.164) that represents the whole model modes and frequencies analysis message *entity* (3.2.9)

4.86.166
element_analysis_message
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *analysis_message* (4.86.163) that represents the element analysis message *entity* (3.2.9)

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4.86.167
node_analysis_message
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *analysis_message* (4.86.163) that represents the node analysis message *entity* (3.2.9)

4.86.168
element_group_analysis_message
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *analysis_message* (4.86.163) that represents the element group analysis message *entity* (3.2.9)

4.86.169
volume_3d_substructure_element_reference
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the volume 3d substructure element reference *entity* (3.2.9)

4.86.170
volume_2d_substructure_element_reference
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the volume 2d substructure element reference *entity* (3.2.9)

4.86.171
surface_3d_substructure_element_reference
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the surface 3d substructure element reference *entity* (3.2.9)

4.86.172
surface_2d_substructure_element_reference
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the surface 2d substructure element reference *entity* (3.2.9)

4.86.173
curve_3d_substructure_element_reference
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the curve 3d substructure element reference *entity* (3.2.9)

4.86.174
curve_2d_substructure_element_reference
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the curve 2d substructure element reference *entity* (3.2.9)

4.86.175
substructure_node_reference
<resource: finite_element_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the substructure node reference *entity* (3.2.9)

4.87 hierarchy_schema

4.87.1
fd_step
<resource: hierarchy_schema> *entity data type* (3.2.10) that is a type of *mbna_step* (4.87.5) that represents the fd step *entity* (3.2.9)

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4.87.2
fd_zone
<resource: hierarchy_schema> *entity data type* (3.2.10) that is a type of *mbna_zone* (4.87.6) that represents the fd zone *entity* (3.2.9)

4.87.3
mbna_model
<resource: hierarchy_schema> *entity data type* (3.2.10) that is a type of *model_product_domain* (4.67.3) that represents the mbna model *entity* (3.2.9)

4.87.4
mbna_state
<resource: hierarchy_schema> *entity data type* (3.2.10) that is a type of *model_state_domain* (4.67.6) that represents the mbna state *entity* (3.2.9)

4.87.5
mbna_step
<resource: hierarchy_schema> *entity data type* (3.2.10) that is a type of *model_action_domain* (4.67.2) that represents the mbna step *entity* (3.2.9)

4.87.6
mbna_zone
<resource: hierarchy_schema> *entity data type* (3.2.10) that is a type of *model_product_domain_with_mesh* (4.67.4) that represents the mbna zone *entity* (3.2.9)

4.88 kinematic_analysis_control_and_result_schema

4.88.1
kinematic_control
<resource: kinematic_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the kinematic control *entity* (3.2.9)

Note 1 to entry: A **kinematic_control** is a control information necessary for a forward or a backward analysis of a *mechanism_representation* (4.92.1).

4.88.2
prescribed_path
<resource: kinematic_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *link_motion_representation_along_path* (4.89.7) that represents the prescribed path *entity* (3.2.9)

4.88.3
kinematic_analysis_result
<resource: kinematic_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the kinematic analysis result *entity* (3.2.9)

Note 1 to entry: A **kinematic_analysis_result** is a result information from the kinematic simulation of a *mechanism_representation* (4.92.1).

4.88.4
kinematic_analysis_consistency
<resource: kinematic_analysis_control_and_result_schema> *entity data type* (3.2.10) that represents the kinematic analysis consistency *entity* (3.2.9)

Note 1 to entry: A **kinematic_analysis_consistency** is a relationship between the result of a kinematic analysis and its input.

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4.88.5
resulting_path
<resource: kinematic_analysis_control_and_result_schema> *entity data type* (3.2.10) that is a type of *link_motion_representation_along_path* (4.89.7) that represents the resulting path *entity* (3.2.9)

4.89 kinematic_motion_representation_schema

4.89.1
interpolated_configuration_representation
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the interpolated configuration representation *entity* (3.2.9)

Note 1 to entry: An **interpolated_configuration_representation** is a type of representation that specifies a motion (forward analysis) of a *kinematic_topology_structure* (4.93.1).

4.89.2
interpolated_configuration_sequence
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the interpolated configuration sequence *entity* (3.2.9)

Note 1 to entry: An **interpolated_configuration_sequence** is a type of geometric_representation_item that represent a sequence of *interpolated_configuration_segment* (4.89.3) instances, each consisting of a *mechanism_state_representation* (4.91.1) at a particular parameter value and an interpolation type to the next or in the case of the last one to the first interpolated_configuration_segment.

4.89.3
interpolated_configuration_segment
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the interpolated configuration segment *entity* (3.2.9)

Note 1 to entry: An **interpolated_configuration_segment** is a type of founded_item that specifies a single segment of a *interpolated_configuration_sequence* (4.89.2).

4.89.4
link_motion_relationship
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *definitional_representation_relationship* (4.41.5) and *representation_relationship_with_transformation* (4.41.21) that represents the link motion relationship *entity* (3.2.9)

Note 1 to entry: A **link_motion_relationship** is a type of definitional_representation_relationship and of representation_relationship_with_transformation.

4.89.5
item_link_motion_relationship
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *link_motion_relationship* (4.89.4) that represents the item link motion relationship *entity* (3.2.9)

Note 1 to entry: An **item_link_motion_relationship** is a type of link_motion_relationship where a praticular *representation_item* (4.41.16) within a *shape_representation* (4.20.8) is selected.

4.89.6
link_motion_transformation
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *item_defined_transformation* (4.41.10) that represents the link motion transformation *entity* (3.2.9)

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4.89.7
link_motion_representation_along_path
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the link motion representation along path *entity* (3.2.9)

4.89.8
geometric_representation_context_with_parameter
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_context* (4.28.1) that represents the geometric representation context with parameter *entity* (3.2.9)

Note 1 to entry: A **geometric_representation_context_with_parameter** is a type of geometric_representation_context with an additional parameter.

4.89.9
kinematic_path
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the kinematic path *entity* (3.2.9)

4.89.10
kinematic_path_defined_by_nodes
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *kinematic_path* (4.89.9) that represents the kinematic path defined by nodes *entity* (3.2.9)

Note 1 to entry: A **kinematic_path_defined_by_nodes** is a type of kinematic_path whose segments are of type *path_node* (4.89.15).

4.89.11
kinematic_path_defined_by_curves
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *kinematic_path* (4.89.9) that represents the kinematic path defined by curves *entity* (3.2.9)

Note 1 to entry: A **kinematic_path_defined_by_curves** is a type of kinematic_path whose segments are of type *curve_based_path_with_orientation* (4.89.20).

4.89.12
kinematic_path_segment
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the kinematic path segment *entity* (3.2.9)

4.89.13
path_parameter_representation
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *definitional_representation* (4.41.4) that represents the path parameter representation *entity* (3.2.9)

Note 1 to entry: A **path_parameter_representation** is a type of definitional_representation that is a collector of parametric curves.

4.89.14
path_parameter_representation_context
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_context* (4.28.1) and *parametric_representation_context* (4.41.12) that represents the path parameter representation context *entity* (3.2.9)

Note 1 to entry: A **path_parameter_representation_context** is a type of geometric_representation_context and of parametric_representation_context.

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4.89.15
path_node
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *kinematic_path_segment* (4.89.12) that represents the path node *entity* (3.2.9)

Note 1 to entry: A **path_node** is a type of kinematic_path_segment that is a constituent of a path definition.

4.89.16
point_to_point_path
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *path_node* (4.89.15) that represents the point to point path *entity* (3.2.9)

4.89.17
circular_path
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *path_node* (4.89.15) that represents the circular path *entity* (3.2.9)

4.89.18
linear_path
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *path_node* (4.89.15) that represents the linear path *entity* (3.2.9)

4.89.19
curve_based_path
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *path_node* (4.89.15) that represents the curve based path *entity* (3.2.9)

4.89.20
curve_based_path_with_orientation
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *kinematic_path_segment* (4.89.12) that represents the curve based path with orientation *entity* (3.2.9)

Note 1 to entry: A **curve_based_path_with_orientation** is a type of kinematic_path_segment that controls both, the position and orientation of a link along curves.

4.89.21
curve_based_path_with_orientation_and_parameters
<resource: kinematic_motion_representation_schema> *entity data type* (3.2.10) that is a type of *curve_based_path_with_orientation* (4.89.20) that represents the curve based path with orientation and parameters *entity* (3.2.9)

Note 1 to entry: A **curve_based_path_with_orientation_and_parameters** is a type of curve_based_path_with_orientation that adds additional parameter curves in addition to the position and orientation curves that follow the same parametrisation.

4.90 kinematic_property_schema

4.90.1
product_definition_kinematics
<resource: kinematic_property_schema> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) that represents the product definition kinematics *entity* (3.2.9)

4.90.2

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product_definition_relationship_kinematics
<resource: kinematic_property_schema> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) that represents the product definition relationship kinematics *entity* (3.2.9)

4.90.3
kinematic_property_definition_representation
<resource: kinematic_property_schema> *entity data type* (3.2.10) that is a type of *property_definition_representation* (4.20.6) that represents the kinematic property definition representation *entity* (3.2.9)

Note 1 to entry: A **kinematic_property_definition_representation** is a type of property_definition_representation that relates a *shape_representation* (4.20.8) to a *product_definition_kinematics* (4.90.1).

4.90.4
kinematic_property_topology_representation
<resource: kinematic_property_schema> *entity data type* (3.2.10) that is a type of *kinematic_property_definition_representation* (4.90.3) that represents the kinematic property topology representation *entity* (3.2.9)

4.90.5
kinematic_property_mechanism_representation
<resource: kinematic_property_schema> *entity data type* (3.2.10) that is a type of *kinematic_property_definition_representation* (4.90.3) that represents the kinematic property mechanism representation *entity* (3.2.9)

Note 1 to entry: A **kinematic_property_mechanism_representation** is a type of kinematic_property_definition_representation that relates a *mechanism_representation* (4.92.1) to a *product_definition_kinematics* (4.90.1) together with the identification of a *kinematic_link_representation* (4.92.3) as the base.

4.90.6
context_dependent_kinematic_link_representation
<resource: kinematic_property_schema> *entity data type* (3.2.10) that represents the context dependent kinematic link representation *entity* (3.2.9)

Note 1 to entry: A **context_dependent_kinematic_link_representation** is the association of a *kinematic_link_representation_association* (4.92.6) with a *product_definition_relationship_kinematics* (4.90.2).

4.91 kinematic_state_schema

4.91.1
mechanism_state_representation
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the mechanism state representation *entity* (3.2.9)

Note 1 to entry: A **mechanism_state_representation** is a type of representation that specifies a particular state of a *mechanism_representation* (4.92.1) by applying *pair_value* (4.91.2) instances for each *kinematic_pair* (4.92.8) of the underlying mechanism_representation.

4.91.2
pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the pair value *entity* (3.2.9)

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Note 1 to entry: A **pair_value** is a type of geometric_representation_item that is a configuration of the two links that join a *kinematic_pair* (4.92.8).

4.91.3
sliding_surface_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the sliding surface pair value *entity* (3.2.9)

4.91.4
rolling_surface_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the rolling surface pair value *entity* (3.2.9)

4.91.5
revolute_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the revolute pair value *entity* (3.2.9)

4.91.6
prismatic_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the prismatic pair value *entity* (3.2.9)

4.91.7
screw_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the screw pair value *entity* (3.2.9)

4.91.8
cylindrical_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the cylindrical pair value *entity* (3.2.9)

4.91.9
low_order_kinematic_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the low order kinematic pair value *entity* (3.2.9)

Note 1 to entry: A **low_order_kinematic_pair_value** is a type of pair_value that specifies the set of pair parameters for a *low_order_kinematic_pair* (4.92.11).

4.91.10
spherical_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the spherical pair value *entity* (3.2.9)

4.91.11
sliding_curve_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the sliding curve pair value *entity* (3.2.9)

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4.91.12
rolling_curve_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the rolling curve pair value *entity* (3.2.9)

4.91.13
gear_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the gear pair value *entity* (3.2.9)

4.91.14
rack_and_pinion_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the rack and pinion pair value *entity* (3.2.9)

4.91.15
universal_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the universal pair value *entity* (3.2.9)

4.91.16
planar_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the planar pair value *entity* (3.2.9)

4.91.17
unconstrained_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the unconstrained pair value *entity* (3.2.9)

4.91.18
point_on_surface_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the point on surface pair value *entity* (3.2.9)

4.91.19
point_on_planar_curve_pair_value
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *pair_value* (4.91.2) that represents the point on planar curve pair value *entity* (3.2.9)

4.91.20
rotation_about_direction
<resource: kinematic_state_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the rotation about direction *entity* (3.2.9)

Note 1 to entry: A **rotation_about_direction** is a type of geometric_representation_item that specifies a rotation in Cartesian coordinate space R^3.

4.92 kinematic_structure_schema

4.92.1
mechanism_representation
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the mechanism representation *entity* (3.2.9)

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Note 1 to entry: A **mechanism_representation** is a type of representation that specifies the capabilities of relative motion of its links under the constraints imposed by its joints.

4.92.2
pair_representation_relationship
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) and *representation_relationship_with_transformation* (4.41.21) that represents the pair representation relationship *entity* (3.2.9)

Note 1 to entry: A **pair_representation_relationship** is a type of geometric_representation_item and of representation_relationship_with_transformation.

4.92.3
kinematic_link_representation
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the kinematic link representation *entity* (3.2.9)

4.92.4
linear_flexible_link_representation
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *kinematic_link_representation* (4.92.3) that represents the linear flexible link representation *entity* (3.2.9)

4.92.5
rigid_link_representation
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *kinematic_link_representation* (4.92.3) that represents the rigid link representation *entity* (3.2.9)

4.92.6
kinematic_link_representation_association
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *representation_relationship* (4.41.20) that represents the kinematic link representation association *entity* (3.2.9)

Note 1 to entry: A **kinematic_link_representation_association** is a type of representation_relationship that associates a *representation* (4.41.13) with a *kinematic_link_representation* (4.92.3).

4.92.7
su_parameters
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the su parameters *entity* (3.2.9)

4.92.8
kinematic_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) and *item_defined_transformation* (4.41.10) that represents the kinematic pair *entity* (3.2.9)

Note 1 to entry: A **kinematic_pair** is a type of geometric_representation_item and of item_defined_transformation that defines the kinematic constraints between two adjacent links coinciding at a joint.

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4.92.9
high_order_kinematic_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *kinematic_pair* (4.92.8) that represents the high order kinematic pair *entity* (3.2.9)

Note 1 to entry: A **high_order_kinematic_pair** is a type of kinematic_pair that requires references to one or more surfaces or curves in order to be defined kinematically.

4.92.10
low_order_kinematic_pair_with_motion_coupling
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *kinematic_pair* (4.92.8) that represents the low order kinematic pair with motion coupling *entity* (3.2.9)

4.92.11
low_order_kinematic_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *kinematic_pair* (4.92.8) that represents the low order kinematic pair *entity* (3.2.9)

Note 1 to entry: A **low_order_kinematic_pair** is a type of kinematic_pair whose motion is constraint by simple translation or rotational parameters.

4.92.12
low_order_kinematic_pair_with_range
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *low_order_kinematic_pair* (4.92.11) that represents the low order kinematic pair with range *entity* (3.2.9)

Note 1 to entry: A **low_order_kinematic_pair_with_range** is a type of low_order_kinematic_pair with lower and upper bounds for the translation or rotational parameters.

4.92.13
actuated_kinematic_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *kinematic_pair* (4.92.8) that represents the actuated kinematic pair *entity* (3.2.9)

Note 1 to entry: A **actuated_kinematic_pair** is a type of kinematic_pair that is actuated in one or more degrees of freedom.

4.92.14
revolute_pair_with_range
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *revolute_pair* (4.92.16) that represents the revolute pair with range *entity* (3.2.9)

4.92.15
prismatic_pair_with_range
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *prismatic_pair* (4.92.17) that represents the prismatic pair with range *entity* (3.2.9)

4.92.16
revolute_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *low_order_kinematic_pair* (4.92.11) that represents the revolute pair *entity* (3.2.9)

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4.92.17
prismatic_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *low_order_kinematic_pair* (4.92.11) that represents the prismatic pair *entity* (3.2.9)

4.92.18
screw_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *low_order_kinematic_pair_with_motion_coupling* (4.92.10) that represents the screw pair *entity* (3.2.9)

4.92.19
screw_pair_with_range
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *screw_pair* (4.92.18) that represents the screw pair with range *entity* (3.2.9)

4.92.20
cylindrical_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *low_order_kinematic_pair* (4.92.11) that represents the cylindrical pair *entity* (3.2.9)

4.92.21
cylindrical_pair_with_range
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *cylindrical_pair* (4.92.20) that represents the cylindrical pair with range *entity* (3.2.9)

4.92.22
spherical_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *low_order_kinematic_pair* (4.92.11) that represents the spherical pair *entity* (3.2.9)

4.92.23
spherical_pair_with_range
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *spherical_pair* (4.92.22) that represents the spherical pair with range *entity* (3.2.9)

4.92.24
spherical_pair_with_pin
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *low_order_kinematic_pair* (4.92.11) that represents the spherical pair with pin *entity* (3.2.9)

4.92.25
spherical_pair_with_pin_and_range
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *spherical_pair_with_pin* (4.92.24) that represents the spherical pair with pin and range *entity* (3.2.9)

4.92.26
universal_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *low_order_kinematic_pair* (4.92.11) that represents the universal pair *entity* (3.2.9)

4.92.27
universal_pair_with_range
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *universal_pair* (4.92.26) that represents the universal pair with range *entity* (3.2.9)

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4.92.28
homokinetic_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *universal_pair* (4.92.26) that represents the homokinetic pair *entity* (3.2.9)

Note 1 to entry: A **homokinetic_pair** is a type of universal_pair, where the rotation of input axis and output axis are uniform.

4.92.29
planar_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *low_order_kinematic_pair* (4.92.11) that represents the planar pair *entity* (3.2.9)

4.92.30
planar_pair_with_range
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *planar_pair* (4.92.29) that represents the planar pair with range *entity* (3.2.9)

4.92.31
unconstrained_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *low_order_kinematic_pair* (4.92.11) that represents the unconstrained pair *entity* (3.2.9)

4.92.32
fully_constrained_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *low_order_kinematic_pair* (4.92.11) that represents the fully constrained pair *entity* (3.2.9)

4.92.33
point_on_surface_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *high_order_kinematic_pair* (4.92.9) that represents the point on surface pair *entity* (3.2.9)

4.92.34
point_on_surface_pair_with_range
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *point_on_surface_pair* (4.92.33) that represents the point on surface pair with range *entity* (3.2.9)

4.92.35
surface_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *high_order_kinematic_pair* (4.92.9) that represents the surface pair *entity* (3.2.9)

4.92.36
surface_pair_with_range
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *surface_pair* (4.92.35) that represents the surface pair with range *entity* (3.2.9)

4.92.37
sliding_surface_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *surface_pair* (4.92.35) that represents the sliding surface pair *entity* (3.2.9)

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4.92.38
rolling_surface_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *surface_pair* (4.92.35) that represents the rolling surface pair *entity* (3.2.9)

4.92.39
linear_flexible_and_planar_curve_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *high_order_kinematic_pair* (4.92.9) that represents the linear flexible and planar curve pair *entity* (3.2.9)

Note 1 to entry: A **linear_flexible_and_planar_curve_pair** is a type of high_order_kinematic_pair that describes a linear flexible link that moves around a rotating curve where the rotation axis of the curve is perpendicular to the direction of the linear flexible link and the curve.

4.92.40
point_on_planar_curve_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *high_order_kinematic_pair* (4.92.9) that represents the point on planar curve pair *entity* (3.2.9)

4.92.41
point_on_planar_curve_pair_with_range
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *point_on_planar_curve_pair* (4.92.40) that represents the point on planar curve pair with range *entity* (3.2.9)

4.92.42
planar_curve_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *high_order_kinematic_pair* (4.92.9) that represents the planar curve pair *entity* (3.2.9)

4.92.43
planar_curve_pair_range
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *planar_curve_pair* (4.92.42) that represents the planar curve pair range *entity* (3.2.9)

4.92.44
sliding_curve_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *planar_curve_pair* (4.92.42) that represents the sliding curve pair *entity* (3.2.9)

4.92.45
rolling_curve_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *planar_curve_pair* (4.92.42) that represents the rolling curve pair *entity* (3.2.9)

4.92.46
gear_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *low_order_kinematic_pair_with_motion_coupling* (4.92.10) that represents the gear pair *entity* (3.2.9)

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4.92.47
gear_pair_with_range
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *gear_pair* (4.92.46) that represents the gear pair with range *entity* (3.2.9)

4.92.48
rack_and_pinion_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *low_order_kinematic_pair_with_motion_coupling* (4.92.10) that represents the rack and pinion pair *entity* (3.2.9)

4.92.49
rack_and_pinion_pair_with_range
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *rack_and_pinion_pair* (4.92.48) that represents the rack and pinion pair with range *entity* (3.2.9)

4.92.50
linear_flexible_and_pinion_pair
<resource: kinematic_structure_schema> *entity data type* (3.2.10) that is a type of *low_order_kinematic_pair_with_motion_coupling* (4.92.10) that represents the linear flexible and pinion pair *entity* (3.2.9)

Note 1 to entry: A **linear_flexible_and_pinion_pair** is a type of low_order_kinematic_pair_with_motion_coupling that describes a linear flexible link that moves around a rolling pinion where the rotation axis of the pinion is perpendicular to the direction of the linear flexible link.

4.93 kinematic_topology_schema

4.93.1
kinematic_topology_structure
<resource: kinematic_topology_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the kinematic topology structure *entity* (3.2.9)

Note 1 to entry: A **kinematic_topology_structure** is a type of representation that specifies the topological aspects of a kinematic representation.

4.93.2
kinematic_topology_substructure
<resource: kinematic_topology_schema> *entity data type* (3.2.10) that is a type of *kinematic_topology_structure* (4.93.1) that represents the kinematic topology substructure *entity* (3.2.9)

Note 1 to entry: A **kinematic_topology_substructure** is a type of kinematic_topology_structure that specifies the topological characteristics of a mechanism in terms of tree or network structures.

4.93.3
kinematic_topology_directed_structure
<resource: kinematic_topology_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the kinematic topology directed structure *entity* (3.2.9)

Note 1 to entry: A **kinematic_topology_directed_structure** is a type of representation that identified a directed structure within a parent *kinematic_topology_structure* (4.93.1).

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4.93.4
kinematic_topology_tree_structure
<resource: kinematic_topology_schema> *entity data type* (3.2.10) that is a type of *kinematic_topology_directed_structure* (4.93.3) that represents the kinematic topology tree structure *entity* (3.2.9)

4.93.5
kinematic_topology_network_structure
<resource: kinematic_topology_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the kinematic topology network structure *entity* (3.2.9)

4.93.6
kinematic_joint
<resource: kinematic_topology_schema> *entity data type* (3.2.10) that is a type of *edge* (4.31.8) that represents the kinematic joint *entity* (3.2.9)

Note 1 to entry: A **kinematic_joint** is a type of edge that is a specification of the topological aspect of an ordered connection between two and only two links.

4.93.7
kinematic_link
<resource: kinematic_topology_schema> *entity data type* (3.2.10) that is a type of *vertex* (4.31.30) that represents the kinematic link *entity* (3.2.9)

Note 1 to entry: A **kinematic_link** is a type of vertex representation of the topological aspects associated with a rigid part of a mechanism.

4.93.8
kinematic_loop
<resource: kinematic_topology_schema> *entity data type* (3.2.10) that is a type of *edge_loop* (4.31.11) that represents the kinematic loop *entity* (3.2.9)

Note 1 to entry: A **kinematic_loop** is a type of edge_loop that is a cycle in the subgraph.

4.93.9
oriented_joint
<resource: kinematic_topology_schema> *entity data type* (3.2.10) that is a type of *oriented_edge* (4.31.21) that represents the oriented joint *entity* (3.2.9)

Note 1 to entry: An **oriented_joint** is a type of oriented_edge that is a direction of traversal of a joint.

4.94 machining_feature_schema

4.94.1
applied_area
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the applied area *entity* (3.2.9)

Note 1 to entry: An **applied_area** is a type of shape_aspect that is the representation of the bounded enclosed area used in the definition of the *thread* (4.94.58) and *turned_knurl* (4.94.61)*feature_definition* (4.42.22).

4.94.2
boss
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the boss *entity* (3.2.9)

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Note 1 to entry: A **boss** is a type of feature_definition that is an enclosed shape protrusion with a reference location and position.

4.94.3
boss_top
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the boss top *entity* (3.2.9)

Note 1 to entry: A **boss_top** is a type of shape_aspect that is the end condition for a *boss* (4.94.2)*feature_definition* (4.42.22).

4.94.4
chamfer
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *transition_feature* (4.94.60) that represents the chamfer *entity* (3.2.9)

Note 1 to entry: A **chamfer** is a type of transition_feature that is the representation of a linear transition between two *shape_aspect* (4.19.10).

4.94.5
chamfer_offset
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the chamfer offset *entity* (3.2.9)

Note 1 to entry: A **chamfer_offset** is a type of shape_aspect that is the representation of the linear setbacks from the edge of two surfaces to create a *chamfer* (4.94.4)*feature_definition* (4.42.22).

4.94.6
circular_pattern
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *replicate_feature* (4.94.43) that represents the circular pattern *entity* (3.2.9)

Note 1 to entry: A **circular_pattern** is a type of replicate_feature that relates a base feature and one or more *shape_aspect* (4.19.10) which are the placement of the base feature at a specified circular location on the base part.

4.94.7
circular_closed_profile
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the circular closed profile *entity* (3.2.9)

Note 1 to entry: A **circular_closed_profile** is a type of shape_aspect that is an enclosed 2D area defined by a radius, with orientation and location.

4.94.8
closed_path_profile
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the closed path profile *entity* (3.2.9)

Note 1 to entry: A **closed_path_profile** is a type of shape_aspect that is a closed two-dimensional area defined by a connected set of curves with a location and orientation.

4.94.9
composite_hole
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *compound_feature* (4.94.10) that represents the composite hole *entity* (3.2.9)

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Note 1 to entry: A **composite_hole** is a type of compound_feature that is the representation of two *round_hole* (4.94.47) for the purpose of creating two round_hole combinations, the countersunk hole and the counterbore hole.

4.94.10
compound_feature
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the compound feature *entity* (3.2.9)

Note 1 to entry: A **compound_feature** is a type of feature_definition that is the representation of several *instanced_feature* (4.42.27) and their relationships to one another for the purpose of creating unique user defined features.

4.94.11
direction_shape_representation
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the direction shape representation *entity* (3.2.9)

Note 1 to entry: A **direction_shape_representation** is a type of shape_representation that represents a direction vector in two-dimensional or three-dimensional space.

4.94.12
edge_round
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *transition_feature* (4.94.60) that represents the edge round *entity* (3.2.9)

Note 1 to entry: An **edge_round** is a type of transition_feature that is the representation of a circular convex transition between two *shape_aspect* (4.19.10).

4.94.13
externally_defined_feature_definition
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) and *externally_defined_item* (4.11.3) that represents the externally defined feature definition *entity* (3.2.9)

Note 1 to entry: An **externally_defined_feature_definition** is a type of externally_defined_item and a type of feature_definition.

4.94.14
face_shape_representation
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the face shape representation *entity* (3.2.9)

Note 1 to entry: A **face_shape_representation** is a type of shape_representation that represents geometry defined by a portion of an associated surface.

4.94.15
feature_component_definition
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) that represents the feature component definition *entity* (3.2.9)

Note 1 to entry: A **feature_component_definition** is a type of characterized_object that is used as a constituent of a preconceived form pattern.

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4.94.16
feature_component_relationship
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) that represents the feature component relationship *entity* (3.2.9)

4.94.17
feature_pattern
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *replicate_feature* (4.94.43) that represents the feature pattern *entity* (3.2.9)

Note 1 to entry: A **feature_pattern** is a type of replicate_feature that relates a base feature and one or more *shape_aspect* (4.19.10) which are the placement of the base feature at a specified location on the base part.

4.94.18
fillet
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *transition_feature* (4.94.60) that represents the fillet *entity* (3.2.9)

Note 1 to entry: A **fillet** is a type of transition_feature that is the representation of a circular concave transition between two *shape_aspect* (4.19.10).

4.94.19
flat_face
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the flat face *entity* (3.2.9)

Note 1 to entry: A **flat_face** is a type of feature_definition that is the representation of a volume that is removed from the base shape.

4.94.20
gear
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the gear *entity* (3.2.9)

Note 1 to entry: A **gear** is a type of feature_definition that is the representation of a gear shape that is applied to all or a portion of a *shape_aspect* (4.19.10).

4.94.21
hole_bottom
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the hole bottom *entity* (3.2.9)

Note 1 to entry: A **hole_bottom** is a type of shape_aspect that is the representation of the end condition for a hole *feature_definition* (4.42.22).

4.94.22
linear_profile
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the linear profile *entity* (3.2.9)

Note 1 to entry: A **linear_profile** is a type of shape_aspect that is the representation of a straight line with orientation and location.

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4.94.23
location_shape_representation
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the location shape representation *entity* (3.2.9)

Note 1 to entry: A **location_shape_representation** is a type of shape_representation that represents a geometric position or a reference point.

4.94.24
marking
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the marking *entity* (3.2.9)

Note 1 to entry: A **marking** is a type of feature_definition that is the representation of a text or symbol shapes that are applied to all or a portion of a *shape_aspect* (4.19.10).

4.94.25
modified_pattern
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the modified pattern *entity* (3.2.9)

Note 1 to entry: A **modified_pattern** is a type of shape_aspect that represents the result of a collection of omissions and offsets of a base feature in either a *rectangular_pattern* (4.94.41) or a *circular_pattern* (4.94.6).

4.94.26
ngon_closed_profile
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the ngon closed profile *entity* (3.2.9)

Note 1 to entry: An **ngon_closed_profile** is a type of shape_aspect that represents an enclosed 2D area with location and orientation.

4.94.27
open_path_profile
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the open path profile *entity* (3.2.9)

Note 1 to entry: An **open_path_profile** is a type of shape_aspect that represents a connected set of curves with a location and orientation.

4.94.28
outer_round
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the outer round *entity* (3.2.9)

Note 1 to entry: An **outer_round** is a type of feature_definition that is the representation of a volume that is removed from the base shape.

4.94.29
outside_profile
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the outside profile *entity* (3.2.9)

Note 1 to entry: An **outside_profile** is a type of feature_definition that is the representation of the outside boundary of the base shape.

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4.94.30
partial_circular_profile
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the partial circular profile *entity* (3.2.9)

Note 1 to entry: A **partial_circular_profile** is a type of shape_aspect that is the representation of arc of constant radius, with a location and a position.

4.94.31
path_feature_component
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the path feature component *entity* (3.2.9)

Note 1 to entry: A **path_feature_component** is a type of shape_aspect that is the representation 2D or 3D curve or set of curves.

4.94.32
path_shape_representation
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the path shape representation *entity* (3.2.9)

Note 1 to entry: A **path_shape_representation** is a type of shape representation which represents a curved path using an ordered collection of geometric curves such that the collection of curves is continuous and directed.

4.94.33
pattern_offset_membership
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_component_relationship* (4.94.16) that represents the pattern offset membership *entity* (3.2.9)

4.94.34
pattern_omit_membership
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_component_relationship* (4.94.16) that represents the pattern omit membership *entity* (3.2.9)

4.94.35
planar_shape_representation
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the planar shape representation *entity* (3.2.9)

Note 1 to entry: A **planar_shape_representation** is a type of shape_representation that represents a direction vector in two-dimensional or three-dimensional space, and location.

4.94.36
pocket
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the pocket *entity* (3.2.9)

Note 1 to entry: A **pocket** is a type of feature_definition that is the representation of a volume that is removed from the base shape.

4.94.37
pocket_bottom
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the pocket bottom *entity* (3.2.9)

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Note 1 to entry: A **pocket_bottom** is a type of shape_aspect that is the representation of the end condition for a *pocket* (4.94.36)*feature_definition* (4.42.22).

4.94.38
profile_floor
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the profile floor *entity* (3.2.9)

Note 1 to entry: A **profile_floor** is a type of shape_aspect that is the representation of the bottom condition for an *outside_profile* (4.94.29)*feature_definition* (4.42.22).

4.94.39
protrusion
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the protrusion *entity* (3.2.9)

Note 1 to entry: A **protrusion** is a type of feature_definition that is the representation of a volume that is extruding from the base shape.

4.94.40
rectangular_closed_profile
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the rectangular closed profile *entity* (3.2.9)

Note 1 to entry: A **rectangular_closed_profile** is a type of shape_aspect that represents an enclosed 2D area with location and orientation.

4.94.41
rectangular_pattern
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *replicate_feature* (4.94.43) that represents the rectangular pattern *entity* (3.2.9)

Note 1 to entry: A **rectangular_pattern** is a type of replicate_feature that relates a base feature and one or more *shape_aspect* (4.19.10) which are the placement of the base feature at a specified row and column location on the base part.

4.94.42
removal_volume
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the removal volume *entity* (3.2.9)

Note 1 to entry: A **removal_volume** is a type of feature_definition that is the representation of a volume that is removed from the base shape.

4.94.43
replicate_feature
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the replicate feature *entity* (3.2.9)

Note 1 to entry: A **replicate_feature** is a type of feature_definition that is either a feature_definition or another **replicate_feature** for the purpose of multiple representations.

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4.94.44
revolved_profile
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the revolved profile *entity* (3.2.9)

Note 1 to entry: A **revolved_profile** is a type of feature_definition that is the representation of a volume that is removed from the base shape.

4.94.45
rib_top
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the rib top *entity* (3.2.9)

Note 1 to entry: A **rib_top** is a type of feature_definition that is the representation of a volume that is removed from the top of a shape.

4.94.46
rib_top_floor
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the rib top floor *entity* (3.2.9)

Note 1 to entry: A **rib_top_floor** is a type of shape_aspect that is the representation of the floor condition for a *rib_top* (4.94.45)*feature_definition* (4.42.22).

4.94.47
round_hole
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the round hole *entity* (3.2.9)

Note 1 to entry: A **round_hole** is a type of feature_definition that is the representation of a circular enclosed volume this is removed from the base shape.

4.94.48
rounded_end
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the rounded end *entity* (3.2.9)

Note 1 to entry: A **rounded_end** is a type of feature_definition that is the representation of a volume that is removed from the base shape.

4.94.49
rounded_u_profile
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the rounded u profile *entity* (3.2.9)

Note 1 to entry: A **rounded_u_profile** is a type of shape_aspect that is the representation of an arc with connected straight lines at each end, with a location, and a position.

4.94.50
shape_defining_relationship
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) that represents the shape defining relationship *entity* (3.2.9)

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4.94.51
spherical_cap
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the spherical cap *entity* (3.2.9)

Note 1 to entry: A **spherical_cap** is a type of feature_definition that is the representation of a volume that is extruding from the base shape.

4.94.52
square_u_profile
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the square u profile *entity* (3.2.9)

Note 1 to entry: A **square_u_profile** is a type of shape_aspect that is the representation of three connected straight lines, a location and a position.

4.94.53
step
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the step *entity* (3.2.9)

Note 1 to entry: A **step** is a type of feature_definition that is the representation of a volume that is removed from the base shape.

4.94.54
slot
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the slot *entity* (3.2.9)

Note 1 to entry: A **slot** is a type of feature_definition that is the representation of a volume that is removed from the base shape.

4.94.55
slot_end
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the slot end *entity* (3.2.9)

Note 1 to entry: A **slot_end** is a type of shape_aspect that is the representation of the end condition for a *slot* (4.94.54)*feature_definition* (4.42.22).

4.94.56
taper
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the taper *entity* (3.2.9)

Note 1 to entry: A **taper** is a type of shape_aspect which represents a linear change applied to a machining feature.

4.94.57
tee_profile
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the tee profile *entity* (3.2.9)

Note 1 to entry: A **tee_profile** is a type of shape_aspect which is the representation of an upside-down T shape with a location and a position.

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4.94.58
thread
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the thread *entity* (3.2.9)

Note 1 to entry: A **thread** is a type of feature_definition that is the representation of a thread shape that is applied to all or a portion of a *shape_aspect* (4.19.10).

4.94.59
thread_runout
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the thread runout *entity* (3.2.9)

Note 1 to entry: A **thread_runout** is a type of shape_aspect that is the representation of the thread runout requirements used in the definition of the *thread* (4.94.58)*feature_definition* (4.42.22).

4.94.60
transition_feature
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the transition feature *entity* (3.2.9)

Note 1 to entry: A **transition_feature** is a type of shape_aspect that is the representation of a transition between two shape_aspect entities.

4.94.61
turned_knurl
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *feature_definition* (4.42.22) that represents the turned knurl *entity* (3.2.9)

Note 1 to entry: A **turned_knurl** is a type of feature_definition that is the representation of a diamond, diagonal, or straight shape that is applied to all or a portion of a *shape_aspect* (4.19.10).

4.94.62
vee_profile
<resource: machining_feature_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the vee profile *entity* (3.2.9)

Note 1 to entry: A **vee_profile** is a type of shape_aspect that is the representation of two connected straight lines, with a location and a position.

4.95 mathematical_functions_schema

4.95.1
generic_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that represents the generic expression *entity* (3.2.9)

4.95.2
simple_generic_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_expression* (4.95.1) that represents the simple generic expression *entity* (3.2.9)

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4.95.3
generic_literal
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *simple_generic_expression* (4.95.2) that represents the generic literal *entity* (3.2.9)

4.95.4
generic_variable
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *simple_generic_expression* (4.95.2) that represents the generic variable *entity* (3.2.9)

4.95.5
variable_semantics
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that represents the variable semantics *entity* (3.2.9)

4.95.6
environment
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that represents the environment *entity* (3.2.9)

4.95.7
unary_generic_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_expression* (4.95.1) that represents the unary generic expression *entity* (3.2.9)

4.95.8
binary_generic_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_expression* (4.95.1) that represents the binary generic expression *entity* (3.2.9)

4.95.9
multiple_arity_generic_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_expression* (4.95.1) that represents the multiple arity generic expression *entity* (3.2.9)

4.95.10
binary_numeric_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *numeric_expression* (4.95.20) and *binary_generic_expression* (4.95.8) that represents the binary numeric expression *entity* (3.2.9)

4.95.11
simple_numeric_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *numeric_expression* (4.95.20) and *simple_generic_expression* (4.95.2) that represents the simple numeric expression *entity* (3.2.9)

4.95.12
boolean_literal
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *simple_boolean_expression* (4.95.13) and *generic_literal* (4.95.3) that represents the boolean literal *entity* (3.2.9)

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4.95.13
simple_boolean_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *boolean_expression* (4.95.14) and *simple_generic_expression* (4.95.2) that represents the simple boolean expression *entity* (3.2.9)

4.95.14
boolean_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *expression* (4.95.15) that represents the boolean expression *entity* (3.2.9)

4.95.15
expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_expression* (4.95.1) that represents the expression *entity* (3.2.9)

4.95.16
boolean_variable
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *simple_boolean_expression* (4.95.13) and *variable* (4.95.26) that represents the boolean variable *entity* (3.2.9)

4.95.17
int_literal
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that represents the int literal *entity* (3.2.9)

4.95.18
numeric_variable
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *simple_numeric_expression* (4.95.11) and *variable* (4.95.26) that represents the numeric variable *entity* (3.2.9)

4.95.19
int_numeric_variable
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *numeric_variable* (4.95.18) that represents the int numeric variable *entity* (3.2.9)

4.95.20
numeric_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *expression* (4.95.15) that represents the numeric expression *entity* (3.2.9)

4.95.21
real_literal
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that represents the real literal *entity* (3.2.9)

4.95.22
real_numeric_variable
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *numeric_variable* (4.95.18) that represents the real numeric variable *entity* (3.2.9)

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4.95.23
slash_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *binary_numeric_expression* (4.95.10) that represents the slash expression *entity* (3.2.9)

4.95.24
string_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *expression* (4.95.15) that represents the string expression *entity* (3.2.9)

4.95.25
string_variable
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *simple_string_expression* (4.95.27) and *variable* (4.95.26) that represents the string variable *entity* (3.2.9)

4.95.26
variable
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_variable* (4.95.4) that represents the variable *entity* (3.2.9)

4.95.27
simple_string_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *string_expression* (4.95.24) and *simple_generic_expression* (4.95.2) that represents the simple string expression *entity* (3.2.9)

4.95.28
quantifier_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *multiple_arity_generic_expression* (4.95.9) that represents the quantifier expression *entity* (3.2.9)

4.95.29
dependent_variable_definition
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *unary_generic_expression* (4.95.7) that represents the dependent variable definition *entity* (3.2.9)

4.95.30
bound_variable_semantics
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *variable_semantics* (4.95.5) that represents the bound variable semantics *entity* (3.2.9)

4.95.31
free_variable_semantics
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *variable_semantics* (4.95.5) that represents the free variable semantics *entity* (3.2.9)

4.95.32
complex_number_literal
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_literal* (4.95.3) that represents the complex number literal *entity* (3.2.9)

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4.95.33
complex_number_literal_polar
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *complex_number_literal* (4.95.32) that represents the complex number literal polar *entity* (3.2.9)

4.95.34
logical_literal
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_literal* (4.95.3) that represents the logical literal *entity* (3.2.9)

4.95.35
binary_literal
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_literal* (4.95.3) that represents the binary literal *entity* (3.2.9)

4.95.36
maths_enum_literal
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_literal* (4.95.3) that represents the maths enum literal *entity* (3.2.9)

4.95.37
real_tuple_literal
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_literal* (4.95.3) that represents the real tuple literal *entity* (3.2.9)

4.95.38
integer_tuple_literal
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_literal* (4.95.3) that represents the integer tuple literal *entity* (3.2.9)

4.95.39
atom_based_literal
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_literal* (4.95.3) that represents the atom based literal *entity* (3.2.9)

4.95.40
maths_tuple_literal
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_literal* (4.95.3) that represents the maths tuple literal *entity* (3.2.9)

4.95.41
maths_variable
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_variable* (4.95.4) that represents the maths variable *entity* (3.2.9)

4.95.42
maths_real_variable
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_variable* (4.95.41) and *real_numeric_variable* (4.95.22) that represents the maths real variable *entity* (3.2.9)

4.95.43
maths_integer_variable
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_variable* (4.95.41) and *int_numeric_variable* (4.95.19) that represents the maths integer variable *entity* (3.2.9)

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4.95.44
maths_boolean_variable
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_variable* (4.95.41) and *boolean_variable* (4.95.16) that represents the maths boolean variable *entity* (3.2.9)

4.95.45
maths_string_variable
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_variable* (4.95.41) and *string_variable* (4.95.25) that represents the maths string variable *entity* (3.2.9)

4.95.46
function_application
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *multiple_arity_generic_expression* (4.95.9) that represents the function application *entity* (3.2.9)

4.95.47
maths_space
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_expression* (4.95.1) that represents the maths space *entity* (3.2.9)

4.95.48
elementary_space
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_space* (4.95.47) and *generic_literal* (4.95.3) that represents the elementary space *entity* (3.2.9)

4.95.49
finite_integer_interval
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_space* (4.95.47) and *generic_literal* (4.95.3) that represents the finite integer interval *entity* (3.2.9)

4.95.50
integer_interval_from_min
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_space* (4.95.47) and *generic_literal* (4.95.3) that represents the integer interval from min *entity* (3.2.9)

4.95.51
integer_interval_to_max
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_space* (4.95.47) and *generic_literal* (4.95.3) that represents the integer interval to max *entity* (3.2.9)

4.95.52
finite_real_interval
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_space* (4.95.47) and *generic_literal* (4.95.3) that represents the finite real interval *entity* (3.2.9)

4.95.53
real_interval_from_min
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_space* (4.95.47) and *generic_literal* (4.95.3) that represents the real interval from min *entity* (3.2.9)

4.95.54
real_interval_to_max
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_space* (4.95.47) and *generic_literal* (4.95.3) that represents the real interval to max *entity* (3.2.9)

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4.95.55
cartesian_complex_number_region
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_space* (4.95.47) and *generic_literal* (4.95.3) that represents the cartesian complex number region *entity* (3.2.9)

4.95.56
polar_complex_number_region
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_space* (4.95.47) and *generic_literal* (4.95.3) that represents the polar complex number region *entity* (3.2.9)

4.95.57
finite_space
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_space* (4.95.47) and *generic_literal* (4.95.3) that represents the finite space *entity* (3.2.9)

4.95.58
uniform_product_space
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_space* (4.95.47) and *generic_literal* (4.95.3) that represents the uniform product space *entity* (3.2.9)

4.95.59
listed_product_space
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_space* (4.95.47) and *generic_literal* (4.95.3) that represents the listed product space *entity* (3.2.9)

4.95.60
extended_tuple_space
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_space* (4.95.47) and *generic_literal* (4.95.3) that represents the extended tuple space *entity* (3.2.9)

4.95.61
function_space
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_space* (4.95.47) and *generic_literal* (4.95.3) that represents the function space *entity* (3.2.9)

4.95.62
maths_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *generic_expression* (4.95.1) that represents the maths function *entity* (3.2.9)

4.95.63
finite_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *generic_literal* (4.95.3) that represents the finite function *entity* (3.2.9)

4.95.64
constant_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *generic_literal* (4.95.3) that represents the constant function *entity* (3.2.9)

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4.95.65
selector_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *generic_literal* (4.95.3) that represents the selector function *entity* (3.2.9)

4.95.66
elementary_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *generic_literal* (4.95.3) that represents the elementary function *entity* (3.2.9)

4.95.67
restriction_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *unary_generic_expression* (4.95.7) that represents the restriction function *entity* (3.2.9)

4.95.68
repackaging_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *unary_generic_expression* (4.95.7) that represents the repackaging function *entity* (3.2.9)

4.95.69
reindexed_array_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *unary_generic_expression* (4.95.7) that represents the reindexed array function *entity* (3.2.9)

4.95.70
series_composed_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *multiple_arity_generic_expression* (4.95.9) that represents the series composed function *entity* (3.2.9)

4.95.71
parallel_composed_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *multiple_arity_generic_expression* (4.95.9) that represents the parallel composed function *entity* (3.2.9)

4.95.72
explicit_table_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) that represents the explicit table function *entity* (3.2.9)

4.95.73
listed_real_data
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *explicit_table_function* (4.95.72) and *generic_literal* (4.95.3) that represents the listed real data *entity* (3.2.9)

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4.95.74
listed_integer_data
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *explicit_table_function* (4.95.72) and *generic_literal* (4.95.3) that represents the listed integer data *entity* (3.2.9)

4.95.75
listed_logical_data
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *explicit_table_function* (4.95.72) and *generic_literal* (4.95.3) that represents the listed logical data *entity* (3.2.9)

4.95.76
listed_string_data
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *explicit_table_function* (4.95.72) and *generic_literal* (4.95.3) that represents the listed string data *entity* (3.2.9)

4.95.77
listed_complex_number_data
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *explicit_table_function* (4.95.72) and *generic_literal* (4.95.3) that represents the listed complex number data *entity* (3.2.9)

4.95.78
listed_data
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *explicit_table_function* (4.95.72) and *generic_literal* (4.95.3) that represents the listed data *entity* (3.2.9)

4.95.79
externally_listed_data
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *explicit_table_function* (4.95.72) and *generic_literal* (4.95.3) and *externally_defined_item* (4.11.3) that represents the externally listed data *entity* (3.2.9)

4.95.80
linearized_table_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *explicit_table_function* (4.95.72) and *unary_generic_expression* (4.95.7) that represents the linearized table function *entity* (3.2.9)

4.95.81
standard_table_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *linearized_table_function* (4.95.80) that represents the standard table function *entity* (3.2.9)

4.95.82
regular_table_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *linearized_table_function* (4.95.80) that represents the regular table function *entity* (3.2.9)

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4.95.83
triangular_matrix
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *linearized_table_function* (4.95.80) that represents the triangular matrix *entity* (3.2.9)

4.95.84
strict_triangular_matrix
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *triangular_matrix* (4.95.83) that represents the strict triangular matrix *entity* (3.2.9)

4.95.85
symmetric_matrix
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *linearized_table_function* (4.95.80) that represents the symmetric matrix *entity* (3.2.9)

4.95.86
symmetric_banded_matrix
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *symmetric_matrix* (4.95.85) that represents the symmetric banded matrix *entity* (3.2.9)

4.95.87
banded_matrix
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *linearized_table_function* (4.95.80) that represents the banded matrix *entity* (3.2.9)

4.95.88
basic_sparse_matrix
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *explicit_table_function* (4.95.72) and *multiple_arity_generic_expression* (4.95.9) that represents the basic sparse matrix *entity* (3.2.9)

4.95.89
homogeneous_linear_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *unary_generic_expression* (4.95.7) that represents the homogeneous linear function *entity* (3.2.9)

4.95.90
general_linear_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *unary_generic_expression* (4.95.7) that represents the general linear function *entity* (3.2.9)

4.95.91
b_spline_basis
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *generic_literal* (4.95.3) that represents the b spline basis *entity* (3.2.9)

4.95.92
b_spline_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *unary_generic_expression* (4.95.7) that represents the b spline function *entity* (3.2.9)

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4.95.93
rationalize_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *unary_generic_expression* (4.95.7) that represents the rationalize function *entity* (3.2.9)

4.95.94
partial_derivative_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *unary_generic_expression* (4.95.7) that represents the partial derivative function *entity* (3.2.9)

4.95.95
partial_derivative_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *unary_generic_expression* (4.95.7) that represents the partial derivative expression *entity* (3.2.9)

4.95.96
definite_integral_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *unary_generic_expression* (4.95.7) that represents the definite integral function *entity* (3.2.9)

4.95.97
definite_integral_expression
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *quantifier_expression* (4.95.28) that represents the definite integral expression *entity* (3.2.9)

4.95.98
abstracted_expression_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *quantifier_expression* (4.95.28) that represents the abstracted expression function *entity* (3.2.9)

4.95.99
expression_denoted_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *unary_generic_expression* (4.95.7) that represents the expression denoted function *entity* (3.2.9)

4.95.100
imported_point_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *generic_literal* (4.95.3) that represents the imported point function *entity* (3.2.9)

4.95.101
imported_curve_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *generic_literal* (4.95.3) that represents the imported curve function *entity* (3.2.9)

4.95.102
imported_surface_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *generic_literal* (4.95.3) that represents the imported surface function *entity* (3.2.9)

4.95.103

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imported_volume_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) and *generic_literal* (4.95.3) that represents the imported volume function *entity* (3.2.9)

4.95.104
application_defined_function
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that is a type of *maths_function* (4.95.62) that represents the application defined function *entity* (3.2.9)

4.95.105
mathematical_description
<resource: mathematical_functions_schema> *entity data type* (3.2.10) that represents the mathematical description *entity* (3.2.9)

4.96 mechanical_design_schema

4.96.1
annotation_placeholder_occurrence
<resource: mechanical_design_schema> *entity data type* (3.2.10) that is a type of *annotation_occurrence* (4.38.4) and *geometric_representation_item* (4.28.2) that represents the annotation placeholder occurrence *entity* (3.2.9)

Note 1 to entry: An **annotation_placeholder_occurrence** is a type of annotation_occurrence and geometric_representation_item that provides enough information about the position and orientation of a PMI annotation so that a target system with PMI authoring capability can re-create the presentation based on the Representation data given in the file.

4.96.2
draughting_model_item_association_with_placeholder
<resource: mechanical_design_schema> *entity data type* (3.2.10) that is a type of *draughting_model_item_association* (4.80.11) that represents the draughting model item association with placeholder *entity* (3.2.9)

Note 1 to entry: A **draughting_model_item_association_with_placeholder** is a type of draughting_model_item_association that specifies a placeholder for product and manufacturing information annotation.

4.96.3
pmi_requirement_item_association
<resource: mechanical_design_schema> *entity data type* (3.2.10) that is a type of *item_identified_representation_usage* (4.20.5) that represents the pmi requirement item association *entity* (3.2.9)

Note 1 to entry: A **pmi_requirement_item_association** is a type of item_identified_representation_usage that associates a requirement to product manufacturing information.

4.97 mesh_connectivity_schema

4.97.1
matched_mesh_connection
<resource: mesh_connectivity_schema> *entity data type* (3.2.10) that is a type of *mesh_connectivity* (4.97.2) that represents the matched mesh connection *entity* (3.2.9)

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4.97.2
mesh_connectivity
<resource: mesh_connectivity_schema> *entity data type* (3.2.10) that represents the mesh connectivity *entity* (3.2.9)

4.97.3
mesh_overset_hole
<resource: mesh_connectivity_schema> *entity data type* (3.2.10) that is a type of *mismatched_mesh_connection* (4.97.5) that represents the mesh overset hole *entity* (3.2.9)

4.97.4
mismatched_donor_mesh
<resource: mesh_connectivity_schema> *entity data type* (3.2.10) that represents the mismatched donor mesh *entity* (3.2.9)

4.97.5
mismatched_mesh_connection
<resource: mesh_connectivity_schema> *entity data type* (3.2.10) that is a type of *mesh_connectivity* (4.97.2) that represents the mismatched mesh connection *entity* (3.2.9)

4.97.6
mismatched_mesh_region
<resource: mesh_connectivity_schema> *entity data type* (3.2.10) that is a type of *mismatched_mesh_connection* (4.97.5) that represents the mismatched mesh region *entity* (3.2.9)

4.97.7
multiple_mesh_block
<resource: mesh_connectivity_schema> *entity data type* (3.2.10) that represents the multiple mesh block *entity* (3.2.9)

4.97.8
structured_donor_mesh
<resource: mesh_connectivity_schema> *entity data type* (3.2.10) that is a type of *mismatched_donor_mesh* (4.97.4) that represents the structured donor mesh *entity* (3.2.9)

4.97.9
unstructured_donor_mesh
<resource: mesh_connectivity_schema> *entity data type* (3.2.10) that is a type of *mismatched_donor_mesh* (4.97.4) that represents the unstructured donor mesh *entity* (3.2.9)

4.98 mesh_function_schema

4.98.1
mesh_function
<resource: mesh_function_schema> *entity data type* (3.2.10) that is a type of *application_defined_function* (4.95.104) and *unary_generic_expression* (4.95.7) that represents the mesh function *entity* (3.2.9)

4.98.2
mesh_function_basis
<resource: mesh_function_schema> *entity data type* (3.2.10) that is a type of *application_defined_function* (4.95.104) and *unary_generic_expression* (4.95.7) that represents the mesh function basis *entity* (3.2.9)

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4.99 mesh_topology_schema

4.99.1
array_based_unstructured_mesh
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *unstructured_mesh* (4.99.20) that represents the array based unstructured mesh *entity* (3.2.9)

4.99.2
array_based_unstructured_mesh_and_vertices
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *array_based_unstructured_mesh* (4.99.1) that represents the array based unstructured mesh and vertices *entity* (3.2.9)

4.99.3
cell
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *topological_representation_item* (4.31.29) that represents the cell *entity* (3.2.9)

4.99.4
cell_of_structured_mesh
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *cell* (4.99.3) that represents the cell of structured mesh *entity* (3.2.9)

4.99.5
cell_with_explicit_boundary
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *cell* (4.99.3) that represents the cell with explicit boundary *entity* (3.2.9)

4.99.6
explicit_unstructured_mesh
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *unstructured_mesh* (4.99.20) that represents the explicit unstructured mesh *entity* (3.2.9)

4.99.7
extraction_of_structured_submesh
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *extraction_of_submesh* (4.99.8) that represents the extraction of structured submesh *entity* (3.2.9)

4.99.8
extraction_of_submesh
<resource: mesh_topology_schema> *entity data type* (3.2.10) that represents the extraction of submesh *entity* (3.2.9)

4.99.9
extraction_of_submesh_by_cells
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *extraction_of_submesh* (4.99.8) that represents the extraction of submesh by cells *entity* (3.2.9)

4.99.10
extraction_of_submesh_by_vertices
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *extraction_of_submesh* (4.99.8) that represents the extraction of submesh by vertices *entity* (3.2.9)

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4.99.11
indices_list
<resource: mesh_topology_schema> *entity data type* (3.2.10) that represents the indices list *entity* (3.2.9)

4.99.12
indices_range
<resource: mesh_topology_schema> *entity data type* (3.2.10) that represents the indices range *entity* (3.2.9)

4.99.13
mesh
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *topological_representation_item* (4.31.29) that represents the mesh *entity* (3.2.9)

4.99.14
mesh_derived_maths_space
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *maths_space* (4.95.47) that represents the mesh derived maths space *entity* (3.2.9)

4.99.15
product_of_mesh
<resource: mesh_topology_schema> *entity data type* (3.2.10) that represents the product of mesh *entity* (3.2.9)

4.99.16
rind
<resource: mesh_topology_schema> *entity data type* (3.2.10) that represents the rind *entity* (3.2.9)

4.99.17
structured_mesh
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *mesh* (4.99.13) that represents the structured mesh *entity* (3.2.9)

4.99.18
structured_mesh_with_rind
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *structured_mesh* (4.99.17) that represents the structured mesh with rind *entity* (3.2.9)

4.99.19
submesh
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *mesh* (4.99.13) that represents the submesh *entity* (3.2.9)

4.99.20
unstructured_mesh
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *mesh* (4.99.13) that represents the unstructured mesh *entity* (3.2.9)

4.99.21
vertex_defined_cell
<resource: mesh_topology_schema> *entity data type* (3.2.10) that is a type of *cell* (4.99.3) that represents the vertex defined cell *entity* (3.2.9)

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4.100 method_definition_schema

4.100.1
action_method_with_associated_documents
<resource: method_definition_schema> *entity data type* (3.2.10) that is a type of *action_method* (4.1.3) that represents the action method with associated documents *entity* (3.2.9)

4.100.2
action_method_with_associated_documents_constrained
<resource: method_definition_schema> *entity data type* (3.2.10) that is a type of *action_method_with_associated_documents* (4.100.1) that represents the action method with associated documents constrained *entity* (3.2.9)

4.100.3
action_method_to_select_from
<resource: method_definition_schema> *entity data type* (3.2.10) that is a type of *action_method* (4.1.3) that represents the action method to select from *entity* (3.2.9)

4.100.4
process_or_process_relationship_effectivity
<resource: method_definition_schema> *entity data type* (3.2.10) that is a type of *effectivity* (4.9.5) that represents the process or process relationship effectivity *entity* (3.2.9)

4.100.5
serial_action_method
<resource: method_definition_schema> *entity data type* (3.2.10) that is a type of *action_method_relationship* (4.1.4) that represents the serial action method *entity* (3.2.9)

4.100.6
sequential_method
<resource: method_definition_schema> *entity data type* (3.2.10) that is a type of *serial_action_method* (4.100.5) that represents the sequential method *entity* (3.2.9)

4.100.7
concurrent_action_method
<resource: method_definition_schema> *entity data type* (3.2.10) that is a type of *action_method_relationship* (4.1.4) that represents the concurrent action method *entity* (3.2.9)

4.100.8
context_dependent_action_method_relationship
<resource: method_definition_schema> *entity data type* (3.2.10) that represents the context dependent action method relationship *entity* (3.2.9)

4.100.9
context_dependent_action_relationship
<resource: method_definition_schema> *entity data type* (3.2.10) that represents the context dependent action relationship *entity* (3.2.9)

4.100.10
relationship_condition
<resource: method_definition_schema> *entity data type* (3.2.10) that represents the relationship condition *entity* (3.2.9)

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4.101 parameterization_schema

4.101.1
variational_parameter
<resource: parameterization_schema> *entity data type* (3.2.10) that is a type of *variational_representation_item* (4.127.1) and *maths_variable* (4.95.41) that represents the variational parameter *entity* (3.2.9)

4.101.2
bound_variational_parameter
<resource: parameterization_schema> *entity data type* (3.2.10) that is a type of *variational_parameter* (4.101.1) that represents the bound variational parameter *entity* (3.2.9)

4.101.3
unbound_variational_parameter
<resource: parameterization_schema> *entity data type* (3.2.10) that is a type of *variational_parameter* (4.101.1) that represents the unbound variational parameter *entity* (3.2.9)

4.101.4
bound_parameter_environment
<resource: parameterization_schema> *entity data type* (3.2.10) that is a type of *environment* (4.95.6) that represents the bound parameter environment *entity* (3.2.9)

4.101.5
unbound_parameter_environment
<resource: parameterization_schema> *entity data type* (3.2.10) that is a type of *environment* (4.95.6) that represents the unbound parameter environment *entity* (3.2.9)

4.101.6
instance_attribute_reference
<resource: parameterization_schema> *entity data type* (3.2.10) that is a type of *variable_semantics* (4.95.5) that represents the instance attribute reference *entity* (3.2.9)

4.101.7
unbound_variational_parameter_semantics
<resource: parameterization_schema> *entity data type* (3.2.10) that is a type of *variable_semantics* (4.95.5) that represents the unbound variational parameter semantics *entity* (3.2.9)

4.101.8
fixed_instance_attribute_set
<resource: parameterization_schema> *entity data type* (3.2.10) that is a type of *variational_representation_item* (4.127.1) that represents the fixed instance attribute set *entity* (3.2.9)

4.101.9
generated_finite_numeric_space
<resource: parameterization_schema> *entity data type* (3.2.10) that is a type of *finite_space* (4.95.57) that represents the generated finite numeric space *entity* (3.2.9)

4.102 procedural_sketch_schema

4.102.1
sketch_command
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that represents the sketch command *entity* (3.2.9)

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4.102.2
sketch_create_curve_element
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_command* (4.102.1) and *geometric_representation_item* (4.28.2) that represents the sketch create curve element *entity* (3.2.9)

4.102.3
create_line_segment
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_create_curve_element* (4.102.2) that represents the create line segment *entity* (3.2.9)

4.102.4
create_line_segment_2_points
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_line_segment* (4.102.3) that represents the create line segment 2 points *entity* (3.2.9)

4.102.5
create_line_segment_point_tangent
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_line_segment* (4.102.3) that represents the create line segment point tangent *entity* (3.2.9)

4.102.6
create_line_segment_2_tangents
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_line_segment* (4.102.3) that represents the create line segment 2 tangents *entity* (3.2.9)

4.102.7
create_centreline
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_create_curve_element* (4.102.2) that represents the create centreline *entity* (3.2.9)

4.102.8
create_polyline
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_create_curve_element* (4.102.2) that represents the create polyline *entity* (3.2.9)

4.102.9
create_rectangle
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_create_curve_element* (4.102.2) that represents the create rectangle *entity* (3.2.9)

4.102.10
create_polygon
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_create_curve_element* (4.102.2) that represents the create polygon *entity* (3.2.9)

4.102.11
create_circular_arc
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_create_curve_element* (4.102.2) that represents the create circular arc *entity* (3.2.9)

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4.102.12
create_circular_arc_concentric
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_circular_arc* (4.102.11) that represents the create circular arc concentric *entity* (3.2.9)

4.102.13
create_circular_arc_3_tangents
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_circular_arc* (4.102.11) that represents the create circular arc 3 tangents *entity* (3.2.9)

4.102.14
create_circular_arc_centre_ends
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_circular_arc* (4.102.11) that represents the create circular arc centre ends *entity* (3.2.9)

4.102.15
create_circular_arc_start_centre_angle
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_circular_arc* (4.102.11) that represents the create circular arc start centre angle *entity* (3.2.9)

4.102.16
create_circular_arc_start_centre_length
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_circular_arc* (4.102.11) that represents the create circular arc start centre length *entity* (3.2.9)

4.102.17
create_circular_arc_start_end_angle
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_circular_arc* (4.102.11) that represents the create circular arc start end angle *entity* (3.2.9)

4.102.18
create_circular_arc_start_end_direction
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_circular_arc* (4.102.11) that represents the create circular arc start end direction *entity* (3.2.9)

4.102.19
create_circular_arc_start_end_radius
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_circular_arc* (4.102.11) that represents the create circular arc start end radius *entity* (3.2.9)

4.102.20
create_circular_arc_3_points
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_circular_arc* (4.102.11) that represents the create circular arc 3 points *entity* (3.2.9)

4.102.21
create_circular_arc_angles
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_circular_arc* (4.102.11) that represents the create circular arc angles *entity* (3.2.9)

4.102.22
create_circle
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_create_curve_element* (4.102.2) that represents the create circle *entity* (3.2.9)

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4.102.23
create_circle_centre_point
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_circle* (4.102.22) that represents the create circle centre point *entity* (3.2.9)

4.102.24
create_circle_concentric
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_circle* (4.102.22) that represents the create circle concentric *entity* (3.2.9)

4.102.25
create_circle_3_tangents
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_circle* (4.102.22) that represents the create circle 3 tangents *entity* (3.2.9)

4.102.26
create_circle_2_points
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_circle* (4.102.22) that represents the create circle 2 points *entity* (3.2.9)

4.102.27
create_circle_3_points
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_circle* (4.102.22) that represents the create circle 3 points *entity* (3.2.9)

4.102.28
create_ellipse
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_create_curve_element* (4.102.2) that represents the create ellipse *entity* (3.2.9)

4.102.29
create_ellipse_3_points
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_ellipse* (4.102.28) that represents the create ellipse 3 points *entity* (3.2.9)

4.102.30
create_ellipse_centre_point
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *create_ellipse* (4.102.28) that represents the create ellipse centre point *entity* (3.2.9)

4.102.31
create_spline
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_create_curve_element* (4.102.2) that represents the create spline *entity* (3.2.9)

4.102.32
create_parabolic_arc
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_create_curve_element* (4.102.2) that represents the create parabolic arc *entity* (3.2.9)

4.102.33
create_fillet
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_create_curve_element* (4.102.2) that represents the create fillet *entity* (3.2.9)

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4.102.34
create_chamfer
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_create_curve_element* (4.102.2) that represents the create chamfer *entity* (3.2.9)

4.102.35
create_divided_curve
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_create_curve_element* (4.102.2) that represents the create divided curve *entity* (3.2.9)

4.102.36
sketch_operate_transform
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_command* (4.102.1) and *geometric_representation_item* (4.28.2) that represents the sketch operate transform *entity* (3.2.9)

4.102.37
sketch_transform_translate
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_operate_transform* (4.102.36) that represents the sketch transform translate *entity* (3.2.9)

4.102.38
sketch_transform_rotate
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_operate_transform* (4.102.36) that represents the sketch transform rotate *entity* (3.2.9)

4.102.39
sketch_transform_mirror
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_operate_transform* (4.102.36) that represents the sketch transform mirror *entity* (3.2.9)

4.102.40
sketch_transform_scale
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_operate_transform* (4.102.36) that represents the sketch transform scale *entity* (3.2.9)

4.102.41
sketch_create_pattern_element
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_command* (4.102.1) and *geometric_curve_set* (4.27.49) that represents the sketch create pattern element *entity* (3.2.9)

4.102.42
create_pattern_rectangular
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_create_pattern_element* (4.102.41) that represents the create pattern rectangular *entity* (3.2.9)

4.102.43
create_pattern_circular
<resource: procedural_sketch_schema> *entity data type* (3.2.10) that is a type of *sketch_create_pattern_element* (4.102.41) that represents the create pattern circular *entity* (3.2.9)

4.103 process_property_representation_schema

4.103.1

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action_property_representation
<resource: process_property_representation_schema> *entity data type* (3.2.10) that represents the action property representation *entity* (3.2.9)

4.103.2
resource_property_representation
<resource: process_property_representation_schema> *entity data type* (3.2.10) that represents the resource property representation *entity* (3.2.9)

4.104 process_property_schema

4.104.1
action_property
<resource: process_property_schema> *entity data type* (3.2.10) that represents the action property *entity* (3.2.9)

4.104.2
product_definition_process
<resource: process_property_schema> *entity data type* (3.2.10) that is a type of *action* (4.1.1) that represents the product definition process *entity* (3.2.9)

4.104.3
process_product_association
<resource: process_property_schema> *entity data type* (3.2.10) that represents the process product association *entity* (3.2.9)

4.104.4
property_process
<resource: process_property_schema> *entity data type* (3.2.10) that is a type of *action* (4.1.1) that represents the property process *entity* (3.2.9)

4.104.5
process_property_association
<resource: process_property_schema> *entity data type* (3.2.10) that represents the process property association *entity* (3.2.9)

4.104.6
replacement_relationship
<resource: process_property_schema> *entity data type* (3.2.10) that is a type of *action_relationship* (4.1.5) that represents the replacement relationship *entity* (3.2.9)

4.104.7
resource_property
<resource: process_property_schema> *entity data type* (3.2.10) that represents the resource property *entity* (3.2.9)

4.104.8
action_resource_requirement
<resource: process_property_schema> *entity data type* (3.2.10) that represents the action resource requirement *entity* (3.2.9)

4.104.9
action_property_relationship
<resource: process_property_schema> *entity data type* (3.2.10) that represents the action property relationship *entity* (3.2.9)

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4.104.10
requirement_for_action_resource
<resource: process_property_schema> *entity data type* (3.2.10) that is a type of *action_resource_requirement* (4.104.8) that represents the requirement for action resource *entity* (3.2.9)

4.104.11
resource_property_relationship
<resource: process_property_schema> *entity data type* (3.2.10) that represents the resource property relationship *entity* (3.2.9)

4.104.12
action_resource_requirement_relationship
<resource: process_property_schema> *entity data type* (3.2.10) that represents the action resource requirement relationship *entity* (3.2.9)

4.104.13
resource_requirement_type
<resource: process_property_schema> *entity data type* (3.2.10) that represents the resource requirement type *entity* (3.2.9)

4.104.14
resource_requirement_type_relationship
<resource: process_property_schema> *entity data type* (3.2.10) that represents the resource requirement type relationship *entity* (3.2.9)

4.105 product_analysis_schema

4.105.1
behavioural_decomposition_of_temporal_spatial_domain
<resource: product_analysis_schema> *entity data type* (3.2.10) that represents the behavioural decomposition of temporal spatial domain *entity* (3.2.9)

Note 1 to entry: A *behavioural_decomposition_of_temporal_spatial_domain* (4.105.1) is a decomposition of a *temporal_spatial_domain* (4.105.8) into specifications for different behaviours.

4.105.2
domain_property
<resource: product_analysis_schema> *entity data type* (3.2.10) that represents the domain property *entity* (3.2.9)

Note 1 to entry: A *domain_property* (4.105.2) is a specification of a property within a *temporal_spatial_domain* (4.105.8).

4.105.3
physical_action_domain
<resource: product_analysis_schema> *entity data type* (3.2.10) that is a type of *temporal_spatial_domain* (4.105.8) that represents the physical action domain *entity* (3.2.9)

Note 1 to entry: A *physical_action_domain* (4.105.3) is a type of temporal_spatial_domain that has a finite time dimension.

4.105.4

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physical_product_domain
<resource: product_analysis_schema> *entity data type* (3.2.10) that is a type of *temporal_spatial_domain* (4.105.8) that represents the physical product domain *entity* (3.2.9)

Note 1 to entry: A **physical_product_domain** is a type of temporal_spatial_domain that has an indefinite time dimension and that performs a number of activities during its life.

4.105.5
physical_state_domain
<resource: product_analysis_schema> *entity data type* (3.2.10) that is a type of *temporal_spatial_domain* (4.105.8) that represents the physical state domain *entity* (3.2.9)

Note 1 to entry: A *physical_state_domain* (4.105.5) is a type of temporal_spatial_domain that has no time dimension.

4.105.6
spatial_decomposition_of_temporal_spatial_domain
<resource: product_analysis_schema> *entity data type* (3.2.10) that represents the spatial decomposition of temporal spatial domain *entity* (3.2.9)

Note 1 to entry: A **spatial_decomposition_of_temporal_spatial_domain** is a decomposition of *temporal_spatial_domain* (4.105.8) into specifications for different spatial regions.

4.105.7
temporal_decomposition_of_action_domain
<resource: product_analysis_schema> *entity data type* (3.2.10) that represents the temporal decomposition of action domain *entity* (3.2.9)

Note 1 to entry: A **temporal_decomposition_of_action_domain** is a decomposition of a *physical_action_domain* (4.105.3) into specifications for different times.

4.105.8
temporal_spatial_domain
<resource: product_analysis_schema> *entity data type* (3.2.10) that represents the temporal spatial domain *entity* (3.2.9)

Note 1 to entry: A *temporal_spatial_domain* (4.105.8) is a specification of a quantity of space, time or both, which may or may not contain matter.

4.106 product_and_model_relationships_schema

4.106.1
product_view_relationship
<resource: product_and_model_relationships_schema> *entity data type* (3.2.10) that represents the product view relationship *entity* (3.2.9)

Note 1 to entry: A **product_view_relationship** is a relationship that is between:

— an idealisation of a product for analysis; and

— a discretised analysis model

which indicates that the discretised analysis model is a model of the idealised product created for the purpose of numerical analysis.

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4.107 product_data_equivalence_criteria_schema

4.107.1
data_equivalence_assessment_inspection_association
<resource: product_data_equivalence_criteria_schema> *entity data type* (3.2.10) that represents the data equivalence assessment inspection association *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_assessment_inspection_association** is a relationship between a *data_equivalence_criterion_assessment_association* (4.107.5) and a *data_equivalence_criterion_inspection_association* (4.107.6) for associating an **assessment_specification** and an **inspection_requirement** applied to the same *data_equivalence_criterion* (4.107.4).

4.107.2
data_equivalence_assessment_specification
<resource: product_data_equivalence_criteria_schema> *entity data type* (3.2.10) that represents the data equivalence assessment specification *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_assessment_specification** is a specification to be applied to evaluate inspection results for each criterion.

4.107.3
data_equivalence_criteria_representation
<resource: product_data_equivalence_criteria_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the data equivalence criteria representation *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_criteria_representation** is a type of representation that represents a selected set of criteria on data equivalence.

4.107.4
data_equivalence_criterion
<resource: product_data_equivalence_criteria_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the data equivalence criterion *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_criterion** is a type of representation_item that represents a criterion that is an aspect of the requirement on product data equivalence.

4.107.5
data_equivalence_criterion_assessment_association
<resource: product_data_equivalence_criteria_schema> *entity data type* (3.2.10) that represents the data equivalence criterion assessment association *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_criterion_assessment_association** is a relationship between a criterion and an assessment specification.

4.107.6
data_equivalence_criterion_inspection_association
<resource: product_data_equivalence_criteria_schema> *entity data type* (3.2.10) that is a type of *representation_item_relationship* (4.41.17) that represents the data equivalence criterion inspection association *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_criterion_inspection_association** is a type of representation_item_relationship that represents a relationship between a criterion and its pertaining inspection requirement.

4.107.7

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data_equivalence_inspection_requirement
<resource: product_data_equivalence_criteria_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the data equivalence inspection requirement *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_inspection_requirement** is a type of representation_item that represents requirements on acceptable inspection method for inspecting whether, or not, pertaining criterion on data equivalence holds.

4.107.8
data_equivalence_report_request
<resource: product_data_equivalence_criteria_schema> *entity data type* (3.2.10) that represents the data equivalence report request *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_report_request** is a specification of a report to be generated as a result of inspection for a *data_equivalence_criterion* (4.107.4).

4.107.9
detailed_equivalence_report_request
<resource: product_data_equivalence_criteria_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_report_request* (4.107.8) that represents the detailed equivalence report request *entity* (3.2.9)

Note 1 to entry: A **detailed_equivalence_report_request** is a type of data_equivalence_report_request that requests detailed inspection report on the criterion concerned.

4.107.10
detailed_equivalence_report_request_with_number_of_instances
<resource: product_data_equivalence_criteria_schema> *entity data type* (3.2.10) that is a type of *detailed_equivalence_report_request* (4.107.9) that represents the detailed equivalence report request with number of instances *entity* (3.2.9)

Note 1 to entry: A **detailed_equivalence_report_request_with_number_of_instances** is a type of detailed_equivalence_report_request that controls maximum number of instances reported.

4.107.11
summary_report_request_with_number_of_instances
<resource: product_data_equivalence_criteria_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_report_request* (4.107.8) that represents the summary report request with number of instances *entity* (3.2.9)

Note 1 to entry: A **summary_report_request_with_number_of_instances** is a type of data_equivalence_report_request that requests a summarized inspection report on the criterion concerned.

4.108 product_data_equivalence_definition_schema

4.108.1
data_equivalence_definition
<resource: product_data_equivalence_definition_schema> *entity data type* (3.2.10) that represents the data equivalence definition *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_definition** is a set of information on product data equivalence.

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4.108.2
data_equivalence_definition_relationship
<resource: product_data_equivalence_definition_schema> *entity data type* (3.2.10) that represents the data equivalence definition relationship *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_definition_relationship** is a relationship between two *data_equivalence_definition* (4.108.1) instances.

4.108.3
data_equivalence_definition_representation_relationship
<resource: product_data_equivalence_definition_schema> *entity data type* (3.2.10) that represents the data equivalence definition representation relationship *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_definition_representation_relationship** is a relationship between an instance of *data_equivalence_definition* (4.108.1) and an instance of *data_equivalence_criteria_representation* (4.107.3) or of *data_equivalence_inspection_result_representation* (4.109.10).

4.108.4
product_data_and_data_equivalence_relationship
<resource: product_data_equivalence_definition_schema> *entity data type* (3.2.10) that represents the product data and data equivalence relationship *entity* (3.2.9)

Note 1 to entry: A **product_data_and_data_equivalence_relationship** is a relationship between the product data equivalence information defined by *data_equivalence_definition* (4.108.1) and the target product data inspected.

4.108.5
validation_software_identification
<resource: product_data_equivalence_definition_schema> *entity data type* (3.2.10) that represents the validation software identification *entity* (3.2.9)

Note 1 to entry: A **validation_software_identification** is an identification of software required to be used for data checking.

4.109 product_data_equivalence_inspection_result_schema

4.109.1
criterion_report_item_with_number_of_instances
<resource: product_data_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_inspection_criterion_report_item* (4.109.5) that represents the criterion report item with number of instances *entity* (3.2.9)

4.109.2
criterion_report_item_with_value
<resource: product_data_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_inspection_criterion_report_item* (4.109.5) that represents the criterion report item with value *entity* (3.2.9)

Note 1 to entry: A **criterion_report_item_with_value** is a type of data_equivalence_inspection_criterion_report_item that represents any measured value calculated for the criterion.

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4.109.3
data_equivalence_inspected_element_pair
<resource: product_data_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the data equivalence inspected element pair *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_inspected_element_pair** is a type of representation_item that represents a pair of inspected elements.

4.109.4
data_equivalence_inspection_criterion_report
<resource: product_data_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_inspection_report* (4.109.8) that represents the data equivalence inspection criterion report *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_inspection_criterion_report** is a type of data_equivalence_inspection_report that represents summary information of the inspection results for one specific criterion.

4.109.5
data_equivalence_inspection_criterion_report_item
<resource: product_data_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the data equivalence inspection criterion report item *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_inspection_criterion_report_item** is a type of representation_item and abstract supertype of *criterion_report_item_with_number_of_instances* (4.109.1) and *criterion_report_item_with_value* (4.109.2).

4.109.6
data_equivalence_inspection_instance_report
<resource: product_data_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_inspection_report* (4.109.8) that represents the data equivalence inspection instance report *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_inspection_instance_report** is a type of data_equivalence_inspection_report that represents detailed information of inspection results at entity instance level for one specific criterion.

4.109.7
data_equivalence_inspection_instance_report_item
<resource: product_data_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the data equivalence inspection instance report item *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_inspection_instance_report_item** is a type of representation_item that represents a detailed inspection result for a pair of inspected elements of the specified product data.

4.109.8
data_equivalence_inspection_report
<resource: product_data_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the data equivalence inspection report *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_inspection_report** is a type of representation_item that represents an inspection report with respect to one specific criterion.

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4.109.9
data_equivalence_inspection_result
<resource: product_data_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the data equivalence inspection result *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_inspection_result** is a type of representation_item that represents the result of inspection regarding specified criterion.

4.109.10
data_equivalence_inspection_result_representation
<resource: product_data_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the data equivalence inspection result representation *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_inspection_result_representation** is a type of representation that represents inspection results for the specified product data equivalence criteria against specific pair of product data instances.

4.109.11
data_equivalence_inspection_result_with_judgement
<resource: product_data_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_equivalence_inspection_result* (4.109.9) that represents the data equivalence inspection result with judgement *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_inspection_result_with_judgement** is a type of data_equivalence_inspection_result that contains information on whether the data inspected have passed or failed the test for the criterion.

4.109.12
data_equivalence_report_inspection_association
<resource: product_data_equivalence_inspection_result_schema> *entity data type* (3.2.10) that is a type of *representation_item_relationship* (4.41.17) that represents the data equivalence report inspection association *entity* (3.2.9)

Note 1 to entry: A **data_equivalence_report_inspection_association** is a type of representation_item_relationship that represents the correspondence between an inspection report and the inspection requirement used for the inspection.

4.110 product_data_quality_criteria_schema

4.110.1
data_quality_criteria_representation
<resource: product_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the data quality criteria representation *entity* (3.2.9)

Note 1 to entry: A **data_quality_criteria_representation** is a type of representation that represents a selected set of criteria on product data quality.

4.110.2
data_quality_criterion
<resource: product_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the data quality criterion *entity* (3.2.9)

Note 1 to entry: A **data_quality_criterion** is a type of representation_item that represents a criterion that is an aspect of a requirement on product data quality.

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4.110.3
data_quality_measurement_requirement
<resource: product_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the data quality measurement requirement *entity* (3.2.9)

Note 1 to entry: A **data_quality_measurement_requirement** is a type of representation_item that represents requirements on acceptable measurement for testing whether the criterion on data quality holds (data quality defect exists) or not.

4.110.4
data_quality_criterion_measurement_association
<resource: product_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *representation_item_relationship* (4.41.17) that represents the data quality criterion measurement association *entity* (3.2.9)

Note 1 to entry: A **data_quality_criterion_measurement_association** is a type of representation_item_relationship which represents a relationship between a criterion and its corresponding measurement requirement.

4.110.5
data_quality_assessment_specification
<resource: product_data_quality_criteria_schema> *entity data type* (3.2.10) that represents the data quality assessment specification *entity* (3.2.9)

Note 1 to entry: A **data_quality_assessment_specification** is the representation of a specification to be applied to evaluate inspection results for each criterion.

4.110.6
data_quality_criterion_assessment_association
<resource: product_data_quality_criteria_schema> *entity data type* (3.2.10) that represents the data quality criterion assessment association *entity* (3.2.9)

Note 1 to entry: A **data_quality_criterion_assessment_association** is the representation of a relationship between a criterion and an assessment specification.

4.110.7
data_quality_assessment_measurement_association
<resource: product_data_quality_criteria_schema> *entity data type* (3.2.10) that represents the data quality assessment measurement association *entity* (3.2.9)

Note 1 to entry: A **data_quality_assessment_measurement_association** is the representation of a relationship between a measurement requirement and its corresponding assessment specification.

4.110.8
data_quality_report_request
<resource: product_data_quality_criteria_schema> *entity data type* (3.2.10) that represents the data quality report request *entity* (3.2.9)

Note 1 to entry: A **data_quality_report_request** is the representation of the specification of a report to be generated as a result of inspection for a *data_quality_criterion* (4.110.2).

4.110.9
summary_report_request
<resource: product_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *data_quality_report_request* (4.110.8) that represents the summary report request *entity* (3.2.9)

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Note 1 to entry: A **summary_report_request** is a type of data_quality_report_request that requests a summarized inspection report on the criterion concerned.

4.110.10
detailed_report_request
<resource: product_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *data_quality_report_request* (4.110.8) that represents the detailed report request *entity* (3.2.9)

Note 1 to entry: A **detailed_report_request** is a type of data_quality_report_request that requests a detailed inspection report on the criterion concerned.

4.110.11
detailed_report_request_with_number_of_data
<resource: product_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *detailed_report_request* (4.110.10) that represents the detailed report request with number of data *entity* (3.2.9)

Note 1 to entry: A **detailed_report_request_with_number_of_data** is a type of detailed_report_request that controls the maximum number of instances reported.

4.111 product_data_quality_definition_schema

4.111.1
data_quality_definition
<resource: product_data_quality_definition_schema> *entity data type* (3.2.10) that represents the data quality definition *entity* (3.2.9)

Note 1 to entry: A **data_quality_definition** is a description of the aspects of product data quality.

4.111.2
data_quality_definition_representation_relationship
<resource: product_data_quality_definition_schema> *entity data type* (3.2.10) that represents the data quality definition representation relationship *entity* (3.2.9)

Note 1 to entry: A **data_quality_definition_representation_relationship** is a characterization of a *data_quality_definition* (4.111.1) by a *data_quality_criteria_representation* (4.110.1) or a *data_quality_inspection_result_representation* (4.112.1).

4.111.3
product_data_and_data_quality_relationship
<resource: product_data_quality_definition_schema> *entity data type* (3.2.10) that represents the product data and data quality relationship *entity* (3.2.9)

Note 1 to entry: A **product_data_and_data_quality_relationship** is a relationship between a *data_quality_definition* (4.111.1) and a *product_definition* (4.18.7).

4.111.4
data_quality_definition_relationship
<resource: product_data_quality_definition_schema> *entity data type* (3.2.10) that represents the data quality definition relationship *entity* (3.2.9)

Note 1 to entry: A **data_quality_definition_relationship** is a relationship between two *data_quality_definition* (4.111.1) instances.

4.111.5

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software_for_data_quality_check
<resource: product_data_quality_definition_schema> *entity data type* (3.2.10) that represents the software for data quality check *entity* (3.2.9)

Note 1 to entry: A **software_for_data_quality_check** is an identification of the software required to be used, or used in the data quality inspection.

4.112 product_data_quality_inspection_result_schema

4.112.1
data_quality_inspection_result_representation
<resource: product_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the data quality inspection result representation *entity* (3.2.9)

Note 1 to entry: A **data_quality_inspection_result_representation** is a type of representation that represents inspection results for the specified product data quality criteria against a specific instance of product data.

4.112.2
data_quality_inspection_result
<resource: product_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the data quality inspection result *entity* (3.2.9)

Note 1 to entry: A **data_quality_inspection_result** is a type of representation_item that represents the result of inspection regarding one specified criterion.

4.112.3
data_quality_inspection_result_with_judgement
<resource: product_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_quality_inspection_result* (4.112.2) that represents the data quality inspection result with judgement *entity* (3.2.9)

Note 1 to entry: A **data_quality_inspection_result_with_judgement** is a type of data_quality_inspection_result that contains information on whether the data inspected have passed or failed the test for the criterion.

4.112.4
data_quality_inspection_report
<resource: product_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the data quality inspection report *entity* (3.2.9)

Note 1 to entry: A **data_quality_inspection_report** is a type of representation_item that represents an inspection report with respect to one specific criterion.

4.112.5
data_quality_inspection_criterion_report
<resource: product_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_quality_inspection_report* (4.112.4) that represents the data quality inspection criterion report *entity* (3.2.9)

Note 1 to entry: A **data_quality_inspection_criterion_report** is a type of data_quality_inspection_report that represents summary information of the inspection results for one specific criterion.

4.112.6

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data_quality_inspection_criterion_report_item
<resource: product_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the data quality inspection criterion report item *entity* (3.2.9)

4.112.7
data_quality_inspection_instance_report
<resource: product_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_quality_inspection_report* (4.112.4) that represents the data quality inspection instance report *entity* (3.2.9)

Note 1 to entry: A **data_quality_inspection_instance_report** is a type of data_quality_inspection_report that represents detailed information of an inspection result in at an entity instance level for one specific criterion.

4.112.8
data_quality_inspection_instance_report_item
<resource: product_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the data quality inspection instance report item *entity* (3.2.9)

Note 1 to entry: A **data_quality_inspection_instance_report_item** is a type of representation_item that represents a detailed inspection result for an inspected element or a pair of inspected elements of the specified product data.

4.112.9
data_quality_report_measurement_association
<resource: product_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *representation_item_relationship* (4.41.17) that represents the data quality report measurement association *entity* (3.2.9)

Note 1 to entry: A **data_quality_report_measurement_association** is a type of representation_item_relationship that represents the correspondence between a *data_quality_inspection_report* (4.112.4) and the *data_quality_measurement_requirement* (4.110.3) used for the inspection.

4.113 property_distribution_and_model_relationships_schema

4.113.1
distribution_view_relationship
<resource: property_distribution_and_model_relationships_schema> *entity data type* (3.2.10) that represents the distribution view relationship *entity* (3.2.9)

Note 1 to entry: A **distribution_view_relationship** is a relationship between:

— a property distribution over an idealisation of a product, action or state for analysis; and

— a discretised model of a property distribution obtained by analysis

which indicates that the discretised model is a model of the property distribution.

4.113.2
same_discretised_distribution_model
<resource: property_distribution_and_model_relationships_schema> *entity data type* (3.2.10) that represents the same discretised distribution model *entity* (3.2.9)

Note 1 to entry: A **same_discretised_distribution_model** is a relationship between records of a discretised distribution model, which states they each have the same meaning.

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4.113.3
same_idealised_distribution
<resource: property_distribution_and_model_relationships_schema> *entity data type* (3.2.10) that represents the same idealised distribution *entity* (3.2.9)

Note 1 to entry: A **same_idealised_distribution** is a relationship between records of an property distribution over an idealisation of product, action or state for analysis, which states they each have the same meaning.

4.114 results_schema

4.114.1
mbna_discrete_data
<resource: results_schema> *entity data type* (3.2.10) that is a type of *mbna_result* (4.114.4) that represents the mbna discrete data *entity* (3.2.9)

4.114.2
mbna_discrete_data_with_rind
<resource: results_schema> *entity data type* (3.2.10) that is a type of *mbna_discrete_data* (4.114.1) that represents the mbna discrete data with rind *entity* (3.2.9)

4.114.3
mbna_history
<resource: results_schema> *entity data type* (3.2.10) that is a type of *mbna_result* (4.114.4) that represents the mbna history *entity* (3.2.9)

4.114.4
mbna_result
<resource: results_schema> *entity data type* (3.2.10) that is a type of *model_property_distribution* (4.67.5) that represents the mbna result *entity* (3.2.9)

4.114.5
mbna_solution
<resource: results_schema> *entity data type* (3.2.10) that is a type of *mbna_result* (4.114.4) that represents the mbna solution *entity* (3.2.9)

4.114.6
mbna_solution_with_rind
<resource: results_schema> *entity data type* (3.2.10) that is a type of *mbna_solution* (4.114.5) that represents the mbna solution with rind *entity* (3.2.9)

4.115 risk_schema

4.115.1
causal_consequence
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the causal consequence *entity* (3.2.9)

Note 1 to entry: A **causal_consequence** is a type of product_definition_relationship that relates two *risk_consequence* (4.115.21)'s identifying one to be the secondary effect of the other.

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4.115.2
contained_acceptance
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *risk_activity_structure* (4.115.16) that represents the contained acceptance *entity* (3.2.9)

Note 1 to entry: A **contained_acceptance** is a type of risk_activity_structure that associates a *risk_acceptance* (4.115.15) with a *risk_control* (4.115.22)

4.115.3
contained_analysis
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *risk_activity_structure* (4.115.16) that represents the contained analysis *entity* (3.2.9)

Note 1 to entry: A **contained_analysis** is a type of risk_activity_structure that associates a *risk_analysis* (4.115.17) with a *risk_assessment* (4.115.18)

4.115.4
contained_communication
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *risk_activity_structure* (4.115.16) that represents the contained communication *entity* (3.2.9)

Note 1 to entry: A **contained_communication** is a type of risk_activity_structure that associates a *risk_control* (4.115.22) with a *risk_communication* (4.115.20)

4.115.5
contained_estimation
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *risk_activity_structure* (4.115.16) that represents the contained estimation *entity* (3.2.9)

Note 1 to entry: A **contained_estimation** is a type of risk_activity_structure that associates a *risk_estimation* (4.115.23) with a *risk_analysis* (4.115.17)

4.115.6
contained_evaluation
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *risk_activity_structure* (4.115.16) that represents the contained evaluation *entity* (3.2.9)

Note 1 to entry: A **contained_evaluation** is a type of risk_activity_structure that associates a *risk_evaluation* (4.115.24) with a *risk_assessment* (4.115.18)

4.115.7
contained_identification
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *risk_activity_structure* (4.115.16) that represents the contained identification *entity* (3.2.9)

Note 1 to entry: A **contained_identification** is a type of risk_activity_structure that associates a *risk_analysis* (4.115.17) with a *risk_identification* (4.115.25)

4.115.8
contained_treatments
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *risk_activity_structure* (4.115.16) that represents the contained treatments *entity* (3.2.9)

Note 1 to entry: A **contained_treatments** is a type of risk_activity_structure that associates a *risk_control* (4.115.22) with a *risk_treatment* (4.115.36)

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4.115.9
event_occurrence_characterized_object
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *event_occurrence* (4.7.7) that represents the event occurrence characterized object *entity* (3.2.9)

Note 1 to entry: An **event_occurrence_characterized_object** is a type of event_occurrence and characterized_object that describes the probability for the risk to occur.

4.115.10
event_probability
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) that represents the event probability *entity* (3.2.9)

Note 1 to entry: An **event_probability** is a type of property_definition that describes the probability for the risk to occur.

4.115.11
monitor
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *risk_activity_structure* (4.115.16) that represents the monitor *entity* (3.2.9)

Note 1 to entry: A **monitor** is a type of risk_activity_structure that associates a *risk_control* (4.115.22) with a *risk_assessment* (4.115.18)

4.115.12
probability_representation
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *property_definition_representation* (4.20.6) that represents the probability representation *entity* (3.2.9)

Note 1 to entry: A **probability_representation** is a type of property_definition_representation that represents the values resulting from the probability estimation or calculation.

4.115.13
related_consequence
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the related consequence *entity* (3.2.9)

Note 1 to entry: A **related_consequence** is a type of product_definition_relationship that relates a *risk_consequence* (4.115.21) to a *risk_perception* (4.115.29)

4.115.14
risk
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *product* (4.18.4) that represents the risk *entity* (3.2.9)

Note 1 to entry: A **risk** is a type of product that is the combination of the probability of an event and its consequence.

4.115.15
risk_acceptance
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *action* (4.1.1) that represents the risk acceptance *entity* (3.2.9)

Note 1 to entry: A **risk_acceptance** is a type of action that is the process of planning and accepting a risk.

4.115.16

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risk_activity_structure
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *action_relationship* (4.1.5) that represents the risk activity structure *entity* (3.2.9)

Note 1 to entry: A **risk_activity_structure** is a type of action_relationship that defines the structure of risk related actions.

4.115.17
risk_analysis
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *action* (4.1.1) that represents the risk analysis *entity* (3.2.9)

Note 1 to entry: A **risk_analysis** is a type of action that is the systematic use of information to identify sources and to estimate risk.

4.115.18
risk_assessment
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *action* (4.1.1) that represents the risk assessment *entity* (3.2.9)

Note 1 to entry: A **risk_assessment** is a type of action that is the overall process of *risk_analysis* (4.115.17) and *risk_evaluation* (4.115.24).

4.115.19
risk_attitude
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *property_definition_representation* (4.20.6) that represents the risk attitude *entity* (3.2.9)

Note 1 to entry: A **risk_attitude** is a type of property_definition_representation and a factor that helps weight the criticality of the *risk_level* (4.115.27)

4.115.20
risk_communication
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *action* (4.1.1) that represents the risk communication *entity* (3.2.9)

Note 1 to entry: A **risk_communication** is a type of action that is the exchange or sharing of information about risk between the stakeholders.

4.115.21
risk_consequence
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the risk consequence *entity* (3.2.9)

Note 1 to entry: A **risk_consequence** is a type of product_definition that is the outcome of an event.

4.115.22
risk_control
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *action* (4.1.1) that represents the risk control *entity* (3.2.9)

Note 1 to entry: A **risk_control** is a type of action that is used as a top level action to coordinate subordinate actions implementing risk management decisions.

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4.115.23
risk_estimation
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *action* (4.1.1) that represents the risk estimation *entity* (3.2.9)

Note 1 to entry: A **risk_estimation** is a type of action within this action values are assigned to the probability and consequences of a risk.

4.115.24
risk_evaluation
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *action* (4.1.1) that represents the risk evaluation *entity* (3.2.9)

Note 1 to entry: A **risk_evaluation** is a type of action comparing the *risk_perception* (4.115.29) against given criteria to determine the significance associated with a particular *risk* (4.115.14).

4.115.25
risk_identification
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *action* (4.1.1) that represents the risk identification *entity* (3.2.9)

Note 1 to entry: A **risk_identification** is a type of action that is used to find, list, and characterize risks.

4.115.26
risk_impact_assignment
<resource: risk_schema> *entity data type* (3.2.10) that represents the risk impact assignment *entity* (3.2.9)

Note 1 to entry: A **risk_impact_assignment** is an association of a *risk_consequence* (4.115.21) with impacted item.

4.115.27
risk_level
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) that represents the risk level *entity* (3.2.9)

Note 1 to entry: A **risk_level** is a type of property_definition that describes an identifiable goal or objective that can be the possible outcome of the risk.

4.115.28
risk_measure
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *action_method* (4.1.3) that represents the risk measure *entity* (3.2.9)

Note 1 to entry: A **risk_measure** is a type of action_method that is used in a *risk_treatment* (4.115.36).

4.115.29
risk_perception
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the risk perception *entity* (3.2.9)

Note 1 to entry: A **risk_perception** is a type of product_definition that is used to identify a collection of values or concerns that a stakeholder views a particular *risk* (4.115.14).

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4.115.30
risk_perception_characterized_object
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *risk_perception* (4.115.29) that represents the risk perception characterized object *entity* (3.2.9)

Note 1 to entry: A **risk_perception_characterized_object** is a type of characterized_object and a risk_perception that is used to associate a property with a risk_perception.

4.115.31
risk_perception_context
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *product_definition_context* (4.2.8) that represents the risk perception context *entity* (3.2.9)

Note 1 to entry: A **risk_perception_context** is a type of product_definition_context and is the context for the elements of *risk_perception* (4.115.29) are related.

4.115.32
risk_perception_formation
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) that represents the risk perception formation *entity* (3.2.9)

Note 1 to entry: A **risk_perception_formation** is a type of product_definition_formation that is the identification of a specific version of risk.

4.115.33
risk_perception_relationship
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the risk perception relationship *entity* (3.2.9)

Note 1 to entry: A **risk_perception_relationship** is a type of product_definition_relationship that relates two *risk_perception* (4.115.29) and provides an identification and description of their relationship.

4.115.34
risk_perception_source_assignment
<resource: risk_schema> *entity data type* (3.2.10) that represents the risk perception source assignment *entity* (3.2.9)

Note 1 to entry: A **risk_perception_source_assignment** is an association between a *risk_perception* (4.115.29) and the items used to identify it.

4.115.35
risk_relationship
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *product_relationship* (4.18.22) that represents the risk relationship *entity* (3.2.9)

Note 1 to entry: A **risk_relationship** is a type of product_relationship that relates two *risk* (4.115.14)'s and provides an identification and description of their relationship.

4.115.36
risk_treatment
<resource: risk_schema> *entity data type* (3.2.10) that is a type of *action* (4.1.1) that represents the risk treatment *entity* (3.2.9)

Note 1 to entry: A **risk_treatment** is a type of action that defines the process of selecting and implementing measures to modify risk.

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4.116 set_theory_schema

4.116.1
complement
<resource: set_theory_schema> *entity data type* (3.2.10) that represents the complement *entity* (3.2.9)

Note 1 to entry: A **complement** is a relationship that is between set S1, set U, and set S2, that indicates set S2 consists of all members of U that are not members of S1.

4.116.2
intersection
<resource: set_theory_schema> *entity data type* (3.2.10) that represents the intersection *entity* (3.2.9)

Note 1 to entry: An **intersection** is a relationship that is between set R and set of sets {Si}, that indicates set R consists of each thing that is a member of each set within {Si}.

4.116.3
power_set
<resource: set_theory_schema> *entity data type* (3.2.10) that represents the power set *entity* (3.2.9)

Note 1 to entry: A **power_set** is a relationship that is between set S and set S*, that indicates S* is the set of all subsets of S.

4.116.4
proper_subset
<resource: set_theory_schema> *entity data type* (3.2.10) that is a type of *subset* (4.116.6) that represents the proper subset *entity* (3.2.9)

Note 1 to entry: A **proper_subset** is a type of subset that is a relationship between set A and set B, that indicates each member of set A is also a member of set B, and that set A does not equal set B.

4.116.5
same_membership
<resource: set_theory_schema> *entity data type* (3.2.10) that represents the same membership *entity* (3.2.9)

Note 1 to entry: A **same_membership** is a relationship that is between set S1 and set S2, that indicates the sets have the same members.

4.116.6
subset
<resource: set_theory_schema> *entity data type* (3.2.10) that represents the subset *entity* (3.2.9)

Note 1 to entry: A **subset** is a relationship that is between set A and set B, that indicates each member of set A is also a member of set B.

4.116.7
union
<resource: set_theory_schema> *entity data type* (3.2.10) that represents the union *entity* (3.2.9)

Note 1 to entry: A **union** is a relationship that is between set R and set of sets {Si}, that indicates set R consists of each thing that is a member of a set within {Si}.

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4.116.8
union_of_all_members
<resource: set_theory_schema> *entity data type* (3.2.10) that represents the union of all members *entity* (3.2.9)

Note 1 to entry: A **union_of_all_members** is a relationship that is between set R and sets S, where each of the members of S is a set, that indicates set R consists of each thing that is a member of a set within S.

4.117 shape_data_quality_criteria_schema

4.117.1
shape_data_quality_criteria_representation
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *data_quality_criteria_representation* (4.110.1) that represents the shape data quality criteria representation *entity* (3.2.9)

4.117.2
shape_data_quality_criterion
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *data_quality_criterion* (4.110.2) and *data_quality_measurement_requirement* (4.110.3) that represents the shape data quality criterion *entity* (3.2.9)

Note 1 to entry: A **shape_data_quality_criterion** is a type of data_quality_criterion and a type of data_quality_measurement_requirement.

4.117.3
shape_data_quality_assessment_by_numerical_test
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *data_quality_assessment_specification* (4.110.5) that represents the shape data quality assessment by numerical test *entity* (3.2.9)

4.117.4
shape_data_quality_value_range
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *compound_representation_item* (4.41.3) that represents the shape data quality value range *entity* (3.2.9)

Note 1 to entry: A **shape_data_quality_value_range** is a type of compound_representation_item that is a pair of numbers representing the range in which the value shall lie for use in specifying thresholds of criteria or accuracies for measurements.

4.117.5
shape_data_quality_value_limit
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *measure_representation_item* (4.34.7) and *qualified_representation_item* (4.34.10) that represents the shape data quality value limit *entity* (3.2.9)

Note 1 to entry: A **shape_data_quality_value_limit** is a type of measure_representation_item and a type of qualified_representation_item that specifies a qualified numerical value representing either the lower limit or the upper limit of a particular quantifiable characteristic.

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4.117.6
shape_data_quality_upper_value_limit
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *shape_data_quality_value_limit* (4.117.5) that represents the shape data quality upper value limit *entity* (3.2.9)

4.117.7
shape_data_quality_lower_value_limit
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *shape_data_quality_value_limit* (4.117.5) that represents the shape data quality lower value limit *entity* (3.2.9)

4.117.8
shape_summary_request_with_representative_value
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *summary_report_request* (4.110.9) that represents the shape summary request with representative value *entity* (3.2.9)

Note 1 to entry: A **shape_summary_request_with_representative_value** is a type of summary_report_request that requests a summarized inspection report with representative measured value on the criterion concerned.

4.117.9
shape_data_quality_assessment_by_logical_test
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *data_quality_assessment_specification* (4.110.5) that represents the shape data quality assessment by logical test *entity* (3.2.9)

4.117.10
erroneous_data
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *shape_data_quality_criterion* (4.117.2) that represents the erroneous data *entity* (3.2.9)

Note 1 to entry: An **erroneous_data** is a type of shape_data_quality_criterion that is a supertype of criteria for detecting a mathematically invalid shape data.

4.117.11
erroneous_topology
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_data* (4.117.10) that represents the erroneous topology *entity* (3.2.9)

Note 1 to entry: An **erroneous_topology** is a type of erroneous_data that is a supertype of criteria for detecting topologically invalid shape data.

4.117.12
open_edge_loop
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_topology* (4.117.11) that represents the open edge loop *entity* (3.2.9)

4.117.13
open_closed_shell
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_topology* (4.117.11) that represents the open closed shell *entity* (3.2.9)

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4.117.14
inconsistent_adjacent_face_normals
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_topology* (4.117.11) that represents the inconsistent adjacent face normals *entity* (3.2.9)

4.117.15
disconnected_face_set
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_topology* (4.117.11) that represents the disconnected face set *entity* (3.2.9)

4.117.16
erroneous_geometry
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_data* (4.117.10) that represents the erroneous geometry *entity* (3.2.9)

Note 1 to entry: An **erroneous_geometry** is a type of erroneous_data that is a supertype of criteria for detecting geometrically invalid shape data.

4.117.17
inconsistent_curve_transition_code
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_geometry* (4.117.16) that represents the inconsistent curve transition code *entity* (3.2.9)

4.117.18
erroneous_b_spline_curve_definition
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_geometry* (4.117.16) that represents the erroneous b spline curve definition *entity* (3.2.9)

4.117.19
inconsistent_surface_transition_code
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_geometry* (4.117.16) that represents the inconsistent surface transition code *entity* (3.2.9)

4.117.20
erroneous_b_spline_surface_definition
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_geometry* (4.117.16) that represents the erroneous b spline surface definition *entity* (3.2.9)

4.117.21
erroneous_topology_and_geometry_relationship
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_data* (4.117.10) that represents the erroneous topology and geometry relationship *entity* (3.2.9)

Note 1 to entry: An **erroneous_topology_and_geometry_relationship** is a type of erroneous_data that is a supertype of criteria for detecting a mathematically invalid geometry and topology relationship.

4.117.22
inconsistent_edge_and_curve_directions
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_topology_and_geometry_relationship* (4.117.21) that represents the inconsistent edge and curve directions *entity* (3.2.9)

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4.117.23
inconsistent_face_and_surface_normals
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_topology_and_geometry_relationship* (4.117.21) that represents the inconsistent face and surface normals *entity* (3.2.9)

4.117.24
inconsistent_face_and_closed_shell_normals
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_topology_and_geometry_relationship* (4.117.21) that represents the inconsistent face and closed shell normals *entity* (3.2.9)

4.117.25
intersecting_loops_in_face
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_topology_and_geometry_relationship* (4.117.21) that represents the intersecting loops in face *entity* (3.2.9)

4.117.26
wrongly_placed_loop
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_topology_and_geometry_relationship* (4.117.21) that represents the wrongly placed loop *entity* (3.2.9)

4.117.27
erroneous_manifold_solid_brep
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_data* (4.117.10) that represents the erroneous manifold solid brep *entity* (3.2.9)

Note 1 to entry: An **erroneous_manifold_solid_brep** is a type of erroneous_data that is a supertype of criteria for detecting a mathematically invalid *manifold_solid_brep* (4.27.2).

4.117.28
wrongly_oriented_void
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_manifold_solid_brep* (4.117.27) that represents the wrongly oriented void *entity* (3.2.9)

4.117.29
wrongly_placed_void
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_manifold_solid_brep* (4.117.27) that represents the wrongly placed void *entity* (3.2.9)

4.117.30
intersecting_shells_in_solid
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_manifold_solid_brep* (4.117.27) that represents the intersecting shells in solid *entity* (3.2.9)

4.117.31
solid_with_wrong_number_of_voids
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *erroneous_manifold_solid_brep* (4.117.27) that represents the solid with wrong number of voids *entity* (3.2.9)

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4.117.32
inapt_data
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *shape_data_quality_criterion* (4.117.2) that represents the inapt data *entity* (3.2.9)

Note 1 to entry: An **inapt_data** is a type of shape_data_quality_criterion that is a supertype of criteria for detecting potential problem data from the application point of view.

4.117.33
inapt_topology
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_data* (4.117.32) that represents the inapt topology *entity* (3.2.9)

Note 1 to entry: An **inapt_topology** is a type of inapt_data that is a supertype of criteria for detecting topologically inappropriate shape data.

4.117.34
free_edge
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_topology* (4.117.33) that represents the free edge *entity* (3.2.9)

4.117.35
non_manifold_at_edge
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_topology* (4.117.33) that represents the non manifold at edge *entity* (3.2.9)

4.117.36
non_manifold_at_vertex
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_topology* (4.117.33) that represents the non manifold at vertex *entity* (3.2.9)

4.117.37
over_used_vertex
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_topology* (4.117.33) that represents the over used vertex *entity* (3.2.9)

4.117.38
inapt_geometry
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_data* (4.117.32) that represents the inapt geometry *entity* (3.2.9)

Note 1 to entry: An **inapt_geometry** is a type of inapt_data that is a supertype of criteria for detecting geometrically inappropriate shape data.

4.117.39
nearly_degenerate_geometry
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_geometry* (4.117.38) that represents the nearly degenerate geometry *entity* (3.2.9)

Note 1 to entry: A **nearly_degenerate_geometry** is a type of inapt_geometry that is a supertype of criteria for detecting nearly degenerate geometry data.

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4.117.40
small_area_surface
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *nearly_degenerate_geometry* (4.117.39) that represents the small area surface *entity* (3.2.9)

4.117.41
short_length_curve
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *nearly_degenerate_geometry* (4.117.39) that represents the short length curve *entity* (3.2.9)

4.117.42
entirely_narrow_surface
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *nearly_degenerate_geometry* (4.117.39) that represents the entirely narrow surface *entity* (3.2.9)

4.117.43
discontinuous_geometry
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_geometry* (4.117.38) that represents the discontinuous geometry *entity* (3.2.9)

Note 1 to entry: A **discontinuous_geometry** is a type of inapt_geometry that is a supertype of criteria for detecting geometry data with discontinuity.

4.117.44
g1_discontinuous_curve
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *discontinuous_geometry* (4.117.43) that represents the g1 discontinuous curve *entity* (3.2.9)

4.117.45
g2_discontinuous_curve
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *discontinuous_geometry* (4.117.43) that represents the g2 discontinuous curve *entity* (3.2.9)

4.117.46
g1_discontinuous_surface
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *discontinuous_geometry* (4.117.43) that represents the g1 discontinuous surface *entity* (3.2.9)

4.117.47
g2_discontinuous_surface
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *discontinuous_geometry* (4.117.43) that represents the g2 discontinuous surface *entity* (3.2.9)

4.117.48
self_intersecting_geometry
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_geometry* (4.117.38) that represents the self intersecting geometry *entity* (3.2.9)

Note 1 to entry: A **self_intersecting_geometry** is a type of inapt_geometry that is a supertype of criteria for detecting self-intersecting geometry data.

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4.117.49
self_intersecting_curve
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *self_intersecting_geometry* (4.117.48) that represents the self intersecting curve *entity* (3.2.9)

4.117.50
self_intersecting_surface
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *self_intersecting_geometry* (4.117.48) that represents the self intersecting surface *entity* (3.2.9)

Note 1 to entry: A **self_intersecting_surface** is a type of self_intersecting_geometry This entity asserts that a surface has self-intersection within its domain.

4.117.51
geometry_with_local_near_degeneracy
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_geometry* (4.117.38) that represents the geometry with local near degeneracy *entity* (3.2.9)

Note 1 to entry: A **geometry_with_local_near_degeneracy** is a type of inapt_geometry that is a supertype of criteria for detecting geometry including locally infinitesimal characteristics.

4.117.52
curve_with_small_curvature_radius
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometry_with_local_near_degeneracy* (4.117.51) that represents the curve with small curvature radius *entity* (3.2.9)

4.117.53
short_length_curve_segment
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometry_with_local_near_degeneracy* (4.117.51) that represents the short length curve segment *entity* (3.2.9)

4.117.54
surface_with_small_curvature_radius
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometry_with_local_near_degeneracy* (4.117.51) that represents the surface with small curvature radius *entity* (3.2.9)

4.117.55
small_area_surface_patch
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometry_with_local_near_degeneracy* (4.117.51) that represents the small area surface patch *entity* (3.2.9)

4.117.56
narrow_surface_patch
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometry_with_local_near_degeneracy* (4.117.51) that represents the narrow surface patch *entity* (3.2.9)

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4.117.57
indistinct_surface_knots
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometry_with_local_near_degeneracy* (4.117.51) that represents the indistinct surface knots *entity* (3.2.9)

4.117.58
indistinct_curve_knots
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometry_with_local_near_degeneracy* (4.117.51) that represents the indistinct curve knots *entity* (3.2.9)

4.117.59
nearly_degenerate_surface_boundary
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometry_with_local_near_degeneracy* (4.117.51) that represents the nearly degenerate surface boundary *entity* (3.2.9)

4.117.60
nearly_degenerate_surface_patch
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometry_with_local_near_degeneracy* (4.117.51) that represents the nearly degenerate surface patch *entity* (3.2.9)

4.117.61
overlapping_geometry
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_geometry* (4.117.38) that represents the overlapping geometry *entity* (3.2.9)

Note 1 to entry: An **overlapping_geometry** is a type of inapt_geometry that is a supertype of criteria for detecting partly overlapping geometric entities.

4.117.62
partly_overlapping_curves
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *overlapping_geometry* (4.117.61) that represents the partly overlapping curves *entity* (3.2.9)

4.117.63
partly_overlapping_surfaces
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *overlapping_geometry* (4.117.61) that represents the partly overlapping surfaces *entity* (3.2.9)

4.117.64
multiply_defined_geometry
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_geometry* (4.117.38) that represents the multiply defined geometry *entity* (3.2.9)

Note 1 to entry: A **multiply_defined_geometry** is a type of inapt_geometry that is a supertype of criteria for detecting multiply defined geometry data.

4.117.65
multiply_defined_curves
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *multiply_defined_geometry* (4.117.64) that represents the multiply defined curves *entity* (3.2.9)

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4.117.66
multiply_defined_surfaces
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *multiply_defined_geometry* (4.117.64) that represents the multiply defined surfaces *entity* (3.2.9)

4.117.67
multiply_defined_cartesian_points
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *multiply_defined_geometry* (4.117.64) that represents the multiply defined cartesian points *entity* (3.2.9)

4.117.68
multiply_defined_directions
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *multiply_defined_geometry* (4.117.64) that represents the multiply defined directions *entity* (3.2.9)

4.117.69
multiply_defined_placements
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *multiply_defined_geometry* (4.117.64) that represents the multiply defined placements *entity* (3.2.9)

4.117.70
geometry_with_local_irregularity
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_geometry* (4.117.38) that represents the geometry with local irregularity *entity* (3.2.9)

Note 1 to entry: A **geometry_with_local_irregularity** is a type of inapt_geometry that is a supertype of criteria for detecting geometry data that have local inappropriate characteristics.

4.117.71
extreme_patch_width_variation
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometry_with_local_irregularity* (4.117.70) that represents the extreme patch width variation *entity* (3.2.9)

4.117.72
zero_surface_normal
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometry_with_local_irregularity* (4.117.70) that represents the zero surface normal *entity* (3.2.9)

4.117.73
abrupt_change_of_surface_normal
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometry_with_local_irregularity* (4.117.70) that represents the abrupt change of surface normal *entity* (3.2.9)

4.117.74
overcomplex_geometry
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_geometry* (4.117.38) that represents the overcomplex geometry *entity* (3.2.9)

Note 1 to entry: An **overcomplex_geometry** is a type of inapt_geometry and is a supertype of criteria for detecting overcomplex geometry data.

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4.117.75
excessively_high_degree_curve
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *overcomplex_geometry* (4.117.74) that represents the excessively high degree curve *entity* (3.2.9)

4.117.76
excessively_high_degree_surface
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *overcomplex_geometry* (4.117.74) that represents the excessively high degree surface *entity* (3.2.9)

4.117.77
surface_with_excessive_patches_in_one_direction
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *overcomplex_geometry* (4.117.74) that represents the surface with excessive patches in one direction *entity* (3.2.9)

4.117.78
curve_with_excessive_segments
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *overcomplex_geometry* (4.117.74) that represents the curve with excessive segments *entity* (3.2.9)

4.117.79
high_degree_linear_curve
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *overcomplex_geometry* (4.117.74) that represents the high degree linear curve *entity* (3.2.9)

4.117.80
high_degree_planar_surface
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *overcomplex_geometry* (4.117.74) that represents the high degree planar surface *entity* (3.2.9)

4.117.81
high_degree_conic
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *overcomplex_geometry* (4.117.74) that represents the high degree conic *entity* (3.2.9)

4.117.82
high_degree_axi_symmetric_surface
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *overcomplex_geometry* (4.117.74) that represents the high degree axi symmetric surface *entity* (3.2.9)

4.117.83
inapt_topology_and_geometry_relationship
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_data* (4.117.32) that represents the inapt topology and geometry relationship *entity* (3.2.9)

Note 1 to entry: An **inapt_topology_and_geometry_relationship** is a type of inapt_data that is a supertype of criteria for detecting an inappropriate relationship between topology and geometry.

4.117.84
topology_related_to_nearly_degenerate_geometry
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_topology_and_geometry_relationship* (4.117.83) that represents the topology related to nearly degenerate geometry *entity* (3.2.9)

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Note 1 to entry: A **topology_related_to_nearly_degenerate_geometry** is a type of inapt_topology_and_geometry_relationship and is a supertype of criteria for detecting topology related to nearly degenerate geometry of various types.

4.117.85
short_length_edge
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *topology_related_to_nearly_degenerate_geometry* (4.117.84) that represents the short length edge *entity* (3.2.9)

4.117.86
small_area_face
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *topology_related_to_nearly_degenerate_geometry* (4.117.84) that represents the small area face *entity* (3.2.9)

4.117.87
entirely_narrow_face
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *topology_related_to_nearly_degenerate_geometry* (4.117.84) that represents the entirely narrow face *entity* (3.2.9)

4.117.88
geometric_gap_in_topology
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_topology_and_geometry_relationship* (4.117.83) that represents the geometric gap in topology *entity* (3.2.9)

Note 1 to entry: A **geometric_gap_in_topology** is a type of inapt_topology_and_geometry_relationship that is a supertype of criteria for detecting various types of gap between geometry and topology.

4.117.89
gap_between_adjacent_edges_in_loop
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometric_gap_in_topology* (4.117.88) that represents the gap between adjacent edges in loop *entity* (3.2.9)

4.117.90
gap_between_vertex_and_base_surface
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometric_gap_in_topology* (4.117.88) that represents the gap between vertex and base surface *entity* (3.2.9)

4.117.91
gap_between_vertex_and_edge
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometric_gap_in_topology* (4.117.88) that represents the gap between vertex and edge *entity* (3.2.9)

4.117.92
gap_between_edge_and_base_surface
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometric_gap_in_topology* (4.117.88) that represents the gap between edge and base surface *entity* (3.2.9)

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4.117.93
gap_between_pcurves_related_to_an_edge
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometric_gap_in_topology* (4.117.88) that represents the gap between pcurves related to an edge *entity* (3.2.9)

4.117.94
gap_between_faces_related_to_an_edge
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *geometric_gap_in_topology* (4.117.88) that represents the gap between faces related to an edge *entity* (3.2.9)

4.117.95
non_smooth_geometry_transition_across_edge
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_topology_and_geometry_relationship* (4.117.83) that represents the non smooth geometry transition across edge *entity* (3.2.9)

Note 1 to entry: A **non_smooth_geometry_transition_across_edge** is a type of inapt_topology_and_geometry_relationship that is a supertype of criteria for detecting two types of non smooth geometric transition across an edge.

4.117.96
g1_discontinuity_between_adjacent_faces
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *non_smooth_geometry_transition_across_edge* (4.117.95) that represents the g1 discontinuity between adjacent faces *entity* (3.2.9)

4.117.97
g2_discontinuity_between_adjacent_faces
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *non_smooth_geometry_transition_across_edge* (4.117.95) that represents the g2 discontinuity between adjacent faces *entity* (3.2.9)

4.117.98
topology_related_to_self_intersecting_geometry
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_topology_and_geometry_relationship* (4.117.83) that represents the topology related to self intersecting geometry *entity* (3.2.9)

Note 1 to entry: A **topology_related_to_self_intersecting_geometry** is a type of inapt_topology_and_geometry_relationship and is a supertype of several criteria for detecting topology related to self-intersecting geometry.

4.117.99
self_intersecting_loop
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *topology_related_to_self_intersecting_geometry* (4.117.98) that represents the self intersecting loop *entity* (3.2.9)

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4.117.100
self_intersecting_shell
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *topology_related_to_self_intersecting_geometry* (4.117.98) that represents the self intersecting shell *entity* (3.2.9)

4.117.101
intersecting_connected_face_sets
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *topology_related_to_self_intersecting_geometry* (4.117.98) that represents the intersecting connected face sets *entity* (3.2.9)

4.117.102
steep_geometry_transition_across_edge
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_topology_and_geometry_relationship* (4.117.83) that represents the steep geometry transition across edge *entity* (3.2.9)

Note 1 to entry: A **steep_geometry_transition_across_edge** is a type of inapt_topology_and_geometry_relationship criterion that is a supertype of criteria for detecting a portion of shape data where adjacent topological elements are steeply connected.

4.117.103
steep_angle_between_adjacent_edges
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *steep_geometry_transition_across_edge* (4.117.102) that represents the steep angle between adjacent edges *entity* (3.2.9)

4.117.104
steep_angle_between_adjacent_faces
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *steep_geometry_transition_across_edge* (4.117.102) that represents the steep angle between adjacent faces *entity* (3.2.9)

4.117.105
topology_related_to_overlapping_geometry
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_topology_and_geometry_relationship* (4.117.83) that represents the topology related to overlapping geometry *entity* (3.2.9)

Note 1 to entry: A **topology_related_to_overlapping_geometry** is a type of inapt_topology_and_geometry_relationship and is a supertype of criteria for detecting topological entities whose underlying geometry partially overlaps.

4.117.106
partly_overlapping_faces
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *topology_related_to_overlapping_geometry* (4.117.105) that represents the partly overlapping faces *entity* (3.2.9)

4.117.107
partly_overlapping_edges
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *topology_related_to_overlapping_geometry* (4.117.105) that represents the partly overlapping edges *entity* (3.2.9)

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4.117.108
topology_related_to_multiply_defined_geometry
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_topology_and_geometry_relationship* (4.117.83) that represents the topology related to multiply defined geometry *entity* (3.2.9)

Note 1 to entry: A **topology_related_to_multiply_defined_geometry** is a type of inapt_topology_and_geometry_relationship and is a supertype of criteria for detecting topological entities whose underlying geometry completely overlaps.

4.117.109
multiply_defined_faces
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *topology_related_to_multiply_defined_geometry* (4.117.108) that represents the multiply defined faces *entity* (3.2.9)

4.117.110
multiply_defined_vertices
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *topology_related_to_multiply_defined_geometry* (4.117.108) that represents the multiply defined vertices *entity* (3.2.9)

4.117.111
multiply_defined_edges
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *topology_related_to_multiply_defined_geometry* (4.117.108) that represents the multiply defined edges *entity* (3.2.9)

4.117.112
overcomplex_topology_and_geometry_relationship
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_topology_and_geometry_relationship* (4.117.83) that represents the overcomplex topology and geometry relationship *entity* (3.2.9)

Note 1 to entry: An **overcomplex_topology_and_geometry_relationship** is a type of inapt_topology_and_geometry_relationship and is a supertype of criteria for detecting topology related to overcomplex geometry data.

4.117.113
unused_patches
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *overcomplex_topology_and_geometry_relationship* (4.117.112) that represents the unused patches *entity* (3.2.9)

4.117.114
edge_with_excessive_segments
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *overcomplex_topology_and_geometry_relationship* (4.117.112) that represents the edge with excessive segments *entity* (3.2.9)

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4.117.115
face_surface_with_excessive_patches_in_one_direction
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *overcomplex_topology_and_geometry_relationship* (4.117.112) that represents the face surface with excessive patches in one direction *entity* (3.2.9)

4.117.116
inapt_manifold_solid_brep
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_data* (4.117.32) that represents the inapt manifold solid brep *entity* (3.2.9)

Note 1 to entry: An **inapt_manifold_solid_brep** is a type of inapt_data and is a supertype of criteria for detecting some types of inappropriate geometric model.

4.117.117
partly_overlapping_solids
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_manifold_solid_brep* (4.117.116) that represents the partly overlapping solids *entity* (3.2.9)

4.117.118
small_volume_solid
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_manifold_solid_brep* (4.117.116) that represents the small volume solid *entity* (3.2.9)

4.117.119
multiply_defined_solids
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_manifold_solid_brep* (4.117.116) that represents the multiply defined solids *entity* (3.2.9)

4.117.120
entirely_narrow_solid
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_manifold_solid_brep* (4.117.116) that represents the entirely narrow solid *entity* (3.2.9)

4.117.121
solid_with_excessive_number_of_voids
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *inapt_manifold_solid_brep* (4.117.116) that represents the solid with excessive number of voids *entity* (3.2.9)

4.117.122
shape_criteria_representation_with_accuracy
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that is a type of *shape_data_quality_criteria_representation* (4.117.1) that represents the shape criteria representation with accuracy *entity* (3.2.9)

Note 1 to entry: A **shape_criteria_representation_with_accuracy** is a type of shape_data_quality_criteria_representation that contains accuracy information to be applied for measurement.

4.117.123
shape_measurement_accuracy
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that represents the shape measurement accuracy *entity* (3.2.9)

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Note 1 to entry: A **shape_measurement_accuracy** is a representation of the accuracy of the numerical calculation for use in the measurement.

4.117.124
shape_data_quality_criterion_and_accuracy_association
<resource: shape_data_quality_criteria_schema> *entity data type* (3.2.10) that represents the shape data quality criterion and accuracy association *entity* (3.2.9)

Note 1 to entry: A **shape_data_quality_criterion_and_accuracy_association** is the representation of a relationship between a *shape_data_quality_criterion* (4.117.2) and a *shape_measurement_accuracy* (4.117.123) required for the measurement against the criterion.

4.118 shape_data_quality_inspection_result_schema

4.118.1
shape_data_quality_inspection_result_representation
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_quality_inspection_result_representation* (4.112.1) that represents the shape data quality inspection result representation *entity* (3.2.9)

4.118.2
shape_inspection_result_representation_with_accuracy
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *shape_data_quality_inspection_result_representation* (4.118.1) that represents the shape inspection result representation with accuracy *entity* (3.2.9)

Note 1 to entry: A **shape_inspection_result_representation_with_accuracy** is a type of shape_data_quality_inspection_result_representation and has the information of common accuracy applied to all the measurements.

4.118.3
shape_data_quality_inspected_shape_and_result_relationship
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *shape_representation_relationship* (4.20.10) that represents the shape data quality inspected shape and result relationship *entity* (3.2.9)

4.118.4
shape_data_quality_inspection_result
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_quality_inspection_result* (4.112.2) that represents the shape data quality inspection result *entity* (3.2.9)

4.118.5
shape_data_quality_inspection_criterion_report
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_quality_inspection_criterion_report* (4.112.5) that represents the shape data quality inspection criterion report *entity* (3.2.9)

Note 1 to entry: A **shape_data_quality_inspection_criterion_report** is a type of data_quality_inspection_criterion_report and represents summarized information on the result of inspection for a specific shape data quality criterion.

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4.118.6
shape_inspection_result_accuracy_association
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that represents the shape inspection result accuracy association *entity* (3.2.9)

Note 1 to entry: A **shape_inspection_result_accuracy_association** is the representation of the relationship between a *shape_data_quality_inspection_result* (4.118.4) and the accuracy applied by the inspection.

4.118.7
shape_data_quality_inspection_instance_report
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_quality_inspection_instance_report* (4.112.7) that represents the shape data quality inspection instance report *entity* (3.2.9)

Note 1 to entry: A **shape_data_quality_inspection_instance_report** is a type of data_quality_inspection_instance_report and represents a detailed inspection report of the product shape data for a specific criterion.

4.118.8
shape_data_quality_inspection_instance_report_item
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *data_quality_inspection_instance_report_item* (4.112.8) that represents the shape data quality inspection instance report item *entity* (3.2.9)

Note 1 to entry: A **shape_data_quality_inspection_instance_report_item** is a type of data_quality_inspection_instance_report_item and represents the detailed information obtained for each inspected element or a pair of elements of product shape data.

4.118.9
instance_report_item_with_extreme_instances
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *shape_data_quality_inspection_instance_report_item* (4.118.8) that represents the instance report item with extreme instances *entity* (3.2.9)

Note 1 to entry: An **instance_report_item_with_extreme_instances** is a type of shape_data_quality_inspection_instance_report_item that lists extreme values and their locations.

4.118.10
extreme_instance
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that represents the extreme instance *entity* (3.2.9)

Note 1 to entry: An **extreme_instance** is the representation of a pair of extreme measured value and related location information where it was detected.

4.118.11
point_on_edge_curve
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *point_on_curve* (4.28.8) that represents the point on edge curve *entity* (3.2.9)

Note 1 to entry: A **point_on_edge_curve** is a type of point_on_curve that represents a location on the identified *edge_curve* (4.31.10).

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4.118.12
point_on_face_surface
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *point_on_surface* (4.28.9) that represents the point on face surface *entity* (3.2.9)

Note 1 to entry: A **point_on_face_surface** is a type of point_on_surface that represents a location on the identified *face_surface* (4.31.16).

4.118.13
plane_angle_and_ratio_pair
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the plane angle and ratio pair *entity* (3.2.9)

4.118.14
plane_angle_and_length_pair
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the plane angle and length pair *entity* (3.2.9)

4.118.15
b_spline_surface_knot_locator
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the b spline surface knot locator *entity* (3.2.9)

Note 1 to entry: A **b_spline_surface_knot_locator** is a type of founded_item and represents a location by specifying an index of the knot array and a direction in the parametric space of the identified *b_spline_surface* (4.28.72).

4.118.16
b_spline_surface_patch
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the b spline surface patch *entity* (3.2.9)

Note 1 to entry: A **b_spline_surface_patch** is a type of founded_item and represents a location by specifying a patch with *u* and *v* knot indices on the identified *b_spline_surface* (4.28.72).

4.118.17
b_spline_curve_knot_locator
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the b spline curve knot locator *entity* (3.2.9)

Note 1 to entry: A **b_spline_curve_knot_locator** is a type of founded_item and represents a location by specifying an index of the knot array of the identified *b_spline_curve* (4.28.34).

4.118.18
b_spline_curve_segment
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the b spline curve segment *entity* (3.2.9)

4.118.19
b_spline_surface_strip
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the b spline surface strip *entity* (3.2.9)

Note 1 to entry: A **b_spline_surface_strip** is a type of founded_item and represents a location by specifying a surface strip of the identified *b_spline_surface* (4.28.72).

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4.118.20
composite_curve_transition_locator
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the composite curve transition locator *entity* (3.2.9)

Note 1 to entry: A **composite_curve_transition_locator** is a type of founded_item and represents a location by specifying the index of a connecting point between two segments in the identified *composite_curve* (4.28.44).

4.118.21
rectangular_composite_surface_transition_locator
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the rectangular composite surface transition locator *entity* (3.2.9)

Note 1 to entry: A **rectangular_composite_surface_transition_locator** is a type of founded_item and represents a location by specifying an index of connecting segments between two patches in the identified *rectangular_composite_surface* (4.28.84).

4.118.22
boundary_curve_of_b_spline_or_rectangular_composite_surface
<resource: shape_data_quality_inspection_result_schema> *entity data type* (3.2.10) that is a type of *founded_item* (4.41.7) that represents the boundary curve of b spline or rectangular composite surface *entity* (3.2.9)

Note 1 to entry: A **boundary_curve_of_b_spline_or_rectangular_composite_surface** is a type of founded_item and represents a location by specifying a boundary of the parametric space of the identified surface.

4.119 solid_shape_element_schema

4.119.1
modified_solid
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_model* (4.27.1) that represents the modified solid *entity* (3.2.9)

4.119.2
edge_blended_solid
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *modified_solid* (4.119.1) that represents the edge blended solid *entity* (3.2.9)

4.119.3
track_blended_solid
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *edge_blended_solid* (4.119.2) that represents the track blended solid *entity* (3.2.9)

4.119.4
track_blended_solid_with_end_conditions
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *track_blended_solid* (4.119.3) that represents the track blended solid with end conditions *entity* (3.2.9)

4.119.5
solid_with_constant_radius_edge_blend
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *edge_blended_solid* (4.119.2) that represents the solid with constant radius edge blend *entity* (3.2.9)

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4.119.6
solid_with_variable_radius_edge_blend
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *track_blended_solid* (4.119.3) that represents the solid with variable radius edge blend *entity* (3.2.9)

4.119.7
solid_with_chamfered_edges
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *edge_blended_solid* (4.119.2) that represents the solid with chamfered edges *entity* (3.2.9)

4.119.8
solid_with_single_offset_chamfer
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_chamfered_edges* (4.119.7) that represents the solid with single offset chamfer *entity* (3.2.9)

4.119.9
solid_with_double_offset_chamfer
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_chamfered_edges* (4.119.7) that represents the solid with double offset chamfer *entity* (3.2.9)

4.119.10
solid_with_angle_based_chamfer
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_chamfered_edges* (4.119.7) that represents the solid with angle based chamfer *entity* (3.2.9)

4.119.11
surfaced_open_shell
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *open_shell* (4.31.19) that represents the surfaced open shell *entity* (3.2.9)

4.119.12
sculptured_solid
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *modified_solid* (4.119.1) that represents the sculptured solid *entity* (3.2.9)

4.119.13
sculptured_solid_with_selection
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *sculptured_solid* (4.119.12) that represents the sculptured solid with selection *entity* (3.2.9)

4.119.14
offset_face_solid
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *modified_solid* (4.119.1) that represents the offset face solid *entity* (3.2.9)

4.119.15
shelled_solid
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *modified_solid* (4.119.1) that represents the shelled solid *entity* (3.2.9)

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4.119.16
double_offset_shelled_solid
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *shelled_solid* (4.119.15) that represents the double offset shelled solid *entity* (3.2.9)

4.119.17
complex_shelled_solid
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *shelled_solid* (4.119.15) that represents the complex shelled solid *entity* (3.2.9)

4.119.18
modified_solid_with_placed_configuration
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *modified_solid* (4.119.1) that represents the modified solid with placed configuration *entity* (3.2.9)

4.119.19
solid_with_depression
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *modified_solid_with_placed_configuration* (4.119.18) that represents the solid with depression *entity* (3.2.9)

4.119.20
solid_with_through_depression
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_depression* (4.119.19) that represents the solid with through depression *entity* (3.2.9)

4.119.21
solid_with_hole
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_depression* (4.119.19) that represents the solid with hole *entity* (3.2.9)

4.119.22
solid_with_stepped_round_hole
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_hole* (4.119.21) that represents the solid with stepped round hole *entity* (3.2.9)

4.119.23
conical_stepped_hole_transition
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the conical stepped hole transition *entity* (3.2.9)

4.119.24
solid_with_stepped_round_hole_and_conical_transitions
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_stepped_round_hole* (4.119.22) that represents the solid with stepped round hole and conical transitions *entity* (3.2.9)

4.119.25
solid_with_flat_bottom_round_hole
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_stepped_round_hole* (4.119.22) that represents the solid with flat bottom round hole *entity* (3.2.9)

4.119.26

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solid_with_spherical_bottom_round_hole
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_stepped_round_hole* (4.119.22) that represents the solid with spherical bottom round hole *entity* (3.2.9)

4.119.27
solid_with_conical_bottom_round_hole
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_stepped_round_hole* (4.119.22) that represents the solid with conical bottom round hole *entity* (3.2.9)

4.119.28
solid_with_pocket
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_depression* (4.119.19) that represents the solid with pocket *entity* (3.2.9)

4.119.29
solid_with_rectangular_pocket
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_pocket* (4.119.28) that represents the solid with rectangular pocket *entity* (3.2.9)

4.119.30
solid_with_circular_pocket
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_pocket* (4.119.28) that represents the solid with circular pocket *entity* (3.2.9)

4.119.31
solid_with_general_pocket
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_pocket* (4.119.28) that represents the solid with general pocket *entity* (3.2.9)

4.119.32
solid_with_slot
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_depression* (4.119.19) that represents the solid with slot *entity* (3.2.9)

4.119.33
solid_with_straight_slot
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_slot* (4.119.32) that represents the solid with straight slot *entity* (3.2.9)

4.119.34
solid_with_curved_slot
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_slot* (4.119.32) that represents the solid with curved slot *entity* (3.2.9)

4.119.35
solid_with_trapezoidal_section_slot
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_slot* (4.119.32) that represents the solid with trapezoidal section slot *entity* (3.2.9)

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4.119.36
solid_with_tee_section_slot
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_slot* (4.119.32) that represents the solid with tee section slot *entity* (3.2.9)

4.119.37
solid_with_groove
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_depression* (4.119.19) that represents the solid with groove *entity* (3.2.9)

4.119.38
solid_with_protrusion
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *modified_solid_with_placed_configuration* (4.119.18) that represents the solid with protrusion *entity* (3.2.9)

4.119.39
solid_with_circular_protrusion
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_protrusion* (4.119.38) that represents the solid with circular protrusion *entity* (3.2.9)

4.119.40
solid_with_rectangular_protrusion
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_protrusion* (4.119.38) that represents the solid with rectangular protrusion *entity* (3.2.9)

4.119.41
solid_with_general_protrusion
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_protrusion* (4.119.38) that represents the solid with general protrusion *entity* (3.2.9)

4.119.42
solid_with_shape_element_pattern
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *modified_solid_with_placed_configuration* (4.119.18) that represents the solid with shape element pattern *entity* (3.2.9)

4.119.43
solid_with_circular_pattern
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_shape_element_pattern* (4.119.42) that represents the solid with circular pattern *entity* (3.2.9)

4.119.44
solid_with_rectangular_pattern
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_shape_element_pattern* (4.119.42) that represents the solid with rectangular pattern *entity* (3.2.9)

4.119.45
solid_with_incomplete_circular_pattern
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_circular_pattern* (4.119.43) that represents the solid with incomplete circular pattern *entity* (3.2.9)

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4.119.46
solid_with_incomplete_rectangular_pattern
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_with_rectangular_pattern* (4.119.44) that represents the solid with incomplete rectangular pattern *entity* (3.2.9)

4.119.47
thickened_face_solid
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *solid_model* (4.27.1) that represents the thickened face solid *entity* (3.2.9)

4.119.48
extruded_face_solid_with_trim_conditions
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *extruded_face_solid* (4.27.34) that represents the extruded face solid with trim conditions *entity* (3.2.9)

4.119.49
extruded_face_solid_with_draft_angle
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *extruded_face_solid_with_trim_conditions* (4.119.48) that represents the extruded face solid with draft angle *entity* (3.2.9)

4.119.50
extruded_face_solid_with_multiple_draft_angles
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *extruded_face_solid_with_trim_conditions* (4.119.48) that represents the extruded face solid with multiple draft angles *entity* (3.2.9)

4.119.51
revolved_face_solid_with_trim_conditions
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *revolved_face_solid* (4.27.35) that represents the revolved face solid with trim conditions *entity* (3.2.9)

4.119.52
auxiliary_geometric_instance_aggregator
<resource: solid_shape_element_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the auxiliary geometric instance aggregator *entity* (3.2.9)

4.120 state_and_model_relationships_schema

4.120.1
same_discretised_state_model
<resource: state_and_model_relationships_schema> *entity data type* (3.2.10) that represents the same discretised state model *entity* (3.2.9)

Note 1 to entry: A **same_discretised_state_model** is a discretised model of a state created for numerical analysis.

4.120.2
same_idealised_state
<resource: state_and_model_relationships_schema> *entity data type* (3.2.10) that represents the same idealised state *entity* (3.2.9)

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Note 1 to entry: A **same_idealised_state** is a relationship between records of an idealisation of state for analysis, which states they each have the same meaning.

4.120.3
state_view_relationship
<resource: state_and_model_relationships_schema> *entity data type* (3.2.10) that represents the state view relationship *entity* (3.2.9)

Note 1 to entry: A **state_view_relationship** is a relationship between:

— an idealisation of a state for analysis; and

— a discretised state analysis model

which indicates that the discretised state analysis model is a model of the idealised state created for the purpose of numerical analysis.

4.121 state_observed_schema

4.121.1
ascribable_state
<resource: state_observed_schema> *entity data type* (3.2.10) that represents the ascribable state *entity* (3.2.9)

Note 1 to entry: An **ascribable_state** is a representation of a relationship that relates one instance of the entity *state_observed* (4.121.5) to its *state_type* (4.122.1) and provides an identification and description of their relationship.

4.121.2
ascribable_state_relationship
<resource: state_observed_schema> *entity data type* (3.2.10) that represents the ascribable state relationship *entity* (3.2.9)

Note 1 to entry: An **ascribable_state_relationship** is a relationship that relates two instances of the entity *ascribable_state* (4.121.1) and provides an identification and description of their relationship.

4.121.3
state_definition_to_state_assignment_relationship
<resource: state_observed_schema> *entity data type* (3.2.10) that is a type of *ascribable_state_relationship* (4.121.2) that represents the state definition to state assignment relationship *entity* (3.2.9)

Note 1 to entry: A **state_definition_to_state_assignment_relationship** is a type of ascribable_state_relationship that describes a relationship between two *ascribable_state* (4.121.1) objects.

4.121.4
hypothesis_state_to_confirmation_state_relationship
<resource: state_observed_schema> *entity data type* (3.2.10) that is a type of *state_definition_to_state_assignment_relationship* (4.121.3) that represents the hypothesis state to confirmation state relationship *entity* (3.2.9)

Note 1 to entry: A **hypothesis_state_to_confirmation_state_relationship** is a type of state_definition_to_state_assignment_relationship that describes a relationship between two *ascribable_state* (4.121.1) objects.

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4.121.5
state_observed
<resource: state_observed_schema> *entity data type* (3.2.10) that represents the state observed *entity* (3.2.9)

Note 1 to entry: A **state_observed** is the existence of a mode of being for a period of time.

4.121.6
state_observed_assignment
<resource: state_observed_schema> *entity data type* (3.2.10) that represents the state observed assignment *entity* (3.2.9)

Note 1 to entry: A **state_observed_assignment** is an association of a *state_observed* (4.121.5) with product or activity data.

4.121.7
state_observed_relationship
<resource: state_observed_schema> *entity data type* (3.2.10) that represents the state observed relationship *entity* (3.2.9)

Note 1 to entry: A **state_observed_relationship** is a relationship that relates instances of two sets of the entity *state_observed* (4.121.5) and provides an identification and description of their relationship.

4.121.8
state_observed_role
<resource: state_observed_schema> *entity data type* (3.2.10) that represents the state observed role *entity* (3.2.9)

Note 1 to entry: A **state_observed_role** is a definition that defines a role for a *state_observed_assignment* (4.121.6) and a description of that role.

4.122 state_type_schema

4.122.1
state_type
<resource: state_type_schema> *entity data type* (3.2.10) that represents the state type *entity* (3.2.9)

Note 1 to entry: A **state_type** is a mode of being.

4.122.2
state_type_assignment
<resource: state_type_schema> *entity data type* (3.2.10) that represents the state type assignment *entity* (3.2.9)

Note 1 to entry: A **state_type_assignment** is an association of a *state_type* (4.122.1) with product or activity data.

4.122.3
state_type_relationship
<resource: state_type_schema> *entity data type* (3.2.10) that represents the state type relationship *entity* (3.2.9)

Note 1 to entry: A **state_type_relationship** is a relationship that relates instances of two sets of the entity *state_type* (4.122.1) and provides an identification and description of their relationship.

4.122.4

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state_type_role
<resource: state_type_schema> *entity data type* (3.2.10) that represents the state type role *entity* (3.2.9)

Note 1 to entry: A **state_type_role** is a definition that defines a role for a *state_type_assignment* (4.122.2) and a description of that role.

4.123 structural_response_definition_schema

4.123.1
structural_response_property
<resource: structural_response_definition_schema> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) that represents the structural response property *entity* (3.2.9)

4.123.2
fea_model_definition
<resource: structural_response_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the fea model definition *entity* (3.2.9)

4.123.3
node_definition
<resource: structural_response_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the node definition *entity* (3.2.9)

4.123.4
element_definition
<resource: structural_response_definition_schema> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the element definition *entity* (3.2.9)

4.124 structural_response_representation_schema

4.124.1
fea_model
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the fea model *entity* (3.2.9)

4.124.2
fea_model_3d
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_model* (4.124.1) that represents the fea model 3d *entity* (3.2.9)

4.124.3
fea_model_2d
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_model* (4.124.1) that represents the fea model 2d *entity* (3.2.9)

4.124.4
structural_response_property_definition_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *property_definition_representation* (4.20.6) that represents the structural response property definition representation *entity* (3.2.9)

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4.124.5
fea_representation_item
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the fea representation item *entity* (3.2.9)

4.124.6
direction_node
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *direction* (4.28.14) that represents the direction node *entity* (3.2.9)

4.124.7
fea_axis2_placement_2d
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *axis2_placement_2d* (4.28.18) that represents the fea axis2 placement 2d *entity* (3.2.9)

4.124.8
fea_axis2_placement_3d
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *axis2_placement_3d* (4.28.19) that represents the fea axis2 placement 3d *entity* (3.2.9)

4.124.9
node_set
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the node set *entity* (3.2.9)

4.124.10
analysis_item_within_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the analysis item within representation *entity* (3.2.9)

4.124.11
node_geometric_relationship
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the node geometric relationship *entity* (3.2.9)

4.124.12
element_geometric_relationship
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the element geometric relationship *entity* (3.2.9)

4.124.13
node_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the node representation *entity* (3.2.9)

4.124.14
node
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *node_representation* (4.124.13) that represents the node *entity* (3.2.9)

4.124.15
node_with_vector
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *node* (4.124.14) that represents the node with vector *entity* (3.2.9)

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4.124.16
node_with_solution_coordinate_system
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *node* (4.124.14) that represents the node with solution coordinate system *entity* (3.2.9)

4.124.17
dummy_node
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *node_representation* (4.124.13) that represents the dummy node *entity* (3.2.9)

4.124.18
geometric_node
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *node_representation* (4.124.13) that represents the geometric node *entity* (3.2.9)

4.124.19
substructure_node_relationship
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *representation_relationship* (4.41.20) that represents the substructure node relationship *entity* (3.2.9)

4.124.20
element_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the element representation *entity* (3.2.9)

4.124.21
volume_3d_element_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_representation* (4.124.20) that represents the volume 3d element representation *entity* (3.2.9)

4.124.22
axisymmetric_volume_2d_element_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_representation* (4.124.20) that represents the axisymmetric volume 2d element representation *entity* (3.2.9)

4.124.23
plane_volume_2d_element_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_representation* (4.124.20) that represents the plane volume 2d element representation *entity* (3.2.9)

4.124.24
surface_3d_element_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_representation* (4.124.20) that represents the surface 3d element representation *entity* (3.2.9)

4.124.25
axisymmetric_surface_2d_element_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_representation* (4.124.20) that represents the axisymmetric surface 2d element representation *entity* (3.2.9)

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4.124.26
plane_surface_2d_element_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_representation* (4.124.20) that represents the plane surface 2d element representation *entity* (3.2.9)

4.124.27
curve_3d_element_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_representation* (4.124.20) that represents the curve 3d element representation *entity* (3.2.9)

4.124.28
axisymmetric_curve_2d_element_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_representation* (4.124.20) that represents the axisymmetric curve 2d element representation *entity* (3.2.9)

4.124.29
plane_curve_2d_element_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_representation* (4.124.20) that represents the plane curve 2d element representation *entity* (3.2.9)

4.124.30
element_descriptor
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the element descriptor *entity* (3.2.9)

4.124.31
volume_3d_element_descriptor
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_descriptor* (4.124.30) that represents the volume 3d element descriptor *entity* (3.2.9)

4.124.32
axisymmetric_volume_2d_element_descriptor
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_descriptor* (4.124.30) that represents the axisymmetric volume 2d element descriptor *entity* (3.2.9)

4.124.33
plane_volume_2d_element_descriptor
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_descriptor* (4.124.30) that represents the plane volume 2d element descriptor *entity* (3.2.9)

4.124.34
volume_3d_element_basis
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the volume 3d element basis *entity* (3.2.9)

4.124.35
volume_2d_element_basis
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the volume 2d element basis *entity* (3.2.9)

4.124.36

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surface_3d_element_descriptor
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_descriptor* (4.124.30) that represents the surface 3d element descriptor *entity* (3.2.9)

4.124.37
axisymmetric_surface_2d_element_descriptor
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_descriptor* (4.124.30) that represents the axisymmetric surface 2d element descriptor *entity* (3.2.9)

4.124.38
plane_surface_2d_element_descriptor
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_descriptor* (4.124.30) that represents the plane surface 2d element descriptor *entity* (3.2.9)

4.124.39
surface_3d_element_basis
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface 3d element basis *entity* (3.2.9)

4.124.40
surface_2d_element_basis
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface 2d element basis *entity* (3.2.9)

4.124.41
curve_3d_element_descriptor
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_descriptor* (4.124.30) that represents the curve 3d element descriptor *entity* (3.2.9)

4.124.42
axisymmetric_curve_2d_element_descriptor
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_descriptor* (4.124.30) that represents the axisymmetric curve 2d element descriptor *entity* (3.2.9)

4.124.43
plane_curve_2d_element_descriptor
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_descriptor* (4.124.30) that represents the plane curve 2d element descriptor *entity* (3.2.9)

4.124.44
curve_3d_element_basis
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve 3d element basis *entity* (3.2.9)

4.124.45
curve_2d_element_basis
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve 2d element basis *entity* (3.2.9)

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4.124.46
point_element_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_representation* (4.124.20) that represents the point element representation *entity* (3.2.9)

4.124.47
point_element_matrix
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the point element matrix *entity* (3.2.9)

4.124.48
stationary_mass
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *point_element_matrix* (4.124.47) that represents the stationary mass *entity* (3.2.9)

4.124.49
grounded_spring
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *point_element_matrix* (4.124.47) that represents the grounded spring *entity* (3.2.9)

4.124.50
grounded_damper
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *point_element_matrix* (4.124.47) that represents the grounded damper *entity* (3.2.9)

4.124.51
directionally_explicit_element_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_representation* (4.124.20) that represents the directionally explicit element representation *entity* (3.2.9)

4.124.52
system_and_freedom
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the system and freedom *entity* (3.2.9)

4.124.53
directionally_explicit_element_coefficient
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the directionally explicit element coefficient *entity* (3.2.9)

4.124.54
explicit_element_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_representation* (4.124.20) that represents the explicit element representation *entity* (3.2.9)

4.124.55
explicit_element_matrix
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the explicit element matrix *entity* (3.2.9)

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4.124.56
substructure_element_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_representation* (4.124.20) that represents the substructure element representation *entity* (3.2.9)

4.124.57
aligned_axis_tolerance
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the aligned axis tolerance *entity* (3.2.9)

4.124.58
arbitrary_volume_3d_element_coordinate_system
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the arbitrary volume 3d element coordinate system *entity* (3.2.9)

4.124.59
parametric_volume_3d_element_coordinate_system
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the parametric volume 3d element coordinate system *entity* (3.2.9)

4.124.60
arbitrary_volume_2d_element_coordinate_system
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the arbitrary volume 2d element coordinate system *entity* (3.2.9)

4.124.61
parametric_volume_2d_element_coordinate_system
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the parametric volume 2d element coordinate system *entity* (3.2.9)

4.124.62
aligned_surface_3d_element_coordinate_system
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the aligned surface 3d element coordinate system *entity* (3.2.9)

4.124.63
parametric_surface_3d_element_coordinate_system
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the parametric surface 3d element coordinate system *entity* (3.2.9)

4.124.64
constant_surface_3d_element_coordinate_system
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the constant surface 3d element coordinate system *entity* (3.2.9)

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4.124.65
aligned_surface_2d_element_coordinate_system
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the aligned surface 2d element coordinate system *entity* (3.2.9)

4.124.66
parametric_surface_2d_element_coordinate_system
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the parametric surface 2d element coordinate system *entity* (3.2.9)

4.124.67
aligned_curve_3d_element_coordinate_system
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the aligned curve 3d element coordinate system *entity* (3.2.9)

4.124.68
parametric_curve_3d_element_coordinate_system
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the parametric curve 3d element coordinate system *entity* (3.2.9)

4.124.69
parametric_curve_3d_element_coordinate_direction
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the parametric curve 3d element coordinate direction *entity* (3.2.9)

4.124.70
curve_2d_element_coordinate_system
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the curve 2d element coordinate system *entity* (3.2.9)

4.124.71
directionally_explicit_element_coordinate_system_arbitrary
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the directionally explicit element coordinate system arbitrary *entity* (3.2.9)

4.124.72
directionally_explicit_element_coordinate_system_aligned
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the directionally explicit element coordinate system aligned *entity* (3.2.9)

4.124.73
euler_angles
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the euler angles *entity* (3.2.9)

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4.124.74
volume_3d_element_integrated_matrix
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the volume 3d element integrated matrix *entity* (3.2.9)

4.124.75
volume_3d_element_integrated_matrix_with_definition
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *volume_3d_element_integrated_matrix* (4.124.74) that represents the volume 3d element integrated matrix with definition *entity* (3.2.9)

4.124.76
volume_3d_element_field_integration_rule
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the volume 3d element field integration rule *entity* (3.2.9)

4.124.77
volume_3d_element_field_integration_explicit
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the volume 3d element field integration explicit *entity* (3.2.9)

4.124.78
volume_position_weight
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the volume position weight *entity* (3.2.9)

4.124.79
volume_2d_element_integrated_matrix
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the volume 2d element integrated matrix *entity* (3.2.9)

4.124.80
volume_2d_element_integrated_matrix_with_definition
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *volume_2d_element_integrated_matrix* (4.124.79) that represents the volume 2d element integrated matrix with definition *entity* (3.2.9)

4.124.81
volume_2d_element_field_integration_rule
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the volume 2d element field integration rule *entity* (3.2.9)

4.124.82
volume_2d_element_field_integration_explicit
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the volume 2d element field integration explicit *entity* (3.2.9)

4.124.83
surface_3d_element_integrated_matrix
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface 3d element integrated matrix *entity* (3.2.9)

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4.124.84
surface_3d_element_integrated_matrix_with_definition
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *surface_3d_element_integrated_matrix* (4.124.83) that represents the surface 3d element integrated matrix with definition *entity* (3.2.9)

4.124.85
surface_3d_element_integration
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface 3d element integration *entity* (3.2.9)

4.124.86
surface_3d_element_field_integration_rule
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface 3d element field integration rule *entity* (3.2.9)

4.124.87
surface_3d_element_field_integration_explicit
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface 3d element field integration explicit *entity* (3.2.9)

4.124.88
surface_position_weight
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface position weight *entity* (3.2.9)

4.124.89
surface_section_integration_rule
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface section integration rule *entity* (3.2.9)

4.124.90
surface_section_integration_explicit
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface section integration explicit *entity* (3.2.9)

4.124.91
surface_section_position_weight
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface section position weight *entity* (3.2.9)

4.124.92
surface_2d_element_integrated_matrix
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface 2d element integrated matrix *entity* (3.2.9)

4.124.93
surface_2d_element_integrated_matrix_with_definition
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *surface_2d_element_integrated_matrix* (4.124.92) that represents the surface 2d element integrated matrix with definition *entity* (3.2.9)

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4.124.94
surface_2d_element_integration
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface 2d element integration *entity* (3.2.9)

4.124.95
surface_2d_element_length_integration_rule
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface 2d element length integration rule *entity* (3.2.9)

4.124.96
surface_2d_element_length_integration_explicit
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface 2d element length integration explicit *entity* (3.2.9)

4.124.97
curve_3d_element_integrated_matrix
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve 3d element integrated matrix *entity* (3.2.9)

4.124.98
curve_3d_element_integrated_matrix_with_definition
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *curve_3d_element_integrated_matrix* (4.124.97) that represents the curve 3d element integrated matrix with definition *entity* (3.2.9)

4.124.99
curve_3d_element_integration
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve 3d element integration *entity* (3.2.9)

4.124.100
curve_3d_element_length_integration_rule
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve 3d element length integration rule *entity* (3.2.9)

4.124.101
curve_3d_element_length_integration_explicit
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve 3d element length integration explicit *entity* (3.2.9)

4.124.102
curve_3d_element_position_weight
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve 3d element position weight *entity* (3.2.9)

4.124.103
curve_section_integration_explicit
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve section integration explicit *entity* (3.2.9)

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4.124.104
curve_2d_element_integrated_matrix
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve 2d element integrated matrix *entity* (3.2.9)

4.124.105
curve_2d_element_integrated_matrix_with_definition
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *curve_2d_element_integrated_matrix* (4.124.104) that represents the curve 2d element integrated matrix with definition *entity* (3.2.9)

4.124.106
curve_2d_element_integration
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve 2d element integration *entity* (3.2.9)

4.124.107
fea_parametric_point
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_representation_item* (4.124.5) that represents the fea parametric point *entity* (3.2.9)

4.124.108
volume_element_location
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the volume element location *entity* (3.2.9)

4.124.109
surface_volume_element_location
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface volume element location *entity* (3.2.9)

4.124.110
surface_element_location
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface element location *entity* (3.2.9)

4.124.111
surface_section_element_location
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface section element location *entity* (3.2.9)

4.124.112
surface_section_element_location_absolute
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *surface_section_element_location* (4.124.111) that represents the surface section element location absolute *entity* (3.2.9)

4.124.113
surface_section_element_location_dimensionless
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *surface_section_element_location* (4.124.111) that represents the surface section element location dimensionless *entity* (3.2.9)

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4.124.114
curve_volume_element_location
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve volume element location *entity* (3.2.9)

4.124.115
curve_element_location
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve element location *entity* (3.2.9)

4.124.116
curve_section_element_location
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve section element location *entity* (3.2.9)

4.124.117
element_material
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the element material *entity* (3.2.9)

4.124.118
fea_material_property_geometric_relationship
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the fea material property geometric relationship *entity* (3.2.9)

4.124.119
fea_material_property_representation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *material_property_representation* (4.33.3) that represents the fea material property representation *entity* (3.2.9)

4.124.120
fea_material_property_representation_item
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the fea material property representation item *entity* (3.2.9)

4.124.121
fea_linear_elasticity
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_material_property_representation_item* (4.124.120) that represents the fea linear elasticity *entity* (3.2.9)

4.124.122
fea_mass_density
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_material_property_representation_item* (4.124.120) that represents the fea mass density *entity* (3.2.9)

4.124.123
fea_area_density
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_material_property_representation_item* (4.124.120) that represents the fea area density *entity* (3.2.9)

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4.124.124
fea_tangential_coefficient_of_linear_thermal_expansion
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_material_property_representation_item* (4.124.120) that represents the fea tangential coefficient of linear thermal expansion *entity* (3.2.9)

4.124.125
fea_secant_coefficient_of_linear_thermal_expansion
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_material_property_representation_item* (4.124.120) that represents the fea secant coefficient of linear thermal expansion *entity* (3.2.9)

4.124.126
fea_moisture_absorption
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_material_property_representation_item* (4.124.120) that represents the fea moisture absorption *entity* (3.2.9)

4.124.127
fea_shell_membrane_stiffness
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_material_property_representation_item* (4.124.120) that represents the fea shell membrane stiffness *entity* (3.2.9)

4.124.128
fea_shell_bending_stiffness
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_material_property_representation_item* (4.124.120) that represents the fea shell bending stiffness *entity* (3.2.9)

4.124.129
fea_shell_membrane_bending_coupling_stiffness
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_material_property_representation_item* (4.124.120) that represents the fea shell membrane bending coupling stiffness *entity* (3.2.9)

4.124.130
fea_shell_shear_stiffness
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_material_property_representation_item* (4.124.120) that represents the fea shell shear stiffness *entity* (3.2.9)

4.124.131
surface_element_property
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface element property *entity* (3.2.9)

4.124.132
surface_section_field
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface section field *entity* (3.2.9)

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4.124.133
surface_section_field_constant
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *surface_section_field* (4.124.132) that represents the surface section field constant *entity* (3.2.9)

4.124.134
surface_section_field_varying
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *surface_section_field* (4.124.132) that represents the surface section field varying *entity* (3.2.9)

4.124.135
surface_section
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the surface section *entity* (3.2.9)

4.124.136
uniform_surface_section
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *surface_section* (4.124.135) that represents the uniform surface section *entity* (3.2.9)

4.124.137
uniform_surface_section_layered
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *surface_section* (4.124.135) that represents the uniform surface section layered *entity* (3.2.9)

4.124.138
fea_surface_section_geometric_relationship
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the fea surface section geometric relationship *entity* (3.2.9)

4.124.139
curve_3d_element_property
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve 3d element property *entity* (3.2.9)

4.124.140
curve_element_interval
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve element interval *entity* (3.2.9)

4.124.141
curve_element_interval_constant
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *curve_element_interval* (4.124.140) that represents the curve element interval constant *entity* (3.2.9)

4.124.142
curve_element_interval_linearly_varying
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *curve_element_interval* (4.124.140) that represents the curve element interval linearly varying *entity* (3.2.9)

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4.124.143
curve_2d_element_property
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve 2d element property *entity* (3.2.9)

4.124.144
curve_element_section_definition
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve element section definition *entity* (3.2.9)

4.124.145
curve_element_section_derived_definitions
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *curve_element_section_definition* (4.124.144) that represents the curve element section derived definitions *entity* (3.2.9)

4.124.146
fea_curve_section_geometric_relationship
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the fea curve section geometric relationship *entity* (3.2.9)

4.124.147
curve_element_end_offset
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve element end offset *entity* (3.2.9)

4.124.148
curve_element_end_release
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve element end release *entity* (3.2.9)

4.124.149
curve_element_end_release_packet
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the curve element end release packet *entity* (3.2.9)

4.124.150
axisymmetric_2d_element_property
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the axisymmetric 2d element property *entity* (3.2.9)

4.124.151
plane_2d_element_property
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that represents the plane 2d element property *entity* (3.2.9)

4.124.152
simple_plane_2d_element_property
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *plane_2d_element_property* (4.124.151) that represents the simple plane 2d element property *entity* (3.2.9)

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4.124.153
fea_group
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the fea group *entity* (3.2.9)

4.124.154
element_group
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_group* (4.124.153) that represents the element group *entity* (3.2.9)

4.124.155
node_group
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *fea_group* (4.124.153) that represents the node group *entity* (3.2.9)

4.124.156
fea_group_relation
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *group_relationship* (4.12.2) that represents the fea group relation *entity* (3.2.9)

4.124.157
volume_3d_element_group
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_group* (4.124.154) that represents the volume 3d element group *entity* (3.2.9)

4.124.158
volume_2d_element_group
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_group* (4.124.154) that represents the volume 2d element group *entity* (3.2.9)

4.124.159
surface_3d_element_group
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_group* (4.124.154) that represents the surface 3d element group *entity* (3.2.9)

4.124.160
surface_2d_element_group
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_group* (4.124.154) that represents the surface 2d element group *entity* (3.2.9)

4.124.161
curve_3d_element_group
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_group* (4.124.154) that represents the curve 3d element group *entity* (3.2.9)

4.124.162
curve_2d_element_group
<resource: structural_response_representation_schema> *entity data type* (3.2.10) that is a type of *element_group* (4.124.154) that represents the curve 2d element group *entity* (3.2.9)

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4.125 systems_engineering_representation_schema

4.125.1
action_method_assignment_relationship
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that represents the action method assignment relationship *entity* (3.2.9)

Note 1 to entry: A **action_method_assignment_relationship** is a relationship between two *action_method_assignment* (4.15.2) instances.

4.125.2
analysis_model
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the analysis model *entity* (3.2.9)

Note 1 to entry: An **analysis_model** is a type of representation used to represent an analysis.

4.125.3
analysis_model_relationship
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that represents the analysis model relationship *entity* (3.2.9)

4.125.4
analysis_representation_context
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that is a type of *representation_context* (4.41.14) that represents the analysis representation context *entity* (3.2.9)

Note 1 to entry: An **analysis_representation_context** is a type of representation_context used in the definition of analysis models.

4.125.5
description_text
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that represents the description text *entity* (3.2.9)

Note 1 to entry: A **description_text** is a set of words that describe something.

4.125.6
description_text_assignment
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that represents the description text assignment *entity* (3.2.9)

Note 1 to entry: A **description_text_assignment** is the assignment of a description to something.

4.125.7
description_text_assignment_relationship
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that represents the description text assignment relationship *entity* (3.2.9)

Note 1 to entry: A **description_text_assignment_relationship** is a relationship between two *description_text_assignment* (4.125.6) objects.

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4.125.8
expression_assignment
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that represents the expression assignment *entity* (3.2.9)

Note 1 to entry: An **expression_assignment** is an assignment of an expression to product data.

4.125.9
expression_item_representation_item
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the expression item representation item *entity* (3.2.9)

Note 1 to entry: An **expression_item_representation_item** is a type of representation_item used in the definition of an expression representation.

4.125.10
expression_representation
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the expression representation *entity* (3.2.9)

Note 1 to entry: An **expression_representation** is a type of representation that is an expression.

4.125.11
expression_representation_context
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that is a type of *representation_context* (4.41.14) that represents the expression representation context *entity* (3.2.9)

Note 1 to entry: An **expression_representation_context** is a type of representation_context that is the context for an expression representation.

4.125.12
expression_role
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that represents the expression role *entity* (3.2.9)

Note 1 to entry: An **expression_role** is the role an expression plays.

4.125.13
functional_model
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the functional model *entity* (3.2.9)

Note 1 to entry: A **functional_model** is a type of representation used to represent behaviour in the form of a functional model.

4.125.14
functional_representation_context
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that is a type of *representation_context* (4.41.14) that represents the functional representation context *entity* (3.2.9)

Note 1 to entry: A **functional_representation_context** is a type of representation_context used in the definition of functional models, this will include information regarding the functional modelling paradigm.

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4.125.15
functional_representation_item
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that is a type of *representation_proxy_item* (4.125.16) that represents the functional representation item *entity* (3.2.9)

Note 1 to entry: A **functional_representation_item** is a type of representation_proxy_item used in the definition of a functional model.

4.125.16
representation_proxy_item
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the representation proxy item *entity* (3.2.9)

Note 1 to entry: A **representation_proxy_item** is a type of representation_item used in the definition of representation when the actual items required are not subtypes of representation item.

4.125.17
state_based_behaviour_model
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the state based behaviour model *entity* (3.2.9)

Note 1 to entry: A **state_based_behaviour_model** is a type of representation used in the definition of state-based behaviour model.

4.125.18
state_based_behaviour_representation_context
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that is a type of *representation_context* (4.41.14) that represents the state based behaviour representation context *entity* (3.2.9)

Note 1 to entry: A **state_based_behaviour_representation_context** is a type of representation_context used in the definition of state-based behaviour model.

4.125.19
state_based_behaviour_representation_item
<resource: systems_engineering_representation_schema> *entity data type* (3.2.10) that is a type of *representation_proxy_item* (4.125.16) that represents the state based behaviour representation item *entity* (3.2.9)

Note 1 to entry: A **state_based_behaviour_representation_item** is a type of representation_proxy_item used in the definition of state-based behaviour model.

4.126 topology_based_identification_schema

4.126.1
basic_face_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the basic face identification *entity* (3.2.9)

Note 1 to entry: A **basic_face_identification** is a type of geometric_representation_item that identifies a face of a solid shape.

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4.126.2
imported_face_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *basic_face_identification* (4.126.1) that represents the imported face identification *entity* (3.2.9)

Note 1 to entry: An **imported_face_identification** is a type of basic_face_identification that specifies a face in an imported B-rep model.

4.126.3
profile_based_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *basic_face_identification* (4.126.1) that represents the profile based feature identification *entity* (3.2.9)

Note 1 to entry: A **profile_based_feature_identification** is a type of basic_face_identification that specifies a face relating to a profile based feature.

4.126.4
extrude_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *profile_based_feature_identification* (4.126.3) that represents the extrude feature identification *entity* (3.2.9)

4.126.5
revolve_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *profile_based_feature_identification* (4.126.3) that represents the revolve feature identification *entity* (3.2.9)

Note 1 to entry: A **revolve_feature_identification** is a type of profile_based_feature_identification that specifies a face relating to a revolve feature such as *revolved_face_solid* (4.27.35) in ISO 10303-42.

4.126.6
hole_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *basic_face_identification* (4.126.1) that represents the hole feature identification *entity* (3.2.9)

4.126.7
transition_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *basic_face_identification* (4.126.1) that represents the transition feature identification *entity* (3.2.9)

Note 1 to entry: A **transition_feature_identification** is a type of basic_face_identification that specifies a face relating to a transition feature such as an edge blend, or a chamfer.

4.126.8
edge_blend_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *transition_feature_identification* (4.126.7) that represents the edge blend feature identification *entity* (3.2.9)

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4.126.9
chamfer_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *transition_feature_identification* (4.126.7) that represents the chamfer feature identification *entity* (3.2.9)

4.126.10
shell_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *basic_face_identification* (4.126.1) that represents the shell feature identification *entity* (3.2.9)

4.126.11
offset_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *basic_face_identification* (4.126.1) that represents the offset feature identification *entity* (3.2.9)

4.126.12
trimmed_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *basic_face_identification* (4.126.1) that represents the trimmed feature identification *entity* (3.2.9)

4.126.13
face_surface_based_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *basic_face_identification* (4.126.1) that represents the face surface based feature identification *entity* (3.2.9)

Note 1 to entry: A **face_surface_based_feature_identification** is a type of basic_face_identification that specifies a face relating to a *face_surface* (4.31.16) based operation.

4.126.14
sculpture_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *face_surface_based_feature_identification* (4.126.13) that represents the sculpture feature identification *entity* (3.2.9)

4.126.15
thicken_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *face_surface_based_feature_identification* (4.126.13) that represents the thicken feature identification *entity* (3.2.9)

4.126.16
pattern_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *basic_face_identification* (4.126.1) that represents the pattern feature identification *entity* (3.2.9)

4.126.17
rectangular_pattern_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *pattern_feature_identification* (4.126.16) that represents the rectangular pattern feature identification *entity* (3.2.9)

Note 1 to entry: A **rectangular_pattern_feature_identification** is a type of pattern_feature_identification in which identifies a single face in a rectangular pattern of replicates of a specified shape feature.

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4.126.18
circular_pattern_feature_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *pattern_feature_identification* (4.126.16) that represents the circular pattern feature identification *entity* (3.2.9)

Note 1 to entry: A **circular_pattern_feature_identification** is a type of pattern_feature_identification in which identifies a single face in a circular pattern of replicates of a specified shape feature.

4.126.19
ambiguity_resolution
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the ambiguity resolution *entity* (3.2.9)

Note 1 to entry: An **ambiguity_resolution** is a type of geometric_representation_item that specifies the information needed to resolve the ambiguity between the topological entities having the same basic identification in the old model (pre-edit model) and new model (post-edit model).

4.126.20
split_element_information
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *ambiguity_resolution* (4.126.19) that represents the split element information *entity* (3.2.9)

Note 1 to entry: A **split_element_information** is a type of ambiguity_resolution that specifies the SEI to resolve the ambiguity when element split occurs.

4.126.21
merged_element_information
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *ambiguity_resolution* (4.126.19) that represents the merged element information *entity* (3.2.9)

Note 1 to entry: A **merged_element_information** is a type of ambiguity_resolution that specifies the MEI to resolve the ambiguity when elements are merged to create a new element.

4.126.22
topology_based_element_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the topology based element identification *entity* (3.2.9)

Note 1 to entry: A **topology_based_element_identification** is a type of geometric_representation_item that specifies the identifications of topological elements such as face, edge, and vertex.

4.126.23
topology_based_face_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *topology_based_element_identification* (4.126.22) that represents the topology based face identification *entity* (3.2.9)

Note 1 to entry: A **topology_based_face_identification** is a type of topology_based_element_identification that represents the identification of a face entity based on its topological information.

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4.126.24
topology_based_edge_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *topology_based_element_identification* (4.126.22) that represents the topology based edge identification *entity* (3.2.9)

Note 1 to entry: A **topology_based_edge_identification** is a type of topology_based_element_identification that represents the identification of an edge entity based on its topological information.

4.126.25
topology_based_vertex_identification
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *topology_based_element_identification* (4.126.22) that represents the topology based vertex identification *entity* (3.2.9)

Note 1 to entry: A **topology_based_vertex_identification** is a type of topology_based_element_identification that represents the identification of a vertex entity based on its topological information.

4.126.26
user_selected_topology_element
<resource: topology_based_identification_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) that represents the user selected topology element *entity* (3.2.9)

Note 1 to entry: A **user_selected_topology_element** is a type of geometric_representation_item and represents an element selected for the persistent identification of the user selected element in the procedural shape modelling.

4.127 variational_representation_schema

4.127.1
variational_representation_item
<resource: variational_representation_schema> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the variational representation item *entity* (3.2.9)

4.127.2
auxiliary_geometric_representation_item
<resource: variational_representation_schema> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) and *variational_representation_item* (4.127.1) that represents the auxiliary geometric representation item *entity* (3.2.9)

4.127.3
variational_representation
<resource: variational_representation_schema> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the variational representation *entity* (3.2.9)

4.127.4
variational_current_representation_relationship
<resource: variational_representation_schema> *entity data type* (3.2.10) that is a type of *representation_relationship* (4.41.20) that represents the variational current representation relationship *entity* (3.2.9)

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5 ISO 10303 application module entity data types and application objects

5.1 Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim

5.1.1 cc_design_approval

<application module: Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim> *entity data type* (3.2.10) that is a type of *approval_assignment* (4.15.5) that represents the cc design approval *entity* (3.2.9)

5.1.2 cc_design_certification

<application module: Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim> *entity data type* (3.2.10) that is a type of *certification_assignment* (4.15.10) that represents the cc design certification *entity* (3.2.9)

Note 1 to entry: A **cc_design_certification** is a type of certification_assignment that assigns a *certification* (4.5.1) to a product that is supplied by an external organization.

5.1.3 cc_design_contract

<application module: Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim> *entity data type* (3.2.10) that is a type of *contract_assignment* (4.15.14) that represents the cc design contract *entity* (3.2.9)

Note 1 to entry: A **cc_design_contract** is a type of contract_assignment that relates a contract to a *product_definition_formation* (4.18.11).

5.1.4 cc_design_date_and_time_assignment

<application module: Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim> *entity data type* (3.2.10) that is a type of *date_and_time_assignment* (4.15.15) that represents the cc design date and time assignment *entity* (3.2.9)

Note 1 to entry: A **cc_design_date_and_time_assignment** is a type of date_and_time_assignment that relates a date_and_time_assignment to a particular piece of product data.

5.1.5 cc_design_person_and_organization_assignment

<application module: Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim> *entity data type* (3.2.10) that is a type of *person_and_organization_assignment* (4.15.47) that represents the cc design person and organization assignment *entity* (3.2.9)

Note 1 to entry: A **cc_design_person_and_organization_assignment** is a type of person_and_organization_assignment that relates a *person_and_organization* (4.17.11) to a particular piece of product data.

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5.1.6
cc_design_security_classification
<application module: Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim> *entity data type* (3.2.10) that is a type of *security_classification_assignment* (4.15.61) that represents the cc design security classification *entity* (3.2.9)

5.1.7
cc_design_specification_reference
<application module: Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim> *entity data type* (3.2.10) that is a type of *document_reference* (4.15.17) that represents the cc design specification reference *entity* (3.2.9)

Note 1 to entry: A **cc_design_specification_reference** is a type of document_reference dd that relates a reference to a specification to a complete definition of a product or to some aspect of its shape.

5.1.8
change
<application module: Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim> *entity data type* (3.2.10) that is a type of *action_assignment* (4.15.1) that represents the change *entity* (3.2.9)

5.1.9
change_request
<application module: Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim> *entity data type* (3.2.10) that is a type of *action_request_assignment* (4.15.4) that represents the change request *entity* (3.2.9)

Note 1 to entry: A **change_request** is a type of action_request_assignment that is a formal notification of a desire for a modification to a particular piece of product data.

5.1.10
design_context
<application module: Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim> *entity data type* (3.2.10) that is a type of *product_definition_context* (4.2.8) that represents the design context *entity* (3.2.9)

Note 1 to entry: A **design_context** is a type of product_definition_context that defines a life cycle stage of design as the frame of reference for *product_definition* (4.18.7) entities.

5.1.11
design_make_from_relationship
<application module: Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the design make from relationship *entity* (3.2.9)

Note 1 to entry: A **design_make_from_relationship** is a type of product_definition_relationship that specifies that one product's design has been derived from another product's design.

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5.1.12
mechanical_context
<application module: Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim> *entity data type* (3.2.10) that is a type of *product_context* (4.2.7) that represents the mechanical context *entity* (3.2.9)

Note 1 to entry: A **mechanical_context** is a type of product_context that is applicable to those products that are mechanical.

5.1.13
start_request
<application module: Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim> *entity data type* (3.2.10) that is a type of *action_request_assignment* (4.15.4) that represents the start request *entity* (3.2.9)

Note 1 to entry: A **start_request** is a type of action_request_assignment that is a formal notification of a desire to begin a new design for a product or group of products.

5.1.14
start_work
<application module: Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim> *entity data type* (3.2.10) that is a type of *action_assignment* (4.15.1) that represents the start work *entity* (3.2.9)

Note 1 to entry: A **start_work** is a type of action_assignment that identifies the *start_request* (5.4.13) instances that have been fulfilled and, as a result, have established a new version of a product.

5.1.15
supplied_part_relationship
<application module: Ap203_configuration_controlled_3d_design_of_mechanical_parts_and_assemblies_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the supplied part relationship *entity* (3.2.9)

Note 1 to entry: A **supplied_part_relationship** is a type of product_definition_relationship that relates the identifications of two products and specifies that one is the identification used by the internal design organization and the other is the identification used by a supplier.

5.2 Ap239_product_life_cycle_support_mim

5.2.1
characterized_action_directive
<application module: Ap239_product_life_cycle_support_mim> *entity data type* (3.2.10) that is a type of *action_directive* (4.1.2) and *characterized_object* (4.19.1) that represents the characterized action directive *entity* (3.2.9)

Note 1 to entry: A **characterized_action_directive** is a type of characterized_object and action_directive

5.2.2
characterized_action_method_relationship
<application module: Ap239_product_life_cycle_support_mim> *entity data type* (3.2.10) that is a type of *action_method_relationship* (4.1.4) and *characterized_object* (4.19.1) that represents the characterized action method relationship *entity* (3.2.9)

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Note 1 to entry: A **characterized_action_method_relationship** is a type of characterized_object and action_method_relationship

5.2.3
characterized_analysis_assignment
<application module: Ap239_product_life_cycle_support_mim> *entity data type* (3.2.10) that is a type of *analysis_assignment* (5.388.1) and *characterized_object* (4.19.1) that represents the characterized analysis assignment *entity* (3.2.9)

Note 1 to entry: A **characterized_analysis_assignment** is a type of characterized_object and analysis_assignment

5.2.4
characterized_assembly_component_usage
<application module: Ap239_product_life_cycle_support_mim> *entity data type* (3.2.10) that is a type of *assembly_component_usage* (4.25.2) and *characterized_object* (4.19.1) that represents the characterized assembly component usage *entity* (3.2.9)

Note 1 to entry: A **characterized_assembly_component_usage** is a type of characterized_object and assembly_component_usage

5.2.5
characterized_versioned_action_request
<application module: Ap239_product_life_cycle_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *versioned_action_request* (4.1.15) that represents the characterized versioned action request *entity* (3.2.9)

Note 1 to entry: A **characterized_versioned_action_request** is a type of characterized_object and versioned_action_request

5.3 Ap242_managed_model_based_3d_engineering_arm

5.3.1
Assignment_object_relationship
<application module: Ap242_managed_model_based_3d_engineering_arm> *application object* (3.1.78) that represents the assignment object relationship *entity* (3.2.9)

5.4 Ap242_managed_model_based_3d_engineering_mim

5.4.1
cc_design_approval
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *approval_assignment* (4.15.5) that represents the cc design approval *entity* (3.2.9)

5.4.2
cc_design_certification
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *certification_assignment* (4.15.10) that represents the cc design certification *entity* (3.2.9)

Note 1 to entry: A **cc_design_certification** is a type of certification_assignment that assigns a *certification* (4.5.1) to a product that is supplied by an external organization.

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5.4.3
cc_design_contract
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *contract_assignment* (4.15.14) that represents the cc design contract *entity* (3.2.9)

Note 1 to entry: A **cc_design_contract** is a type of contract_assignment that relates a contract to a *product_definition_formation* (4.18.11).

5.4.4
cc_design_date_and_time_assignment
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *date_and_time_assignment* (4.15.15) that represents the cc design date and time assignment *entity* (3.2.9)

Note 1 to entry: A **cc_design_date_and_time_assignment** is a type of date_and_time_assignment that relates a date_and_time_assignment to a particular piece of product data.

5.4.5
cc_design_person_and_organization_assignment
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *person_and_organization_assignment* (4.15.47) that represents the cc design person and organization assignment *entity* (3.2.9)

Note 1 to entry: A **cc_design_person_and_organization_assignment** is a type of person_and_organization_assignment that relates a *person_and_organization* (4.17.11) to a particular piece of product data.

5.4.6
cc_design_security_classification
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *security_classification_assignment* (4.15.61) that represents the cc design security classification *entity* (3.2.9)

5.4.7
cc_design_specification_reference
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *document_reference* (4.15.17) that represents the cc design specification reference *entity* (3.2.9)

Note 1 to entry: A **cc_design_specification_reference** is a type of document_reference that relates a reference to a specification to a complete definition of a product or to some aspect of its shape.

5.4.8
change
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *action_assignment* (4.15.1) that represents the change *entity* (3.2.9)

5.4.9
change_request
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *action_request_assignment* (4.15.4) that represents the change request *entity* (3.2.9)

Note 1 to entry: A **change_request** is a type of action_request_assignment that is a formal notification of a desire for a modification to a particular piece of product data.

5.4.10

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design_context
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *product_definition_context* (4.2.8) that represents the design context *entity* (3.2.9)

Note 1 to entry: A **design_context** is a type of product_definition_context that defines a life-cycle stage of design as the frame of reference for *product_definition* (4.18.7) entities.

5.4.11
design_make_from_relationship
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the design make from relationship *entity* (3.2.9)

Note 1 to entry: A **design_make_from_relationship** is a type of product_definition_relationship that specifies that one product's design has been derived from another product's design.

5.4.12
mechanical_context
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *product_context* (4.2.7) that represents the mechanical context *entity* (3.2.9)

Note 1 to entry: A **mechanical_context** is a type of product_context that is applicable to those products that are mechanical.

5.4.13
start_request
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *action_request_assignment* (4.15.4) that represents the start request *entity* (3.2.9)

Note 1 to entry: A **start_request** is a type of action_request_assignment that is a formal notification of a desire to begin a new design for a product or group of products.

5.4.14
start_work
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *action_assignment* (4.15.1) that represents the start work *entity* (3.2.9)

Note 1 to entry: A **start_work** is a type of action_assignment that identifies the *start_request* (5.4.13) that have been fulfilled and, as a result, have established a new version of a product.

5.4.15
supplied_part_relationship
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the supplied part relationship *entity* (3.2.9)

Note 1 to entry: A **supplied_part_relationship** is a type of product_definition_relationship that relates the identifications of two products and specifies that one is the identification used by the internal design organization and the other is the identification used by a supplier.

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5.4.16
mated_part_relationship
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) and *group_assignment* (4.15.32) and *product_definition_shape* (4.19.8) and *product_definition_relationship* (4.18.15) and *shape_aspect* (4.19.10) that represents the mated part relationship *entity* (3.2.9)

Note 1 to entry: A **mated_part_relationship** is a type of group, of group_assignment, of product_definition_relationship, of product_definition_shape, and of shape_aspect.

5.4.17
angle_direction_reference
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *representation_item_relationship* (4.41.17) and *geometric_representation_item* (4.28.2) that represents the angle direction reference *entity* (3.2.9)

Note 1 to entry: An **angle_direction_reference** is a type of representation_item_relationship and a type of geometric_representation_item for the purpose of specifying a ply orientation angle.

5.4.18
min_and_major_ply_orientation_basis
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *representation_item_relationship* (4.41.17) and *geometric_representation_item* (4.28.2) that represents the min and major ply orientation basis *entity* (3.2.9)

Note 1 to entry: A **min_and_major_ply_orientation_basis** is a type of representation_item_relationship and a type of geometric_representation_item for the purpose of specifying the major and minor ply orientation basis.

5.4.19
ap242_assignment_object_relationship
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *assignment_object_relationship* (4.15.6) that represents the ap242 assignment object relationship *entity* (3.2.9)

Note 1 to entry: An **ap242_assignment_object_relationship** is a type of assignment_object_relationship that describes a relationship between two assignment objects.

5.4.20
draped_defined_transformation
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *transformation_with_derived_angle* (5.4.23) that represents the draped defined transformation *entity* (3.2.9)

Note 1 to entry: A **draped_defined_transformation** is a type of transformation_with_derived_angle that implements the ARM concept of *Draped_orientation_angle* (5.652.4).

5.4.21
laid_defined_transformation
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *transformation_with_derived_angle* (5.4.23) that represents the laid defined transformation *entity* (3.2.9)

Note 1 to entry: A **laid_defined_transformation** is a type of transformation_with_derived_angle that implements the ARM concept of *Laid_orientation_angle* (5.652.5).

5.4.22

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point_path
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *compound_representation_item* (4.41.3) and *geometric_representation_item* (4.28.2) that represents the point path *entity* (3.2.9)

Note 1 to entry: A **point_path** is a type of compound_representation_item and a type of geometric_representation_item.

5.4.23
transformation_with_derived_angle
<application module: Ap242_managed_model_based_3d_engineering_mim> *entity data type* (3.2.10) that is a type of *item_defined_transformation* (4.41.10) that represents the transformation with derived angle *entity* (3.2.9)

5.5 Appearance_assignment_arm

5.5.1
Appearance_assignment
<application module: Appearance_assignment_arm> *application object* (3.1.78) that represents the appearance assignment *entity* (3.2.9)

Note 1 to entry: An **Appearance_assignment** is the identification of the characteristics of visual appearance of geometric or annotation elements.

5.5.2
Context_dependent_appearance_assignment
<application module: Appearance_assignment_arm> *application object* (3.1.78) that is a type of *Appearance_assignment* (5.5.1) that represents the context dependent appearance assignment *entity* (3.2.9)

Note 1 to entry: A **Context_dependent_appearance_assignment** is a type of Appearance_assignment that identifies visual characteristics that apply in the context of a viewing context.

5.5.3
Context_dependent_over_riding_styled_element
<application module: Appearance_assignment_arm> *application object* (3.1.78) that is a type of *Over_riding_styled_element* (5.5.4) that represents the context dependent over riding styled element *entity* (3.2.9)

Note 1 to entry: A **Context_dependent_over_riding_styled_element** is a type of Over_riding_styled_element that overrides the visual characteristics of another *Styled_element* (5.5.6) in the context of another *Detailed_geometric_model_element* (5.10.9) or a *Styled_model* (5.5.7).

5.5.4
Over_riding_styled_element
<application module: Appearance_assignment_arm> *application object* (3.1.78) that is a type of *Styled_element* (5.5.6) that represents the over riding styled element *entity* (3.2.9)

Note 1 to entry: An **Over_riding_styled_element** is a type of Styled_element that overrides the visual characteristics of another Styled_element.

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5.5.5
Planar_box
<application module: Appearance_assignment_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the planar box *entity* (3.2.9)

Note 1 to entry: A **Planar_box** is a type of Detailed_geometric_model_element that specifies an arbitrary rectangular box and its location in a two-dimensional Cartesian coordinate system.

5.5.6
Styled_element
<application module: Appearance_assignment_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the styled element *entity* (3.2.9)

Note 1 to entry: A **Styled_element** is a type of Representation_item that has presentation information.

5.5.7
Styled_model
<application module: Appearance_assignment_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the styled model *entity* (3.2.9)

Note 1 to entry: A **Styled_model** is a type of Representation that contains a set of geometric or annotation elements for which visual characteristics are specified.

5.5.8
Styled_model_replication
<application module: Appearance_assignment_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the styled model replication *entity* (3.2.9)

Note 1 to entry: A **Styled_model_replication** is a type of Representation_item that replicates a *Styled_model* (5.5.7) in another Styled_model that includes it with a transformation.

5.6 Colour_arm

5.6.1
Colour
<application module: Colour_arm> *application object* (3.1.78) that represents the colour *entity* (3.2.9)

Note 1 to entry: A **Colour** is a name for a property of reflecting light at a particular wavelength.

5.6.2
Externally_defined_colour
<application module: Colour_arm> *application object* (3.1.78) that is a type of *Colour* (5.6.1) that represents the externally defined colour *entity* (3.2.9)

Note 1 to entry: An **Externally_defined_colour** is a type of Colour that has its definition established and maintained by a source outside of ISO 10303.

5.6.3
Pre_defined_colour
<application module: Colour_arm> *application object* (3.1.78) that is a type of *Colour* (5.6.1) that represents the pre defined colour *entity* (3.2.9)

Note 1 to entry: A **Pre_defined_colour** is a type of Colour that has its definition established and maintained in the Colour module.

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5.6.4
User_defined_colour
<application module: Colour_arm> *application object* (3.1.78) that is a type of *Colour* (5.6.1) that represents the user defined colour *entity* (3.2.9)

Note 1 to entry: A **User_defined_colour** is a type of Colour that has its definition established without referencing any standard.

5.7 Colour_mim

5.7.1
externally_defined_colour
<application module: Colour_mim> *entity data type* (3.2.10) that is a type of *colour_specification* (4.40.9) and *externally_defined_item* (4.11.3) that represents the externally defined colour *entity* (3.2.9)

Note 1 to entry: An **externally_defined_colour** is a type of colour_specification and a type of externally_defined_item that has its definition specified outside of ISO 10303.

5.8 Curve_appearance_arm

5.8.1
Curve_appearance
<application module: Curve_appearance_arm> *application object* (3.1.78) that represents the curve appearance *entity* (3.2.9)

Note 1 to entry: A **Curve_appearance** is the visual appearance of geometric curves and annotation curves.

5.8.2
Externally_defined_marker
<application module: Curve_appearance_arm> *application object* (3.1.78) that is a type of *Marker* (5.8.4) that represents the externally defined marker *entity* (3.2.9)

Note 1 to entry: An **Externally_defined_marker** is a type of Marker defined by an outside source.

5.8.3
Externally_defined_terminator
<application module: Curve_appearance_arm> *application object* (3.1.78) that is a type of *Terminator* (5.8.8) that represents the externally defined terminator *entity* (3.2.9)

Note 1 to entry: An **Externally_defined_terminator** is a type of Terminator with its shape defined by an outside source.

5.8.4
Marker
<application module: Curve_appearance_arm> *application object* (3.1.78) that represents the marker *entity* (3.2.9)

Note 1 to entry: A **Marker** is a visual reference.

5.8.5
Point_appearance
<application module: Curve_appearance_arm> *application object* (3.1.78) that represents the point appearance *entity* (3.2.9)

Note 1 to entry: A **Point_appearance** is the visual appearance of a point.

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5.8.6
Predefined_marker
<application module: Curve_appearance_arm> *application object* (3.1.78) that is a type of *Marker* (5.8.4) that represents the predefined marker *entity* (3.2.9)

Note 1 to entry: A **Predefined_marker** is a type of Marker which is defined in this document.

5.8.7
Predefined_terminator
<application module: Curve_appearance_arm> *application object* (3.1.78) that is a type of *Terminator* (5.8.8) that represents the predefined terminator *entity* (3.2.9)

Note 1 to entry: A **Predefined_terminator** is a type of Terminator which is defined in this document.

5.8.8
Terminator
<application module: Curve_appearance_arm> *application object* (3.1.78) that represents the terminator *entity* (3.2.9)

Note 1 to entry: A **Terminator** is the shape that denotes the end of a construct.

5.8.9
User_defined_marker
<application module: Curve_appearance_arm> *application object* (3.1.78) that is a type of *Marker* (5.8.4) that represents the user defined marker *entity* (3.2.9)

Note 1 to entry: A **User_defined_marker** is a type of Marker that is defined without referencing any standard or convention.

5.8.10
User_defined_terminator
<application module: Curve_appearance_arm> *application object* (3.1.78) that is a type of *Terminator* (5.8.8) that represents the user defined terminator *entity* (3.2.9)

Note 1 to entry: A **User_defined_terminator** is a type of Terminator that is defined without referencing any standard or convention.

5.8.11
Vector_appearance
<application module: Curve_appearance_arm> *application object* (3.1.78) that is a type of *Curve_appearance* (5.8.1) that represents the vector appearance *entity* (3.2.9)

Note 1 to entry: A **Vector_appearance** is a type of Curve_appearance that is the definition of the visual appearance of a vector.

5.9 Curve_appearance_mim

5.9.1
externally_defined_marker
<application module: Curve_appearance_mim> *entity data type* (3.2.10) that is a type of *externally_defined_symbol* (4.38.27) and *pre_defined_marker* (4.37.40) that represents the externally defined marker *entity* (3.2.9)

Note 1 to entry: An **externally_defined_marker** is a type of externally_defined_symbol and a type of pre_defined_marker that implements the ARM concept of *Externally_defined_marker* (5.8.2).

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5.9.2
externally_defined_terminator_symbol
<application module: Curve_appearance_mim> *entity data type* (3.2.10) that is a type of *externally_defined_symbol* (4.38.27) that represents the externally defined terminator symbol *entity* (3.2.9)

Note 1 to entry: An **externally_defined_terminator_symbol** is a type of externally_defined_symbol that implements the ARM concept of *Externally_defined_terminator* (5.8.3).

5.9.3
pre_defined_point_marker_symbol
<application module: Curve_appearance_mim> *entity data type* (3.2.10) that is a type of *pre_defined_marker* (4.37.40) and *pre_defined_symbol* (4.38.29) that represents the pre defined point marker symbol *entity* (3.2.9)

Note 1 to entry: A **pre_defined_point_marker_symbol** is a type of pre_defined_marker and a type of pre_defined_symbol with a shape that is either an asterisk, circle, dot, plus, square, triangle or "x".

5.9.4
pre_defined_terminator_symbol
<application module: Curve_appearance_mim> *entity data type* (3.2.10) that is a type of *pre_defined_symbol* (4.38.29) that represents the pre defined terminator symbol *entity* (3.2.9)

Note 1 to entry: A **pre_defined_terminator_symbol** is a type of pre_defined_symbol that implements the ARM concept of *Predefined_terminator* (5.8.7).

5.9.5
user_defined_marker
<application module: Curve_appearance_mim> *entity data type* (3.2.10) that is a type of *mapped_item* (4.41.11) and *pre_defined_marker* (4.37.40) that represents the user defined marker *entity* (3.2.9)

Note 1 to entry: A **user_defined_marker** is a type of pre_defined_marker and mapped_item that implements the ARM concept of *User_defined_marker* (5.8.9).

5.9.6
user_defined_terminator_symbol
<application module: Curve_appearance_mim> *entity data type* (3.2.10) that is a type of *mapped_item* (4.41.11) and *pre_defined_symbol* (4.38.29) that represents the user defined terminator symbol *entity* (3.2.9)

Note 1 to entry: A **user_defined_terminator_symbol** is a type of pre_defined_symbol and mapped_item that implements the ARM concept of *User_defined_terminator* (5.8.10).

5.9.7
vector_style
<application module: Curve_appearance_mim> *entity data type* (3.2.10) that is a type of *curve_style* (4.37.9) and *pre_defined_terminator_symbol* (5.9.4) that represents the vector style *entity* (3.2.9)

Note 1 to entry: A **vector_style** is a type of curve_style and pre_defined_terminator_symbol that implements the ARM concept of *Vector_appearance* (5.8.11).

5.10 Elemental_geometric_shape_arm

5.10.1

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Axis_placement
<application module: Elemental_geometric_shape_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the axis placement *entity* (3.2.9)

Note 1 to entry: An **Axis_placement** is a type of Detailed_geometric_model_element that locates and orient a geometric item with respect to the coordinate system of its *Geometric_coordinate_space* (5.10.11).

5.10.2
Axis_placement_2d
<application module: Elemental_geometric_shape_arm> *application object* (3.1.78) that is a type of *Axis_placement* (5.10.1) that represents the axis placement 2d *entity* (3.2.9)

Note 1 to entry: An **Axis_placement_2d** is a type of Axis_placement that is two-dimensional.

5.10.3
Axis_placement_3d
<application module: Elemental_geometric_shape_arm> *application object* (3.1.78) that is a type of *Axis_placement* (5.10.1) that represents the axis placement 3d *entity* (3.2.9)

Note 1 to entry: An **Axis_placement_3d** is a type of Axis_placement that is three-dimensional.

5.10.4
Axis1_placement
<application module: Elemental_geometric_shape_arm> *application object* (3.1.78) that is a type of *Axis_placement* (5.10.1) that represents the axis1 placement *entity* (3.2.9)

Note 1 to entry: An **Axis1_placement** is a type of *Detailed_geometric_model_element* (5.10.9) that defines the position of a single axis in three-dimensional space.

5.10.5
Point
<application module: Elemental_geometric_shape_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the point *entity* (3.2.9)

5.10.6
Cartesian_point
<application module: Elemental_geometric_shape_arm> *application object* (3.1.78) that is a type of *Point* (5.10.5) that represents the cartesian point *entity* (3.2.9)

Note 1 to entry: A **Cartesian_point** is a type of Point that defines a point by a list of up to 3 cartesian coordinates.

5.10.7
Cartesian_transformation_2d
<application module: Elemental_geometric_shape_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the cartesian transformation 2d *entity* (3.2.9)

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5.10.8
Cartesian_transformation_3d
<application module: Elemental_geometric_shape_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the cartesian transformation 3d *entity* (3.2.9)

Note 1 to entry: A **Cartesian_transformation_3d** is a type of Detailed_geometric_model_element that is a geometric transformation defined in a 3D geometric space by a 3*3 matrix and a cartesian point.

5.10.9
Detailed_geometric_model_element
<application module: Elemental_geometric_shape_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the detailed geometric model element *entity* (3.2.9)

5.10.10
Direction
<application module: Elemental_geometric_shape_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the direction *entity* (3.2.9)

Note 1 to entry: A **Direction** is a type of Detailed_geometric_model_element that defines a 2 or 3 dimensional vector.

5.10.11
Geometric_coordinate_space
<application module: Elemental_geometric_shape_arm> *application object* (3.1.78) that is a type of *Numerical_representation_context* (5.12.1) that represents the geometric coordinate space *entity* (3.2.9)

Note 1 to entry: A **Geometric_coordinate_space** is a type of Numerical_representation_context that defines a coordinate space where geometric elements can be defined.

5.10.12
Geometric_model
<application module: Elemental_geometric_shape_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the geometric model *entity* (3.2.9)

Note 1 to entry: A **Geometric_model** is a type of Representation dedicated to the description of geometric constructs.

5.10.13
Geometric_placement
<application module: Elemental_geometric_shape_arm> *application object* (3.1.78) that is a type of *Geometric_placement_operation* (5.10.14) that represents the geometric placement *entity* (3.2.9)

Note 1 to entry: A **Geometric_placement** is a type of Geometric_placement_operation that results in an axis placement in a coordinate space.

5.10.14
Geometric_placement_operation
<application module: Elemental_geometric_shape_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the geometric placement operation *entity* (3.2.9)

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5.10.15
Geometric_operator_transformation
<application module: Elemental_geometric_shape_arm> *application object* (3.1.78) that is a type of *Geometric_placement_operation* (5.10.14) that represents the geometric operator transformation *entity* (3.2.9)

Note 1 to entry: A **Geometric_operator_transformation** is a type of Geometric_placement_operation that results in a Cartesian transformation.

5.11 Elemental_topology_arm

5.11.1
Connected_edge_set
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Detailed_topological_model_element* (5.11.5) that represents the connected edge set *entity* (3.2.9)

Note 1 to entry: A **Connected_edge_set** is a type of Detailed_topological_model_element that is a set of edges arcwise connected via their common vertices.

5.11.2
Connected_edge_sub_set
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Connected_edge_set* (5.11.1) that represents the connected edge sub set *entity* (3.2.9)

Note 1 to entry: A **Connected_edge_sub_set** is a type of Connected_edge_set that represents a subset of a parent Connected_edge_set.

5.11.3
Connected_face_set
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Detailed_topological_model_element* (5.11.5) that represents the connected face set *entity* (3.2.9)

Note 1 to entry: A **Connected_face_set** is a type of Detailed_topological_model_element that is a set of faces such that the domain of the faces together with their bounding edges and vertices is connected.

5.11.4
Connected_face_sub_set
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Connected_face_set* (5.11.3) that represents the connected face sub set *entity* (3.2.9)

5.11.5
Detailed_topological_model_element
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the detailed topological model element *entity* (3.2.9)

Note 1 to entry: A **Detailed_topological_model_element** is a type of Representation_item that represents a single element of the topology, or connectivity, of the entities that make up the representation of an object.

5.11.6
Edge
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Detailed_topological_model_element* (5.11.5) that represents the edge *entity* (3.2.9)

Note 1 to entry: An **Edge** is a type of Detailed_topological_model_element that is an oriented bounded one dimensional manifold connecting two vertices.

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5.11.7
Edge_loop
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Loop* (5.11.11) and *Path* (5.11.13) that represents the edge loop *entity* (3.2.9)

Note 1 to entry: An **Edge_loop** is a type of Loop with a non-zero extent.

5.11.8
Face
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Detailed_topological_model_element* (5.11.5) that represents the face *entity* (3.2.9)

Note 1 to entry: A **Face** is a type of Detailed_topological_model_element that is a topological entity of dimensionality 2 corresponding to the intuitive notion of a piece of surface bounded by loops.

5.11.9
Face_bound
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Detailed_topological_model_element* (5.11.5) that represents the face bound *entity* (3.2.9)

Note 1 to entry: A **Face_bound** is a type of Detailed_topological_model_element that is the usage of a loop for bounding a *Face* (5.11.8).

5.11.10
Face_outer_bound
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Face_bound* (5.11.9) that represents the face outer bound *entity* (3.2.9)

Note 1 to entry: A **Face_outer_bound** is a type of Face_bound which carries the additional semantics of defining an outer boundary on the face.

5.11.11
Loop
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Detailed_topological_model_element* (5.11.5) that represents the loop *entity* (3.2.9)

Note 1 to entry: A **Loop** is a type of Detailed_topological_model_element constructed from a single *Vertex* (5.11.16), or by stringing together connected edges beginning and ending at the same Vertex.

5.11.12
Oriented_edge
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Edge* (5.11.6) that represents the oriented edge *entity* (3.2.9)

Note 1 to entry: An **Oriented_edge** is a type of Edge constructed from another edge which contains a BOOLEAN orientation flag to indicate whether or not the orientation of the constructed edge agrees with the orientation of the original edge.

5.11.13
Path
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Detailed_topological_model_element* (5.11.5) that represents the path *entity* (3.2.9)

Note 1 to entry: A **Path** is a type of Detailed_topological_model_element consisting of an ordered collection of *Oriented_edge* (5.11.12) instances, such that the start vertex of each edge coincides with the end vertex of its predecessor.

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5.11.14
Subedge
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Edge* (5.11.6) that represents the subedge *entity* (3.2.9)

Note 1 to entry: A **Subedge** is a type of Edge, whose domain is a connected portion of the domain of an existing Edge.

5.11.15
Subpath
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Path* (5.11.13) that represents the subpath *entity* (3.2.9)

Note 1 to entry: A **Subpath** is a type of Path, whose domain is a connected portion of the domain of an existing Path.

5.11.16
Vertex
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Detailed_topological_model_element* (5.11.5) that represents the vertex *entity* (3.2.9)

Note 1 to entry: A **Vertex** is a type of Detailed_topological_model_element is a point of interest in topological space, it has dimensionality 0.

5.11.17
Vertex_loop
<application module: Elemental_topology_arm> *application object* (3.1.78) that is a type of *Loop* (5.11.11) that represents the vertex loop *entity* (3.2.9)

Note 1 to entry: A **Vertex_loop** is a type of Loop of zero extent consisting of a single vertex.

5.12 Foundation_representation_arm

5.12.1
Numerical_representation_context
<application module: Foundation_representation_arm> *application object* (3.1.78) that is a type of *Representation_context* (5.12.3) that represents the numerical representation context *entity* (3.2.9)

Note 1 to entry: A **Numerical_representation_context** is a type of Representation_context in which units and uncertainties may be defined.

5.12.2
Representation
<application module: Foundation_representation_arm> *application object* (3.1.78) that represents the representation *entity* (3.2.9)

Note 1 to entry: A **Representation** is a collection of one or more instances of *Representation_item* (5.12.5) that are related in the specified *Representation_context* (5.12.3).

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5.12.3
Representation_context
<application module: Foundation_representation_arm> *application object* (3.1.78) that represents the representation context *entity* (3.2.9)

Note 1 to entry: A **Representation_context** is a context in which instances of *Representation_item* (5.12.5) are related.

5.12.4
Representation_context_reference
<application module: Foundation_representation_arm> *application object* (3.1.78) that represents the representation context reference *entity* (3.2.9)

Note 1 to entry: A **Representation_context_reference** is an identification based reference to a *Representation_context* (5.12.3).

5.12.5
Representation_item
<application module: Foundation_representation_arm> *application object* (3.1.78) that represents the representation item *entity* (3.2.9)

Note 1 to entry: A **Representation_item** is an element of representation.

5.12.6
Representation_item_relationship
<application module: Foundation_representation_arm> *application object* (3.1.78) that represents the representation item relationship *entity* (3.2.9)

Note 1 to entry: A **Representation_item_relationship** is a relationship between two *Representation_item* (5.12.5) instances.

5.12.7
Representation_reference
<application module: Foundation_representation_arm> *application object* (3.1.78) that represents the representation reference *entity* (3.2.9)

Note 1 to entry: A **Representation_reference** is an identification based reference to a *Representation* (5.12.2).

5.12.8
Representation_relationship
<application module: Foundation_representation_arm> *application object* (3.1.78) that represents the representation relationship *entity* (3.2.9)

Note 1 to entry: A **Representation_relationship** is an association between two instances of *Representation* (5.12.2).

5.12.9
String_representation_item
<application module: Foundation_representation_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the string representation item *entity* (3.2.9)

Note 1 to entry: A **String_representation_item** is a type of Representation_item that specifies a text.

5.13 General_surface_appearance_arm

5.13.1

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Boundary_curve_appearance
<application module: General_surface_appearance_arm> *application object* (3.1.78) that is a type of *Surface_related_curve_appearance* (5.13.9) that represents the boundary curve appearance *entity* (3.2.9)

5.13.2
Control_grid_appearance
<application module: General_surface_appearance_arm> *application object* (3.1.78) that is a type of *Surface_related_curve_appearance* (5.13.9) that represents the control grid appearance *entity* (3.2.9)

5.13.3
Parameter_line_appearance
<application module: General_surface_appearance_arm> *application object* (3.1.78) that is a type of *Surface_related_curve_appearance* (5.13.9) that represents the parameter line appearance *entity* (3.2.9)

5.13.4
Segmentation_curve_appearance
<application module: General_surface_appearance_arm> *application object* (3.1.78) that is a type of *Surface_related_curve_appearance* (5.13.9) that represents the segmentation curve appearance *entity* (3.2.9)

5.13.5
Silhouette_curve_appearance
<application module: General_surface_appearance_arm> *application object* (3.1.78) that is a type of *Surface_related_curve_appearance* (5.13.9) that represents the silhouette curve appearance *entity* (3.2.9)

5.13.6
Surface_appearance
<application module: General_surface_appearance_arm> *application object* (3.1.78) that represents the surface appearance *entity* (3.2.9)

Note 1 to entry: A **Surface_appearance** is the definition of the visual appearance of a surface.

5.13.7
Surface_appearance_element
<application module: General_surface_appearance_arm> *application object* (3.1.78) that represents the surface appearance element *entity* (3.2.9)

Note 1 to entry: A **Surface_appearance_element** is either a *Surface_related_curve_appearance* (5.13.9) or a *Surface_colour* (5.13.8).

5.13.8
Surface_colour
<application module: General_surface_appearance_arm> *application object* (3.1.78) that is a type of *Surface_appearance_element* (5.13.7) that represents the surface colour *entity* (3.2.9)

Note 1 to entry: A **Surface_colour** is a type of is a type of Surface_appearance_element that is the colour for presentation of a surface that are not shaded.

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5.13.9
Surface_related_curve_appearance
<application module: General_surface_appearance_arm> *application object* (3.1.78) that is a type of *Surface_appearance_element* (5.13.7) that represents the surface related curve appearance *entity* (3.2.9)

5.14 Layer_assignment_arm

5.14.1
Layer
<application module: Layer_assignment_arm> *application object* (3.1.78) that represents the layer *entity* (3.2.9)

Note 1 to entry: A **Layer** is a general structure for collection of *Representation_item* (5.12.5) instances.

5.14.2
Structuring_method_hierarchy
<application module: Layer_assignment_arm> *application object* (3.1.78) that represents the structuring method hierarchy *entity* (3.2.9)

Note 1 to entry: A **Structuring_method_hierarchy** is a mechanism to build up a nesting of *Group* (5.113.1) objects within Group or *Layer* (5.14.1) objects in structuring methods.

5.15 Layer_assignment_mim

5.15.1
rep_item_group
<application module: Layer_assignment_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) and *representation_item* (4.41.16) that represents the rep item group *entity* (3.2.9)

Note 1 to entry: A **rep_item_group** is a type of group and a type of representation_item.

5.16 Date_time_arm

5.16.1
Calendar_date
<application module: Date_time_arm> *application object* (3.1.78) that represents the calendar date *entity* (3.2.9)

Note 1 to entry: A **Calendar_date** is a date that is defined as a day in a month of a year.

5.16.2
Date_time
<application module: Date_time_arm> *application object* (3.1.78) that represents the date time *entity* (3.2.9)

Note 1 to entry: A **Date_time** is a time on a particular day.

5.16.3
Local_time
<application module: Date_time_arm> *application object* (3.1.78) that represents the local time *entity* (3.2.9)

Note 1 to entry: A **Local_time** is a point in time in a day, represented on a 24-hour clock by hour, minute and second.

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5.16.4
Time_offset
<application module: Date_time_arm> *application object* (3.1.78) that represents the time offset *entity* (3.2.9)

Note 1 to entry: A **Time_offset** is an oriented offset from Coordinated Universal Time.

5.17 Person_organization_arm

5.17.1
Address
<application module: Person_organization_arm> *application object* (3.1.78) that represents the address *entity* (3.2.9)

Note 1 to entry: An **Address** is the information that locate persons or organizations.

5.17.2
Address_assignment
<application module: Person_organization_arm> *application object* (3.1.78) that represents the address assignment *entity* (3.2.9)

Note 1 to entry: An **Address_assignment** is the association of an *Organization* (5.17.3) or a *Person_in_organization* (5.17.6) with an *Address* (5.17.1).

5.17.3
Organization
<application module: Person_organization_arm> *application object* (3.1.78) that represents the organization *entity* (3.2.9)

Note 1 to entry: An **Organization** is an administrative structure in which persons are active.

5.17.4
Organization_relationship
<application module: Person_organization_arm> *application object* (3.1.78) that represents the organization relationship *entity* (3.2.9)

Note 1 to entry: An **Organization_relationship** is a relationship between two instances of *Organization* (5.17.3).

5.17.5
Person
<application module: Person_organization_arm> *application object* (3.1.78) that represents the person *entity* (3.2.9)

Note 1 to entry: A **Person** is an individual human being.

5.17.6
Person_in_organization
<application module: Person_organization_arm> *application object* (3.1.78) that represents the person in organization *entity* (3.2.9)

Note 1 to entry: A **Person_in_organization** is the identification of a *Person* (5.17.5) and of his role in an *Organization* (5.17.3)

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5.18 Person_organization_mim

5.18.1
person_and_organization_address
<application module: Person_organization_mim> *entity data type* (3.2.10) that is a type of *organizational_address* (4.17.7) and *personal_address* (4.17.18) that represents the person and organization address *entity* (3.2.9)

Note 1 to entry: A **person_and_organization_address** is a type of personal_address and of organizational_address that defines the address of a person in the context of his activity in an organization.

5.19 Approval_arm

5.19.1
Approval
<application module: Approval_arm> *application object* (3.1.78) that represents the approval *entity* (3.2.9)

Note 1 to entry: An **Approval** is a formal confirmation of the quality of some activity or product data.

5.19.2
Approval_assignment
<application module: Approval_arm> *application object* (3.1.78) that represents the approval assignment *entity* (3.2.9)

Note 1 to entry: An **Approval_assignment** is the assignment of an *Approval* (5.19.1) to activity or product data.

5.19.3
Approval_relationship
<application module: Approval_arm> *application object* (3.1.78) that represents the approval relationship *entity* (3.2.9)

Note 1 to entry: An **Approval_relationship** is a typed association between two instances of *Approval* (5.19.1).

5.19.4
Approval_status
<application module: Approval_arm> *application object* (3.1.78) that represents the approval status *entity* (3.2.9)

Note 1 to entry: An **Approval_status** is a particular rank of approval.

5.19.5
Approving_person_organization
<application module: Approval_arm> *application object* (3.1.78) that represents the approving person organization *entity* (3.2.9)

Note 1 to entry: An **Approving_person_organization** is an association between an *Approval* (5.19.1) and the organization or person and organization that has granted this approval.

5.20 Approval_mim

5.20.1
applied_approval_assignment
<application module: Approval_mim> *entity data type* (3.2.10) that is a type of *approval_assignment* (4.15.5) that represents the applied approval assignment *entity* (3.2.9)

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Note 1 to entry: An **applied_approval_assignment** is a type of approval_assignment that allows the representation of the assignment of an approval to product or activity data.

5.21 Person_organization_assignment_arm

5.21.1
Organization_or_person_in_organization_assignment

<application module: Person_organization_assignment_arm> *application object* (3.1.78) that represents the organization or person in organization assignment *entity* (3.2.9)

Note 1 to entry: An **Organization_or_person_in_organization_assignment** is an association of an organization or a person in an organization with activity or product data.

5.22 Person_organization_assignment_mim

5.22.1
applied_organization_assignment

<application module: Person_organization_assignment_mim> *entity data type* (3.2.10) that is a type of *organization_assignment* (4.15.42) that represents the applied organization assignment *entity* (3.2.9)

5.22.2
applied_person_and_organization_assignment

<application module: Person_organization_assignment_mim> *entity data type* (3.2.10) that is a type of *person_and_organization_assignment* (4.15.47) that represents the applied person and organization assignment *entity* (3.2.9)

5.23 Date_time_assignment_arm

5.23.1
Date_or_date_time_assignment

<application module: Date_time_assignment_arm> *application object* (3.1.78) that represents the date or date time assignment *entity* (3.2.9)

Note 1 to entry: A **Date_or_date_time_assignment** is an association of a *Calendar_date* (5.16.1) or a *Date_time* (5.16.2) with activity or product data.

5.24 Date_time_assignment_mim

5.24.1
applied_date_and_time_assignment

<application module: Date_time_assignment_mim> *entity data type* (3.2.10) that is a type of *date_and_time_assignment* (4.15.15) that represents the applied date and time assignment *entity* (3.2.9)

5.24.2
applied_date_assignment

<application module: Date_time_assignment_mim> *entity data type* (3.2.10) that is a type of *date_assignment* (4.15.16) that represents the applied date assignment *entity* (3.2.9)

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5.25 Security_classification_arm

5.25.1
Security_classification
<application module: Security_classification_arm> *application object* (3.1.78) that represents the security classification *entity* (3.2.9)

Note 1 to entry: A **Security_classification** is a level of confidentiality that can be applied to protect activity or product data against unauthorized usage.

5.25.2
Security_classification_assignment
<application module: Security_classification_arm> *application object* (3.1.78) that represents the security classification assignment *entity* (3.2.9)

Note 1 to entry: A **Security_classification_assignment** is an association of a *Security_classification* (5.25.1) with activity or product data.

5.26 Security_classification_mim

5.26.1
applied_security_classification_assignment
<application module: Security_classification_mim> *entity data type* (3.2.10) that is a type of *security_classification_assignment* (4.15.61) that represents the applied security classification assignment *entity* (3.2.9)

5.27 Product_categorization_arm

5.27.1
Product_category
<application module: Product_categorization_arm> *application object* (3.1.78) that represents the product category *entity* (3.2.9)

Note 1 to entry: A **Product_category** is a type of product that is defined for a purpose that is specific to a module or application protocol.

5.27.2
Product_category_assignment
<application module: Product_categorization_arm> *application object* (3.1.78) that represents the product category assignment *entity* (3.2.9)

Note 1 to entry: A **Product_category_assignment** is the inclusion of one or more products in a product category.

5.27.3
Product_category_hierarchy
<application module: Product_categorization_arm> *application object* (3.1.78) that represents the product category hierarchy *entity* (3.2.9)

Note 1 to entry: A **Product_category_hierarchy** is a hierarchical relationship between one instance of *Product_category* (5.27.1) and another.

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5.28 Product_identification_arm

5.28.1
Product
<application module: Product_identification_arm> *application object* (3.1.78) that represents the product *entity* (3.2.9)

Note 1 to entry: A **Product** is the identification of a product or of a type of product.

5.29 Product_version_arm

5.29.1
Product_version
<application module: Product_version_arm> *application object* (3.1.78) that represents the product version *entity* (3.2.9)

Note 1 to entry: A **Product_version** is a revision of a *Product* (5.28.1).

5.30 Product_view_definition_arm

5.30.1
Product_view_definition
<application module: Product_view_definition_arm> *application object* (3.1.78) that represents the product view definition *entity* (3.2.9)

Note 1 to entry: A **Product_view_definition** is a characterization of a *Product_version* (5.29.1) relevant in one or more application domains and for one or more life-cycle stages.

5.30.2
Product_definition_exchange_context
<application module: Product_view_definition_arm> *application object* (3.1.78) that is a type of *Additional_view_definition_context* (5.30.5) that represents the product definition exchange context *entity* (3.2.9)

Note 1 to entry: A **Product_definition_exchange_context** is a type of Additional_view_definition_context that provides the default_unit, default_language and/or default_context used for identification and descriptions.

5.30.3
View_definition_context
<application module: Product_view_definition_arm> *application object* (3.1.78) that represents the view definition context *entity* (3.2.9)

Note 1 to entry: A **View_definition_context** is the grouping of an application domain and a life-cycle stage.

5.30.4
Initial_view_definition_context
<application module: Product_view_definition_arm> *application object* (3.1.78) that is a type of *View_definition_context* (5.30.3) that represents the initial view definition context *entity* (3.2.9)

Note 1 to entry: An **Initial_view_definition_context** is a type of View_definition_context that is used as initial context for a *Product_view_definition* (5.30.1).

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5.30.5
Additional_view_definition_context
<application module: Product_view_definition_arm> *application object* (3.1.78) that is a type of *View_definition_context* (5.30.3) that represents the additional view definition context *entity* (3.2.9)

Note 1 to entry: An **Additional_view_definition_context** is a type of View_definition_context that is used as additional context for a *Product_view_definition* (5.30.1).

5.31 Product_version_relationship_arm

5.31.1
Product_version_relationship
<application module: Product_version_relationship_arm> *application object* (3.1.78) that represents the product version relationship *entity* (3.2.9)

Note 1 to entry: A **Product_version_relationship** is an association between two versions of *Product* (5.28.1).

5.31.2
Supplied_part_relationship
<application module: Product_version_relationship_arm> *application object* (3.1.78) that is a type of *Product_version_relationship* (5.31.1) that represents the supplied part relationship *entity* (3.2.9)

Note 1 to entry: A **Supplied_part_relationship** is a type of Product_version_relationship that relates two instances of *Product_version* (5.29.1) that represent the same object in different organizational contexts.

5.32 Identification_assignment_arm

5.32.1
Identification_assignment
<application module: Identification_assignment_arm> *application object* (3.1.78) that represents the identification assignment *entity* (3.2.9)

Note 1 to entry: An **Identification_assignment** is the assignment of an identifier to product or activity data.

5.33 Identification_assignment_mim

5.33.1
applied_identification_assignment
<application module: Identification_assignment_mim> *entity data type* (3.2.10) that is a type of *identification_assignment* (4.15.33) that represents the applied identification assignment *entity* (3.2.9)

5.34 Part_and_version_identification_arm

5.34.1
Part
<application module: Part_and_version_identification_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the part *entity* (3.2.9)

Note 1 to entry: A **Part** is a type of Product that collects the definitional information of the versions of either a *part* (3.1.80) or of a *non-countable material* (3.1.79).

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5.34.2
Part_version
<application module: Part_and_version_identification_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the part version *entity* (3.2.9)

Note 1 to entry: A **Part_version** is a type of Product_version that identifies a version of a part.

5.35 Part_view_definition_arm

5.35.1
Part_view_definition
<application module: Part_view_definition_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the part view definition *entity* (3.2.9)

Note 1 to entry: A **Part_view_definition** is a type of Product_view_definition that defines a characterization view of a version of a *Part* (5.34.1).

5.35.2
Initial_part_view_definition_context
<application module: Part_view_definition_arm> *application object* (3.1.78) that is a type of *Initial_view_definition_context* (5.30.4) that represents the initial part view definition context *entity* (3.2.9)

5.35.3
Additional_part_view_definition_context
<application module: Part_view_definition_arm> *application object* (3.1.78) that is a type of *Additional_view_definition_context* (5.30.5) that represents the additional part view definition context *entity* (3.2.9)

5.36 Product_relationship_arm

5.36.1
Product_relationship
<application module: Product_relationship_arm> *application object* (3.1.78) that represents the product relationship *entity* (3.2.9)

Note 1 to entry: A **Product_relationship** is an association between two *Product* (5.28.1) instances.

5.37 Alias_identification_arm

5.37.1
Alias_identification
<application module: Alias_identification_arm> *application object* (3.1.78) that is a type of *Identification_assignment* (5.32.1) that represents the alias identification *entity* (3.2.9)

Note 1 to entry: An **Alias_identification** is a type of Identification_assignment that provides an alias identifier to product or activity data.

5.38 Assembly_structure_arm

5.38.1
Assembly_component_relationship
<application module: Assembly_structure_arm> *application object* (3.1.78) that is a type of *Product_occurrence_definition_relationship* (5.38.5) that represents the assembly component relationship *entity* (3.2.9)

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5.38.2
Component_upper_level_identification
<application module: Assembly_structure_arm> *application object* (3.1.78) that is a type of *Assembly_component_relationship* (5.38.1) that represents the component upper level identification *entity* (3.2.9)

5.38.3
Multi_level_reference_designator
<application module: Assembly_structure_arm> *application object* (3.1.78) that is a type of *Assembly_component_relationship* (5.38.1) that represents the multi level reference designator *entity* (3.2.9)

Note 1 to entry: A **Multi_level_reference_designator** is a type of Assembly_component_relationship that specifies the relationship between an assembly and a constituent if the assembly is not the immediate parent for the constituent and there are several hierarchical levels between the assembly and the constituent.

5.38.4
Next_assembly_usage
<application module: Assembly_structure_arm> *application object* (3.1.78) that is a type of *Assembly_component_relationship* (5.38.1) that represents the next assembly usage *entity* (3.2.9)

5.38.5
Product_occurrence_definition_relationship
<application module: Assembly_structure_arm> *application object* (3.1.78) that represents the product occurrence definition relationship *entity* (3.2.9)

Note 1 to entry: A **Product_occurrence_definition_relationship** is an occurrence relationship between two instances of *Product_view_definition* (5.30.1).

5.38.6
Promissory_usage
<application module: Assembly_structure_arm> *application object* (3.1.78) that is a type of *Assembly_component_relationship* (5.38.1) that represents the promissory usage *entity* (3.2.9)

5.39 Contextual_shape_positioning_arm

5.39.1
Axis_placement_mapping
<application module: Contextual_shape_positioning_arm> *application object* (3.1.78) that represents the axis placement mapping *entity* (3.2.9)

Note 1 to entry: An **Axis_placement_mapping** is a geometric transformation that is defined by a source and a target *Representation_item* (5.12.5) that are mapped onto each other.

5.39.2
Contextual_shape_representation
<application module: Contextual_shape_positioning_arm> *application object* (3.1.78) that represents the contextual shape representation *entity* (3.2.9)

Note 1 to entry: A **Contextual_shape_representation** is an association of a *Geometric_model_relationship* (5.366.2) to a product structure relationship.

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5.39.3
Geometric_composition_with_operator_transformation
<application module: Contextual_shape_positioning_arm> *application object* (3.1.78) that is a type of *Geometric_relationship_with_operator_transformation* (5.39.7) and *Definitional_representation_relationship* (5.366.1) that represents the geometric composition with operator transformation *entity* (3.2.9)

Note 1 to entry: A **Geometric_composition_with_operator_transformation** is a type of Definitional_representation_relationship and a type of Geometric_relationship_with_operator_transformation.

5.39.4
Geometric_composition_with_placement_transformation
<application module: Contextual_shape_positioning_arm> *application object* (3.1.78) that is a type of *Geometric_relationship_with_placement_transformation* (5.39.8) and *Definitional_representation_relationship* (5.366.1) that represents the geometric composition with placement transformation *entity* (3.2.9)

Note 1 to entry: A **Geometric_composition_with_placement_transformation** is a type of Definitional_representation_relationship and a type of Geometric_relationship_with_placement_transformation.

5.39.5
Geometric_placement_model
<application module: Contextual_shape_positioning_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the geometric placement model *entity* (3.2.9)

Note 1 to entry: A **Geometric_placement_model** is a type of Geometric_model that contains exactly one *Geometric_placement_operation* (5.10.14).

5.39.6
Geometric_model_relationship_with_transformation
<application module: Contextual_shape_positioning_arm> *application object* (3.1.78) that is a type of *Geometric_model_relationship* (5.366.2) that represents the geometric model relationship with transformation *entity* (3.2.9)

5.39.7
Geometric_relationship_with_operator_transformation
<application module: Contextual_shape_positioning_arm> *application object* (3.1.78) that is a type of *Geometric_model_relationship_with_transformation* (5.39.6) that represents the geometric relationship with operator transformation *entity* (3.2.9)

5.39.8
Geometric_relationship_with_placement_transformation
<application module: Contextual_shape_positioning_arm> *application object* (3.1.78) that is a type of *Geometric_model_relationship_with_transformation* (5.39.6) that represents the geometric relationship with placement transformation *entity* (3.2.9)

Note 1 to entry: A **Geometric_relationship_with_placement_transformation** is a type of Geometric_model_relationship_with_transformation where the transformation is defined indirectly by one or several pairs of *Representation_item* (5.12.5) instances that are mapped onto each other.

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5.40 Property_assignment_arm

5.40.1
Applied_independent_property
<application module: Property_assignment_arm> *application object* (3.1.78) that is a type of *Assigned_property* (5.40.2) that represents the applied independent property *entity* (3.2.9)

Note 1 to entry: An **Applied_independent_property** is a type of Assigned_property that is associated with an *Independent_property* (5.44.1).

5.40.2
Assigned_property
<application module: Property_assignment_arm> *application object* (3.1.78) that represents the assigned property *entity* (3.2.9)

Note 1 to entry: An **Assigned_property** is a property that is assigned to product data.

5.40.3
Applied_independent_property_relationship
<application module: Property_assignment_arm> *application object* (3.1.78) that represents the applied independent property relationship *entity* (3.2.9)

Note 1 to entry: An **Applied_independent_property_relationship** is a relationship between two *Applied_independent_property* (5.40.1) objects.

5.40.4
Property_definition_relationship
<application module: Property_assignment_arm> *application object* (3.1.78) that represents the property definition relationship *entity* (3.2.9)

Note 1 to entry: A **Property_definition_relationship** is a relationship between two *Assigned_property* (5.40.2) objects.

5.40.5
Property_definition_representation
<application module: Property_assignment_arm> *application object* (3.1.78) that represents the property definition representation *entity* (3.2.9)

5.40.6
Property_representation
<application module: Property_assignment_arm> *application object* (3.1.78) that is a type of *Property_definition_representation* (5.40.5) that represents the property representation *entity* (3.2.9)

5.41 Shape_property_assignment_arm

5.41.1
Assigned_shape_property
<application module: Shape_property_assignment_arm> *application object* (3.1.78) that is a type of *Assigned_property* (5.40.2) that represents the assigned shape property *entity* (3.2.9)

Note 1 to entry: An **Assigned_shape_property** is a type of Assigned_property for identifying a shape property for an object.

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5.41.2
Item_identified_representation_usage
<application module: Shape_property_assignment_arm> *application object* (3.1.78) that represents the item identified representation usage *entity* (3.2.9)

Note 1 to entry: An **Item_identified_representation_usage** is an identification of a single, list or set of *Representation_item* (5.12.5) instances within a *Representation* (5.12.2) as the element(s) that represent an identified target.

5.41.3
Shape_dependent_property_representation
<application module: Shape_property_assignment_arm> *application object* (3.1.78) that is a type of *Property_definition_representation* (5.40.5) that represents the shape dependent property representation *entity* (3.2.9)

5.41.4
Shape_description_association
<application module: Shape_property_assignment_arm> *application object* (3.1.78) that is a type of *Property_definition_representation* (5.40.5) that represents the shape description association *entity* (3.2.9)

5.41.5
Shape_element_description_association
<application module: Shape_property_assignment_arm> *application object* (3.1.78) that is a type of *Property_definition_representation* (5.40.5) that represents the shape element description association *entity* (3.2.9)

Note 1 to entry: A **Shape_element_description_association** is a type of Property_definition_representation that is an association of a geometric representation of a *Shape_element* (5.41.6) or a *Shape_element_relationship* (5.41.7).

5.41.6
Shape_element
<application module: Shape_property_assignment_arm> *application object* (3.1.78) that represents the shape element *entity* (3.2.9)

Note 1 to entry: A **Shape_element** is a portion of a shape property of product data.

5.41.7
Shape_element_relationship
<application module: Shape_property_assignment_arm> *application object* (3.1.78) that represents the shape element relationship *entity* (3.2.9)

Note 1 to entry: A **Shape_element_relationship** is a relationship between two instances of *Shape_element* (5.41.6).

5.42 Shape_property_assignment_mim

5.42.1
geometric_item_specific_usage
<application module: Shape_property_assignment_mim> *entity data type* (3.2.10) that is a type of *item_identified_representation_usage* (4.20.5) that represents the geometric item specific usage *entity* (3.2.9)

Note 1 to entry: A **geometric_item_specific_usage** is a type of item_identified_representation_usage that is used for the implementation of the ARM concept *Shape_element* (5.41.6).

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5.42.2
chain_based_geometric_item_specific_usage
<application module: Shape_property_assignment_mim> *entity data type* (3.2.10) that is a type of *geometric_item_specific_usage* (5.42.1) and *chain_based_item_identified_representation_usage* (4.20.1) that represents the chain based geometric item specific usage *entity* (3.2.9)

Note 1 to entry: A **chain_based_geometric_item_specific_usage** is a type of chain_based_item_identified_representation_usage and a type of geometric_item_specific_usage that is used for the implementation of the ARM concept *Shape_element* (5.41.6).

5.43 External_model_arm

5.43.1
External_geometric_model
<application module: External_model_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the external geometric model *entity* (3.2.9)

Note 1 to entry: An **External_geometric_model** is a type of 3D Geometric_model whose content is provided in an external file.

5.44 Independent_property_arm

5.44.1
Independent_property
<application module: Independent_property_arm> *application object* (3.1.78) that represents the independent property *entity* (3.2.9)

Note 1 to entry: An **Independent_property** is a type of property.

5.44.2
Independent_property_relationship
<application module: Independent_property_arm> *application object* (3.1.78) that represents the independent property relationship *entity* (3.2.9)

Note 1 to entry: An **Independent_property_relationship** is a relationship between two instances of *Independent_property* (5.44.1).

5.45 Independent_property_representation_arm

5.45.1
Independent_property_representation
<application module: Independent_property_representation_arm> *application object* (3.1.78) that is a type of *Property_definition_representation* (5.40.5) that represents the independent property representation *entity* (3.2.9)

5.46 Geometric_validation_property_representation_arm

5.46.1
Geometric_validation_property
<application module: Geometric_validation_property_representation_arm> *application object* (3.1.78) that represents the geometric validation property *entity* (3.2.9)

Note 1 to entry: A **Geometric_validation_property** is the association of a solid or surface *Geometric_model* (5.10.12) with a representation of a property derived from the geometry it contains.

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5.47 Process_property_assignment_arm

5.47.1
Activity_property
<application module: Process_property_assignment_arm> *application object* (3.1.78) that represents the activity property *entity* (3.2.9)

Note 1 to entry: An **Activity_property** is a property of an *Activity* (5.56.1) or of an *Activity_method* (5.58.1).

5.47.2
Activity_property_representation
<application module: Process_property_assignment_arm> *application object* (3.1.78) that represents the activity property representation *entity* (3.2.9)

Note 1 to entry: An **Activity_property_representation** is an association between an *Activity_property* (5.47.1) and one of its representations.

5.47.3
Applied_independent_activity_property
<application module: Process_property_assignment_arm> *application object* (3.1.78) that is a type of *Activity_property* (5.47.1) that represents the applied independent activity property *entity* (3.2.9)

Note 1 to entry: An **Applied_independent_activity_property** is a type of Activity_property that is an association of an Activity_property with an *Independent_property* (5.44.1).

5.48 Product_view_definition_relationship_arm

5.48.1
View_definition_relationship
<application module: Product_view_definition_relationship_arm> *application object* (3.1.78) that represents the view definition relationship *entity* (3.2.9)

Note 1 to entry: A **View_definition_relationship** is an association between two instances of *Product_view_definition* (5.30.1).

5.48.2
View_definition_usage
<application module: Product_view_definition_relationship_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the view definition usage *entity* (3.2.9)

Note 1 to entry: A **View_definition_usage** is a type of View_definition_relationship that specifies a directed association between two instances of *Product_view_definition* (5.30.1).

5.49 Work_request_arm

5.49.1
Activity_method_assignment
<application module: Work_request_arm> *application object* (3.1.78) that represents the activity method assignment *entity* (3.2.9)

Note 1 to entry: An **Activity_method_assignment** is an association between an *Activity_method* (5.58.1) and a *Work_request* (5.49.3).

5.49.2

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Affected_items_assignment
<application module: Work_request_arm> *application object* (3.1.78) that represents the affected items assignment *entity* (3.2.9)

Note 1 to entry: An **Affected_items_assignment** is an association of a *Work_request* (5.49.3) with the product or activity data that are subjects of this Work_request.

5.49.3
Work_request
<application module: Work_request_arm> *application object* (3.1.78) that represents the work request *entity* (3.2.9)

Note 1 to entry: A **Work_request** is the solicitation for some work to be done.

5.49.4
Work_request_relationship
<application module: Work_request_arm> *application object* (3.1.78) that represents the work request relationship *entity* (3.2.9)

Note 1 to entry: A **Work_request_relationship** is a relationship between two *Work_request* (5.49.3) objects.

5.49.5
Work_request_status
<application module: Work_request_arm> *application object* (3.1.78) that represents the work request status *entity* (3.2.9)

Note 1 to entry: A **Work_request_status** is an association of a status with a *Work_request* (5.49.3).

5.50 Work_request_mim

5.50.1
applied_action_request_assignment
<application module: Work_request_mim> *entity data type* (3.2.10) that is a type of *action_request_assignment* (4.15.4) that represents the applied action request assignment *entity* (3.2.9)

5.51 Work_order_arm

5.51.1
Directed_activity
<application module: Work_order_arm> *application object* (3.1.78) that is a type of *Activity* (5.56.1) that represents the directed activity *entity* (3.2.9)

5.51.2
Directed_activity_items_assignment
<application module: Work_order_arm> *application object* (3.1.78) that represents the directed activity items assignment *entity* (3.2.9)

5.51.3
Work_order
<application module: Work_order_arm> *application object* (3.1.78) that represents the work order *entity* (3.2.9)

Note 1 to entry: A **Work_order** is the authorization for one or more *Activity* (5.56.1) objects to be performed.

5.51.4

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Work_order_relationship
<application module: Work_order_arm> *application object* (3.1.78) that represents the work order relationship *entity* (3.2.9)

Note 1 to entry: A **Work_order_relationship** is a relationship between two *Work_order* (5.51.3) objects.

5.52 Work_order_mim

5.52.1
applied_directed_action_assignment
<application module: Work_order_mim> *entity data type* (3.2.10) that is a type of *directed_action_assignment* (4.1.13) that represents the applied directed action assignment *entity* (3.2.9)

5.53 Certification_arm

5.53.1
Certification
<application module: Certification_arm> *application object* (3.1.78) that represents the certification *entity* (3.2.9)

Note 1 to entry: A **Certification** is a certificate.

5.53.2
Certification_assignment
<application module: Certification_arm> *application object* (3.1.78) that represents the certification assignment *entity* (3.2.9)

Note 1 to entry: A **Certification_assignment** is an association of a *Certification* (5.53.1) with activity or product data.

5.54 Certification_mim

5.54.1
applied_certification_assignment
<application module: Certification_mim> *entity data type* (3.2.10) that is a type of *certification_assignment* (4.15.10) that represents the applied certification assignment *entity* (3.2.9)

5.55 Product_replacement_arm

5.55.1
Alternate_product_relationship
<application module: Product_replacement_arm> *application object* (3.1.78) that represents the alternate product relationship *entity* (3.2.9)

Note 1 to entry: An **Alternate_product_relationship** is an association between two instances of *Product* (5.28.1).

5.55.2
Assembly_relationship_substitution
<application module: Product_replacement_arm> *application object* (3.1.78) that represents the assembly relationship substitution *entity* (3.2.9)

Note 1 to entry: An **Assembly_relationship_substitution** is a relationship that indicates that an *Assembly_component_relationship* (5.38.1) may be substituted by another Assembly_component_relationship.

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5.56 Activity_arm

5.56.1
Activity
<application module: Activity_arm> *application object* (3.1.78) that represents the activity *entity* (3.2.9)

Note 1 to entry: An **Activity** is the identification of the occurrence of an action that has taken place, is taking place, or is expected to take place in the future.

5.56.2
Activity_relationship
<application module: Activity_arm> *application object* (3.1.78) that represents the activity relationship *entity* (3.2.9)

Note 1 to entry: An **Activity_relationship** is a relationship between two instances of *Activity* (5.56.1).

5.56.3
Activity_status
<application module: Activity_arm> *application object* (3.1.78) that represents the activity status *entity* (3.2.9)

Note 1 to entry: An **Activity_status** is the assignment of a status to an *Activity* (5.56.1) .

5.56.4
Applied_activity_assignment
<application module: Activity_arm> *application object* (3.1.78) that represents the applied activity assignment *entity* (3.2.9)

Note 1 to entry: An **Applied_activity_assignment** is an association of an *Activity* (5.56.1) with product or activity data.

5.57 Activity_mim

5.57.1
applied_action_assignment
<application module: Activity_mim> *entity data type* (3.2.10) that is a type of *action_assignment* (4.15.1) that represents the applied action assignment *entity* (3.2.9)

Note 1 to entry: An **applied_action_assignment** is an *action* (4.1.1) related to the data that are affected by the action.

5.58 Activity_method_arm

5.58.1
Activity_method
<application module: Activity_method_arm> *application object* (3.1.78) that represents the activity method *entity* (3.2.9)

Note 1 to entry: An **Activity_method** is a way to carry out an *Activity* (5.56.1).

5.59 Dimension_tolerance_arm

5.59.1

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Angular_location
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that is a type of *Dimensional_location* (5.59.11) that represents the angular location *entity* (3.2.9)

5.59.2
Angular_size
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that is a type of *Dimensional_size* (5.59.6) that represents the angular size *entity* (3.2.9)

5.59.3
Curved_distance
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that is a type of *Dimensional_location* (5.59.11) that represents the curved distance *entity* (3.2.9)

Note 1 to entry: A **Curved_distance** is a type of Dimensional_location that represents the arc length along a curve.

5.59.4
Curved_size
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that is a type of *Dimensional_size* (5.59.6) that represents the curved size *entity* (3.2.9)

Note 1 to entry: A **Curved_size** is a type of Dimensional_size that is the tolerance on a dimension for a curve measured along the entire path of a curve.

5.59.5
Diameter_size
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that is a type of *Dimensional_size* (5.59.6) that represents the diameter size *entity* (3.2.9)

Note 1 to entry: A **Diameter_size** is a type of Dimensional_size that is a diameter of a circular, cylindrical, spherical, or toroidal feature.

5.59.6
Dimensional_size
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_dimension* (5.59.8) that represents the dimensional size *entity* (3.2.9)

5.59.7
Dimension_value_with_limitation
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that represents the dimension value with limitation *entity* (3.2.9)

Note 1 to entry: A **Dimension_value_with_limitation** is the value range of a toleranced geometric dimension.

5.59.8
Geometric_dimension
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that represents the geometric dimension *entity* (3.2.9)

Note 1 to entry: A **Geometric_dimension** is the specification of size of an element of a shape, or a displacement of one shape element relative to another shape element.

5.59.9

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Limits_and_fits
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that represents the limits and fits *entity* (3.2.9)

Note 1 to entry: A **Limits_and_fits** is a tolerance specified by reference to the limits-and-fits system standardized by ISO 286.

5.59.10
Linear_distance
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that is a type of *Dimensional_location* (5.59.11) that represents the linear distance *entity* (3.2.9)

Note 1 to entry: A **Linear_distance** is a type of Dimensional_location that specifies the distance along a straight line between two elements of a shape.

5.59.11
Dimensional_location
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_dimension* (5.59.8) that represents the dimensional location *entity* (3.2.9)

Note 1 to entry: A **Dimensional_location** is a type of Geometric_dimension that represents the specification of the distance or angle that one feature is displaced from another feature.

5.59.12
Edge_of_undefined_shape_size
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that is a type of *Dimensional_size* (5.59.6) that represents the edge of undefined shape size *entity* (3.2.9)

Note 1 to entry: An **Edge_of_undefined_shape_size** is a type of *Geometric_dimension* (5.59.8) that represents an "edge of undefined shape" size as defined in ISO 13715.

5.59.13
Machining_feature_size
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that is a type of *Dimensional_size* (5.59.6) that represents the machining feature size *entity* (3.2.9)

5.59.14
Measurement_path
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that represents the measurement path *entity* (3.2.9)

Note 1 to entry: A **Measurement_path** is a path, direction, or domain of applicability for a dimension or tolerance.

5.59.15
Plus_minus_bounds
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that represents the plus minus bounds *entity* (3.2.9)

5.59.16
Angle_plus_minus_bounds
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that is a type of *Plus_minus_bounds* (5.59.15) that represents the angle plus minus bounds *entity* (3.2.9)

Note 1 to entry: An **Angle_plus_minus_bounds** is a type of Plus_minus_bounds in which the domain is a plane angle.

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5.59.17
Length_plus_minus_bounds
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that is a type of *Plus_minus_bounds* (5.59.15) that represents the length plus minus bounds *entity* (3.2.9)

Note 1 to entry: A **Length_plus_minus_bounds** is a type of Plus_minus_bounds in which the domain is a distance.

5.59.18
Radial_size
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that is a type of *Dimensional_size* (5.59.6) that represents the radial size *entity* (3.2.9)

Note 1 to entry: A **Radial_size** is a type of Dimensional_size that is a radius of a circular, cylindrical, spherical, or toroidal feature.

5.59.19
Thickness_size
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that is a type of *Dimensional_size* (5.59.6) that represents the thickness size *entity* (3.2.9)

Note 1 to entry: A **Thickness_size** is a type of Dimensional_size that represents a thickness.

5.59.20
Tolerance_range
<application module: Dimension_tolerance_arm> *application object* (3.1.78) that represents the tolerance range *entity* (3.2.9)

5.60 Dimension_tolerance_mim

5.60.1
externally_defined_dimension_definition
<application module: Dimension_tolerance_mim> *entity data type* (3.2.10) that is a type of *dimensional_size* (4.43.6) and *externally_defined_item* (4.11.3) that represents the externally defined dimension definition *entity* (3.2.9)

Note 1 to entry: An **externally_defined_dimension_definition** is a type of dimensional_size and externally_defined_item that enables the specification of a kind of dimension that is not defined in this standard.

5.61 Geometric_tolerance_arm

5.61.1
Affected_plane_tolerance_zone
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Directed_or_oriented_tolerance_zone* (5.61.23) that represents the affected plane tolerance zone *entity* (3.2.9)

5.61.2
All_around_shape_element
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Continuous_shape_element* (5.61.11) that represents the all around shape element *entity* (3.2.9)

Note 1 to entry: An **All_around_shape_element** is a type of *Composite_shape_element* (5.611.2) that represents the concept of "all around" as defined in ISO 1101.

5.61.3

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All_around_shape_element_along_collection_plane
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *All_around_shape_element* (5.61.2) that represents the all around shape element along collection plane *entity* (3.2.9)

Note 1 to entry: An **All_around_shape_element_along_collection_plane** is a type of All_around_shape_element that represents the "all around" along a specified "collection plane" as defined in ISO 1101.

5.61.4
Angularity_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_tolerance* (5.61.27) that represents the angularity tolerance *entity* (3.2.9)

Note 1 to entry: An **Angularity_tolerance** is a type of Geometric_tolerance that is a constraint on the location of a surface, of a centre plane, of an edge, or of an axis that lies theoretically at a specified angle (other than 90 degrees) from a datum plane or from a datum axis.

5.61.5
Axis_placement_shape_element
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the axis placement shape element *entity* (3.2.9)

Note 1 to entry: An **Axis_placement_shape_element** is a type of Shape_element that is associated with an *Axis_placement* (5.10.1).

5.61.6
Between_shape_element
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Continuous_shape_element* (5.61.11) that represents the between shape element *entity* (3.2.9)

Note 1 to entry: A **Between_shape_element** is a type of Continuous_shape_element where some of the composing members are marked as forming elements of the borders of the continuous region.

5.61.7
Circular_runout_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_tolerance* (5.61.27) that represents the circular runout tolerance *entity* (3.2.9)

Note 1 to entry: A **Circular_runout_tolerance** is a type of Geometric_tolerance that constrains the deviation of features constructed about an axis or at right angles to an axis.

5.61.8
Coaxiality_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_tolerance* (5.61.27) that represents the coaxiality tolerance *entity* (3.2.9)

Note 1 to entry: A **Coaxiality_tolerance** is a type of Geometric_tolerance that constrains a centre point or plane of a surface of revolution, or of circular elements, about a datum feature.

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5.61.9
Concentricity_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_tolerance* (5.61.27) that represents the concentricity tolerance *entity* (3.2.9)

Note 1 to entry: A **Concentricity_tolerance** is a type of Geometric_tolerance that controls the median points of a surface of revolution relative to a datum axis.

5.61.10
Contacting_feature
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the contacting feature *entity* (3.2.9)

Note 1 to entry: A **Contacting_feature** is a type of Shape_element that is non-definitional and for which the rules governing contacting feature defined in ISO 5459 shall apply.

5.61.11
Continuous_shape_element
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Composite_shape_element* (5.611.2) that represents the continuous shape element *entity* (3.2.9)

Note 1 to entry: A **Continuous_shape_element** is a type of Composite_shape_element where the geometric elements associated with the underlying *Shape_element* (5.41.6) members are touching and thus establish a continuous region.

5.61.12
Cylindricity_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_tolerance* (5.61.27) that represents the cylindricity tolerance *entity* (3.2.9)

5.61.13
Datum
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the datum *entity* (3.2.9)

Note 1 to entry: A **Datum** is a type of Shape_element from which dimensions and tolerances are referenced.

5.61.14
Datum_feature
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the datum feature *entity* (3.2.9)

Note 1 to entry: A **Datum_feature** is a type of Shape_element on the boundary of the shape of a product.

5.61.15
Datum_reference_compartment
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *General_datum_reference* (5.61.26) that represents the datum reference compartment *entity* (3.2.9)

Note 1 to entry: A **Datum_reference_compartment** is a type of General_datum_reference that represents the compartment of either the primary, secondary or tertiary datum in a feature control frame.

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5.61.16
Datum_reference_element
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *General_datum_reference* (5.61.26) that represents the datum reference element *entity* (3.2.9)

Note 1 to entry: A **Datum_reference_element** is a type of General_datum_reference that represents a single datum reference of a common datum with a *Datum_reference_compartment* (5.61.15).

5.61.17
Datum_reference_modifier_with_value
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that represents the datum reference modifier with value *entity* (3.2.9)

Note 1 to entry: A **Datum_reference_modifier_with_value** is an association between a **modifier_type** and a **modifier_value** that defines the specific boundary size of the associated feature for establishing a datum.

5.61.18
Datum_system
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the datum system *entity* (3.2.9)

Note 1 to entry: A **Datum_system** is a type of Shape_element that is non-definitional and that represents the ordered collection of one to three datum reference compartments within a geometric tolerance frame.

5.61.19
Datum_system_with_associated_model_coordinate_system
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Axis_placement_shape_element* (5.61.5) and *Datum_system* (5.61.18) that represents the datum system with associated model coordinate system *entity* (3.2.9)

Note 1 to entry: A **Datum_system_with_associated_model_coordinate_system** is a type of Axis_placement_shape_element and a type of Datum_system to represent the relation between a datum system and a model coordinate system as defined in ISO 16792.

5.61.20
Datum_target
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the datum target *entity* (3.2.9)

5.61.21
Dimensional_location_with_datum_feature
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Datum_feature* (5.61.14) and *Dimensional_location* (5.59.11) that represents the dimensional location with datum feature *entity* (3.2.9)

Note 1 to entry: A **Dimensional_location_with_datum_feature** is a type of Datum_feature and type of Dimensional_location that shall be used when the datum is established from two opposing *Shape_element* (5.41.6) that define a feature of size.

5.61.22
Dimensional_size_with_datum_feature
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Datum_feature* (5.61.14) and *Dimensional_size* (5.59.6) that represents the dimensional size with datum feature *entity* (3.2.9)

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Note 1 to entry: A **Dimensional_size_with_datum_feature** is a type of Datum_feature and type of Dimensional_size.

5.61.23
Directed_or_oriented_tolerance_zone
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Tolerance_zone* (5.61.55) that represents the directed or oriented tolerance zone *entity* (3.2.9)

Note 1 to entry: A **Directed_or_oriented_tolerance_zone** is a type of Tolerance_zone that includes additional direction or orientation information for the tolerance zone.

5.61.24
Directed_tolerance_zone
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Tolerance_zone_with_datum* (5.61.56) that represents the directed tolerance zone *entity* (3.2.9)

Note 1 to entry: A **Directed_tolerance_zone** is a type of Tolerance_zone_with_datum that represents an "intersection plane" for a geometric tolerance as defined in ISO 1101.

5.61.25
Flatness_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_tolerance* (5.61.27) that represents the flatness tolerance *entity* (3.2.9)

Note 1 to entry: A **Flatness_tolerance** is a type of Geometric_tolerance that constraints the form of a planar feature.

5.61.26
General_datum_reference
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the general datum reference *entity* (3.2.9)

Note 1 to entry: A **General_datum_reference** is a type of Shape_element that is non-definitional and that represents the occurrence of a *Datum* (5.61.13) within a *Datum_system* (5.61.18).

5.61.27
Geometric_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that represents the geometric tolerance *entity* (3.2.9)

Note 1 to entry: A **Geometric_tolerance** is a specification of the allowed deviation of some element of the shape of a product from its theoretically exact shape.

5.61.28
Geometric_tolerance_auxiliary_classification
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that represents the geometric tolerance auxiliary classification *entity* (3.2.9)

Note 1 to entry: A **Geometric_tolerance_auxiliary_classification** is an additional classification applied to a *Geometric_tolerance* (5.61.27)

5.61.29
Geometric_tolerance_relationship
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that represents the geometric tolerance relationship *entity* (3.2.9)

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Note 1 to entry: A **Geometric_tolerance_relationship** is a relationship between two instances of *Geometric_tolerance* (5.61.27).

5.61.30
Gps_filtration_specification
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that represents the gps filtration specification *entity* (3.2.9)

Note 1 to entry: A **Gps_filtration_specification** is a specification of the filtering of the toleranced feature.

5.61.31
Gps_filter
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that represents the gps filter *entity* (3.2.9)

Note 1 to entry: A **Gps_filter** is a specification of a filtering element of the toleranced feature.

5.61.32
Line_profile_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_tolerance* (5.61.27) that represents the line profile tolerance *entity* (3.2.9)

Note 1 to entry: A **Line_profile_tolerance** is a type of Geometric_tolerance that specifies the definition of a uniform boundary along the true profile within which the elements of the toleranced surface shall lie.

5.61.33
Non_uniform_zone_definition
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Tolerance_zone_definition* (5.61.57) that represents the non uniform zone definition *entity* (3.2.9)

5.61.34
Parallelism_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_tolerance* (5.61.27) that represents the parallelism tolerance *entity* (3.2.9)

Note 1 to entry: A **Parallelism_tolerance** is a type of Geometric_tolerance that specifies that a surface or a curve shall be parallel to a reference datum, with an allowed amount of deviation.

5.61.35
Perpendicularity_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_tolerance* (5.61.27) that represents the perpendicularity tolerance *entity* (3.2.9)

Note 1 to entry: A **Perpendicularity_tolerance** is a type of Geometric_tolerance that is a constraint that specifies that a surface or a curve shall be perpendicular to a reference datum with an allowed amount of deviation.

5.61.36
Placed_target
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Datum_target* (5.61.20) that represents the placed target *entity* (3.2.9)

Note 1 to entry: A **Placed_target** is a type of Datum_target that specifies a Datum_target that is represented implicitly by parameters.

5.61.37

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Plane_shape_element
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the plane shape element *entity* (3.2.9)

Note 1 to entry: A **Plane_shape_element** is a type of Shape_element that is associated with a *Plane* (5.470.14).

5.61.38
Point_shape_element
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the point shape element *entity* (3.2.9)

Note 1 to entry: A **Point_shape_element** is a type of Shape_element that is associated with a *Point* (5.10.5).

5.61.39
Position_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_tolerance* (5.61.27) that represents the position tolerance *entity* (3.2.9)

Note 1 to entry: A **Position_tolerance** is a type of Geometric_tolerance that controls the position of a *Shape_element* (5.41.6) that is a feature of size.

5.61.40
Projected_zone_definition
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Tolerance_zone_definition* (5.61.57) that represents the projected zone definition *entity* (3.2.9)

5.61.41
Projected_zone_definition_with_offset
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Projected_zone_definition* (5.61.40) that represents the projected zone definition with offset *entity* (3.2.9)

5.61.42
Roundness_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_tolerance* (5.61.27) that represents the roundness tolerance *entity* (3.2.9)

Note 1 to entry: A **Roundness_tolerance** is a type of Geometric_tolerance that specifies a tolerance zone bounded by two concentric circles within which each circular element of a surface must lie.

5.61.43
Oriented_tolerance_zone
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Tolerance_zone_with_datum* (5.61.56) that represents the oriented tolerance zone *entity* (3.2.9)

Note 1 to entry: An **Oriented_tolerance_zone** is a type of Tolerance_zone_with_datum that represents an "orientation plane" for a geometric tolerance as defined in ISO 1101.

5.61.44
Runout_zone_definition
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Tolerance_zone_definition* (5.61.57) that represents the runout zone definition *entity* (3.2.9)

Note 1 to entry: A **Runout_zone_definition** is a type of Tolerance_zone_definition that is defined by the orientation of the measurement of the toleranced *Shape_element* (5.41.6) to the *Centre_of_symmetry* (5.131.3) of a datum feature.

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5.61.45
Straightness_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_tolerance* (5.61.27) that represents the straightness tolerance *entity* (3.2.9)

Note 1 to entry: A **Straightness_tolerance** is a type of Geometric_tolerance that specifies a tolerance zone within which the considered element of a feature or a derived median line must lie.

5.61.46
Surface_profile_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_tolerance* (5.61.27) that represents the surface profile tolerance *entity* (3.2.9)

Note 1 to entry: A **Surface_profile_tolerance** is a type of Geometric_tolerance that is the definition of a uniform boundary along an ideal profile within which the elements of a surface must lie.

5.61.47
Symmetry_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_tolerance* (5.61.27) that represents the symmetry tolerance *entity* (3.2.9)

Note 1 to entry: A **Symmetry_tolerance** is a type of Geometric_tolerance that is a constraint on the amount of deviation a toleranced element may have from being symmetrical to a datum.

5.61.48
Target_area
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Datum_target* (5.61.20) that represents the target area *entity* (3.2.9)

Note 1 to entry: A **Target_area** is a type of Datum_target that specifies an area bounded by a closed *Shape_element* (5.41.6).

5.61.49
Target_circle
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Placed_target* (5.61.36) that represents the target circle *entity* (3.2.9)

Note 1 to entry: A **Target_circle** is a type of Placed_target that specifies a *Datum_target* (5.61.20) that is defined by an implicit circle.

5.61.50
Target_circular_curve
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Placed_target* (5.61.36) that represents the target circular curve *entity* (3.2.9)

Note 1 to entry: A **Target_circular_curve** is a type of Placed_target that specifies a *Datum_target* (5.61.20) that is defined by an implicit circular curve.

5.61.51
Target_curve
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Datum_target* (5.61.20) that represents the target curve *entity* (3.2.9)

Note 1 to entry: A **Target_curve** is a type of Datum_target that is specified by a single curve.

5.61.52

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Target_point
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Placed_target* (5.61.36) that represents the target point *entity* (3.2.9)

Note 1 to entry: A **Target_point** is a type of Placed_target that specifies a *Datum_target* (5.61.20) that is defined by a single implicit point.

5.61.53
Target_rectangle
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Placed_target* (5.61.36) that represents the target rectangle *entity* (3.2.9)

Note 1 to entry: A **Target_rectangle** is a type of Placed_target that specifies a *Datum_target* (5.61.20) that is defined by an implicit rectangle.

5.61.54
Target_straight_line
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Placed_target* (5.61.36) that represents the target straight line *entity* (3.2.9)

Note 1 to entry: A **Target_straight_line** is a type of Placed_target that specifies a *Datum_target* (5.61.20) that is defined by an implicit straight line.

5.61.55
Tolerance_zone
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the tolerance zone *entity* (3.2.9)

Note 1 to entry: A **Tolerance_zone** is a type of Shape_element that represents a tolerance zone as defined in ISO 1101.

5.61.56
Tolerance_zone_with_datum
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Directed_or_oriented_tolerance_zone* (5.61.23) that represents the tolerance zone with datum *entity* (3.2.9)

Note 1 to entry: A **Tolerance_zone_with_datum** is a type of Directed_or_oriented_tolerance_zone that includes direction or orientation classification with respect to referenced features.

5.61.57
Tolerance_zone_definition
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that represents the tolerance zone definition *entity* (3.2.9)

Note 1 to entry: A **Tolerance_zone_definition** is the specification of the set of *Geometric_tolerance* (5.61.27) for which the *Tolerance_zone* (5.61.55) defines the zone.

5.61.58
Total_runout_tolerance
<application module: Geometric_tolerance_arm> *application object* (3.1.78) that is a type of *Geometric_tolerance* (5.61.27) that represents the total runout tolerance *entity* (3.2.9)

Note 1 to entry: A **Total_runout_tolerance** is a type of Geometric_tolerance that constrains the deviation features constructed about an axis or at right angles to an axis.

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5.62 Geometric_tolerance_mim

5.62.1
feature_for_datum_target_relationship
<application module: Geometric_tolerance_mim> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) that represents the feature for datum target relationship *entity* (3.2.9)

Note 1 to entry: A **feature_for_datum_target_relationship** is a type of shape_aspect_relationship that defines the nominal feature for a *datum_target* (4.42.17).

5.62.2
placed_datum_target_feature
<application module: Geometric_tolerance_mim> *entity data type* (3.2.10) that is a type of *datum_target* (4.42.17) that represents the placed datum target feature *entity* (3.2.9)

Note 1 to entry: A **placed_datum_target_feature** is a type of datum_target that represents the implicit definition of a datum target for tolerancing purposes.

5.63 Default_tolerance_arm

5.63.1
General_tolerance_table
<application module: Default_tolerance_arm> *application object* (3.1.78) that represents the general tolerance table *entity* (3.2.9)

Note 1 to entry: A **General_tolerance_table** is a table containing information about *General_tolerances* (5.63.2).

5.63.2
General_tolerances
<application module: Default_tolerance_arm> *application object* (3.1.78) that is a type of *Default_shape_property* (5.696.1) that represents the general tolerances *entity* (3.2.9)

5.63.3
Number_of_decimal_places
<application module: Default_tolerance_arm> *application object* (3.1.78) that represents the number of decimal places *entity* (3.2.9)

Note 1 to entry: A **Number_of_decimal_places** is an entry in a *Tolerance_table_cell* (5.63.6) representing the range of applicability of a tolerance value by specifying the presented number of digits after the decimal separator.

5.63.4
Plus_minus_toleranced_datum
<application module: Default_tolerance_arm> *application object* (3.1.78) that represents the plus minus toleranced datum *entity* (3.2.9)

Note 1 to entry: A **Plus_minus_toleranced_datum** is an entry in a *Tolerance_table_cell* (5.63.6) that is a plus minus tolerance directly applied to a dimension.

5.63.5
Significant_number_of_digits
<application module: Default_tolerance_arm> *application object* (3.1.78) that represents the significant number of digits *entity* (3.2.9)

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Note 1 to entry: A **Significant_number_of_digits** is an entry in a *Tolerance_table_cell* (5.63.6) representing the range of applicability of a tolerance value by specifying the presented number of digits.

5.63.6
Tolerance_table_cell
<application module: Default_tolerance_arm> *application object* (3.1.78) that represents the tolerance table cell *entity* (3.2.9)

Note 1 to entry: A **Tolerance_table_cell** is one cell of a *General_tolerance_table* (5.63.1).

5.63.7
Upper_lower_limit
<application module: Default_tolerance_arm> *application object* (3.1.78) that represents the upper lower limit *entity* (3.2.9)

Note 1 to entry: An **Upper_lower_limit** is an entry in a *Tolerance_table_cell* (5.63.6) representing the range of applicability of a tolerance value by specifying an upper and a lower limit.

5.63.8
Upper_lower_toleranced_datum
<application module: Default_tolerance_arm> *application object* (3.1.78) that represents the upper lower toleranced datum *entity* (3.2.9)

Note 1 to entry: An **Upper_lower_toleranced_datum** is an entry in a *Tolerance_table_cell* (5.63.6) that is a tolerance range for a dimension.

5.64 Default_tolerance_mim

5.64.1
default_tolerance_table
<application module: Default_tolerance_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the default tolerance table *entity* (3.2.9)

Note 1 to entry: A **default_tolerance_table** is a type of representation that specifies information about general tolerances.

5.64.2
default_tolerance_table_cell
<application module: Default_tolerance_mim> *entity data type* (3.2.10) that is a type of *compound_representation_item* (4.41.3) that represents the default tolerance table cell *entity* (3.2.9)

Note 1 to entry: A **default_tolerance_table_cell** is a type of compound_representation_item that specifies one cell entry in a *default_tolerance_table* (5.64.1).

5.65 Value_with_unit_arm

5.65.1
Area_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Derived_unit* (5.65.5) that represents the area unit *entity* (3.2.9)

Note 1 to entry: An **Area_unit** is a type of Derived_unit in which the content of a surface is expressed.

5.65.2

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Amount_of_substance_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Unit* (5.65.19) that represents the amount of substance unit *entity* (3.2.9)

Note 1 to entry: An **Amount_of_substance_unit** is a type of Unit in which the number of elementary entities of a substance as compared to the number of atoms in 0.012 kilograms of carbon-12 is expressed.

5.65.3
Context_dependent_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Unit* (5.65.19) that represents the context dependent unit *entity* (3.2.9)

Note 1 to entry: A **Context_dependent_unit** is a type of Unit that is not related to the system of units defined in this document.

5.65.4
Conversion_based_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Unit* (5.65.19) that represents the conversion based unit *entity* (3.2.9)

Note 1 to entry: A **Conversion_based_unit** is a type of Unit that that is based on another and related by a conversion factor.

5.65.5
Derived_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Unit* (5.65.19) that represents the derived unit *entity* (3.2.9)

Note 1 to entry: A **Derived_unit** is a type of Unit that is defined by an expression of other units.

5.65.6
Derived_unit_element
<application module: Value_with_unit_arm> *application object* (3.1.78) that represents the derived unit element *entity* (3.2.9)

Note 1 to entry: A **Derived_unit_element** is the association of an exponent with a *Unit* (5.65.19).

5.65.7
Duration
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the duration *entity* (3.2.9)

Note 1 to entry: A **Duration** is a type of Value_with_unit that defines the magnitude of a time interval.

5.65.8
Electric_current_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Unit* (5.65.19) that represents the electric current unit *entity* (3.2.9)

Note 1 to entry: An **Electric_current_unit** is a type of Unit with which movement of electrically charged particles is expressed.

5.65.9
Length_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Unit* (5.65.19) that represents the length unit *entity* (3.2.9)

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Note 1 to entry: A **Length_unit** is a type of Unit in which distances are expressed.

5.65.10
Luminous_intensity_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Unit* (5.65.19) that represents the luminous intensity unit *entity* (3.2.9)

Note 1 to entry: A **Luminous_intensity_unit** is a type of Unit in which the brightness of a body is expressed.

5.65.11
Mass_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Unit* (5.65.19) that represents the mass unit *entity* (3.2.9)

Note 1 to entry: A **Mass_unit** is a type of Unit with which mass is expressed.

5.65.12
Maths_value_with_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that represents the maths value with unit *entity* (3.2.9)

Note 1 to entry: A **Maths_value_with_unit** is the specification of a physical quantity by a mathematical expression and its unit.

5.65.13
Plane_angle_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Unit* (5.65.19) that represents the plane angle unit *entity* (3.2.9)

Note 1 to entry: A **Plane_angle_unit** is a type of Unit by which a angles in planes are expressed.

5.65.14
Ratio_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Unit* (5.65.19) that represents the ratio unit *entity* (3.2.9)

Note 1 to entry: A **Ratio_unit** is a type of Unit that expresses the dimensionless ratio of two quantities of the same kind.

5.65.15
Solid_angle_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Unit* (5.65.19) that represents the solid angle unit *entity* (3.2.9)

Note 1 to entry: A **Solid_angle_unit** is a type of Unit that is solid angle.

5.65.16
Thermodynamic_temperature_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Unit* (5.65.19) that represents the thermodynamic temperature unit *entity* (3.2.9)

Note 1 to entry: A **Thermodynamic_temperature_unit** is a type of Unit in which the degree of heat of a body is expressed.

5.65.17

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Time_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Unit* (5.65.19) that represents the time unit *entity* (3.2.9)

Note 1 to entry: A **Time_unit** is a type of Unit with which the duration of a period is expressed.

5.65.18
Uncertainty_with_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the uncertainty with unit *entity* (3.2.9)

Note 1 to entry: An **Uncertainty_with_unit** is a type of Value_with_unit that specifies the uncertainty that applies to a type of measure.

5.65.19
Unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that represents the unit *entity* (3.2.9)

Note 1 to entry: A **Unit** is a unit quantity.

5.65.20
Value_with_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that represents the value with unit *entity* (3.2.9)

Note 1 to entry: A **Value_with_unit** is the specification of a physical quantity by its value and its unit.

5.65.21
Volume_unit
<application module: Value_with_unit_arm> *application object* (3.1.78) that is a type of *Derived_unit* (5.65.5) that represents the volume unit *entity* (3.2.9)

Note 1 to entry: A **Volume_unit** is a type of Derived_unit in which the solid content of a body is expressed.

5.66 Part_definition_relationship_arm

5.66.1
Definitional_part_view_usage
<application module: Part_definition_relationship_arm> *application object* (3.1.78) that is a type of *View_definition_usage* (5.48.2) that represents the definitional part view usage *entity* (3.2.9)

Note 1 to entry: A **Definitional_part_view_usage** is a type of View_definition_usage established between two instances of *Part_view_definition* (5.35.1) where all the elements of the **related** View_definition_usage are then available to the **relating** View_definition_usage.

5.66.2
Make_from_relationship
<application module: Part_definition_relationship_arm> *application object* (3.1.78) that is a type of *View_definition_usage* (5.48.2) that represents the make from relationship *entity* (3.2.9)

Note 1 to entry: A **Make_from_relationship** is a type of View_definition_usage established between two instances of *Part_view_definition* (5.35.1).

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5.67 Part_definition_relationship_mim

5.67.1
definitional_product_definition_usage

<application module: Part_definition_relationship_mim> *entity data type* (3.2.10) that is a type of *product_definition_usage* (4.25.14) that represents the definitional product definition usage *entity* (3.2.9)

Note 1 to entry: A **definitional_product_definition_usage** is a type of product_definition_usage that implements the ARM concept of *Definitional_part_view_usage* (5.66.1).

5.68 Configuration_item_arm

5.68.1
Item_design_association

<application module: Configuration_item_arm> *application object* (3.1.78) that represents the item design association *entity* (3.2.9)

Note 1 to entry: An **Item_design_association** is the association of a *Product_configuration* (5.68.2) with a *Product_view_definition* (5.30.1) or a *Product_version* (5.29.1).

5.68.2
Product_configuration

<application module: Configuration_item_arm> *application object* (3.1.78) that represents the product configuration *entity* (3.2.9)

Note 1 to entry: A **Product_configuration** is the identification of a *Product_concept* (5.74.2) as a configuration.

5.68.3
Product_configuration_hierarchical_relationship

<application module: Configuration_item_arm> *application object* (3.1.78) that is a type of *Product_configuration_relationship* (5.68.4) that represents the product configuration hierarchical relationship *entity* (3.2.9)

Note 1 to entry: A **Product_configuration_hierarchical_relationship** is a type of Product_configuration_relationship that is used to represent a hierarchical relationship between a parent *Product_configuration* (5.68.2) and a child Product_configuration.

5.68.4
Product_configuration_relationship

<application module: Configuration_item_arm> *application object* (3.1.78) that represents the product configuration relationship *entity* (3.2.9)

Note 1 to entry: A **Product_configuration_relationship** is a relationship between a pair of *Product_configuration* (5.68.2) instances.

5.68.5
Product_configuration_revision_sequence

<application module: Configuration_item_arm> *application object* (3.1.78) that is a type of *Product_configuration_relationship* (5.68.4) that represents the product configuration revision sequence *entity* (3.2.9)

Note 1 to entry: A **Product_configuration_revision_sequence** is a type of Product_configuration_relationship that is used to relate a previous version (predecessor) of a *Product_configuration* (5.68.2) to the version that replaces it (successor).

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5.69 Configuration_item_mim

5.69.1
configuration_item_hierarchical_relationship
<application module: Configuration_item_mim> *entity data type* (3.2.10) that is a type of *configuration_item_relationship* (4.23.5) that represents the configuration item hierarchical relationship *entity* (3.2.9)

Note 1 to entry: A **configuration_item_hierarchical_relationship** is a type of configuration_item_relationship that is used to represent a hierarchical relationship between a parent *configuration_item* (4.23.4) and a child configuration_item.

5.69.2
configuration_item_revision_sequence
<application module: Configuration_item_mim> *entity data type* (3.2.10) that is a type of *configuration_item_relationship* (4.23.5) that represents the configuration item revision sequence *entity* (3.2.9)

Note 1 to entry: A **configuration_item_revision_sequence** is a type of configuration_item_relationship that is used to relate a previous version (relating configuration item) of a *configuration_item* (4.23.4) to the version that replaces it (related configuration item).

5.70 Effectivity_arm

5.70.1
Dated_effectivity
<application module: Effectivity_arm> *application object* (3.1.78) that is a type of *Effectivity* (5.70.2) that represents the dated effectivity *entity* (3.2.9)

Note 1 to entry: A **Dated_effectivity** is a type of Effectivity for which the domain of applicability is defined as an interval of time bounded by dates or events.

5.70.2
Effectivity
<application module: Effectivity_arm> *application object* (3.1.78) that represents the effectivity *entity* (3.2.9)

Note 1 to entry: An **Effectivity** is the identification of a domain of applicability.

5.70.3
Effectivity_relationship
<application module: Effectivity_arm> *application object* (3.1.78) that represents the effectivity relationship *entity* (3.2.9)

Note 1 to entry: An **Effectivity_relationship** is an association between two instances of *Effectivity* (5.70.2).

5.70.4
Lot_effectivity
<application module: Effectivity_arm> *application object* (3.1.78) that is a type of *Effectivity* (5.70.2) that represents the lot effectivity *entity* (3.2.9)

Note 1 to entry: A **Lot_effectivity** is a type of Effectivity for which the domain of applicability is defined as a given batch of items.

5.70.5

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Serial_effectivity
<application module: Effectivity_arm> *application object* (3.1.78) that is a type of *Effectivity* (5.70.2) that represents the serial effectivity *entity* (3.2.9)

Note 1 to entry: A **Serial_effectivity** is a type of Effectivity for which the domain of applicability is defined as a possibly open-ended interval of serial numbers.

5.70.6
Time_interval_effectivity
<application module: Effectivity_arm> *application object* (3.1.78) that is a type of *Effectivity* (5.70.2) that represents the time interval effectivity *entity* (3.2.9)

Note 1 to entry: A **Time_interval_effectivity** is a type of Effectivity for which the domain of applicability is defined as a *Time_interval* (5.81.1).

5.71 Configuration_effectivity_arm

5.71.1
Item_usage_effectivity
<application module: Configuration_effectivity_arm> *application object* (3.1.78) that represents the item usage effectivity *entity* (3.2.9)

Note 1 to entry: An **Item_usage_effectivity** is an effectivity domain that constrains the use of a product with or within another product, in the context of a *Product_configuration* (5.68.2).

5.72 Effectivity_application_arm

5.72.1
Effectivity_assignment
<application module: Effectivity_application_arm> *application object* (3.1.78) that represents the effectivity assignment *entity* (3.2.9)

Note 1 to entry: An **Effectivity_assignment** is the association of an *Effectivity* (5.70.2) with product or activity data.

5.72.2
Ineffectivity_assignment
<application module: Effectivity_application_arm> *application object* (3.1.78) that represents the ineffectivity assignment *entity* (3.2.9)

Note 1 to entry: An **Ineffectivity_assignment** is the association of an *Effectivity* (5.70.2) with product or activity data to state that the assigned items are not effective.

5.73 Effectivity_application_mim

5.73.1
applied_effectivity_assignment
<application module: Effectivity_application_mim> *entity data type* (3.2.10) that is a type of *effectivity_assignment* (4.15.20) that represents the applied effectivity assignment *entity* (3.2.9)

Note 1 to entry: An **applied_effectivity_assignment** is a type of effectivity_assignment that implements the ARM concept of *Effectivity_assignment* (5.72.1).

5.73.2

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applied_ineffectivity_assignment
<application module: Effectivity_application_mim> *entity data type* (3.2.10) that is a type of *effectivity_assignment* (4.15.20) that represents the applied ineffectivity assignment *entity* (3.2.9)

Note 1 to entry: An **applied_ineffectivity_assignment** is a type of effectivity_assignment that implements the ARM concept of *Ineffectivity_assignment* (5.72.2).

5.74 Product_concept_identification_arm

5.74.1
Market
<application module: Product_concept_identification_arm> *application object* (3.1.78) that represents the market *entity* (3.2.9)

Note 1 to entry: A **Market** is the identification of a marketing segment for products.

5.74.2
Product_concept
<application module: Product_concept_identification_arm> *application object* (3.1.78) that represents the product concept *entity* (3.2.9)

Note 1 to entry: A **Product_concept** is the identification of a set of similar products that were, are or will be proposed to customers.

5.75 Project_arm

5.75.1
Project
<application module: Project_arm> *application object* (3.1.78) that represents the project *entity* (3.2.9)

Note 1 to entry: A **Project** is an identified program of work.

5.75.2
Project_assignment
<application module: Project_arm> *application object* (3.1.78) that represents the project assignment *entity* (3.2.9)

Note 1 to entry: A **Project_assignment** is a mechanism to associate a *Project* (5.75.1) with activity or product data.

5.75.3
Project_relationship
<application module: Project_arm> *application object* (3.1.78) that represents the project relationship *entity* (3.2.9)

Note 1 to entry: A **Project_relationship** is an association between two instances of *Project* (5.75.1) with an identifiaction and a description of their relationship.

5.76 Project_mim

5.76.1
applied_organizational_project_assignment
<application module: Project_mim> *entity data type* (3.2.10) that is a type of *organizational_project_assignment* (4.15.45) that represents the applied organizational project assignment *entity* (3.2.9)

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5.77 Contract_arm

5.77.1
Contract
<application module: Contract_arm> *application object* (3.1.78) that represents the contract *entity* (3.2.9)

Note 1 to entry: A **Contract** is a binding agreement.

5.77.2
Contract_assignment
<application module: Contract_arm> *application object* (3.1.78) that represents the contract assignment *entity* (3.2.9)

Note 1 to entry: A **Contract_assignment** is an association of a *Contract* (5.77.1) with activity or product data.

5.77.3
Contract_relationship
<application module: Contract_arm> *application object* (3.1.78) that represents the contract relationship *entity* (3.2.9)

Note 1 to entry: A **Contract_relationship** is a relationship between two *Contract* (5.77.1) objects.

5.78 Contract_mim

5.78.1
applied_contract_assignment
<application module: Contract_mim> *entity data type* (3.2.10) that is a type of *contract_assignment* (4.15.14) that represents the applied contract assignment *entity* (3.2.9)

Note 1 to entry: An **applied_contract_assignment** is a type of contract_assignment that is an association of a *contract* (4.6.1) with activity or product data.

5.79 Product_occurrence_arm

5.79.1
Definition_based_product_occurrence
<application module: Product_occurrence_arm> *application object* (3.1.78) that is a type of *Product_occurrence* (5.79.2) that represents the definition based product occurrence *entity* (3.2.9)

Note 1 to entry: A **Definition_based_product_occurrence** is a type of Product_occurrence that uses another *Product_view_definition* (5.30.1) of the same *Product_version* (5.29.1) as its definition.

5.79.2
Product_occurrence
<application module: Product_occurrence_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the product occurrence *entity* (3.2.9)

5.79.3
Product_occurrence_with_quantity
<application module: Product_occurrence_arm> *application object* (3.1.78) that is a type of *Product_occurrence* (5.79.2) that represents the product occurrence with quantity *entity* (3.2.9)

5.79.4

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Quantified_instance
<application module: Product_occurrence_arm> *application object* (3.1.78) that is a type of *Product_occurrence_with_quantity* (5.79.3) that represents the quantified instance *entity* (3.2.9)

Note 1 to entry: A **Quantified_instance** is a type of Product_occurrence_with_quantity that identifies a quantified occurrence of a part, the occurrence quantity being defined by a *Value_with_unit* (5.65.20).

5.79.5
Selected_instance
<application module: Product_occurrence_arm> *application object* (3.1.78) that is a type of *Product_occurrence_with_quantity* (5.79.3) that represents the selected instance *entity* (3.2.9)

5.79.6
Single_instance
<application module: Product_occurrence_arm> *application object* (3.1.78) that is a type of *Product_occurrence* (5.79.2) that represents the single instance *entity* (3.2.9)

Note 1 to entry: A **Single_instance** is a type of Product_occurrence that identifies a single occurrence of a part.

5.79.7
Specification_based_product_occurrence
<application module: Product_occurrence_arm> *application object* (3.1.78) that is a type of *Product_occurrence* (5.79.2) that represents the specification based product occurrence *entity* (3.2.9)

Note 1 to entry: A **Specification_based_product_occurrence** is a type of Product_occurrence that identifies an occurrence of a *Specification_based_product_version* (5.98.2).

5.79.8
Specified_occurrence
<application module: Product_occurrence_arm> *application object* (3.1.78) that is a type of *Product_occurrence* (5.79.2) that represents the specified occurrence *entity* (3.2.9)

Note 1 to entry: A **Specified_occurrence** is a type of Product_occurrence that reflects a Product_occurrence of a lower assembly level within the context of a higher Product_occurrence assembly level.

5.79.9
Specification_based_part_version
<application module: Product_occurrence_arm> *application object* (3.1.78) that is a type of *Specification_based_product_version* (5.98.2) and *Part_version* (5.34.2) that represents the specification based part version *entity* (3.2.9)

Note 1 to entry: A **Specification_based_part_version** is a type of Specification_based_product_version and a type of Part_version.

5.80 Event_arm

5.80.1
Event
<application module: Event_arm> *application object* (3.1.78) that represents the event *entity* (3.2.9)

Note 1 to entry: An **Event** is the fact of the existence of a state at some point in time.

5.80.2
Event_relationship
<application module: Event_arm> *application object* (3.1.78) that represents the event relationship *entity* (3.2.9)

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Note 1 to entry: An **Event_relationship** is a relationship which exists between two *Event* (5.80.1) instances.

5.80.3
Relative_event
<application module: Event_arm> *application object* (3.1.78) that is a type of *Event* (5.80.1) that represents the relative event *entity* (3.2.9)

Note 1 to entry: A **Relative_event** is a type of Event the start of which will occur, respectively has occurred, with a time offset from the start of another Event.

5.81 Time_interval_arm

5.81.1
Time_interval
<application module: Time_interval_arm> *application object* (3.1.78) that represents the time interval *entity* (3.2.9)

Note 1 to entry: A **Time_interval** is the identification of an intervening time.

5.81.2
Time_interval_relationship
<application module: Time_interval_arm> *application object* (3.1.78) that represents the time interval relationship *entity* (3.2.9)

Note 1 to entry: A **Time_interval_relationship** is the association of two instances of *Time_interval* (5.81.1).

5.81.3
Time_interval_with_bounds
<application module: Time_interval_arm> *application object* (3.1.78) that is a type of *Time_interval* (5.81.1) that represents the time interval with bounds *entity* (3.2.9)

5.82 Constructive_solid_geometry_3d_arm

5.82.1
Csg_model
<application module: Constructive_solid_geometry_3d_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the csg model *entity* (3.2.9)

Note 1 to entry: A **Csg_model** is a type of Geometric_model defined by a collection of primitive solids, combined using regularised boolean operations.

5.83 Class_arm

5.83.1
Class
<application module: Class_arm> *application object* (3.1.78) that represents the class *entity* (3.2.9)

Note 1 to entry: A **Class** is a number of things considered together.

5.83.2
Class_by_extension
<application module: Class_arm> *application object* (3.1.78) that is a type of *Class* (5.83.1) that represents the class by extension *entity* (3.2.9)

Note 1 to entry: A **Class_by_extension** is a type of Class that is a set that is defined by means of a criterion that does not enumerate the members.

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5.83.3
Class_by_intension
<application module: Class_arm> *application object* (3.1.78) that is a type of *Class* (5.83.1) that represents the class by intension *entity* (3.2.9)

Note 1 to entry: A **Class_by_intension** is a type of Class that is a set that is defined by enumerating the members.

5.84 Class_of_activity_arm

5.84.1
Class_of_activity
<application module: Class_of_activity_arm> *application object* (3.1.78) that is a type of *Activity* (5.56.1) and *Class* (5.83.1) that represents the class of activity *entity* (3.2.9)

5.85 Class_of_activity_mim

5.85.1
class_of_activity
<application module: Class_of_activity_mim> *entity data type* (3.2.10) that is a type of *executed_action* (4.1.14) and *class* (4.75.1) that represents the class of activity *entity* (3.2.9)

5.86 Property_condition_arm

5.86.1
Property_condition
<application module: Property_condition_arm> *application object* (3.1.78) that is a type of *Class_of_possession_of_property* (5.90.1) that represents the property condition *entity* (3.2.9)

5.87 Property_condition_mim

5.87.1
condition_property
<application module: Property_condition_mim> *entity data type* (3.2.10) that is a type of *general_property_association* (4.19.6) that represents the condition property *entity* (3.2.9)

5.87.2
property_condition_for_activity
<application module: Property_condition_mim> *entity data type* (3.2.10) that is a type of *class_of_possession_of_property_by_activity* (5.91.1) that represents the property condition for activity *entity* (3.2.9)

5.87.3
property_condition_for_product
<application module: Property_condition_mim> *entity data type* (3.2.10) that is a type of *class_of_possession_of_property_by_product* (5.91.2) that represents the property condition for product *entity* (3.2.9)

5.88 Class_of_product_arm

5.88.1
Class_of_product
<application module: Class_of_product_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) and *Class* (5.83.1) that represents the class of product *entity* (3.2.9)

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5.89 Class_of_product_mim

5.89.1
class_of_product
<application module: Class_of_product_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) and *class* (4.75.1) that represents the class of product *entity* (3.2.9)

5.90 Property_space_arm

5.90.1
Class_of_possession_of_property
<application module: Property_space_arm> *application object* (3.1.78) that is a type of *Applied_independent_property* (5.40.1) that represents the class of possession of property *entity* (3.2.9)

5.90.2
Physical_quantity_range
<application module: Property_space_arm> *application object* (3.1.78) that is a type of *Physical_quantity_space* (5.90.3) that represents the physical quantity range *entity* (3.2.9)

5.90.3
Physical_quantity_space
<application module: Property_space_arm> *application object* (3.1.78) that is a type of *Independent_property* (5.44.1) and *Class* (5.83.1) that represents the physical quantity space *entity* (3.2.9)

5.90.4
Standard_tensor_order_and_symmetry
<application module: Property_space_arm> *application object* (3.1.78) that is a type of *Tensor_order_and_symmetry_by_library_reference* (5.90.6) that represents the standard tensor order and symmetry *entity* (3.2.9)

5.90.5
Tensor_order_and_symmetry
<application module: Property_space_arm> *application object* (3.1.78) that is a type of *Independent_property* (5.44.1) and *Class* (5.83.1) that represents the tensor order and symmetry *entity* (3.2.9)

5.90.6
Tensor_order_and_symmetry_by_library_reference
<application module: Property_space_arm> *application object* (3.1.78) that is a type of *Tensor_order_and_symmetry* (5.90.5) that represents the tensor order and symmetry by library reference *entity* (3.2.9)

5.90.7
Tensor_order_and_symmetry_for_physical_quantity_space
<application module: Property_space_arm> *application object* (3.1.78) that is a type of *Independent_property_relationship* (5.44.2) that represents the tensor order and symmetry for physical quantity space *entity* (3.2.9)

5.91 Property_space_mim

5.91.1

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class_of_possession_of_property_by_activity
<application module: Property_space_mim> *entity data type* (3.2.10) that is a type of *action_property* (4.104.1) that represents the class of possession of property by activity *entity* (3.2.9)

5.91.2
class_of_possession_of_property_by_product
<application module: Property_space_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) that represents the class of possession of property by product *entity* (3.2.9)

5.91.3
possessed_physical_quantity_space
<application module: Property_space_mim> *entity data type* (3.2.10) that is a type of *general_property_association* (4.19.6) that represents the possessed physical quantity space *entity* (3.2.9)

5.91.4
physical_quantity_range
<application module: Property_space_mim> *entity data type* (3.2.10) that is a type of *physical_quantity_space* (5.91.5) that represents the physical quantity range *entity* (3.2.9)

5.91.5
physical_quantity_space
<application module: Property_space_mim> *entity data type* (3.2.10) that is a type of *general_property* (4.19.5) and *class* (4.75.1) that represents the physical quantity space *entity* (3.2.9)

5.91.6
standard_tensor_order_and_symmetry
<application module: Property_space_mim> *entity data type* (3.2.10) that is a type of *tensor_order_and_symmetry_by_library_reference* (5.91.8) that represents the standard tensor order and symmetry *entity* (3.2.9)

5.91.7
tensor_order_and_symmetry
<application module: Property_space_mim> *entity data type* (3.2.10) that is a type of *general_property* (4.19.5) and *class* (4.75.1) that represents the tensor order and symmetry *entity* (3.2.9)

5.91.8
tensor_order_and_symmetry_by_library_reference
<application module: Property_space_mim> *entity data type* (3.2.10) that is a type of *tensor_order_and_symmetry* (5.91.7) and *externally_defined_item* (4.11.3) that represents the tensor order and symmetry by library reference *entity* (3.2.9)

5.91.9
tensor_order_and_symmetry_for_physical_quantity_space
<application module: Property_space_mim> *entity data type* (3.2.10) that is a type of *general_property_relationship* (4.19.7) that represents the tensor order and symmetry for physical quantity space *entity* (3.2.9)

5.92 Property_identification_arm

5.92.1
Identification_of_property
<application module: Property_identification_arm> *application object* (3.1.78) that represents the identification of property *entity* (3.2.9)

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5.92.2
Scale
<application module: Property_identification_arm> *application object* (3.1.78) that represents the scale *entity* (3.2.9)

5.92.3
Scale_for_identification_of_property
<application module: Property_identification_arm> *application object* (3.1.78) that represents the scale for identification of property *entity* (3.2.9)

5.93 Maths_space_arm

5.93.1
Maths_space
<application module: Maths_space_arm> *application object* (3.1.78) that represents the maths space *entity* (3.2.9)

5.94 Independent_property_definition_arm

5.94.1
Physical_quantity_instance
<application module: Independent_property_definition_arm> *application object* (3.1.78) that is a type of *Independent_property* (5.44.1) and *Class* (5.83.1) that represents the physical quantity instance *entity* (3.2.9)

5.94.2
Physical_quantity_symmetry
<application module: Independent_property_definition_arm> *application object* (3.1.78) that is a type of *Independent_property* (5.44.1) and *Class* (5.83.1) that represents the physical quantity symmetry *entity* (3.2.9)

5.94.3
Physical_quantity_symmetry_by_library_reference
<application module: Independent_property_definition_arm> *application object* (3.1.78) that is a type of *Physical_quantity_symmetry* (5.94.2) that represents the physical quantity symmetry by library reference *entity* (3.2.9)

5.94.4
Space_for_physical_quantity
<application module: Independent_property_definition_arm> *application object* (3.1.78) that is a type of *Independent_property_relationship* (5.44.2) that represents the space for physical quantity *entity* (3.2.9)

5.94.5
Standard_physical_quantity_symmetry
<application module: Independent_property_definition_arm> *application object* (3.1.78) that is a type of *Physical_quantity_symmetry_by_library_reference* (5.94.3) that represents the standard physical quantity symmetry *entity* (3.2.9)

5.94.6
Symmetry_for_physical_quantity
<application module: Independent_property_definition_arm> *application object* (3.1.78) that is a type of *Independent_property_relationship* (5.44.2) that represents the symmetry for physical quantity *entity* (3.2.9)

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5.95 Independent_property_definition_mim

5.95.1
physical_quantity_instance
<application module: Independent_property_definition_mim> *entity data type* (3.2.10) that is a type of *general_property* (4.19.5) and *class* (4.75.1) that represents the physical quantity instance *entity* (3.2.9)

5.95.2
physical_quantity_symmetry
<application module: Independent_property_definition_mim> *entity data type* (3.2.10) that is a type of *general_property* (4.19.5) and *class* (4.75.1) that represents the physical quantity symmetry *entity* (3.2.9)

5.95.3
physical_quantity_symmetry_by_library_reference
<application module: Independent_property_definition_mim> *entity data type* (3.2.10) that is a type of *physical_quantity_symmetry* (5.95.2) and *externally_defined_item* (4.11.3) that represents the physical quantity symmetry by library reference *entity* (3.2.9)

5.95.4
space_for_physical_quantity
<application module: Independent_property_definition_mim> *entity data type* (3.2.10) that is a type of *general_property_relationship* (4.19.7) that represents the space for physical quantity *entity* (3.2.9)

5.95.5
standard_physical_quantity_symmetry
<application module: Independent_property_definition_mim> *entity data type* (3.2.10) that is a type of *physical_quantity_symmetry_by_library_reference* (5.95.3) that represents the standard physical quantity symmetry *entity* (3.2.9)

5.95.6
symmetry_for_physical_quantity
<application module: Independent_property_definition_mim> *entity data type* (3.2.10) that is a type of *general_property_relationship* (4.19.7) that represents the symmetry for physical quantity *entity* (3.2.9)

5.96 Product_class_arm

5.96.1
Class_category_association
<application module: Product_class_arm> *application object* (3.1.78) that represents the class category association *entity* (3.2.9)

Note 1 to entry: A **Class_category_association** is the association of a *Specification_category* (5.96.8) with a *Product_class* (5.96.5).

5.96.2
Class_condition_association
<application module: Product_class_arm> *application object* (3.1.78) that represents the class condition association *entity* (3.2.9)

Note 1 to entry: A **Class_condition_association** is the association of a *Specification_expression* (5.96.10) with a *Product_class* (5.96.5).

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5.96.3
Class_inclusion_association
<application module: Product_class_arm> *application object* (3.1.78) that represents the class inclusion association *entity* (3.2.9)

Note 1 to entry: A **Class_inclusion_association** is the assignment of a *Specification_inclusion* (5.96.11) to a *Product_class* (5.96.5).

5.96.4
Class_specification_association
<application module: Product_class_arm> *application object* (3.1.78) that represents the class specification association *entity* (3.2.9)

Note 1 to entry: A **Class_specification_association** is an association of a *Specification* (5.96.7) with a *Product_class* (5.96.5).

5.96.5
Product_class
<application module: Product_class_arm> *application object* (3.1.78) that is a type of *Product_concept* (5.74.2) that represents the product class *entity* (3.2.9)

Note 1 to entry: A **Product_class** is a type of Product_concept that may be characterized with specifications.

5.96.6
Product_class_relationship
<application module: Product_class_arm> *application object* (3.1.78) that represents the product class relationship *entity* (3.2.9)

Note 1 to entry: A **Product_class_relationship** is a relationship between two instances of *Product_class* (5.96.5).

5.96.7
Specification
<application module: Product_class_arm> *application object* (3.1.78) that represents the specification *entity* (3.2.9)

Note 1 to entry: A **Specification** is a characteristic of products to be proposed to customers or users.

5.96.8
Specification_category
<application module: Product_class_arm> *application object* (3.1.78) that represents the specification category *entity* (3.2.9)

Note 1 to entry: A **Specification_category** is the identification of a set of specifications serving the same purpose.

5.96.9
Specification_category_hierarchy
<application module: Product_class_arm> *application object* (3.1.78) that represents the specification category hierarchy *entity* (3.2.9)

Note 1 to entry: A **Specification_category_hierarchy** is used to build up hierarchical structures of instances of *Specification_category* (5.96.8).

5.96.10

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Specification_expression
<application module: Product_class_arm> *application object* (3.1.78) that represents the specification expression *entity* (3.2.9)

Note 1 to entry: A **Specification_expression** is a combination of *Specification* (5.96.7) instances formed with Boolean operations.

5.96.11
Specification_inclusion
<application module: Product_class_arm> *application object* (3.1.78) that represents the specification inclusion *entity* (3.2.9)

Note 1 to entry: A **Specification_inclusion** is the representation of the statement that specifies that the application of a *Specification* (5.96.7) or of a *Specification_expression* (5.96.10) implies the inclusion of an additional Specification or Specification_expression.

5.97 Product_class_mim

5.97.1
characterized_product_concept_feature
<application module: Product_class_mim> *entity data type* (3.2.10) that is a type of *product_concept_feature* (4.24.6) and *characterized_object* (4.19.1) that represents the characterized product concept feature *entity* (3.2.9)

Note 1 to entry: A **characterized_product_concept_feature** is a type of product_concept_feature and of characterized_object that allows a product_concept_feature to be characterized.

5.97.2
characterized_product_concept_feature_category
<application module: Product_class_mim> *entity data type* (3.2.10) that is a type of *product_concept_feature_category* (5.97.7) and *characterized_object* (4.19.1) that represents the characterized product concept feature category *entity* (3.2.9)

Note 1 to entry: A **characterized_product_concept_feature_category** is a type of product_concept_feature_category and of characterized_object that allows a product_concept_feature_category to be characterized.

5.97.3
exclusive_product_concept_feature_category
<application module: Product_class_mim> *entity data type* (3.2.10) that is a type of *product_concept_feature_category* (5.97.7) that represents the exclusive product concept feature category *entity* (3.2.9)

Note 1 to entry: An **exclusive_product_concept_feature_category** is a type of product_concept_feature_category the members of which describe mutually exclusive characteristics of a product.

5.97.4
inclusion_product_concept_feature
<application module: Product_class_mim> *entity data type* (3.2.10) that is a type of *conditional_concept_feature* (4.24.4) that represents the inclusion product concept feature *entity* (3.2.9)

Note 1 to entry: An **inclusion_product_concept_feature** is a type of conditional_concept_feature that represents the statement that the application of a *product_concept_feature* (4.24.6) or of a

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conditional_concept_feature involves the inclusion of an additional product_concept_feature or conditional_concept_feature.

5.97.5
package_product_concept_feature
<application module: Product_class_mim> *entity data type* (3.2.10) that is a type of *product_concept_feature* (4.24.6) that represents the package product concept feature *entity* (3.2.9)

Note 1 to entry: A **package_product_concept_feature** is a type of product_concept_feature that is a collection of product features that shall be offered to the market as a set.

5.97.6
product_class
<application module: Product_class_mim> *entity data type* (3.2.10) that is a type of *product_concept* (4.24.5) and *characterized_object* (4.19.1) that represents the product class *entity* (3.2.9)

Note 1 to entry: A **product_class** is a type of product_concept and of characterized_object that is the identification of a set of similar products to be offered to the market.

5.97.7
product_concept_feature_category
<application module: Product_class_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the product concept feature category *entity* (3.2.9)

Note 1 to entry: A **product_concept_feature_category** is a type of group that identifies a set of similar product features represented with *product_concept_feature* (4.24.6) instances.

5.97.8
product_concept_feature_category_usage
<application module: Product_class_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the product concept feature category usage *entity* (3.2.9)

Note 1 to entry: A **product_concept_feature_category_usage** is a type of group_assignment that associates a *product_concept_feature_category* (5.97.7) with one or more instances of *product_class* (5.97.6), referred to by the inherited attribute items.

5.98 Specified_product_arm

5.98.1
Product_specification
<application module: Specified_product_arm> *application object* (3.1.78) that is a type of *Characterizable_object* (5.643.1) and *Product_configuration* (5.68.2) that represents the product specification *entity* (3.2.9)

Note 1 to entry: A **Product_specification** is a type of Product_configuration and a type of Characterizable_object that characterizes a product or a set of products in a *Product_class* (5.96.5) by a set of specifications.

5.98.2
Specification_based_product_version
<application module: Specified_product_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the specification based product version *entity* (3.2.9)

Note 1 to entry: A **Specification_based_product_version** is a type of Product_version that is defined by a *Product_specification* (5.98.1).

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5.99 Specified_product_mim

5.99.1
product_identification
<application module: Specified_product_mim> *entity data type* (3.2.10) that is a type of *configuration_item* (4.23.4) and *characterized_object* (4.19.1) that represents the product identification *entity* (3.2.9)

Note 1 to entry: A **product_identification** is a type of configuration_item and a type of characterized_object that implements the ARM concept of *Product_specification* (5.98.1).

5.99.2
product_specification
<application module: Specified_product_mim> *entity data type* (3.2.10) that is a type of *product_identification* (5.99.1) and *configurable_item* (4.23.1) that represents the product specification *entity* (3.2.9)

Note 1 to entry: A **product_specification** is a type of product_identification and a type of configurable_item that implements the ARM concept of *Product_specification* (5.98.1).

5.100 Multi_linguism_arm

5.100.1
Language
<application module: Multi_linguism_arm> *application object* (3.1.78) that represents the language *entity* (3.2.9)

Note 1 to entry: A **Language** is the identification of a language by its code as defined in ISO 639-2 and possibly its country code as specified in ISO 3166-1.

5.100.2
Language_indication
<application module: Multi_linguism_arm> *application object* (3.1.78) that represents the language indication *entity* (3.2.9)

Note 1 to entry: A **Language_indication** is the identification of the *Language* (5.100.1) in which a text attribute of one or more instances has been specified.

5.100.3
Attribute_translation_assignment
<application module: Multi_linguism_arm> *application object* (3.1.78) that represents the attribute translation assignment *entity* (3.2.9)

Note 1 to entry: An **Attribute_translation_assignment** is the assignment of a translation to a text attribute of an instance.

5.101 Multi_linguism_mim

5.101.1
attribute_language_assignment
<application module: Multi_linguism_mim> *entity data type* (3.2.10) that is a type of *attribute_classification_assignment* (4.15.7) that represents the attribute language assignment *entity* (3.2.9)

5.101.2

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multi_language_attribute_assignment
<application module: Multi_linguism_mim> *entity data type* (3.2.10) that is a type of *attribute_value_assignment* (4.15.8) that represents the multi language attribute assignment *entity* (3.2.9)

5.102 Extended_measure_representation_arm

5.102.1
Measure_item_with_precision
<application module: Extended_measure_representation_arm> *application object* (3.1.78) that is a type of *Measure_item* (5.118.1) that represents the measure item with precision *entity* (3.2.9)

Note 1 to entry: A **Measure_item_with_precision** is a type of Measure_item that has a precision defined as the number of digits that are significant.

5.102.2
Value_limit
<application module: Extended_measure_representation_arm> *application object* (3.1.78) that is a type of *Numerical_item_with_unit* (5.118.3) and *Qualified_representation_item* (5.666.8) that represents the value limit *entity* (3.2.9)

Note 1 to entry: A **Value_limit** is a type of Numerical_item_with_unit and a type of Qualified_representation_item that specifies a qualified numerical value representing either the lower limit or the upper limit of a particular quantifiable characteristic.

5.102.3
Value_list
<application module: Extended_measure_representation_arm> *application object* (3.1.78) that is a type of *Measure_item* (5.118.1) that represents the value list *entity* (3.2.9)

Note 1 to entry: A **Value_list** is a type of Measure_item that is an ordered collection of Measure_item instances.

5.102.4
Value_range
<application module: Extended_measure_representation_arm> *application object* (3.1.78) that is a type of *Measure_item* (5.118.1) that represents the value range *entity* (3.2.9)

Note 1 to entry: A **Value_range** is a type of Measure_item that is a pair of numbers representing the range in which the value shall lie.

5.102.5
Value_range_with_global_unit
<application module: Extended_measure_representation_arm> *application object* (3.1.78) that is a type of *Measure_item* (5.118.1) that represents the value range with global unit *entity* (3.2.9)

Note 1 to entry: A **Value_range_with_global_unit** is a type of Measure_item that is a pair of numerical values representing the range in which the value shall lie.

5.102.6
Value_set
<application module: Extended_measure_representation_arm> *application object* (3.1.78) that is a type of *Measure_item* (5.118.1) that represents the value set *entity* (3.2.9)

Note 1 to entry: A **Value_set** is a type of Measure_item that is an unordered collection of Measure_item instances.

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5.102.7
Value_with_tolerances
<application module: Extended_measure_representation_arm> *application object* (3.1.78) that is a type of *Measure_item* (5.118.1) that represents the value with tolerances *entity* (3.2.9)

Note 1 to entry: A **Value_with_tolerances** is a type of Measure_item that specifies a range of values by specifying a single nominal value and two tolerances that are offsets from the single value.

5.103 Extended_measure_representation_mim

5.103.1
value_range
<application module: Extended_measure_representation_mim> *entity data type* (3.2.10) that is a type of *compound_representation_item* (4.41.3) that represents the value range *entity* (3.2.9)

Note 1 to entry: A **value_range** is a type of compound_representation_item that implements the ARM concept of *Value_range* (5.102.4).

5.104 Specification_based_configuration_arm

5.104.1
Configuration
<application module: Specification_based_configuration_arm> *application object* (3.1.78) that represents the configuration *entity* (3.2.9)

Note 1 to entry: A **Configuration** is the association of a *Class_condition_association* (5.96.2) or a *Class_specification_association* (5.96.4) instance with a design or with a process in order to define a valid usage of it in the context of a certain *Product_class* (5.96.5).

5.105 Specification_based_configuration_mim

5.105.1
configured_effectivity_context_assignment
<application module: Specification_based_configuration_mim> *entity data type* (3.2.10) that is a type of *effectivity_context_assignment* (4.15.21) that represents the configured effectivity context assignment *entity* (3.2.9)

Note 1 to entry: A **configured_effectivity_context_assignment** is a type of effectivity_context_assignment that identifies a context for a *configured_effectivity_assignment* (5.105.2).

5.105.2
configured_effectivity_assignment
<application module: Specification_based_configuration_mim> *entity data type* (3.2.10) that is a type of *effectivity_assignment* (4.15.20) that represents the configured effectivity assignment *entity* (3.2.9)

Note 1 to entry: A **configured_effectivity_assignment** is a type of effectivity_assignment that associates an effectivity with product data.

5.106 Alternative_solution_arm

5.106.1
Alternative_solution
<application module: Alternative_solution_arm> *application object* (3.1.78) that represents the alternative solution *entity* (3.2.9)

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Note 1 to entry: An **Alternative_solution** is the identification of one of potentially many mutually exclusive implementations of a *Functional_element_definition* (5.204.5) or of a *Physical_element_definition* (5.202.5).

5.106.2
Alternative_solution_relationship
<application module: Alternative_solution_arm> *application object* (3.1.78) that represents the alternative solution relationship *entity* (3.2.9)

Note 1 to entry: An **Alternative_solution_relationship** is a relationship between two *Alternative_solution* (5.106.1) objects the meaning of which is defined by the attribute **relation_type**.

5.106.3
Final_solution
<application module: Alternative_solution_arm> *application object* (3.1.78) that is a type of *Alternative_solution* (5.106.1) that represents the final solution *entity* (3.2.9)

Note 1 to entry: A **Final_solution** is a type of Alternative_solution and is a set of additional sensual characteristics that can be applied to an Occurrence that represents a neutral part to complete its definition.

5.106.4
Solution_element
<application module: Alternative_solution_arm> *application object* (3.1.78) that represents the solution element *entity* (3.2.9)

Note 1 to entry: A **Solution_element** is the association of a functional or organic requirement with an occurrence of a part that provides a way to resolve that requirement.

5.106.5
Supplier_solution
<application module: Alternative_solution_arm> *application object* (3.1.78) that is a type of *Alternative_solution* (5.106.1) that represents the supplier solution *entity* (3.2.9)

Note 1 to entry: A **Supplier_solution** is a type of Alternative_solution provided by a supplier.

5.106.6
Technical_solution
<application module: Alternative_solution_arm> *application object* (3.1.78) that is a type of *Alternative_solution* (5.106.1) that represents the technical solution *entity* (3.2.9)

Note 1 to entry: A **Technical_solution** is a type of Alternative_solution where the functional or organic requirements are fulfilled in a technical way.

5.107 Surface_conditions_arm

5.107.1
Coating_layer
<application module: Surface_conditions_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the coating layer *entity* (3.2.9)

Note 1 to entry: A **Coating_layer** is a type of Shape_element that identifies a layer of covering applied to a surface.

5.107.2
Contact_ratio
<application module: Surface_conditions_arm> *application object* (3.1.78) that is a type of *Surface_condition* (5.107.5) that represents the contact ratio *entity* (3.2.9)

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Note 1 to entry: A **Contact_ratio** is a type of Surface_condition that specifies the measure of the quality of contact of a shape on a reference surface.

5.107.3
Extended_visual_appearance
<application module: Surface_conditions_arm> *application object* (3.1.78) that is a type of *Visual_appearance* (5.107.12) that represents the extended visual appearance *entity* (3.2.9)

Note 1 to entry: An **Extended_visual_appearance** is a type of Visual_appearance that specifies attributes regarding the quality visual appearance of the products and parts represented in an external geometric model.

5.107.4
Hardness
<application module: Surface_conditions_arm> *application object* (3.1.78) that is a type of *Surface_condition* (5.107.5) that represents the hardness *entity* (3.2.9)

Note 1 to entry: A **Hardness** is a type of Surface_condition that defines the hardness of a material on its surface.

5.107.5
Surface_condition
<application module: Surface_conditions_arm> *application object* (3.1.78) that is a type of *Assigned_shape_property* (5.41.1) that represents the surface condition *entity* (3.2.9)

5.107.6
Surface_texture
<application module: Surface_conditions_arm> *application object* (3.1.78) that is a type of *Surface_condition* (5.107.5) that represents the surface texture *entity* (3.2.9)

Note 1 to entry: A **Surface_texture** is a type of Surface_condition that represent surface texture requirements as defined in ISO 1302:2002.

5.107.7
Surface_texture_parameter
<application module: Surface_conditions_arm> *application object* (3.1.78) that represents the surface texture parameter *entity* (3.2.9)

Note 1 to entry: A **Surface_texture_parameter** is a detailed requirement of a *Surface_texture* (5.107.6).

5.107.8
User_defined_surface_texture_parameter
<application module: Surface_conditions_arm> *application object* (3.1.78) that is a type of *Surface_texture_parameter* (5.107.7) that represents the user defined surface texture parameter *entity* (3.2.9)

Note 1 to entry: A **User_defined_surface_texture_parameter** is a type of Surface_texture_parameter that defines the requirement as a user-specific string.

5.107.9
Standard_surface_texture_parameter
<application module: Surface_conditions_arm> *application object* (3.1.78) that is a type of *Surface_texture_parameter* (5.107.7) that represents the standard surface texture parameter *entity* (3.2.9)

Note 1 to entry: A **Standard_surface_texture_parameter** is a type of Surface_texture_parameter that represents a surface texture requirement as defined in ISO 1302:2002 clause 6.

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5.107.10
Tactile_appearance
<application module: Surface_conditions_arm> *application object* (3.1.78) that is a type of *Surface_condition* (5.107.5) that represents the tactile appearance *entity* (3.2.9)

Note 1 to entry: A **Tactile_appearance** is a type of Surface_condition that specifies the appearance of a surface of a part regarding the sense of touch.

5.107.11
Treatment_result
<application module: Surface_conditions_arm> *application object* (3.1.78) that is a type of *Surface_condition* (5.107.5) that represents the treatment result *entity* (3.2.9)

Note 1 to entry: A **Treatment_result** is a type of Surface_condition that is a result of a certain treatment.

5.107.12
Visual_appearance
<application module: Surface_conditions_arm> *application object* (3.1.78) that is a type of *Surface_condition* (5.107.5) that represents the visual appearance *entity* (3.2.9)

Note 1 to entry: A **Visual_appearance** is a type of Surface_condition that specifies the appearance of a surface of a part regarding the optical impression.

5.108 Surface_conditions_mim

5.108.1
contact_ratio_representation
<application module: Surface_conditions_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the contact ratio representation *entity* (3.2.9)

Note 1 to entry: A **contact_ratio_representation** is a type of representation that represents the ratio of contact between an object and a measuring gauge.

5.108.2
hardness_representation
<application module: Surface_conditions_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the hardness representation *entity* (3.2.9)

Note 1 to entry: A **hardness_representation** is a type of representation that represents the hardness of an object.

5.108.3
surface_texture_representation
<application module: Surface_conditions_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the surface texture representation *entity* (3.2.9)

Note 1 to entry: A **surface_texture_representation** is a type of representation that represents a surface texture such as roughness or waviness.

5.108.4
tactile_appearance_representation
<application module: Surface_conditions_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the tactile appearance representation *entity* (3.2.9)

Note 1 to entry: A **tactile_appearance_representation** is a type of representation that represents the tactile appearance of an object.

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5.108.5
visual_appearance_representation
<application module: Surface_conditions_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the visual appearance representation *entity* (3.2.9)

Note 1 to entry: A **visual_appearance_representation** is a type of representation that represents the visual appearance of an object.

5.109 Classification_with_attributes_arm

5.109.1
Class_with_attributes
<application module: Classification_with_attributes_arm> *application object* (3.1.78) that is a type of *Class* (5.83.1) that represents the class with attributes *entity* (3.2.9)

Note 1 to entry: A **Class_with_attributes** is a type of Class that may be defined with a set of valued parameters.

5.109.2
Class_hierarchy
<application module: Classification_with_attributes_arm> *application object* (3.1.78) that represents the class hierarchy *entity* (3.2.9)

Note 1 to entry: A **Class_hierarchy** is a hierarchical relationship between two instances of *Class_with_attributes* (5.109.1).

5.109.3
Classification_association
<application module: Classification_with_attributes_arm> *application object* (3.1.78) that is a type of *Classification_assignment* (5.115.1) that represents the classification association *entity* (3.2.9)

Note 1 to entry: A **Classification_association** is a type of Classification_assignment that associates a *Class_with_attributes* (5.109.1) with product or activity data.

5.109.4
Classification_attribute
<application module: Classification_with_attributes_arm> *application object* (3.1.78) that represents the classification attribute *entity* (3.2.9)

Note 1 to entry: A **Classification_attribute** is a characteristic of a *Class_with_attributes* (5.109.1).

5.109.5
Classification_system
<application module: Classification_with_attributes_arm> *application object* (3.1.78) that represents the classification system *entity* (3.2.9)

Note 1 to entry: A **Classification_system** is a schema defining classifications of product or activity data.

5.109.6
External_class_with_attributes
<application module: Classification_with_attributes_arm> *application object* (3.1.78) that is a type of *Class_with_attributes* (5.109.1) that represents the external class with attributes *entity* (3.2.9)

Note 1 to entry: An **External_class_with_attributes** is a type of Class_with_attributes that is defined in an external library.

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5.110 Classification_with_attributes_mim

5.110.1
characterized_class
<application module: Classification_with_attributes_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *class* (4.75.1) that represents the characterized class *entity* (3.2.9)

Note 1 to entry: A **characterized_class** is a type of class and characterized_object to which valued characteristics may be assigned.

5.110.2
class_system
<application module: Classification_with_attributes_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the class system *entity* (3.2.9)

Note 1 to entry: A **class_system** is a type of group that defines classifications of product or activity data.

5.111 Specification_control_arm

5.111.1
Breakdown_node_relationship
<application module: Specification_control_arm> *application object* (3.1.78) that represents the breakdown node relationship *entity* (3.2.9)

Note 1 to entry: A **Breakdown_node_relationship** is a relationship between an alternative solution or a definition of a breakdown element and a definition of a breakdown element.

5.111.2
Class_breakdown_association
<application module: Specification_control_arm> *application object* (3.1.78) that represents the class breakdown association *entity* (3.2.9)

Note 1 to entry: A **Class_breakdown_association** is an association of a *Product_class* (5.96.5) with a breakdown element.

5.111.3
Complex_node_relationship
<application module: Specification_control_arm> *application object* (3.1.78) that represents the complex node relationship *entity* (3.2.9)

5.111.4
Design_constraint_association
<application module: Specification_control_arm> *application object* (3.1.78) that represents the design constraint association *entity* (3.2.9)

Note 1 to entry: A **Design_constraint_association** is an association between a design constraint and a breakdown element or alternative solution whose design is impacted by the design constraint.

5.111.5
Design_constraint_context_association
<application module: Specification_control_arm> *application object* (3.1.78) that represents the design constraint context association *entity* (3.2.9)

Note 1 to entry: A **Design_constraint_context_association** is the association of a design constraint with the context where this constraint is valid.

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5.111.6
Design_constraint_definition
<application module: Specification_control_arm> *application object* (3.1.78) that is a type of *Requirement_view_definition* (5.138.1) that represents the design constraint definition *entity* (3.2.9)

Note 1 to entry: A **Design_constraint_definition** is a type of Requirement_view_definition that specifies a definition of a version of requirement that impacts the design of some physical or functional elements.

5.111.7
Part_function_association
<application module: Specification_control_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the part function association *entity* (3.2.9)

Note 1 to entry: A **Part_function_association** is a type of View_definition_relationship that relates a functional element with a definition of a version of a part that realizes this functionality.

5.111.8
Part_occurrence_relationship
<application module: Specification_control_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the part occurrence relationship *entity* (3.2.9)

Note 1 to entry: A **Part_occurrence_relationship** is a type of View_definition_relationship that relates two part occurrences.

5.111.9
Replaced_usage_relationship
<application module: Specification_control_arm> *application object* (3.1.78) that is a type of *Part_occurrence_relationship* (5.111.8) that represents the replaced usage relationship *entity* (3.2.9)

5.111.10
Specification_category_breakdown_influence
<application module: Specification_control_arm> *application object* (3.1.78) that represents the specification category breakdown influence *entity* (3.2.9)

Note 1 to entry: A **Specification_category_breakdown_influence** is an association with a specification category the members of which influence, in the context of a particular *Product_class* (5.96.5), the design of the solutions and parts realizing a breakdown element.

5.112 Specification_control_mim

5.112.1
class_usage_effectivity_context_assignment
<application module: Specification_control_mim> *entity data type* (3.2.10) that is a type of *effectivity_context_assignment* (4.15.21) that represents the class usage effectivity context assignment *entity* (3.2.9)

Note 1 to entry: A **class_usage_effectivity_context_assignment** is a type of effectivity_context_assignment that implements the ARM concept of *Specification_category_breakdown_influence* (5.111.10).

5.112.2
instance_usage_context_assignment
<application module: Specification_control_mim> *entity data type* (3.2.10) that is a type of *product_definition_context* (4.2.8) that represents the instance usage context assignment *entity* (3.2.9)

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5.113 Group_arm

5.113.1
Group
<application module: Group_arm> *application object* (3.1.78) that represents the group *entity* (3.2.9)

5.113.2
Group_relationship
<application module: Group_arm> *application object* (3.1.78) that represents the group relationship *entity* (3.2.9)

Note 1 to entry: A **Group_relationship** is a relationship between two *Group* (5.113.1) instances.

5.114 Group_mim

5.114.1
applied_group_assignment
<application module: Group_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the applied group assignment *entity* (3.2.9)

5.115 Classification_assignment_arm

5.115.1
Classification_assignment
<application module: Classification_assignment_arm> *application object* (3.1.78) that represents the classification assignment *entity* (3.2.9)

Note 1 to entry: A **Classification_assignment** is the assignment of a *Class* (5.83.1) to product or activity data for their classification.

5.115.2
Classification_assignment_relationship
<application module: Classification_assignment_arm> *application object* (3.1.78) that represents the classification assignment relationship *entity* (3.2.9)

Note 1 to entry: A **Classification_assignment_relationship** is a relationship between two *Classification_assignment* (5.115.1) objects.

5.116 Classification_assignment_mim

5.116.1
applied_classification_assignment
<application module: Classification_assignment_mim> *entity data type* (3.2.10) that is a type of *classification_assignment* (4.15.11) that represents the applied classification assignment *entity* (3.2.9)

5.116.2
applied_classification_assignment_relationship
<application module: Classification_assignment_mim> *entity data type* (3.2.10) that is a type of *classification_assignment_relationship* (4.15.12) that represents the applied classification assignment relationship *entity* (3.2.9)

Note 1 to entry: An **applied_classification_assignment_relationship** is a type of classification_assignment_relationship that describes a relationship between two *applied_classification_assignment* (5.116.1) objects.

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5.117 Part_collection_arm

5.117.1
Collected_item_association
<application module: Part_collection_arm> *application object* (3.1.78) that is a type of *Product_occurrence_definition_relationship* (5.38.5) that represents the collected item association *entity* (3.2.9)

Note 1 to entry: A **Collected_item_association** is a type of Product_occurrence_definition_relationship that associates a *Product_occurrence* (5.79.2) with a *Collection_definition* (5.117.2).

5.117.2
Collection_definition
<application module: Part_collection_arm> *application object* (3.1.78) that is a type of *Part_view_definition* (5.35.1) that represents the collection definition *entity* (3.2.9)

Note 1 to entry: A **Collection_definition** is a type of Part_view_definition that identifies a collection of parts that are mounted in the same product but may not be assembled together.

5.118 Measure_representation_arm

5.118.1
Measure_item
<application module: Measure_representation_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the measure item *entity* (3.2.9)

Note 1 to entry: A **Measure_item** is a type of Representation_item that conveys the value of a quantity.

5.118.2
Numerical_item_with_global_unit
<application module: Measure_representation_arm> *application object* (3.1.78) that is a type of *Measure_item* (5.118.1) that represents the numerical item with global unit *entity* (3.2.9)

Note 1 to entry: A **Numerical_item_with_global_unit** is a type of Measure_item where the value is expressed with respect to a unit provided as a global information associated with the representation context.

5.118.3
Numerical_item_with_unit
<application module: Measure_representation_arm> *application object* (3.1.78) that is a type of *Measure_item* (5.118.1) and *Value_with_unit* (5.65.20) that represents the numerical item with unit *entity* (3.2.9)

Note 1 to entry: A **Numerical_item_with_unit** is a type of Measure_item that is also a Value_with_unit.

5.118.4
Property_value_representation
<application module: Measure_representation_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the property value representation *entity* (3.2.9)

Note 1 to entry: A **Property_value_representation** is a type of Representation that represents one or more quantity values.

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5.119 Document_and_version_identification_arm

5.119.1
Document
<application module: Document_and_version_identification_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the document *entity* (3.2.9)

Note 1 to entry: A **Document** is a type of Product used to identify documentation data that is under configuration change management.

5.119.2
Document_version
<application module: Document_and_version_identification_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the document version *entity* (3.2.9)

Note 1 to entry: A **Document_version** is a type of Product_version A **Document_version** identifies a particular version of a document.

5.120 Document_assignment_arm

5.120.1
Document_assignment
<application module: Document_assignment_arm> *application object* (3.1.78) that represents the document assignment *entity* (3.2.9)

Note 1 to entry: A **Document_assignment** is a mechanism to associate a document with product data, where the assigned document provides information about the data with which it is associated.

5.120.2
Partial_document_assignment
<application module: Document_assignment_arm> *application object* (3.1.78) that is a type of *Document_assignment* (5.120.1) that represents the partial document assignment *entity* (3.2.9)

5.121 Document_assignment_mim

5.121.1
applied_document_reference
<application module: Document_assignment_mim> *entity data type* (3.2.10) that is a type of *document_reference* (4.15.17) that represents the applied document reference *entity* (3.2.9)

5.121.2
applied_document_usage_constraint_assignment
<application module: Document_assignment_mim> *entity data type* (3.2.10) that is a type of *document_usage_constraint_assignment* (4.15.18) that represents the applied document usage constraint assignment *entity* (3.2.9)

5.121.3
document_product_equivalence
<application module: Document_assignment_mim> *entity data type* (3.2.10) that is a type of *document_product_association* (4.8.2) that represents the document product equivalence *entity* (3.2.9)

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5.122 Document_definition_arm

5.122.1
Digital_document_definition
<application module: Document_definition_arm> *application object* (3.1.78) that is a type of *Document_definition* (5.122.2) that represents the digital document definition *entity* (3.2.9)

5.122.2
Document_definition
<application module: Document_definition_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the document definition *entity* (3.2.9)

Note 1 to entry: A **Document_definition** is a type of Product_view_definition that is a *Document_version* (5.119.2) in a particular format.

5.122.3
Document_location_identification
<application module: Document_definition_arm> *application object* (3.1.78) that is a type of *External_source_identification* (5.127.2) that represents the document location identification *entity* (3.2.9)

Note 1 to entry: A **Document_location_identification** is a type of External_source_identification that identifies the location of the components of a *Document_definition* (5.122.2) in an external storage system where they can be found.

5.122.4
Physical_document_definition
<application module: Document_definition_arm> *application object* (3.1.78) that is a type of *Document_definition* (5.122.2) that represents the physical document definition *entity* (3.2.9)

5.123 Document_structure_arm

5.123.1
Document_definition_relationship
<application module: Document_structure_arm> *application object* (3.1.78) that represents the document definition relationship *entity* (3.2.9)

Note 1 to entry: A **Document_definition_relationship** is a relationship between two instances of *Document_definition* (5.122.2).

5.123.2
File_relationship
<application module: Document_structure_arm> *application object* (3.1.78) that represents the file relationship *entity* (3.2.9)

Note 1 to entry: A **File_relationship** is a relationship between two instances of *File* (5.125.2).

5.124 Document_properties_arm

5.124.1
Assigned_document_property
<application module: Document_properties_arm> *application object* (3.1.78) that is a type of *Assigned_property* (5.40.2) that represents the assigned document property *entity* (3.2.9)

Note 1 to entry: An **Assigned_document_property** is a type of Assigned_property that identifies a property assigned to a document definition or to a file.

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5.124.2
Descriptive_document_property
<application module: Document_properties_arm> *application object* (3.1.78) that is a type of *String_representation_item* (5.12.9) that represents the descriptive document property *entity* (3.2.9)

Note 1 to entry: A **Descriptive_document_property** is a type of String_representation_item that specifies a text based characteristics of a *Document_definition* (5.122.2) or of a *File* (5.125.2).

5.124.3
Document_property_representation
<application module: Document_properties_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the document property representation *entity* (3.2.9)

Note 1 to entry: A **Document_property_representation** is a type of Representation that conveys the parameters of a particular aspect of an *Assigned_document_property* (5.124.1).

5.124.4
Numerical_document_property
<application module: Document_properties_arm> *application object* (3.1.78) that is a type of *Numerical_item_with_unit* (5.118.3) that represents the numerical document property *entity* (3.2.9)

Note 1 to entry: A **Numerical_document_property** is a type of Numerical_item_with_unit that specifies a numerical characteristic of a *Document_definition* (5.122.2) or of a *File* (5.125.2).

5.125 File_identification_arm

5.125.1
Digital_file
<application module: File_identification_arm> *application object* (3.1.78) that is a type of *File* (5.125.2) that represents the digital file *entity* (3.2.9)

5.125.2
File
<application module: File_identification_arm> *application object* (3.1.78) that represents the file *entity* (3.2.9)

Note 1 to entry: A **File** is a file stored on a computer system or in a stack of non-digital documents.

5.125.3
File_location_identification
<application module: File_identification_arm> *application object* (3.1.78) that is a type of *External_item_identification* (5.127.1) that represents the file location identification *entity* (3.2.9)

Note 1 to entry: A **File_location_identification** is a type of External_item_identification that identifies the location of a *File* (5.125.2) in an external storage system where it can be found.

5.125.4
Document_type
<application module: File_identification_arm> *application object* (3.1.78) that represents the document type *entity* (3.2.9)

Note 1 to entry: A **Document_type** is the kind of data that are contained in the *File* (5.125.2).

5.125.5

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Hardcopy
<application module: File_identification_arm> *application object* (3.1.78) that is a type of *File* (5.125.2) that represents the hardcopy *entity* (3.2.9)

Note 1 to entry: A **Hardcopy** is a type of File that represents a non-digital document.

5.126 File_identification_mim

5.126.1
document_file
<application module: File_identification_mim> *entity data type* (3.2.10) that is a type of *document* (4.8.1) and *characterized_object* (4.19.1) that represents the document file *entity* (3.2.9)

Note 1 to entry: A **document_file** is a type of document and of characterized_object.

5.127 External_item_identification_assignment_arm

5.127.1
External_item_identification
<application module: External_item_identification_assignment_arm> *application object* (3.1.78) that is a type of *External_source_identification* (5.127.2) that represents the external item identification *entity* (3.2.9)

Note 1 to entry: An **External_item_identification** is a type of External_source_identification that provides the identifier of an item in the context of an external source where it can be found.

5.127.2
External_source_identification
<application module: External_item_identification_assignment_arm> *application object* (3.1.78) that represents the external source identification *entity* (3.2.9)

Note 1 to entry: An **External_source_identification** is the identification of the source where an item, or the components of an item, can be found.

5.127.3
External_item_identification_relationship
<application module: External_item_identification_assignment_arm> *application object* (3.1.78) that represents the external item identification relationship *entity* (3.2.9)

5.128 External_item_identification_assignment_mim

5.128.1
applied_external_identification_assignment
<application module: External_item_identification_assignment_mim> *entity data type* (3.2.10) that is a type of *external_identification_assignment* (4.15.29) that represents the applied external identification assignment *entity* (3.2.9)

5.128.2
applied_external_identification_assignment_relationship
<application module: External_item_identification_assignment_mim> *entity data type* (3.2.10) that is a type of *external_identification_assignment_relationship* (4.15.30) that represents the applied external identification assignment relationship *entity* (3.2.9)

Note 1 to entry: An **applied_external_identification_assignment_relationship** is a type of external_identification_assignment_relationship that describes a relationship between two *applied_external_identification_assignment* (5.128.1) objects.

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5.129 External_properties_arm

5.129.1
External_library_property
<application module: External_properties_arm> *application object* (3.1.78) that is a type of *Independent_property* (5.44.1) that represents the external library property *entity* (3.2.9)

Note 1 to entry: An **External_library_property** is a type of Independent_property is a mechanism to refer to an entry in an external library other than ISO 13584.

5.129.2
Plib_property_reference
<application module: External_properties_arm> *application object* (3.1.78) that is a type of *Independent_property* (5.44.1) that represents the plib property reference *entity* (3.2.9)

Note 1 to entry: A **Plib_property_reference** is a type of Independent_property that designates a property in a library compliant to ISO 13584.

5.130 External_properties_mim

5.130.1
externally_defined_general_property
<application module: External_properties_mim> *entity data type* (3.2.10) that is a type of *general_property* (4.19.5) and *externally_defined_item* (4.11.3) that represents the externally defined general property *entity* (3.2.9)

Note 1 to entry: An **externally_defined_general_property** is a type of externally_defined_item and general_property that implements the ARM concept of *External_library_property* (5.129.1).

5.131 Derived_shape_element_arm

5.131.1
Apex
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Derived_shape_element* (5.131.6) that represents the apex *entity* (3.2.9)

Note 1 to entry: An **Apex** is a type of Derived_shape_element that defines the point corresponding to the common apex (the location where a plane and conical element intersect at a single point) of one or more conical *Shape_element* (5.41.6).

5.131.2
Centre_axis
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Centre_of_symmetry* (5.131.3) that represents the centre axis *entity* (3.2.9)

Note 1 to entry: A **Centre_axis** is a type of Centre_of_symmetry that is axial in form.

5.131.3
Centre_of_symmetry
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Derived_shape_element* (5.131.6) that represents the centre of symmetry *entity* (3.2.9)

Note 1 to entry: A **Centre_of_symmetry** is a type of Derived_shape_element that is derived by determining the geometric centre of one or more *Shape_element* (5.41.6).

5.131.4

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Centre_plane
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Centre_of_symmetry* (5.131.3) that represents the centre plane *entity* (3.2.9)

Note 1 to entry: A **Centre_plane** is a type of Centre_of_symmetry that is the centre plane between two opposing surfaces.

5.131.5
Centre_point
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Centre_of_symmetry* (5.131.3) that represents the centre point *entity* (3.2.9)

Note 1 to entry: A **Centre_point** is a type of Centre_of_symmetry the form of which is that of a point.

5.131.6
Derived_shape_element
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the derived shape element *entity* (3.2.9)

5.131.7
Geometric_alignment
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Derived_shape_element* (5.131.6) that represents the geometric alignment *entity* (3.2.9)

Note 1 to entry: A **Geometric_alignment** is a type of Derived_shape_element that defines a planar or linear feature that requires two or more features lying in the same plane or along the same line.

5.131.8
Geometric_contact
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Derived_shape_element* (5.131.6) that represents the geometric contact *entity* (3.2.9)

5.131.9
Geometric_intersection
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Derived_shape_element* (5.131.6) that represents the geometric intersection *entity* (3.2.9)

Note 1 to entry: A **Geometric_intersection** is a type of Derived_shape_element that is the common intersection of two or more *Shape_element* (5.41.6).

5.131.10
Extension
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Derived_shape_element* (5.131.6) that represents the extension *entity* (3.2.9)

Note 1 to entry: An **Extension** is a type of Derived_shape_element that corresponds to the extension of a curve or surface *Shape_element* (5.41.6).

5.131.11
Median_curve
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Centre_of_symmetry* (5.131.3) that represents the median curve *entity* (3.2.9)

Note 1 to entry: A **Median_curve** is a type of Centre_of_symmetry between two or more curves.

5.131.12

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Median_surface
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Centre_of_symmetry* (5.131.3) that represents the median surface *entity* (3.2.9)

Note 1 to entry: A **Median_surface** is a type of Centre_of_symmetry between two opposing surfaces.

5.131.13
Parallel_offset
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Derived_shape_element* (5.131.6) that represents the parallel offset *entity* (3.2.9)

5.131.14
Perpendicular_to
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Derived_shape_element* (5.131.6) that represents the perpendicular to *entity* (3.2.9)

Note 1 to entry: A **Perpendicular_to** is a type of Derived_shape_element that is oriented orthogonally to another *Shape_element* (5.41.6).

5.131.15
Tangent_plane
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Tangent* (5.131.16) that represents the tangent plane *entity* (3.2.9)

5.131.16
Tangent
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Derived_shape_element* (5.131.6) that represents the tangent *entity* (3.2.9)

Note 1 to entry: A **Tangent** is a type of Derived_shape_element that contacts a curve or surface *Shape_element* (5.41.6) at a single point or line.

5.131.17
Offset_shape_element
<application module: Derived_shape_element_arm> *application object* (3.1.78) that is a type of *Derived_shape_element* (5.131.6) that represents the offset shape element *entity* (3.2.9)

5.132 Construction_geometry_arm

5.132.1
Constructive_geometry
<application module: Construction_geometry_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the constructive geometry *entity* (3.2.9)

Note 1 to entry: A **Constructive_geometry** is a type of Representation that contains a collection of geometric elements used to support the definition of a *Geometric_model* (5.10.12).

5.132.2
Constructive_geometry_association
<application module: Construction_geometry_arm> *application object* (3.1.78) that represents the constructive geometry association *entity* (3.2.9)

Note 1 to entry: A **Constructive_geometry_association** is the association of an auxiliary *Constructive_geometry* (5.132.1) with a *Geometric_model* (5.10.12) or another Constructive_geometry.

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5.133 Construction_geometry_mim

5.133.1
constructive_geometry_representation
<application module: Construction_geometry_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the constructive geometry representation *entity* (3.2.9)

Note 1 to entry: A **constructive_geometry_representation** is a type of representation that implements the ARM concept of *Constructive_geometry* (5.132.1).

5.133.2
constructive_geometry_representation_relationship
<application module: Construction_geometry_mim> *entity data type* (3.2.10) that is a type of *representation_relationship* (4.41.20) that represents the constructive geometry representation relationship *entity* (3.2.9)

Note 1 to entry: A **constructive_geometry_representation_relationship** is a type of representation_relationship that implements the ARM concept of *Constructive_geometry_association* (5.132.2).

5.134 Associative_text_arm

5.134.1
Annotation_curve
<application module: Associative_text_arm> *application object* (3.1.78) that is a type of *Annotation_element* (5.134.2) that represents the annotation curve *entity* (3.2.9)

Note 1 to entry: An **Annotation_curve** is a type of Annotation_element two-dimensional trimmed curve that is used to annotate a drawing or a geometric model.

5.134.2
Annotation_element
<application module: Associative_text_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) and *Styled_element* (5.5.6) that represents the annotation element *entity* (3.2.9)

Note 1 to entry: An **Annotation_element** is a type of Detailed_geometric_model_element and a type of Styled_element that is a representation of an annotation.

5.134.3
Annotation_text
<application module: Associative_text_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the annotation text *entity* (3.2.9)

5.134.4
Dimension_text
<application module: Associative_text_arm> *application object* (3.1.78) that is a type of *Annotation_text_occurrence* (5.134.5) that represents the dimension text *entity* (3.2.9)

5.134.5
Annotation_text_occurrence
<application module: Associative_text_arm> *application object* (3.1.78) that is a type of *Annotation_element* (5.134.2) that represents the annotation text occurrence *entity* (3.2.9)

Note 1 to entry: A **Annotation_text_occurrence** is a type of Annotation_element that presents a text.

5.134.6

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Text_string_representation
<application module: Associative_text_arm> *application object* (3.1.78) that is a type of *Styled_model* (5.5.7) that represents the text string representation *entity* (3.2.9)

5.134.7
Text_style
<application module: Associative_text_arm> *application object* (3.1.78) that represents the text style *entity* (3.2.9)

Note 1 to entry: A **Text_style** is the definition of the visual presentation of a *Text_literal* (5.136.5), *Composite_presentable_text* (5.136.1), *Annotation_text* (5.134.3), or an *Annotation_text_character* (5.624.1).

5.135 Product_structure_arm

5.135.1
Alternate_part_relationship
<application module: Product_structure_arm> *application object* (3.1.78) that is a type of *Alternate_product_relationship* (5.55.1) that represents the alternate part relationship *entity* (3.2.9)

Note 1 to entry: An **Alternate_part_relationship** is a type of *alternate_product_relationship* (4.25.1) where the alternate and base products are parts.

5.136 Text_appearance_arm

5.136.1
Composite_presentable_text
<application module: Text_appearance_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the composite presentable text *entity* (3.2.9)

Note 1 to entry: A **Composite_presentable_text** is a type of Detailed_geometric_model_element that identifies a collection of presentable texts.

5.136.2
Defined_character_glyph
<application module: Text_appearance_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the defined character glyph *entity* (3.2.9)

Note 1 to entry: A **Defined_character_glyph** is a type of Detailed_geometric_model_element for the definition of a single character.

5.136.3
Draughting_pre_defined_text_font
<application module: Text_appearance_arm> *application object* (3.1.78) that represents the draughting pre defined text font *entity* (3.2.9)

Note 1 to entry: A **Draughting_pre_defined_text_font** is a pre defined text font for draughting purposes as defined in ISO 3098.

5.136.4
Externally_defined_text_font
<application module: Text_appearance_arm> *application object* (3.1.78) that represents the externally defined text font *entity* (3.2.9)

Note 1 to entry: An **Externally_defined_text_font** is an external reference to a text font.

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5.136.5
Text_literal
<application module: Text_appearance_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the text literal *entity* (3.2.9)

5.136.6
Text_literal_with_associated_curves
<application module: Text_appearance_arm> *application object* (3.1.78) that is a type of *Text_literal* (5.136.5) that represents the text literal with associated curves *entity* (3.2.9)

5.136.7
Text_literal_with_blanking_box
<application module: Text_appearance_arm> *application object* (3.1.78) that is a type of *Text_literal* (5.136.5) that represents the text literal with blanking box *entity* (3.2.9)

5.136.8
Text_literal_with_delineation
<application module: Text_appearance_arm> *application object* (3.1.78) that is a type of *Text_literal* (5.136.5) that represents the text literal with delineation *entity* (3.2.9)

5.136.9
Text_literal_with_extent
<application module: Text_appearance_arm> *application object* (3.1.78) that is a type of *Text_literal* (5.136.5) that represents the text literal with extent *entity* (3.2.9)

5.137 Requirement_identification_and_version_arm

5.137.1
Requirement
<application module: Requirement_identification_and_version_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the requirement *entity* (3.2.9)

Note 1 to entry: A **Requirement** is a type of Product that is used to uniquely identify a requirement.

5.137.2
Requirement_version
<application module: Requirement_identification_and_version_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the requirement version *entity* (3.2.9)

Note 1 to entry: A **Requirement_version** is a type of Product_version that identifies a particular version of a requirement.

5.137.3
Requirement_version_relationship
<application module: Requirement_identification_and_version_arm> *application object* (3.1.78) that is a type of *Product_version_relationship* (5.31.1) that represents the requirement version relationship *entity* (3.2.9)

Note 1 to entry: A **Requirement_version_relationship** is a type of Product_version_relationship that is used to relate a previous version (predecessor) of a requirement to the version that replaces it (successor).

5.138 Requirement_view_definition_arm

5.138.1

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Requirement_view_definition
<application module: Requirement_view_definition_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the requirement view definition *entity* (3.2.9)

Note 1 to entry: A **Requirement_view_definition** is a type of Product_view_definition that provides a view of a requirement version relevant for one or more application domains.

5.138.2
Single_requirement_view_definition
<application module: Requirement_view_definition_arm> *application object* (3.1.78) that is a type of *Requirement_view_definition* (5.138.1) that represents the single requirement view definition *entity* (3.2.9)

Note 1 to entry: A **Single_requirement_view_definition** is a type of Requirement_view_definition that is defined by a single property.

5.139 Requirement_view_definition_relationship_arm

5.139.1
Requirement_collection_relationship
<application module: Requirement_view_definition_relationship_arm> *application object* (3.1.78) that is a type of *Requirement_view_definition_relationship* (5.139.2) that represents the requirement collection relationship *entity* (3.2.9)

Note 1 to entry: A **Requirement_collection_relationship** is a type of Requirement_view_definition_relationship that is used to relate a parent (collection) requirement to its member requirements.

5.139.2
Requirement_view_definition_relationship
<application module: Requirement_view_definition_relationship_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the requirement view definition relationship *entity* (3.2.9)

5.139.3
Tracing_relationship
<application module: Requirement_view_definition_relationship_arm> *application object* (3.1.78) that is a type of *Requirement_view_definition_relationship* (5.139.2) that represents the tracing relationship *entity* (3.2.9)

5.139.4
Requirement_precedence_relationship
<application module: Requirement_view_definition_relationship_arm> *application object* (3.1.78) that is a type of *Requirement_view_definition_relationship* (5.139.2) that represents the requirement precedence relationship *entity* (3.2.9)

Note 1 to entry: A **Requirement_precedence_relationship** is a type of Requirement_view_definition_relationship where the related *Requirement_view_definition* (5.138.1) has higher priority than the relating Requirement_view_definition.

5.140 Requirement_view_definition_relationship_mim

5.140.1

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requirement_view_definition_relationship
<application module: Requirement_view_definition_relationship_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the requirement view definition relationship *entity* (3.2.9)

Note 1 to entry: A **requirement_view_definition_relationship** is a type of product_definition_relationship that implements the ARM concept of *Requirement_view_definition_relationship* (5.139.2).

5.141 Building_component_arm

5.141.1
Building_element_component
<application module: Building_component_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the building element component *entity* (3.2.9)

Note 1 to entry: A **Building_element_component** is a type of Shape_element which represents a part of the shape of a *Building_element* (5.143.1) object that can play a functional role.

5.141.2
Negative_component
<application module: Building_component_arm> *application object* (3.1.78) that is a type of *Building_element_component* (5.141.1) that represents the negative component *entity* (3.2.9)

Note 1 to entry: A **Negative_component** is a type of Building_element_component that is a portion of a *Building_element* (5.143.1) and represents a volume of space; it is a volume that is empty space rather than solid material.

5.141.3
Opening
<application module: Building_component_arm> *application object* (3.1.78) that is a type of *Negative_component* (5.141.2) that represents the opening *entity* (3.2.9)

Note 1 to entry: An **Opening** is a type of Negative_component that passes through a *Building_element* (5.143.1) and serves a functional purpose.

5.141.4
Positive_component
<application module: Building_component_arm> *application object* (3.1.78) that is a type of *Building_element_component* (5.141.1) that represents the positive component *entity* (3.2.9)

Note 1 to entry: A **Positive_component** is a type of Building_element_component that represents a solid volume.

5.141.5
Recess
<application module: Building_component_arm> *application object* (3.1.78) that is a type of *Negative_component* (5.141.2) that represents the recess *entity* (3.2.9)

Note 1 to entry: A **Recess** is a type of Negative_component that does not pass through a *Building_element* (5.143.1).

5.142 Building_component_mim

5.142.1

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element_component_classification_group
<application module: Building_component_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the element component classification group *entity* (3.2.9)

5.142.2
negative_component
<application module: Building_component_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the negative component *entity* (3.2.9)

Note 1 to entry: A **negative_component** is a type of shape_aspect that represents a volume of space that is removed from some shape.

5.142.3
opening
<application module: Building_component_mim> *entity data type* (3.2.10) that is a type of *negative_component* (5.142.2) that represents the opening *entity* (3.2.9)

Note 1 to entry: An **opening** is a type of negative_component that represents a volume of space that passes through a structural or enclosing element and serves a functional purpose.

5.142.4
positive_component
<application module: Building_component_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the positive component *entity* (3.2.9)

Note 1 to entry: A **positive_component** is a type of shape_aspect that represents a solid volume that is added to some shape.

5.142.5
recess
<application module: Building_component_mim> *entity data type* (3.2.10) that is a type of *negative_component* (5.142.2) that represents the recess *entity* (3.2.9)

Note 1 to entry: A **recess** is a type of negative_component that represents a volume of space that does not pass through a structural or enclosing element.

5.143 Building_item_arm

5.143.1
Building_element
<application module: Building_item_arm> *application object* (3.1.78) that is a type of *Building_item* (5.143.2) that represents the building element *entity* (3.2.9)

Note 1 to entry: A **Building_element** is a type of Building_item that is a physical part of a building or building system that has a characteristic function.

5.143.2
Building_item
<application module: Building_item_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the building item *entity* (3.2.9)

5.143.3
Fixture_equipment_element
<application module: Building_item_arm> *application object* (3.1.78) that is a type of *Building_element* (5.143.1) that represents the fixture equipment element *entity* (3.2.9)

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Note 1 to entry: A **Fixture_equipment_element** is a type of Building_element that is a solid, tangible part of a building placed or installed in the building.

5.143.4
Service_element
<application module: Building_item_arm> *application object* (3.1.78) that is a type of *Building_element* (5.143.1) that represents the service element *entity* (3.2.9)

5.143.5
Space
<application module: Building_item_arm> *application object* (3.1.78) that is a type of *Building_item* (5.143.2) that represents the space *entity* (3.2.9)

5.143.6
Structure_enclosure_element
<application module: Building_item_arm> *application object* (3.1.78) that is a type of *Building_element* (5.143.1) that represents the structure enclosure element *entity* (3.2.9)

Note 1 to entry: A **Structure_enclosure_element** is a type of Building_element that is an identifiable part of a building that contributes to the basic form or function of a building.

5.144 Building_item_mim

5.144.1
building_element
<application module: Building_item_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the building element *entity* (3.2.9)

Note 1 to entry: A **building_element** is a type of product_definition that is a physical part of a building or building system and has a characteristic function.

5.144.2
fixture_equipment_element
<application module: Building_item_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the fixture equipment element *entity* (3.2.9)

Note 1 to entry: A **fixture_equipment_element** is a type of product_definition that defines a solid, tangible part of a building that is placed or installed in the building.

5.144.3
service_element
<application module: Building_item_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the service element *entity* (3.2.9)

Note 1 to entry: A **service_element** is a type of product_definition that defines a solid, tangible part of a building that is a component in one or more systems installed in the building which provide a service to the building.

5.144.4
space_element
<application module: Building_item_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the space element *entity* (3.2.9)

Note 1 to entry: A **space_element** is a type of product_definition that defines an intangible volumetric region of a building that represents portions of a building usable by building occupants or building service equipment.

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5.144.5
structure_enclosure_element
<application module: Building_item_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the structure enclosure element *entity* (3.2.9)

Note 1 to entry: A **structure_enclosure_element** is a type of product_definition that defines an identifiable part of a building that contributes to the basic form or function of a building.

5.145 Building_structure_arm

5.145.1
Building
<application module: Building_structure_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the building *entity* (3.2.9)

Note 1 to entry: A **Building** is a type of Product_view_definition that defines a version of a construction works, that has the provision of shelter for its occupants or contents as one of its main purposes and is usually enclosed and designed to stand permanently in one place.

5.145.2
Building_level
<application module: Building_structure_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the building level *entity* (3.2.9)

5.145.3
Building_level_assignment
<application module: Building_structure_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the building level assignment *entity* (3.2.9)

5.145.4
Building_section
<application module: Building_structure_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the building section *entity* (3.2.9)

Note 1 to entry: A **Building_section** is a type of Product_view_definition that identifies a logical section in a Building.

5.145.5
Item_assembly
<application module: Building_structure_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the item assembly *entity* (3.2.9)

Note 1 to entry: An **Item_assembly** is a type of Product_view_definition that defines a view of an assembly of *Building_item* (5.143.2) instances or **Item_assembly** instances.

5.145.6
Item_proximity_relationship
<application module: Building_structure_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the item proximity relationship *entity* (3.2.9)

Note 1 to entry: An **Item_proximity_relationship** is a type of View_definition_relationship that defines an association between a *Building_item* (5.143.2) and another Building_item that is near it.

5.145.7

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Sublevel
<application module: Building_structure_arm> *application object* (3.1.78) that is a type of *Building_level* (5.145.2) that represents the sublevel *entity* (3.2.9)

Note 1 to entry: A **Sublevel** is a type of Building_level that is a constituent of another Building_level.

5.146 Building_structure_mim

5.146.1
building
<application module: Building_structure_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the building *entity* (3.2.9)

Note 1 to entry: A **building** is a type of product_definition that defines a version of a construction works, that has the provision of shelter for its occupants or contents as one of its main purposes and is usually enclosed and designed to stand permanently in one place.

5.146.2
building_element_assembly
<application module: Building_structure_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the building element assembly *entity* (3.2.9)

Note 1 to entry: A **building_element_assembly** is a type of product_definition that is a collection of building elements or element assemblies that are assembled together into a larger object.

5.146.3
building_level
<application module: Building_structure_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the building level *entity* (3.2.9)

Note 1 to entry: A **building_level** is a type of product_definition that defines a part of a building that consists of one or more areas accessible through primarily horizontal access paths.

5.146.4
building_section
<application module: Building_structure_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the building section *entity* (3.2.9)

Note 1 to entry: A **building_section** is a type of product_definition that is a logical segment of a building.

5.147 Location_in_building_arm

5.147.1
Contextual_position_in_building
<application module: Location_in_building_arm> *application object* (3.1.78) that represents the contextual position in building *entity* (3.2.9)

Note 1 to entry: A **Contextual_position_in_building** is the specification of the placement of an item, which is defined in its own coordinate space, in the coordinate space of a reference item.

5.147.2
Component_position_in_element
<application module: Location_in_building_arm> *application object* (3.1.78) that represents the component position in element *entity* (3.2.9)

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Note 1 to entry: A **Component_position_in_element** is the specification of the placement of a *Building_element_component* (5.141.1), which is represented in its own coordinate space, in the coordinate space of a *Building_element* (5.143.1).

5.148 Manufacturing_configuration_effectivity_arm

5.148.1
Dated_configuration
<application module: Manufacturing_configuration_effectivity_arm> *application object* (3.1.78) that is a type of *Manufacturing_configuration* (5.148.3) that represents the dated configuration *entity* (3.2.9)

Note 1 to entry: A **Dated_configuration** is a type of Manufacturing_configuration whose effectivity domain is a time interval.

5.148.2
Lot_configuration
<application module: Manufacturing_configuration_effectivity_arm> *application object* (3.1.78) that is a type of *Manufacturing_configuration* (5.148.3) that represents the lot configuration *entity* (3.2.9)

Note 1 to entry: A **Lot_configuration** is a type of Manufacturing_configuration whose effectivity domain is identified by a production lot identifier.

5.148.3
Manufacturing_configuration
<application module: Manufacturing_configuration_effectivity_arm> *application object* (3.1.78) that is a type of *Item_usage_effectivity* (5.71.1) that represents the manufacturing configuration *entity* (3.2.9)

Note 1 to entry: A **Manufacturing_configuration** is a type of Item_usage_effectivity that specifies a condition for the use of a *Product_occurrence* (5.79.2) in a product represented by an instance of *Product_specification* (5.98.1).

5.148.4
Serial_configuration
<application module: Manufacturing_configuration_effectivity_arm> *application object* (3.1.78) that is a type of *Manufacturing_configuration* (5.148.3) that represents the serial configuration *entity* (3.2.9)

Note 1 to entry: A **Serial_configuration** is a type of Manufacturing_configuration whose effectivity domain is an interval of serial numbers.

5.149 Class_of_composition_of_product_arm

5.149.1
Class_of_composition_of_product
<application module: Class_of_composition_of_product_arm> *application object* (3.1.78) that is a type of *Product_version_relationship* (5.31.1) and *Class* (5.83.1) that represents the class of composition of product *entity* (3.2.9)

5.150 Class_of_composition_of_product_mim

5.150.1
class_of_composition_of_product
<application module: Class_of_composition_of_product_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) and *class* (4.75.1) that represents the class of composition of product *entity* (3.2.9)

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5.151 Class_of_connection_of_product_arm

5.151.1
Class_of_connection_of_product
<application module: Class_of_connection_of_product_arm> *application object* (3.1.78) that is a type of *Product_version_relationship* (5.31.1) and *Class* (5.83.1) that represents the class of connection of product *entity* (3.2.9)

5.152 Class_of_connection_of_product_mim

5.152.1
class_of_connection_of_product
<application module: Class_of_connection_of_product_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) and *class* (4.75.1) that represents the class of connection of product *entity* (3.2.9)

5.153 Class_of_containment_of_product_arm

5.153.1
Class_of_containment_of_product
<application module: Class_of_containment_of_product_arm> *application object* (3.1.78) that is a type of *Product_version_relationship* (5.31.1) and *Class* (5.83.1) that represents the class of containment of product *entity* (3.2.9)

5.154 Class_of_containment_of_product_mim

5.154.1
class_of_containment_of_product
<application module: Class_of_containment_of_product_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) and *class* (4.75.1) that represents the class of containment of product *entity* (3.2.9)

5.155 Class_of_involvement_of_product_in_connection_arm

5.155.1
Class_of_connection_of_product_with_involvements
<application module: Class_of_involvement_of_product_in_connection_arm> *application object* (3.1.78) that is a type of *Class_of_connection_of_product* (5.151.1) and *Class_of_product* (5.88.1) that represents the class of connection of product with involvements *entity* (3.2.9)

5.155.2
Class_of_involvement_of_product_in_connection
<application module: Class_of_involvement_of_product_in_connection_arm> *application object* (3.1.78) that is a type of *Product_version_relationship* (5.31.1) and *Class* (5.83.1) that represents the class of involvement of product in connection *entity* (3.2.9)

5.156 Class_of_involvement_of_product_in_connection_mim

5.156.1
class_of_connection_of_product_with_involvements
<application module: Class_of_involvement_of_product_in_connection_mim> *entity data type* (3.2.10) that is a type of *class_of_connection_of_product* (5.152.1) and *class_of_product* (5.89.1) that represents the class of connection of product with involvements *entity* (3.2.9)

5.156.2

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class_of_involvement_of_product_in_connection
<application module: Class_of_involvement_of_product_in_connection_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) and *class* (4.75.1) that represents the class of involvement of product in connection *entity* (3.2.9)

5.157 Product_as_individual_arm

5.157.1
Product_as_individual
<application module: Product_as_individual_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the product as individual *entity* (3.2.9)

Note 1 to entry: A **Product_as_individual** is a type of Product that identifies an individual artefact that has been made or is planned to be made.

5.157.2
Product_as_individual_version
<application module: Product_as_individual_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the product as individual version *entity* (3.2.9)

5.157.3
Product_as_individual_view
<application module: Product_as_individual_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the product as individual view *entity* (3.2.9)

Note 1 to entry: A **Product_as_individual_view** is a type of Product_view_definition that defines a characterization view of a version of a *Product_as_individual* (5.157.1).

5.157.4
Product_as_planned
<application module: Product_as_individual_arm> *application object* (3.1.78) that is a type of *Product_as_individual_version* (5.157.2) that represents the product as planned *entity* (3.2.9)

Note 1 to entry: A **Product_as_planned** is a type of Product_as_individual_version that identifies a revision of an individual artefact that has yet to be made.

5.157.5
Product_as_realized
<application module: Product_as_individual_arm> *application object* (3.1.78) that is a type of *Product_as_individual_version* (5.157.2) that represents the product as realized *entity* (3.2.9)

Note 1 to entry: A **Product_as_realized** is a type of Product_as_individual_version that identifies a revision of an individual artefact that has been made.

5.157.6
Product_design_to_individual
<application module: Product_as_individual_arm> *application object* (3.1.78) that represents the product design to individual *entity* (3.2.9)

Note 1 to entry: A **Product_design_to_individual** is a relationship between a product design, represented by *Product* (5.28.1), and the product that is planned to be made or has been made from the design, represented by *Product_as_individual* (5.157.1).

5.157.7

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Product_design_version_to_individual
<application module: Product_as_individual_arm> *application object* (3.1.78) that represents the product design version to individual *entity* (3.2.9)

Note 1 to entry: A **Product_design_version_to_individual** is a relationship between a version of a product design, represented by *Product_version* (5.29.1) or *Product_configuration* (5.68.2), and the product that is planned to be made (*Product_as_planned* (5.157.4)) or has been made (*Product_as_realized* (5.157.5)) from the design.

5.157.8
Product_design_view_to_individual
<application module: Product_as_individual_arm> *application object* (3.1.78) that represents the product design view to individual *entity* (3.2.9)

Note 1 to entry: A **Product_design_view_to_individual** is a relationship between a product design, represented by *Product_view_definition* (5.30.1).

5.157.9
Product_planned_to_realized
<application module: Product_as_individual_arm> *application object* (3.1.78) that represents the product planned to realized *entity* (3.2.9)

Note 1 to entry: A **Product_planned_to_realized** is a relationship that establishes that a revision of a planned artefact represented by *Product_as_planned* (5.157.4) has been realized as a revision of an actual artefact *Product_as_realized* (5.157.5).

5.158 Product_as_individual_mim

5.158.1
product_design_version_to_individual
<application module: Product_as_individual_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the product design version to individual *entity* (3.2.9)

Note 1 to entry: A **product_design_version_to_individual** is a type of product_definition_formation_relationship that identifies a relationship between a version of a product design, represented by *product_definition_formation* (4.18.11), and the product that is planned to be made (*product_as_planned* (5.158.4)) or has been made (product_definition_formation) from the design.

5.158.2
product_design_to_individual
<application module: Product_as_individual_mim> *entity data type* (3.2.10) that is a type of *product_relationship* (4.18.22) that represents the product design to individual *entity* (3.2.9)

Note 1 to entry: A **product_design_to_individual** is a type of product_relationship that identifies a relationship between a product design, represented by *product* (4.18.4), and the product that is planned to be made or has been made from the design.

5.158.3
product_planned_to_realized
<application module: Product_as_individual_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the product planned to realized *entity* (3.2.9)

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Note 1 to entry: A **product_planned_to_realized** is a type of product_definition_formation_relationship that identifies a relationship that establishes that the planned artefact represented by *product_as_planned* (5.158.4) has been realized as the actual artefact *product* (4.18.4).

5.158.4
product_as_planned
<application module: Product_as_individual_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) that represents the product as planned *entity* (3.2.9)

Note 1 to entry: A **product_as_planned** is a type of product_definition_formation that identifies an individual artefact that has yet to be made.

5.159 Involvement_of_individual_product_in_connection_arm

5.159.1
Connection_of_individual_product_with_involvements
<application module: Involvement_of_individual_product_in_connection_arm> *application object* (3.1.78) that is a type of *Connection_of_individual_product* (5.163.1) and *Product_as_individual_version* (5.157.2) that represents the connection of individual product with involvements *entity* (3.2.9)

5.159.2
Involvement_of_individual_product_in_connection
<application module: Involvement_of_individual_product_in_connection_arm> *application object* (3.1.78) that is a type of *Product_version_relationship* (5.31.1) that represents the involvement of individual product in connection *entity* (3.2.9)

5.160 Involvement_of_individual_product_in_connection_mim

5.160.1
connection_of_individual_product_with_involvements
<application module: Involvement_of_individual_product_in_connection_mim> *entity data type* (3.2.10) that is a type of *connection_of_individual_product* (5.164.1) and *product_definition_formation* (4.18.11) that represents the connection of individual product with involvements *entity* (3.2.9)

5.160.2
involvement_of_individual_product_in_connection
<application module: Involvement_of_individual_product_in_connection_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the involvement of individual product in connection *entity* (3.2.9)

5.161 Composition_of_individual_product_arm

5.161.1
Composition_of_individual_product
<application module: Composition_of_individual_product_arm> *application object* (3.1.78) that is a type of *Product_version_relationship* (5.31.1) that represents the composition of individual product *entity* (3.2.9)

5.162 Composition_of_individual_product_mim

5.162.1
composition_of_individual_product
<application module: Composition_of_individual_product_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the composition of individual product *entity* (3.2.9)

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5.163 Connection_of_individual_product_arm

5.163.1
Connection_of_individual_product
<application module: Connection_of_individual_product_arm> *application object* (3.1.78) that is a type of *Product_version_relationship* (5.31.1) that represents the connection of individual product *entity* (3.2.9)

5.164 Connection_of_individual_product_mim

5.164.1
connection_of_individual_product
<application module: Connection_of_individual_product_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the connection of individual product *entity* (3.2.9)

5.165 Containment_of_individual_product_arm

5.165.1
Containment_of_individual_product
<application module: Containment_of_individual_product_arm> *application object* (3.1.78) that is a type of *Product_version_relationship* (5.31.1) that represents the containment of individual product *entity* (3.2.9)

5.166 Containment_of_individual_product_mim

5.166.1
containment_of_individual_product
<application module: Containment_of_individual_product_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the containment of individual product *entity* (3.2.9)

5.167 Class_of_composition_of_activity_arm

5.167.1
Class_of_composition_of_activity
<application module: Class_of_composition_of_activity_arm> *application object* (3.1.78) that is a type of *Activity_relationship* (5.56.2) and *Class* (5.83.1) that represents the class of composition of activity *entity* (3.2.9)

5.168 Class_of_composition_of_activity_mim

5.168.1
class_of_composition_of_activity
<application module: Class_of_composition_of_activity_mim> *entity data type* (3.2.10) that is a type of *action_relationship* (4.1.5) and *class* (4.75.1) that represents the class of composition of activity *entity* (3.2.9)

5.169 Class_of_connection_of_activity_arm

5.169.1
Class_of_connection_of_activity
<application module: Class_of_connection_of_activity_arm> *application object* (3.1.78) that is a type of *Activity_relationship* (5.56.2) and *Class* (5.83.1) that represents the class of connection of activity *entity* (3.2.9)

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5.170 Class_of_connection_of_activity_mim

5.170.1
class_of_connection_of_activity
<application module: Class_of_connection_of_activity_mim> *entity data type* (3.2.10) that is a type of *action_relationship* (4.1.5) and *class* (4.75.1) that represents the class of connection of activity *entity* (3.2.9)

5.171 Class_of_involvement_in_activity_arm

5.171.1
Class_of_involvement_in_activity
<application module: Class_of_involvement_in_activity_arm> *application object* (3.1.78) that is a type of *Applied_activity_assignment* (5.56.4) and *Class* (5.83.1) that represents the class of involvement in activity *entity* (3.2.9)

5.172 Class_of_involvement_in_activity_mim

5.172.1
class_of_involvement_in_activity
<application module: Class_of_involvement_in_activity_mim> *entity data type* (3.2.10) that is a type of *applied_action_assignment* (5.57.1) and *class* (4.75.1) that represents the class of involvement in activity *entity* (3.2.9)

5.173 Individual_activity_arm

5.173.1
Individual_activity
<application module: Individual_activity_arm> *application object* (3.1.78) that is a type of *Activity* (5.56.1) that represents the individual activity *entity* (3.2.9)

5.174 Individual_activity_mim

5.174.1
individual_activity
<application module: Individual_activity_mim> *entity data type* (3.2.10) that is a type of *executed_action* (4.1.14) that represents the individual activity *entity* (3.2.9)

5.175 Composition_of_individual_activity_arm

5.175.1
Composition_of_individual_activity
<application module: Composition_of_individual_activity_arm> *application object* (3.1.78) that is a type of *Activity_relationship* (5.56.2) that represents the composition of individual activity *entity* (3.2.9)

5.176 Composition_of_individual_activity_mim

5.176.1
composition_of_individual_activity
<application module: Composition_of_individual_activity_mim> *entity data type* (3.2.10) that is a type of *action_relationship* (4.1.5) that represents the composition of individual activity *entity* (3.2.9)

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5.177 Connection_of_individual_activity_arm

5.177.1
Connection_of_individual_activity
<application module: Connection_of_individual_activity_arm> *application object* (3.1.78) that is a type of *Activity_relationship* (5.56.2) that represents the connection of individual activity *entity* (3.2.9)

5.178 Connection_of_individual_activity_mim

5.178.1
connection_of_individual_activity
<application module: Connection_of_individual_activity_mim> *entity data type* (3.2.10) that is a type of *action_relationship* (4.1.5) that represents the connection of individual activity *entity* (3.2.9)

5.179 Individual_involvement_in_activity_arm

5.179.1
Individual_involvement_in_activity
<application module: Individual_involvement_in_activity_arm> *application object* (3.1.78) that is a type of *Applied_activity_assignment* (5.56.4) that represents the individual involvement in activity *entity* (3.2.9)

5.180 Individual_involvement_in_activity_mim

5.180.1
individual_involvement_in_activity
<application module: Individual_involvement_in_activity_mim> *entity data type* (3.2.10) that is a type of *applied_action_assignment* (5.57.1) that represents the individual involvement in activity *entity* (3.2.9)

5.181 Class_of_person_arm

5.181.1
Class_of_person
<application module: Class_of_person_arm> *application object* (3.1.78) that is a type of *Class* (5.83.1) that represents the class of person *entity* (3.2.9)

5.182 Class_of_person_mim

5.182.1
class_of_person
<application module: Class_of_person_mim> *entity data type* (3.2.10) that is a type of *person_type* (4.17.14) and *class* (4.75.1) that represents the class of person *entity* (3.2.9)

5.183 Possession_of_property_arm

5.183.1
Possession_of_property
<application module: Possession_of_property_arm> *application object* (3.1.78) that is a type of *Applied_independent_property* (5.40.1) that represents the possession of property *entity* (3.2.9)

5.184 Possession_of_property_mim

5.184.1

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possession_of_property_by_activity
<application module: Possession_of_property_mim> *entity data type* (3.2.10) that is a type of *action_property* (4.104.1) that represents the possession of property by activity *entity* (3.2.9)

5.184.2
possession_of_property_by_product
<application module: Possession_of_property_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) that represents the possession of property by product *entity* (3.2.9)

5.184.3
possessed_property
<application module: Possession_of_property_mim> *entity data type* (3.2.10) that is a type of *general_property_association* (4.19.6) that represents the possessed property *entity* (3.2.9)

5.185 Schematic_and_symbolization_arm

5.185.1
Drawing_revision_class_of_document
<application module: Schematic_and_symbolization_arm> *application object* (3.1.78) that is a type of *Document_version* (5.119.2) and *Class* (5.83.1) and *Drawing_revision* (5.193.2) that represents the drawing revision class of document *entity* (3.2.9)

5.185.2
Drawing_sheet_revision_class_of_document
<application module: Schematic_and_symbolization_arm> *application object* (3.1.78) that is a type of *Document_version* (5.119.2) and *Class* (5.83.1) and *Drawing_sheet_revision* (5.193.3) that represents the drawing sheet revision class of document *entity* (3.2.9)

5.186 Schematic_and_symbolization_mim

5.186.1
drawing_revision_class_of_document
<application module: Schematic_and_symbolization_mim> *entity data type* (3.2.10) that is a type of *class* (4.75.1) and *product_definition_formation* (4.18.11) and *drawing_revision* (4.81.2) that represents the drawing revision class of document *entity* (3.2.9)

5.186.2
drawing_sheet_revision_class_of_document
<application module: Schematic_and_symbolization_mim> *entity data type* (3.2.10) that is a type of *class* (4.75.1) and *product_definition_formation* (4.18.11) and *drawing_sheet_revision* (4.81.4) that represents the drawing sheet revision class of document *entity* (3.2.9)

5.187 Schematic_drawing_arm

5.187.1
Intra_page_connector
<application module: Schematic_drawing_arm> *application object* (3.1.78) that is a type of *Page_connector* (5.187.4) that represents the intra page connector *entity* (3.2.9)

5.187.2
Off_page_connector
<application module: Schematic_drawing_arm> *application object* (3.1.78) that is a type of *Page_connector* (5.187.4) that represents the off page connector *entity* (3.2.9)

5.187.3

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On_page_connector
<application module: Schematic_drawing_arm> *application object* (3.1.78) that is a type of *Page_connector* (5.187.4) that represents the on page connector *entity* (3.2.9)

5.187.4
Page_connector
<application module: Schematic_drawing_arm> *application object* (3.1.78) that is a type of *Schematic_element_definition* (5.189.8) that represents the page connector *entity* (3.2.9)

5.187.5
Schematic_drawing
<application module: Schematic_drawing_arm> *application object* (3.1.78) that is a type of *Schematic_element_definition* (5.189.8) and *Drawing_sheet_revision* (5.193.3) that represents the schematic drawing *entity* (3.2.9)

5.187.6
Reference_between_page_connectors
<application module: Schematic_drawing_arm> *application object* (3.1.78) that is a type of *Representation_relationship* (5.12.8) that represents the reference between page connectors *entity* (3.2.9)

5.188 Schematic_drawing_mim

5.188.1
intra_page_connector
<application module: Schematic_drawing_mim> *entity data type* (3.2.10) that is a type of *page_connector* (5.188.4) that represents the intra page connector *entity* (3.2.9)

5.188.2
off_page_connector
<application module: Schematic_drawing_mim> *entity data type* (3.2.10) that is a type of *page_connector* (5.188.4) that represents the off page connector *entity* (3.2.9)

5.188.3
on_page_connector
<application module: Schematic_drawing_mim> *entity data type* (3.2.10) that is a type of *page_connector* (5.188.4) that represents the on page connector *entity* (3.2.9)

5.188.4
page_connector
<application module: Schematic_drawing_mim> *entity data type* (3.2.10) that is a type of *schematic_element_definition* (5.190.9) that represents the page connector *entity* (3.2.9)

5.188.5
schematic_drawing
<application module: Schematic_drawing_mim> *entity data type* (3.2.10) that is a type of *schematic_element_definition* (5.190.9) and *drawing_sheet_revision* (4.81.4) that represents the schematic drawing *entity* (3.2.9)

5.188.6
reference_between_page_connectors
<application module: Schematic_drawing_mim> *entity data type* (3.2.10) that is a type of *representation_relationship* (4.41.20) that represents the reference between page connectors *entity* (3.2.9)

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5.189 Schematic_element_arm

5.189.1
Composition_of_schematic_element_occurrence
<application module: Schematic_element_arm> *application object* (3.1.78) that represents the composition of schematic element occurrence *entity* (3.2.9)

5.189.2
Connection_of_schematic_element_occurrence
<application module: Schematic_element_arm> *application object* (3.1.78) that represents the connection of schematic element occurrence *entity* (3.2.9)

5.189.3
Definition_of_schematic_element_occurrence
<application module: Schematic_element_arm> *application object* (3.1.78) that is a type of *Subset* (5.196.6) that represents the definition of schematic element occurrence *entity* (3.2.9)

5.189.4
Derivation_of_schematic_element_definition
<application module: Schematic_element_arm> *application object* (3.1.78) that represents the derivation of schematic element definition *entity* (3.2.9)

5.189.5
Explicit_schematic_element_definition
<application module: Schematic_element_arm> *application object* (3.1.78) that is a type of *Schematic_element_definition* (5.189.8) that represents the explicit schematic element definition *entity* (3.2.9)

5.189.6
Implicit_schematic_element_definition
<application module: Schematic_element_arm> *application object* (3.1.78) that is a type of *Schematic_element_definition* (5.189.8) that represents the implicit schematic element definition *entity* (3.2.9)

5.189.7
Schematic_element
<application module: Schematic_element_arm> *application object* (3.1.78) that is a type of *Class* (5.83.1) and *Representation* (5.12.2) that represents the schematic element *entity* (3.2.9)

5.189.8
Schematic_element_definition
<application module: Schematic_element_arm> *application object* (3.1.78) that is a type of *Schematic_element* (5.189.7) that represents the schematic element definition *entity* (3.2.9)

5.189.9
Schematic_element_occurrence
<application module: Schematic_element_arm> *application object* (3.1.78) that is a type of *Schematic_element* (5.189.7) that represents the schematic element occurrence *entity* (3.2.9)

5.189.10
Usage_of_schematic_element_occurrence
<application module: Schematic_element_arm> *application object* (3.1.78) that represents the usage of schematic element occurrence *entity* (3.2.9)

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5.190 Schematic_element_mim

5.190.1
composition_of_schematic_element_occurrence
<application module: Schematic_element_mim> *entity data type* (3.2.10) that is a type of *mapped_item* (4.41.11) that represents the composition of schematic element occurrence *entity* (3.2.9)

5.190.2
connection_of_schematic_element_occurrence
<application module: Schematic_element_mim> *entity data type* (3.2.10) that is a type of *mapped_item* (4.41.11) that represents the connection of schematic element occurrence *entity* (3.2.9)

5.190.3
definition_of_schematic_element_occurrence
<application module: Schematic_element_mim> *entity data type* (3.2.10) that is a type of *mapped_item* (4.41.11) that represents the definition of schematic element occurrence *entity* (3.2.9)

5.190.4
derivation_of_schematic_element_definition
<application module: Schematic_element_mim> *entity data type* (3.2.10) that is a type of *mapped_item* (4.41.11) that represents the derivation of schematic element definition *entity* (3.2.9)

5.190.5
draughting_model
<application module: Schematic_element_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the draughting model *entity* (3.2.9)

5.190.6
explicit_schematic_element_definition
<application module: Schematic_element_mim> *entity data type* (3.2.10) that is a type of *schematic_element_definition* (5.190.9) that represents the explicit schematic element definition *entity* (3.2.9)

5.190.7
implicit_schematic_element_definition
<application module: Schematic_element_mim> *entity data type* (3.2.10) that is a type of *schematic_element_definition* (5.190.9) that represents the implicit schematic element definition *entity* (3.2.9)

5.190.8
schematic_element
<application module: Schematic_element_mim> *entity data type* (3.2.10) that is a type of *class* (4.75.1) and *draughting_model* (5.190.5) and *presentation_representation* (4.39.26) that represents the schematic element *entity* (3.2.9)

5.190.9
schematic_element_definition
<application module: Schematic_element_mim> *entity data type* (3.2.10) that is a type of *schematic_element* (5.190.8) that represents the schematic element definition *entity* (3.2.9)

5.190.10
schematic_element_occurrence
<application module: Schematic_element_mim> *entity data type* (3.2.10) that is a type of *schematic_element* (5.190.8) that represents the schematic element occurrence *entity* (3.2.9)

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5.190.11
usage_of_schematic_element_occurrence
<application module: Schematic_element_mim> *entity data type* (3.2.10) that is a type of *mapped_item* (4.41.11) that represents the usage of schematic element occurrence *entity* (3.2.9)

5.191 Draughting_annotation_arm

5.191.1
Annotation_subfigure
<application module: Draughting_annotation_arm> *application object* (3.1.78) that is a type of *Annotation_element* (5.134.2) that represents the annotation subfigure *entity* (3.2.9)

5.191.2
Annotation_symbol
<application module: Draughting_annotation_arm> *application object* (3.1.78) that is a type of *Annotation_element* (5.134.2) that represents the annotation symbol *entity* (3.2.9)

5.191.3
Dimension_curve_terminator
<application module: Draughting_annotation_arm> *application object* (3.1.78) that is a type of *Terminator_symbol* (5.191.8) that represents the dimension curve terminator *entity* (3.2.9)

5.191.4
Dimension_symbol
<application module: Draughting_annotation_arm> *application object* (3.1.78) that represents the dimension symbol *entity* (3.2.9)

Note 1 to entry: An **Dimension_symbol** is a predefined annotation symbol used to present information about dimensions.

5.191.5
General_symbol
<application module: Draughting_annotation_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the general symbol *entity* (3.2.9)

5.191.6
Geometric_tolerance_symbol
<application module: Draughting_annotation_arm> *application object* (3.1.78) that represents the geometric tolerance symbol *entity* (3.2.9)

Note 1 to entry: An **Geometric_tolerance_symbol** is a predefined annotation symbol used to present information about a geometric tolerance.

5.191.7
Surface_condition_symbol
<application module: Draughting_annotation_arm> *application object* (3.1.78) that represents the surface condition symbol *entity* (3.2.9)

Note 1 to entry: An **Surface_condition_symbol** is a pre-defined annotation symbol used to present information about surface conditions.

5.191.8
Terminator_symbol
<application module: Draughting_annotation_arm> *application object* (3.1.78) that is a type of *Annotation_symbol* (5.191.2) that represents the terminator symbol *entity* (3.2.9)

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5.192 Draughting_annotation_mim

5.192.1
pre_defined_dimension_symbol
<application module: Draughting_annotation_mim> *entity data type* (3.2.10) that is a type of *pre_defined_symbol* (4.38.29) that represents the pre defined dimension symbol *entity* (3.2.9)

Note 1 to entry: A **pre_defined_dimension_symbol** is a type of pre_defined_symbol that implements the ARM concept of *Dimension_symbol* (5.191.4).

5.192.2
pre_defined_geometrical_tolerance_symbol
<application module: Draughting_annotation_mim> *entity data type* (3.2.10) that is a type of *pre_defined_symbol* (4.38.29) that represents the pre defined geometrical tolerance symbol *entity* (3.2.9)

Note 1 to entry: A **pre_defined_geometrical_tolerance_symbol** is a type of pre_defined_symbol that implements the ARM concept of *Geometric_tolerance_symbol* (5.191.6).

5.192.3
pre_defined_surface_condition_symbol
<application module: Draughting_annotation_mim> *entity data type* (3.2.10) that is a type of *pre_defined_symbol* (4.38.29) that represents the pre defined surface condition symbol *entity* (3.2.9)

Note 1 to entry: A **pre_defined_surface_condition_symbol** is a type of pre_defined_symbol that implements the ARM concept of *Surface_condition_symbol* (5.191.7).

5.193 Drawing_structure_and_administration_arm

5.193.1
Draughting_approval_assignment
<application module: Drawing_structure_and_administration_arm> *application object* (3.1.78) that represents the draughting approval assignment *entity* (3.2.9)

5.193.2
Drawing_revision
<application module: Drawing_structure_and_administration_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the drawing revision *entity* (3.2.9)

5.193.3
Drawing_sheet_revision
<application module: Drawing_structure_and_administration_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the drawing sheet revision *entity* (3.2.9)

5.194 Symbolization_by_schematic_element_arm

5.194.1
Symbolization_by_schematic_element
<application module: Symbolization_by_schematic_element_arm> *application object* (3.1.78) that is a type of *Class* (5.83.1) that represents the symbolization by schematic element *entity* (3.2.9)

5.194.2

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Symbolization_of_member_or_subclass_by_schematic_element
<application module: Symbolization_by_schematic_element_arm> *application object* (3.1.78) that is a type of *Class* (5.83.1) that represents the symbolization of member or subclass by schematic element *entity* (3.2.9)

5.195 Symbolization_by_schematic_element_mim

5.195.1
symbolization_by_schematic_element
<application module: Symbolization_by_schematic_element_mim> *entity data type* (3.2.10) that is a type of *class* (4.75.1) and *presented_item_representation* (4.39.32) that represents the symbolization by schematic element *entity* (3.2.9)

5.195.2
symbolization_of_member_or_subclass_by_schematic_element
<application module: Symbolization_by_schematic_element_mim> *entity data type* (3.2.10) that is a type of *class* (4.75.1) and *presented_item_representation* (4.39.32) that represents the symbolization of member or subclass by schematic element *entity* (3.2.9)

5.195.3
symbolized_class
<application module: Symbolization_by_schematic_element_mim> *entity data type* (3.2.10) that is a type of *presented_item* (4.39.31) that represents the symbolized class *entity* (3.2.9)

5.195.4
symbolized_item
<application module: Symbolization_by_schematic_element_mim> *entity data type* (3.2.10) that is a type of *presented_item* (4.39.31) that represents the symbolized item *entity* (3.2.9)

5.196 Set_theory_arm

5.196.1
Complement
<application module: Set_theory_arm> *application object* (3.1.78) that represents the complement *entity* (3.2.9)

Note 1 to entry: A **Complement** is a relationship that is between set S_1 set U, and set S_2, that indicates set S_2 consists of all members of U that are not members of S_1.

5.196.2
Intersection
<application module: Set_theory_arm> *application object* (3.1.78) that represents the intersection *entity* (3.2.9)

Note 1 to entry: An **Intersection** is a relationship that is between: set R; and set of sets $\{S_i\}$, that indicates set R consists of each thing that is a member of each set within $\{S_i\}$.

5.196.3
Power_set
<application module: Set_theory_arm> *application object* (3.1.78) that represents the power set *entity* (3.2.9)

Note 1 to entry: A **Power_set** is a relationship that is between set S and set S, and that indicates S is the set of all subsets of S.

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5.196.4
Proper_subset
<application module: Set_theory_arm> *application object* (3.1.78) that represents the proper subset *entity* (3.2.9)

Note 1 to entry: A **Proper_subset** is a relationship that is between set A and set B, that indicates each member of set A is also a member of set B and set A does not equal set B.

5.196.5
Same_membership
<application module: Set_theory_arm> *application object* (3.1.78) that represents the same membership *entity* (3.2.9)

Note 1 to entry: A **Same_membership** is a relationship that is between set S_1 and set S_2, that indicates the sets have the same members, that is they are equal.

5.196.6
Subset
<application module: Set_theory_arm> *application object* (3.1.78) that represents the subset *entity* (3.2.9)

Note 1 to entry: A **Subset** is a relationship that is between set A and set B, that indicates each member of set A is also a member of set B.

5.196.7
Union
<application module: Set_theory_arm> *application object* (3.1.78) that represents the union *entity* (3.2.9)

Note 1 to entry: A **Union** is a relationship that is between set R and set of sets $\{S_i\}$, that indicates set R consists of each thing that is a member of any set within $\{S_i\}$.

5.197 Cardinality_of_relationship_arm

5.197.1
Cardinality_of_related_class
<application module: Cardinality_of_relationship_arm> *application object* (3.1.78) that represents the cardinality of related class *entity* (3.2.9)

5.197.2
Cardinality_of_relating_class
<application module: Cardinality_of_relationship_arm> *application object* (3.1.78) that represents the cardinality of relating class *entity* (3.2.9)

5.198 Cardinality_of_relationship_mim

5.198.1
cardinality_of_related_class
<application module: Cardinality_of_relationship_mim> *entity data type* (3.2.10) that is a type of *maths_space_context* (4.35.4) that represents the cardinality of related class *entity* (3.2.9)

5.198.2
cardinality_of_relating_class
<application module: Cardinality_of_relationship_mim> *entity data type* (3.2.10) that is a type of *maths_space_context* (4.35.4) that represents the cardinality of relating class *entity* (3.2.9)

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5.199 Classification_arm

5.199.1
Classification
<application module: Classification_arm> *application object* (3.1.78) that represents the classification *entity* (3.2.9)

5.199.2
Complete_membership
<application module: Classification_arm> *application object* (3.1.78) that represents the complete membership *entity* (3.2.9)

5.200 System_breakdown_arm

5.200.1
System_breakdown
<application module: System_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown* (5.224.1) that represents the system breakdown *entity* (3.2.9)

Note 1 to entry: A **System_breakdown** is a type of Breakdown that identifies a partitioning of a system into a set of related elements so as to form explicit, assembly — component views that comprise the system elements.

5.200.2
System_breakdown_context
<application module: System_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_context* (5.224.2) that represents the system breakdown context *entity* (3.2.9)

Note 1 to entry: A **System_breakdown_context** is a type of Breakdown_context that is a membership relationship between a *System_element* (5.200.4) and a *System_breakdown* (5.200.1) of which the system element is a member.

5.200.3
System_breakdown_version
<application module: System_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_version* (5.224.9) that represents the system breakdown version *entity* (3.2.9)

Note 1 to entry: A **System_breakdown_version** is a type of Breakdown_version that identifies a version of a *System_breakdown* (5.200.1) .

5.200.4
System_element
<application module: System_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element* (5.224.3) that represents the system element *entity* (3.2.9)

Note 1 to entry: A **System_element** is a type of Breakdown_element that identifies the elements in one or more *System_breakdown* (5.200.1) objects.

5.200.5
System_element_definition
<application module: System_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element_definition* (5.224.4) that represents the system element definition *entity* (3.2.9)

Note 1 to entry: A **System_element_definition** is a type of Breakdown_element_definition that identifies a view of a version (*System_element_version* (5.200.7)) of a *System_element* (5.200.4).

5.200.6

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System_element_usage
<application module: System_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element_usage* (5.224.6) that represents the system element usage *entity* (3.2.9)

Note 1 to entry: A **System_element_usage** is a type of Breakdown_element_usage that is a relationship between a *System_element_definition* (5.200.5) and another System_element_definition that is a constituent.

5.200.7
System_element_version
<application module: System_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element_version* (5.224.7) that represents the system element version *entity* (3.2.9)

Note 1 to entry: A **System_element_version** is a type of Breakdown_element_version that identifies a version of a *System_element* (5.200.4) .

5.201 System_breakdown_mim

5.201.1
system_breakdown_context
<application module: System_breakdown_mim> *entity data type* (3.2.10) that is a type of *breakdown_context* (5.225.1) that represents the system breakdown context *entity* (3.2.9)

Note 1 to entry: A **system_breakdown_context** is a type of breakdown_context that identifies the relationship between a system element and a system breakdown of which the element is a member.

5.201.2
system_element_usage
<application module: System_breakdown_mim> *entity data type* (3.2.10) that is a type of *breakdown_element_usage* (5.225.4) that represents the system element usage *entity* (3.2.9)

Note 1 to entry: A **system_element_usage** is a type of breakdown_element_usage that identifies the relationship between a parent and child system element.

5.202 Physical_breakdown_arm

5.202.1
Physical_breakdown
<application module: Physical_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown* (5.224.1) that represents the physical breakdown *entity* (3.2.9)

Note 1 to entry: A **Physical_breakdown** is a type of Breakdown that identifies a partitioning of a product into a set of related physical elements so as to form explicit, parent-child views that comprise the product elements.

5.202.2
Physical_breakdown_context
<application module: Physical_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_context* (5.224.2) that represents the physical breakdown context *entity* (3.2.9)

Note 1 to entry: A **Physical_breakdown_context** is a type of Breakdown_context that is a membership relationship between a *Physical_element* (5.202.4) and a *Physical_breakdown* (5.202.1) of which the physical element is a member.

5.202.3
Physical_breakdown_version
<application module: Physical_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_version* (5.224.9) that represents the physical breakdown version *entity* (3.2.9)

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Note 1 to entry: A **Physical_breakdown_version** is a type of Breakdown_version that identifies a version of a *Physical_breakdown* (5.202.1) .

5.202.4
Physical_element

<application module: Physical_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element* (5.224.3) that represents the physical element *entity* (3.2.9)

Note 1 to entry: A **Physical_element** is a type of Breakdown_element that identifies the elements in one or more *Physical_breakdown* (5.202.1) objects.

5.202.5
Physical_element_definition

<application module: Physical_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element_definition* (5.224.4) that represents the physical element definition *entity* (3.2.9)

Note 1 to entry: A **Physical_element_definition** is a type of Breakdown_element_definition that identifies a view of a version (*Physical_element_version* (5.202.7)) of a *Physical_element* (5.202.4).

5.202.6
Physical_element_usage

<application module: Physical_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element_usage* (5.224.6) that represents the physical element usage *entity* (3.2.9)

Note 1 to entry: A **Physical_element_usage** is a type of Breakdown_element_usage that is a relationship between a parent and child *Physical_element* (5.202.4).

5.202.7
Physical_element_version

<application module: Physical_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element_version* (5.224.7) that represents the physical element version *entity* (3.2.9)

Note 1 to entry: A **Physical_element_version** is a type of Breakdown_element_version that identifies a version of a *Physical_element* (5.202.4) .

5.203 Physical_breakdown_mim

5.203.1
physical_breakdown_context

<application module: Physical_breakdown_mim> *entity data type* (3.2.10) that is a type of *breakdown_context* (5.225.1) that represents the physical breakdown context *entity* (3.2.9)

Note 1 to entry: A **physical_breakdown_context** is a type of breakdown_context that implements the ARM concept of *Physical_breakdown_context* (5.202.2).

5.203.2
physical_element_usage

<application module: Physical_breakdown_mim> *entity data type* (3.2.10) that is a type of *breakdown_element_usage* (5.225.4) that represents the physical element usage *entity* (3.2.9)

Note 1 to entry: A **physical_element_usage** is a type of breakdown_element_usage that implements the ARM concept of *Physical_element_usage* (5.202.6).

5.204 Functional_breakdown_arm

5.204.1

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Functional_breakdown
<application module: Functional_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown* (5.224.1) that represents the functional breakdown *entity* (3.2.9)

Note 1 to entry: A **Functional_breakdown** is a type of Breakdown that identifies a partitioning of a product into a set of related functional elements so as to form explicit structural views that comprise the product elements.

5.204.2
Functional_breakdown_context
<application module: Functional_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_context* (5.224.2) that represents the functional breakdown context *entity* (3.2.9)

Note 1 to entry: A **Functional_breakdown_context** is a type of Breakdown_context that is an association of a *Functional_element* (5.204.4) to a *Functional_breakdown* (5.204.1) of which the functional element is a member.

5.204.3
Functional_breakdown_version
<application module: Functional_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_version* (5.224.9) that represents the functional breakdown version *entity* (3.2.9)

Note 1 to entry: A **Functional_breakdown_version** is a type of Breakdown_version that identifies a version of a *Functional_breakdown* (5.204.1) .

5.204.4
Functional_element
<application module: Functional_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element* (5.224.3) that represents the functional element *entity* (3.2.9)

Note 1 to entry: A **Functional_element** is a type of Breakdown_element that identifies the elements in one or more *Functional_breakdown* (5.204.1) objects.

5.204.5
Functional_element_definition
<application module: Functional_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element_definition* (5.224.4) that represents the functional element definition *entity* (3.2.9)

Note 1 to entry: A **Functional_element_definition** is a type of Breakdown_element_definition that identifies a view of a version (*Functional_element_version* (5.204.7)) of a *Functional_element* (5.204.4) .

5.204.6
Functional_element_usage
<application module: Functional_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element_usage* (5.224.6) that represents the functional element usage *entity* (3.2.9)

Note 1 to entry: A **Functional_element_usage** is a type of Breakdown_element_usage that is an association of a functional element to another functional element that is a constituent.

5.204.7
Functional_element_version
<application module: Functional_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element_version* (5.224.7) that represents the functional element version *entity* (3.2.9)

Note 1 to entry: A **Functional_element_version** is a type of Breakdown_element_version that identifies a version of a *Functional_element* (5.204.4) .

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5.205 Functional_breakdown_mim

5.205.1
functional_breakdown_context
<application module: Functional_breakdown_mim> *entity data type* (3.2.10) that is a type of *breakdown_context* (5.225.1) that represents the functional breakdown context *entity* (3.2.9)

Note 1 to entry: A **functional_breakdown_context** is a type of breakdown_context that identifies the relationship between a functional element and a functional breakdown of which the element is a member.

5.205.2
functional_element_usage
<application module: Functional_breakdown_mim> *entity data type* (3.2.10) that is a type of *breakdown_element_usage* (5.225.4) that represents the functional element usage *entity* (3.2.9)

Note 1 to entry: A **functional_element_usage** is a type of breakdown_element_usage that identifies the relationship between a parent and child functional element.

5.206 Zonal_breakdown_arm

5.206.1
In_zone
<application module: Zonal_breakdown_arm> *application object* (3.1.78) that represents the in zone *entity* (3.2.9)

Note 1 to entry: An **In_zone** is a relationship between a *Zone_element* (5.206.5) and an item that exists within the zone.

5.206.2
Zone_breakdown
<application module: Zonal_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown* (5.224.1) that represents the zone breakdown *entity* (3.2.9)

Note 1 to entry: A **Zone_breakdown** is a type of Breakdown that identifies a partitioning of a product into a set of related zonal elements so as to form explicit, parent-child views that comprise the product elements.

5.206.3
Zone_breakdown_context
<application module: Zonal_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_context* (5.224.2) that represents the zone breakdown context *entity* (3.2.9)

Note 1 to entry: A **Zone_breakdown_context** is a type of Breakdown_context that is a membership relationship between a *Zone_element* (5.206.5) and a *Zone_breakdown* (5.206.2) of which the zonal element is a member.

5.206.4
Zone_breakdown_version
<application module: Zonal_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_version* (5.224.9) that represents the zone breakdown version *entity* (3.2.9)

Note 1 to entry: A **Zone_breakdown_version** is a type of Breakdown_version that identifies a version of a *Zone_breakdown* (5.206.2) .

5.206.5
Zone_element
<application module: Zonal_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element* (5.224.3) that represents the zone element *entity* (3.2.9)

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Note 1 to entry: A **Zone_element** is a type of Breakdown_element that identifies the elements in one or more *Zone_breakdown* (5.206.2) objects.

5.206.6
Zone_element_definition
<application module: Zonal_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element_definition* (5.224.4) that represents the zone element definition *entity* (3.2.9)

Note 1 to entry: A **Zone_element_definition** is a type of Breakdown_element_definition that identifies a view of a version (*Zone_element_version* (5.206.8)) of a *Zone_element* (5.206.5).

5.206.7
Zone_element_usage
<application module: Zonal_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element_usage* (5.224.6) that represents the zone element usage *entity* (3.2.9)

Note 1 to entry: A **Zone_element_usage** is a type of Breakdown_element_usage that is a relationship between a parent and child *Zone_element* (5.206.5).

5.206.8
Zone_element_version
<application module: Zonal_breakdown_arm> *application object* (3.1.78) that is a type of *Breakdown_element_version* (5.224.7) that represents the zone element version *entity* (3.2.9)

Note 1 to entry: A **Zone_element_version** is a type of Breakdown_element_version that identifies a version of a *Zone_element* (5.206.5).

5.207 Zonal_breakdown_mim

5.207.1
in_zone
<application module: Zonal_breakdown_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the in zone *entity* (3.2.9)

Note 1 to entry: An **in_zone** is a type of *product_definition_relationship* (4.18.15) that identifies a relationship between a zone and an item that exists within the zone.

5.207.2
zone_breakdown_context
<application module: Zonal_breakdown_mim> *entity data type* (3.2.10) that is a type of *breakdown_context* (5.225.1) that represents the zone breakdown context *entity* (3.2.9)

Note 1 to entry: A **zone_breakdown_context** is a type of breakdown_context that identifies the relationship between a zone element and a zone breakdown of which the element is a member.

5.207.3
zone_element_usage
<application module: Zonal_breakdown_mim> *entity data type* (3.2.10) that is a type of *breakdown_element_usage* (5.225.4) that represents the zone element usage *entity* (3.2.9)

Note 1 to entry: A **zone_element_usage** is a type of breakdown_element_usage that identifies the relationship between a parent and child zone element.

5.208 Requirement_assignment_arm

5.208.1

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Requirement_assignment
<application module: Requirement_assignment_arm> *application object* (3.1.78) that represents the requirement assignment *entity* (3.2.9)

Note 1 to entry: A **Requirement_assignment** is used to relate a requirement (via the *Requirement_view_definition* (5.138.1) entity) to data types representing the items which are affected by the requirement.

5.208.2
Requirement_satisfied_by
<application module: Requirement_assignment_arm> *application object* (3.1.78) that represents the requirement satisfied by *entity* (3.2.9)

5.208.3
Requirement_source
<application module: Requirement_assignment_arm> *application object* (3.1.78) that represents the requirement source *entity* (3.2.9)

Note 1 to entry: A **Requirement_source** is a relationship between a requirement (via the *Requirement_view_definition* (5.138.1) entity) and the data types representing the source of the requirement

5.209 Requirement_assignment_mim

5.209.1
assigned_requirement
<application module: Requirement_assignment_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the assigned requirement *entity* (3.2.9)

Note 1 to entry: A **assigned_requirement** is a type of group_assignment that identifies a relationship between a requirement assigment and a product definition.

5.209.2
requirement_assigned_object
<application module: Requirement_assignment_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the requirement assigned object *entity* (3.2.9)

Note 1 to entry: A **requirement_assigned_object** is a type of group_assignment that identifies a relationship between a requirement assigment and other objects.

5.209.3
requirement_assignment
<application module: Requirement_assignment_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *group* (4.12.1) that represents the requirement assignment *entity* (3.2.9)

Note 1 to entry: A **requirement_assignment** is a type of group and a type of characterized_object that provides the assigment of a requirement to another object.

5.209.4
requirement_source
<application module: Requirement_assignment_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the requirement source *entity* (3.2.9)

Note 1 to entry: A **requirement_source** is a type of group that provides a link between a requirement and its source object.

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5.209.5
satisfied_requirement
<application module: Requirement_assignment_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the satisfied requirement *entity* (3.2.9)

Note 1 to entry: A **satisfied_requirement** is a type of group_assignment that identifies a relationship between a satisfies requirement and a product definition.

5.209.6
satisfies_requirement
<application module: Requirement_assignment_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the satisfies requirement *entity* (3.2.9)

Note 1 to entry: A **satisfies_requirement** is a type of group that provides a link between a requirement and its satisfying object.

5.209.7
satisfying_item
<application module: Requirement_assignment_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the satisfying item *entity* (3.2.9)

Note 1 to entry: A **satisfying_item** is a type of group_assignment that identifies a relationship between a satisfies requirement and the the object which satisfies the requirement.

5.209.8
source_for_requirement
<application module: Requirement_assignment_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the source for requirement *entity* (3.2.9)

Note 1 to entry: A **source_for_requirement** is a type of group_assignment that identifies a relationship between a requirement source and other objects.

5.209.9
sourced_requirement
<application module: Requirement_assignment_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the sourced requirement *entity* (3.2.9)

Note 1 to entry: A **sourced_requirement** is a type of group_assignment that identifies a relationship between a requirement source and a product definition.

5.210 Organization_type_arm

5.210.1
Organization_organization_type_relationship
<application module: Organization_type_arm> *application object* (3.1.78) that represents the organization organization type relationship *entity* (3.2.9)

Note 1 to entry: An **Organization_organization_type_relationship** is a relationship between an *Organization* (5.17.3) organization and an *Organization_type* (5.210.2).

5.210.2
Organization_type
<application module: Organization_type_arm> *application object* (3.1.78) that represents the organization type *entity* (3.2.9)

Note 1 to entry: An **Organization_type** is a recognized kind of *Organization* (5.17.3).

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5.211 Organization_type_mim

5.211.1
applied_organization_type_assignment
<application module: Organization_type_mim> *entity data type* (3.2.10) that is a type of *organization_type_assignment* (4.15.43) that represents the applied organization type assignment *entity* (3.2.9)

5.212 Information_rights_arm

5.212.1
Applied_information_usage_right
<application module: Information_rights_arm> *application object* (3.1.78) that represents the applied information usage right *entity* (3.2.9)

Note 1 to entry: An **Applied_information_usage_right** is an application of a specific usage right to a set of items.

5.212.2
Information_right
<application module: Information_rights_arm> *application object* (3.1.78) that represents the information right *entity* (3.2.9)

Note 1 to entry: An **Information_right** is a definition of what may or may not be done with information in the sense of legal rights and obligations.

5.212.3
Information_usage_right
<application module: Information_rights_arm> *application object* (3.1.78) that represents the information usage right *entity* (3.2.9)

Note 1 to entry: An **Information_usage_right** is an application an *Information_right* (5.212.2) to a specific usage context.

5.212.4
Information_usage_right_relationship
<application module: Information_rights_arm> *application object* (3.1.78) that represents the information usage right relationship *entity* (3.2.9)

Note 1 to entry: An **Information_usage_right_relationship** is the relationship of one *Information_usage_right* (5.212.3) to another.

5.213 Information_rights_mim

5.213.1
applied_usage_right
<application module: Information_rights_mim> *entity data type* (3.2.10) that is a type of *action_assignment* (4.15.1) that represents the applied usage right *entity* (3.2.9)

Note 1 to entry: An **applied_usage_right** is a type of *applied_action_assignment* (5.57.1) that is the link from an *information_usage_right* (5.213.3) forming the items to which it applies.

5.213.2
information_right
<application module: Information_rights_mim> *entity data type* (3.2.10) that is a type of *action_method* (4.1.3) that represents the information right *entity* (3.2.9)

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Note 1 to entry: An **information_right** is a type of action_method used to represent an information right.

5.213.3
information_usage_right
<application module: Information_rights_mim> *entity data type* (3.2.10) that is a type of *action_method* (4.1.3) that represents the information usage right *entity* (3.2.9)

Note 1 to entry: An **information_usage_right** is a type of action_method used to represent the usage in a context of an information right.

5.213.4
right_to_usage_association
<application module: Information_rights_mim> *entity data type* (3.2.10) that is a type of *action_method_relationship* (4.1.4) that represents the right to usage association *entity* (3.2.9)

Note 1 to entry: A **right_to_usage_association** is a type of action_method_relationship which provides the link between an information right and its usage.

5.213.5
usage_association
<application module: Information_rights_mim> *entity data type* (3.2.10) that is a type of *action_method_relationship* (4.1.4) that represents the usage association *entity* (3.2.9)

Note 1 to entry: A **usage_association** is a type of action_method_relationship which relates a pair of *information_usage_right* (5.213.3).

5.214 Position_in_organization_arm

5.214.1
Person_or_organization_or_person_in_organization_in_position
<application module: Position_in_organization_arm> *application object* (3.1.78) that represents the person or organization or person in organization in position *entity* (3.2.9)

Note 1 to entry: A **Person_or_organization_or_person_in_organization_in_position** is a *Person* (5.17.5), *Organization* (5.17.3), or *Person_in_organization* (5.17.6) that holds a *Position* (5.214.3).

5.214.2
Person_or_organization_or_person_in_organization_in_position_relationship
<application module: Position_in_organization_arm> *application object* (3.1.78) that represents the person or organization or person in organization in position relationship *entity* (3.2.9)

Note 1 to entry: A **Person_or_organization_or_person_in_organization_in_position_relationship** is a relationship between one *Organization* (5.17.3), *Person* (5.17.5), or *Person_in_organization* (5.17.6) and another.

5.214.3
Position
<application module: Position_in_organization_arm> *application object* (3.1.78) that represents the position *entity* (3.2.9)

Note 1 to entry: A **Position** is a function or job performed by a person.

5.214.4
Position_assignment
<application module: Position_in_organization_arm> *application object* (3.1.78) that represents the position assignment *entity* (3.2.9)

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Note 1 to entry: A **Position_assignment** is an association of a *Position* (5.214.3) with activity or product data.

5.214.5
Position_group
<application module: Position_in_organization_arm> *application object* (3.1.78) that represents the position group *entity* (3.2.9)

Note 1 to entry: A **Position_group** is a group for collecting people in their positions to cooperate in an assignment.

5.214.6
Position_group_assignment
<application module: Position_in_organization_arm> *application object* (3.1.78) that represents the position group assignment *entity* (3.2.9)

Note 1 to entry: A **Position_group_assignment** is an association of a *Position_group* (5.214.5) with activity or product data.

5.214.7
Position_group_relationship
<application module: Position_in_organization_arm> *application object* (3.1.78) that represents the position group relationship *entity* (3.2.9)

Note 1 to entry: A **Position_group_relationship** is a relationship that specifies the participation of a position in a group.

5.214.8
Position_group_role
<application module: Position_in_organization_arm> *application object* (3.1.78) that represents the position group role *entity* (3.2.9)

Note 1 to entry: A **Position_group_role** is the role of a *Position_group* (5.214.5) in an organization.

5.214.9
Position_position_type_assignment
<application module: Position_in_organization_arm> *application object* (3.1.78) that represents the position position type assignment *entity* (3.2.9)

Note 1 to entry: A **Position_position_type_assignment** is an assignment of *Position_type* (5.214.12) to a *Position* (5.214.3).

5.214.10
Position_relationship
<application module: Position_in_organization_arm> *application object* (3.1.78) that represents the position relationship *entity* (3.2.9)

Note 1 to entry: A **Position_relationship** is a relationship between *Position* (5.214.3) instances.

5.214.11
Position_role
<application module: Position_in_organization_arm> *application object* (3.1.78) that represents the position role *entity* (3.2.9)

Note 1 to entry: A **Position_role** is a role performed by the *Position* (5.214.3).

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5.214.12
Position_type
<application module: Position_in_organization_arm> *application object* (3.1.78) that represents the position type *entity* (3.2.9)

Note 1 to entry: A **Position_type** is a recognized kind of position.

5.214.13
Position_type_assignment
<application module: Position_in_organization_arm> *application object* (3.1.78) that represents the position type assignment *entity* (3.2.9)

Note 1 to entry: A **Position_type_assignment** is the association of a *Position_type* (5.214.12) with activity or product data.

5.214.14
Position_type_role
<application module: Position_in_organization_arm> *application object* (3.1.78) that represents the position type role *entity* (3.2.9)

Note 1 to entry: A **Position_type_role** is a role performed by the type of *Position* (5.214.3).

5.215 Position_in_organization_mim

5.215.1
applied_position_in_organization_assignment
<application module: Position_in_organization_mim> *entity data type* (3.2.10) that is a type of *position_in_organization_assignment* (4.15.53) that represents the applied position in organization assignment *entity* (3.2.9)

5.215.2
applied_position_in_organization_assignment_group_assignment
<application module: Position_in_organization_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the applied position in organization assignment group assignment *entity* (3.2.9)

5.215.3
applied_position_in_organization_group_assignment
<application module: Position_in_organization_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the applied position in organization group assignment *entity* (3.2.9)

5.215.4
applied_position_in_organization_type_assignment
<application module: Position_in_organization_mim> *entity data type* (3.2.10) that is a type of *position_in_organization_type_assignment* (4.15.55) that represents the applied position in organization type assignment *entity* (3.2.9)

5.215.5
applied_project_group_name_assignment
<application module: Position_in_organization_mim> *entity data type* (3.2.10) that is a type of *name_assignment* (4.15.41) that represents the applied project group name assignment *entity* (3.2.9)

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5.216 Experience_arm

5.216.1
Experience_gained
<application module: Experience_arm> *application object* (3.1.78) that represents the experience gained *entity* (3.2.9)

Note 1 to entry: An **Experience_gained** is a relationship between an *Experience_instance* (5.216.2) and a person or organization.

5.216.2
Experience_instance
<application module: Experience_arm> *application object* (3.1.78) that represents the experience instance *entity* (3.2.9)

Note 1 to entry: An **Experience_instance** is a particular eposide of contact with and/or observation of facts or events which contributes to the accumulation of knowledge or skill.

5.216.3
Experience_type
<application module: Experience_arm> *application object* (3.1.78) that represents the experience type *entity* (3.2.9)

Note 1 to entry: An **Experience_type** is a category or class of experience.

5.216.4
Experience_type_relationship
<application module: Experience_arm> *application object* (3.1.78) that represents the experience type relationship *entity* (3.2.9)

Note 1 to entry: An **Experience_type_relationship** is used to relate a compound experience to its component experiences.

5.217 Experience_mim

5.217.1
applied_experience_assignment
<application module: Experience_mim> *entity data type* (3.2.10) that is a type of *experience_assignment* (4.15.25) that represents the applied experience assignment *entity* (3.2.9)

5.217.2
applied_experience_type_assignment
<application module: Experience_mim> *entity data type* (3.2.10) that is a type of *experience_type_assignment* (4.15.27) that represents the applied experience type assignment *entity* (3.2.9)

5.217.3
characterized_experience
<application module: Experience_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *experience* (4.10.1) that represents the characterized experience *entity* (3.2.9)

Note 1 to entry: A **characterized_experience** is a type of characterized_object and experience that serves to assign *property_definition* (4.19.9) instances to experience instances.

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5.218 Qualifications_arm

5.218.1
Qualification_assignment
<application module: Qualifications_arm> *application object* (3.1.78) that represents the qualification assignment *entity* (3.2.9)

Note 1 to entry: A **Qualification_assignment** is the assignment of a qualification to a person or organization.

5.218.2
Qualification_type
<application module: Qualifications_arm> *application object* (3.1.78) that represents the qualification type *entity* (3.2.9)

Note 1 to entry: A **Qualification_type** is the identification of a definitive recognition as a practitioner.

5.218.3
Qualification_type_relationship
<application module: Qualifications_arm> *application object* (3.1.78) that represents the qualification type relationship *entity* (3.2.9)

Note 1 to entry: A **Qualification_type_relationship** is an association between two *Qualification_type* (5.218.2) instances.

5.219 Qualifications_mim

5.219.1
applied_qualification_type_assignment
<application module: Qualifications_mim> *entity data type* (3.2.10) that is a type of *qualification_type_assignment* (4.15.59) that represents the applied qualification type assignment *entity* (3.2.9)

5.220 Type_of_person_arm

5.220.1
Type_of_person
<application module: Type_of_person_arm> *application object* (3.1.78) that represents the type of person *entity* (3.2.9)

Note 1 to entry: A **Type_of_person** is a type of person.

5.220.2
Type_of_person_assignment
<application module: Type_of_person_arm> *application object* (3.1.78) that represents the type of person assignment *entity* (3.2.9)

Note 1 to entry: A **Type_of_person_assignment** is the association of a *Type_of_person* (5.220.1) in a role with an activity or product data.

5.220.3
Type_of_person_definition
<application module: Type_of_person_arm> *application object* (3.1.78) that represents the type of person definition *entity* (3.2.9)

Note 1 to entry: A **Type_of_person_definition** is the definition of a *Type_of_person* (5.220.1) in terms of required properties or attributes.

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5.220.4
Type_of_person_definition_relationship
<application module: Type_of_person_arm> *application object* (3.1.78) that represents the type of person definition relationship *entity* (3.2.9)

Note 1 to entry: A **Type_of_person_definition_relationship** is a relationship between two definitions of a type of person (*Type_of_person_definition* (5.220.3)).

5.220.5
Type_of_person_definition_required_attributes_relationship
<application module: Type_of_person_arm> *application object* (3.1.78) that represents the type of person definition required attributes relationship *entity* (3.2.9)

Note 1 to entry: A **Type_of_person_definition_required_attributes_relationship** is a relationship between a *Type_of_person_definition* (5.220.3) and the attributes required to define that type of person.

5.221 Type_of_person_mim

5.221.1
applied_person_type_assignment
<application module: Type_of_person_mim> *entity data type* (3.2.10) that is a type of *person_type_assignment* (4.15.49) that represents the applied person type assignment *entity* (3.2.9)

5.221.2
applied_person_type_definition_assignment
<application module: Type_of_person_mim> *entity data type* (3.2.10) that is a type of *person_type_definition_assignment* (4.15.50) that represents the applied person type definition assignment *entity* (3.2.9)

5.221.3
characterized_person_type_definition
<application module: Type_of_person_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *person_type_definition* (4.17.15) that represents the characterized person type definition *entity* (3.2.9)

Note 1 to entry: A **characterized_person_type_definition** is a type of characterized_object and person_type_definition that serves to assign *property_definition* (4.19.9) instances to person_type_definition instances.

5.222 Attribute_classification_arm

5.222.1
Attribute_classification
<application module: Attribute_classification_arm> *application object* (3.1.78) that represents the attribute classification *entity* (3.2.9)

Note 1 to entry: An **Attribute_classification** is an assertion that an attribute on an instance of an EXPRESS entity is a member of a *Class* (5.83.1).

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5.223 Attribute_classification_mim

5.223.1
applied_attribute_classification_assignment
<application module: Attribute_classification_mim> *entity data type* (3.2.10) that is a type of *attribute_classification_assignment* (4.15.7) that represents the applied attribute classification assignment *entity* (3.2.9)

Note 1 to entry: An **applied_attribute_classification_assignment** is a type of attribute_classification_assignment that represents the application of a value, represented by a *class* (4.75.1), to an attribute on an EXPRESS entity.

5.224 Product_breakdown_arm

5.224.1
Breakdown
<application module: Product_breakdown_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the breakdown *entity* (3.2.9)

Note 1 to entry: A **Breakdown** is a type of Product that identifies a partitioning of a product into a set of related elements so as to form explicit, parent-child views that comprise the product elements.

5.224.2
Breakdown_context
<application module: Product_breakdown_arm> *application object* (3.1.78) that represents the breakdown context *entity* (3.2.9)

Note 1 to entry: A **Breakdown_context** is a membership relationship between a *Breakdown_element* (5.224.3) and a *Breakdown* (5.224.1) of which the element is a member.

5.224.3
Breakdown_element
<application module: Product_breakdown_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the breakdown element *entity* (3.2.9)

Note 1 to entry: A **Breakdown_element** is a type of Product that identifies the elements in one or more *Breakdown* (5.224.1) objects.

5.224.4
Breakdown_element_definition
<application module: Product_breakdown_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the breakdown element definition *entity* (3.2.9)

Note 1 to entry: A **Breakdown_element_definition** is a type of Product_view_definition that identifies a view of a version (*Breakdown_element_version* (5.224.7)) of a *Breakdown_element* (5.224.3).

5.224.5
Breakdown_element_realization
<application module: Product_breakdown_arm> *application object* (3.1.78) that is a type of *Product_definition_element_relationship* (5.224.10) that represents the breakdown element realization *entity* (3.2.9)

Note 1 to entry: A **Breakdown_element_realization** is a type of Product_definition_element_relationship that identifies a relationship between a *Breakdown_element_definition* (5.224.4) or a *Breakdown_element_usage* (5.224.6) and an item that realizes that element definition or usage.

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5.224.6
Breakdown_element_usage
<application module: Product_breakdown_arm> *application object* (3.1.78) that is a type of *View_definition_usage* (5.48.2) that represents the breakdown element usage *entity* (3.2.9)

Note 1 to entry: A **Breakdown_element_usage** is a type of *View_definition_relationship* (5.48.1) that identifies a relationship between a parent and child *Breakdown_element* (5.224.3).

5.224.7
Breakdown_element_version
<application module: Product_breakdown_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the breakdown element version *entity* (3.2.9)

Note 1 to entry: A **Breakdown_element_version** is a type of Product_version that identifies a version of a *Breakdown_element* (5.224.3).

5.224.8
Breakdown_of
<application module: Product_breakdown_arm> *application object* (3.1.78) that represents the breakdown of *entity* (3.2.9)

Note 1 to entry: A **Breakdown_of** is a relationship between a *Breakdown* (5.224.1) and a *Product* (5.28.1) of which the breakdown is a view.

5.224.9
Breakdown_version
<application module: Product_breakdown_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the breakdown version *entity* (3.2.9)

Note 1 to entry: A **Breakdown_version** is a type of Product_version that identifies a version of a *Breakdown* (5.224.1) .

5.224.10
Product_definition_element_relationship
<application module: Product_breakdown_arm> *application object* (3.1.78) that represents the product definition element relationship *entity* (3.2.9)

Note 1 to entry: A **Product_definition_element_relationship** is a relationship between a *Breakdown_element_definition* (5.224.4) or a *Breakdown_element_usage* (5.224.6) and a *View_definition_relationship* (5.48.1) or a *Product_view_definition* (5.30.1) .

5.225 Product_breakdown_mim

5.225.1
breakdown_context
<application module: Product_breakdown_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the breakdown context *entity* (3.2.9)

Note 1 to entry: A **breakdown_context** is a type of product_definition_relationship that implements the ARM concept of *Breakdown_context* (5.224.2).

5.225.2
breakdown_element_group_assignment
<application module: Product_breakdown_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the breakdown element group assignment *entity* (3.2.9)

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Note 1 to entry: A **breakdown_element_group_assignment** is a type of group_assignment that implements the ARM concept of *Product_definition_element_relationship* (5.224.10).

5.225.3
breakdown_element_realization

<application module: Product_breakdown_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_definition_element_relationship* (5.225.6) that represents the breakdown element realization *entity* (3.2.9)

Note 1 to entry: A **breakdown_element_realization** is a type of characterized_object and a type of product_definition_element_relationship that implements the ARM concept of *Breakdown_element_realization* (5.224.5).

5.225.4
breakdown_element_usage

<application module: Product_breakdown_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the breakdown element usage *entity* (3.2.9)

Note 1 to entry: A **breakdown_element_usage** is a type of product_definition_relationship that implements the ARM concept of *Breakdown_element_usage* (5.224.6).

5.225.5
breakdown_of

<application module: Product_breakdown_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the breakdown of *entity* (3.2.9)

Note 1 to entry: A **breakdown_of** is a type of product_definition_relationship that implements the ARM concept of *Breakdown_of* (5.224.8).

5.225.6
product_definition_element_relationship

<application module: Product_breakdown_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the product definition element relationship *entity* (3.2.9)

Note 1 to entry: A **product_definition_element_relationship** is a type of group that implements the ARM concept of *Product_definition_element_relationship* (5.224.10).

5.225.7
product_definition_group_assignment

<application module: Product_breakdown_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the product definition group assignment *entity* (3.2.9)

Note 1 to entry: A **product_definition_group_assignment** is a type of group_assignment that implements the ARM concept of *Product_definition_element_relationship* (5.224.10).

5.226 Activity_method_assignment_arm

5.226.1
Activity_method_relationship

<application module: Activity_method_assignment_arm> *application object* (3.1.78) that represents the activity method relationship *entity* (3.2.9)

Note 1 to entry: An **Activity_method_relationship** is a relationship between two instances of *Activity_method* (5.58.1).

5.226.2

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Applied_activity_method_assignment
<application module: Activity_method_assignment_arm> *application object* (3.1.78) that represents the applied activity method assignment *entity* (3.2.9)

Note 1 to entry: An **Applied_activity_method_assignment** is an association of an *Activity_method* (5.58.1) with product or activity data.

5.227 Activity_method_assignment_mim

5.227.1
applied_action_method_assignment
<application module: Activity_method_assignment_mim> *entity data type* (3.2.10) that is a type of *action_method_assignment* (4.15.2) that represents the applied action method assignment *entity* (3.2.9)

Note 1 to entry: An **applied_action_method_assignment** is a type of action_method_assignment that relates an action method to the data that are affected by the action method.

5.228 Attachment_slot_arm

5.228.1
Attachment_slot
<application module: Attachment_slot_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the attachment slot *entity* (3.2.9)

Note 1 to entry: An **Attachment_slot** is a type of Product that represents the position in which a part is or can be attached to a parent product.

5.228.2
Attachment_slot_as_planned
<application module: Attachment_slot_arm> *application object* (3.1.78) that is a type of *Attachment_slot_version* (5.228.10) that represents the attachment slot as planned *entity* (3.2.9)

Note 1 to entry: An **Attachment_slot_as_planned** is a type of Attachment_slot_version that identifies an individual that is the subject of a plan to realize an *Attachment_slot* (5.228.1).

5.228.3
Attachment_slot_as_realized
<application module: Attachment_slot_arm> *application object* (3.1.78) that is a type of *Attachment_slot_version* (5.228.10) that represents the attachment slot as realized *entity* (3.2.9)

Note 1 to entry: An **Attachment_slot_as_realized** is a type of Attachment_slot_version that identifies an individual that is a realized *Attachment_slot* (5.228.1).

5.228.4
Attachment_slot_definition
<application module: Attachment_slot_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the attachment slot definition *entity* (3.2.9)

Note 1 to entry: An **Attachment_slot_definition** is a type of Product_view_definition that identifies a view of an *Attachment_slot* (5.228.1).

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5.228.5
Attachment_slot_design
<application module: Attachment_slot_arm> *application object* (3.1.78) that is a type of *Attachment_slot_version* (5.228.10) that represents the attachment slot design *entity* (3.2.9)

Note 1 to entry: An **Attachment_slot_design** is a type of Attachment_slot_version that identifies the design version of an attachment slot.

5.228.6
Attachment_slot_design_to_planned
<application module: Attachment_slot_arm> *application object* (3.1.78) that represents the attachment slot design to planned *entity* (3.2.9)

Note 1 to entry: An **Attachment_slot_design_to_planned** is a relationship between a design version of an *Attachment_slot* (5.228.1) and a planned individual that conforms to the design.

5.228.7
Attachment_slot_design_to_realized
<application module: Attachment_slot_arm> *application object* (3.1.78) that represents the attachment slot design to realized *entity* (3.2.9)

Note 1 to entry: An **Attachment_slot_design_to_realized** is a relationship between a design version of an *Attachment_slot* (5.228.1) and a realized individual that conforms to the design.

5.228.8
Attachment_slot_on_product
<application module: Attachment_slot_arm> *application object* (3.1.78) that represents the attachment slot on product *entity* (3.2.9)

Note 1 to entry: An **Attachment_slot_on_product** is a relationship between a product and an *Attachment_slot* (5.228.1) that is a location on the product at which to install removable parts.

5.228.9
Attachment_slot_planned_to_realized
<application module: Attachment_slot_arm> *application object* (3.1.78) that represents the attachment slot planned to realized *entity* (3.2.9)

Note 1 to entry: An **Attachment_slot_planned_to_realized** is a relationship between a realized individual of an *Attachment_slot* (5.228.1) and a corresponding planned individual.

5.228.10
Attachment_slot_version
<application module: Attachment_slot_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the attachment slot version *entity* (3.2.9)

Note 1 to entry: An **Attachment_slot_version** is a type of Product_version that identifies a version of *Attachment_slot* (5.228.1).

5.228.11
Product_in_attachment_slot
<application module: Attachment_slot_arm> *application object* (3.1.78) that is a type of *View_definition_usage* (5.48.2) that represents the product in attachment slot *entity* (3.2.9)

Note 1 to entry: A **Product_in_attachment_slot** is a type of View_definition_usage that is a relationship between an *Attachment_slot* (5.228.1) and a *Product_view_definition* (5.30.1) of a *Product* (5.28.1) that is designed to be attached to the attachment slot.

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5.229 Attachment_slot_mim

5.229.1
attachment_slot_as_planned
<application module: Attachment_slot_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) that represents the attachment slot as planned *entity* (3.2.9)

Note 1 to entry: An **attachment_slot_as_planned** is a type of product_definition_formation that identifies an individual that is the subject of a plan to realize an attachment slot.

5.229.2
attachment_slot_as_realized
<application module: Attachment_slot_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) that represents the attachment slot as realized *entity* (3.2.9)

Note 1 to entry: An **attachment_slot_as_realized** is a type of product_definition_formation that identifies an individual that is a realized attachment slot.

5.229.3
attachment_slot_design
<application module: Attachment_slot_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) that represents the attachment slot design *entity* (3.2.9)

Note 1 to entry: An **attachment_slot_design** is a type of product_definition_formation that identifies a design version of an attachment slot.

5.229.4
attachment_slot_design_to_planned
<application module: Attachment_slot_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the attachment slot design to planned *entity* (3.2.9)

Note 1 to entry: An **attachment_slot_design_to_planned** is a type of product_definition_formation_relationship that identifies the relationship between a design version of an attachment slot and a planned individual that conforms to the design.

5.229.5
attachment_slot_design_to_realized
<application module: Attachment_slot_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the attachment slot design to realized *entity* (3.2.9)

Note 1 to entry: An **attachment_slot_design_to_realized** is a type of product_definition_formation_relationship that identifies the relationship between a design version of an attachment slot and a realized individual that conforms to the design.

5.229.6
attachment_slot_on_product
<application module: Attachment_slot_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the attachment slot on product *entity* (3.2.9)

Note 1 to entry: An **attachment_slot_on_product** is a type of product_definition_relationship that identifies the relationship between a product and an attachment slot that is a location on the product at which to install removable parts.

5.229.7

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attachment_slot_planned_to_realized
<application module: Attachment_slot_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the attachment slot planned to realized *entity* (3.2.9)

Note 1 to entry: An **attachment_slot_planned_to_realized** is a type of product_definition_formation_relationship that identifies the relationship between a realized individual of an attachment slot and a corresponding planned individual.

5.229.8
product_in_attachment_slot
<application module: Attachment_slot_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the product in attachment slot *entity* (3.2.9)

Note 1 to entry: A **product_in_attachment_slot** is a type of product_definition_relationship that identifies the relationship between an attachment slot and a product that is capable to attach in the attachment slot.

5.230 Interface_arm

5.230.1
Hierarchical_interface_connection
<application module: Interface_arm> *application object* (3.1.78) that is a type of *Interface_connection* (5.230.2) that represents the hierarchical interface connection *entity* (3.2.9)

Note 1 to entry: A **Hierarchical_interface_connection** is a type of Interface_connection that provides an interconnection between components at different levels in an assembly.

5.230.2
Interface_connection
<application module: Interface_arm> *application object* (3.1.78) that represents the interface connection *entity* (3.2.9)

Note 1 to entry: A **Interface_connection** is an interconnection between a connected pair of *Interface_connector_occurrence* (5.230.5) instances.

5.230.3
Interface_connector
<application module: Interface_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the interface connector *entity* (3.2.9)

Note 1 to entry: An **Interface_connector** is a type of Product that identifies a part of a product with which one or more other products or the environment interacts.

5.230.4
Interface_connector_definition
<application module: Interface_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the interface connector definition *entity* (3.2.9)

Note 1 to entry: An **Interface_connector_definition** is a type of Product_view_definition that identifies a view of an *Interface_connector* (5.230.3).

5.230.5
Interface_connector_occurrence
<application module: Interface_arm> *application object* (3.1.78) that represents the interface connector occurrence *entity* (3.2.9)

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Note 1 to entry: An **Interface_connector_occurrence** is an occurrence of a *Interface_connector_definition* (5.230.4).

5.230.6
Interface_connector_version

<application module: Interface_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the interface connector version *entity* (3.2.9)

Note 1 to entry: An **Interface_connector_version** is a type of Product_version that identifies a version of an *Interface_connector* (5.230.3).

5.230.7
Interface_definition_connection

<application module: Interface_arm> *application object* (3.1.78) that represents the interface definition connection *entity* (3.2.9)

Note 1 to entry: An **Interface_definition_connection** is an interconnection between a connected pair of *Interface_connector_definition* (5.230.4) instances or, if the point of interconnection is not specified, the interconnection between a pair of views (*Product_view_definition* (5.30.1)s) on products

5.230.8
Interface_definition_for

<application module: Interface_arm> *application object* (3.1.78) that represents the interface definition for *entity* (3.2.9)

Note 1 to entry: An **Interface_definition_for** is a relationship between an *Interface_specification* (5.230.9) and an item that conforms to the specification.

5.230.9
Interface_specification

<application module: Interface_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the interface specification *entity* (3.2.9)

Note 1 to entry: An **Interface_specification** is a type of Product that provides a definition of necessary attributes for one or more items that participate in an interface.

5.230.10
Interface_specification_definition

<application module: Interface_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the interface specification definition *entity* (3.2.9)

Note 1 to entry: An **Interface_specification_definition** is a type of Product_view_definition that provides a view of an *Interface_specification* (5.230.9).

5.230.11
Interface_specification_version

<application module: Interface_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the interface specification version *entity* (3.2.9)

Note 1 to entry: An **Interface_specification_version** is a type of Product_version that identifies a version of an *Interface_specification* (5.230.9).

5.231 Interface_mim

5.231.1

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hierarchical_interface_connection
<application module: Interface_mim> *entity data type* (3.2.10) that is a type of *interface_connection* (5.231.2) that represents the hierarchical interface connection *entity* (3.2.9)

Note 1 to entry: A **hierarchical_interface_connection** is a type of interface_connection that that provides an interconnection between components at different levels in an assembly.

5.231.2
interface_connection
<application module: Interface_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the interface connection *entity* (3.2.9)

Note 1 to entry: An **interface_connection** is a type of *product_definition_relationship* (4.18.15) that identifies the relationship between a connected pair of interface connectors.

5.231.3
interface_connector_definition
<application module: Interface_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the interface connector definition *entity* (3.2.9)

Note 1 to entry: An **interface_connector_definition** is a type of product_definition that identifies a view of an interface connector.

5.231.4
interface_connector_occurrence
<application module: Interface_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the interface connector occurrence *entity* (3.2.9)

Note 1 to entry: An **interface_connector_occurrence** is a type of group that identifies an occurrence of an *interface_connector_definition* (5.231.3).

5.231.5
interface_connector_version
<application module: Interface_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) that represents the interface connector version *entity* (3.2.9)

Note 1 to entry: An **interface_connector_version** is a type of product_definition_formation that identifies a version of an interface connector.

5.231.6
interface_definition_connection
<application module: Interface_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the interface definition connection *entity* (3.2.9)

Note 1 to entry: An **interface_definition_connection** is a type of product_definition_relationship that identifies an interconnection between a connected pair of *interface_connector_definition* (5.231.3) instances or, if the point of interconnection is not specified, the interconnection between a pair of *product_definition* (4.18.7) instances.

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5.231.7
interface_definition_for
<application module: Interface_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the interface definition for *entity* (3.2.9)

Note 1 to entry: An **interface_definition_for** is a type of product_definition_relationship that identifies the relationship between an interface specification and an item that conforms to that specification.

5.231.8
interface_specification_definition
<application module: Interface_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the interface specification definition *entity* (3.2.9)

Note 1 to entry: An **interface_specification_definition** is a type of product_definition that identifies a view of an interface specification.

5.231.9
interface_specification_version
<application module: Interface_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) that represents the interface specification version *entity* (3.2.9)

Note 1 to entry: An **interface_specification_version** is a type of product_definition_formation that identifies a version of an interface specification.

5.232 Probability_arm

5.232.1
Probability
<application module: Probability_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the probability *entity* (3.2.9)

Note 1 to entry: A **Probability** is a type of Representation that is a probability value (see definition 3.5.1 above).

5.232.2
Probability_by_name
<application module: Probability_arm> *application object* (3.1.78) that is a type of *Probability* (5.232.1) that represents the probability by name *entity* (3.2.9)

Note 1 to entry: A **Probability_by_name** is a type of Probability whose value belongs to a one of a set of named classes, rather than by assigning a specific numerical value, which may not be available.

5.232.3
Probability_derivation_parameter
<application module: Probability_arm> *application object* (3.1.78) that is a type of *Numerical_item_with_global_unit* (5.118.2) that represents the probability derivation parameter *entity* (3.2.9)

Note 1 to entry: A **Probability_derivation_parameter** is a type of Numerical_item_with_global_unit that is used by a *Probability_derived* (5.232.4) in a particular role in order to calculate the particular probability.

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5.232.4
Probability_derived
<application module: Probability_arm> *application object* (3.1.78) that is a type of *Probability_numeric* (5.232.7) that represents the probability derived *entity* (3.2.9)

Note 1 to entry: A **Probability_derived** is a type of Probability_numeric that associates a particular value of Probability_numeric with the source from which the value derived together with any parameters used to get the particular value.

5.232.5
Probability_generator
<application module: Probability_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the probability generator *entity* (3.2.9)

5.232.6
Probability_named_value
<application module: Probability_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the probability named value *entity* (3.2.9)

Note 1 to entry: A **Probability_named_value** is a type of Representation_item that is used to hold the name of the probability value.

5.232.7
Probability_numeric
<application module: Probability_arm> *application object* (3.1.78) that is a type of *Probability* (5.232.1) that represents the probability numeric *entity* (3.2.9)

Note 1 to entry: A **Probability_numeric** is a type of Probability that is expressed as a numeric value between 0 and 1.

5.232.8
Probability_numeric_value
<application module: Probability_arm> *application object* (3.1.78) that is a type of *Numerical_item_with_global_unit* (5.118.2) that represents the probability numeric value *entity* (3.2.9)

Note 1 to entry: A **Probability_numeric_value** is a type of Numerical_item_with_global_unit providing a numeric representation of a probability.

5.233 Probability_mim

5.233.1
probability_generator
<application module: Probability_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the probability generator *entity* (3.2.9)

Note 1 to entry: A **probability_generator** is a type of *Representation* (5.12.2) that can be used to calculate a probability value from appropriate set of paramater values.

5.234 Condition_arm

5.234.1
Condition
<application module: Condition_arm> *application object* (3.1.78) that represents the condition *entity* (3.2.9)

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Note 1 to entry: A **Condition** is a definition of the precedent that must be fulfilled before a statement or relationship becomes valid.

5.234.2
Condition_assignment
<application module: Condition_arm> *application object* (3.1.78) that represents the condition assignment *entity* (3.2.9)

Note 1 to entry: A **Condition_assignment** is a relationship that identifies the statement or relationship to which a *Condition* (5.234.1) applies.

5.234.3
Condition_parameter
<application module: Condition_arm> *application object* (3.1.78) that represents the condition parameter *entity* (3.2.9)

Note 1 to entry: A **Condition_parameter** is a representation of the product or activity data that is used to specify a *Condition* (5.234.1).

5.234.4
Condition_relationship
<application module: Condition_arm> *application object* (3.1.78) that represents the condition relationship *entity* (3.2.9)

Note 1 to entry: A **Condition_relationship** is a relation between two conditions.

5.235 Condition_evaluation_arm

5.235.1
Condition_evaluation
<application module: Condition_evaluation_arm> *application object* (3.1.78) that represents the condition evaluation *entity* (3.2.9)

Note 1 to entry: A **Condition_evaluation** is a record of the evaluation of a *Condition* (5.234.1) and the subsequent result.

5.235.2
Condition_evaluation_assignment
<application module: Condition_evaluation_arm> *application object* (3.1.78) that represents the condition evaluation assignment *entity* (3.2.9)

Note 1 to entry: A **Condition_evaluation_assignment** is a relationship that identifies the statement or relationship to which the *Condition_evaluation* (5.235.1) applies.

5.235.3
Condition_evaluation_parameter
<application module: Condition_evaluation_arm> *application object* (3.1.78) that represents the condition evaluation parameter *entity* (3.2.9)

Note 1 to entry: A **Condition_evaluation_parameter** is an identification of the product or activity data used in the evaluation of the *Condition* (5.234.1) identified by the *Condition_evaluation* (5.235.1).

5.235.4
Related_condition_parameter
<application module: Condition_evaluation_arm> *application object* (3.1.78) that represents the related condition parameter *entity* (3.2.9)

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Note 1 to entry: A **Related_condition_parameter** is a relationship between a *Condition_parameter* (5.234.3) and a *Condition_evaluation_parameter* (5.235.3).

5.236 State_definition_arm

5.236.1
And_state_cause_effect_definition
<application module: State_definition_arm> *application object* (3.1.78) that is a type of *State_cause_effect_definition* (5.236.4) that represents the and state cause effect definition *entity* (3.2.9)

5.236.2
Or_state_cause_effect_definition
<application module: State_definition_arm> *application object* (3.1.78) that is a type of *State_cause_effect_definition* (5.236.4) that represents the or state cause effect definition *entity* (3.2.9)

5.236.3
Sequence_of_state_definition
<application module: State_definition_arm> *application object* (3.1.78) that is a type of *State_definition_relationship* (5.378.4) that represents the sequence of state definition *entity* (3.2.9)

5.236.4
State_cause_effect_definition
<application module: State_definition_arm> *application object* (3.1.78) that is a type of *State_definition_relationship* (5.378.4) that represents the state cause effect definition *entity* (3.2.9)

Note 1 to entry: A **State_cause_effect_definition** is a type of State_definition_relationship that is used to define a causal relationship between two sets of *State_definition* (5.378.3) entities.

5.236.5
State_complement_definition
<application module: State_definition_arm> *application object* (3.1.78) that is a type of *State_definition_relationship* (5.378.4) that represents the state complement definition *entity* (3.2.9)

5.236.6
State_proper_subset_definition
<application module: State_definition_arm> *application object* (3.1.78) that is a type of *State_definition_relationship* (5.378.4) that represents the state proper subset definition *entity* (3.2.9)

5.236.7
State_subset_definition
<application module: State_definition_arm> *application object* (3.1.78) that is a type of *State_definition_relationship* (5.378.4) that represents the state subset definition *entity* (3.2.9)

5.236.8
State_symptom_definition
<application module: State_definition_arm> *application object* (3.1.78) that is a type of *State_definition_relationship* (5.378.4) that represents the state symptom definition *entity* (3.2.9)

5.236.9
Xor_state_cause_effect_definition
<application module: State_definition_arm> *application object* (3.1.78) that is a type of *State_cause_effect_definition* (5.236.4) that represents the xor state cause effect definition *entity* (3.2.9)

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5.237 State_observed_arm

5.237.1
Applied_state_assignment
<application module: State_observed_arm> *application object* (3.1.78) that represents the applied state assignment *entity* (3.2.9)

Note 1 to entry: An **Applied_state_assignment** is a relationship that allows a subject to have *State* (5.237.5) or to be in a State.

5.237.2
Composition_of_state
<application module: State_observed_arm> *application object* (3.1.78) that is a type of *State_relationship* (5.237.14) that represents the composition of state *entity* (3.2.9)

Note 1 to entry: A **Composition_of_state** is a type of state relationship and it relates the nature of states in relation to one another, where two or more *State* (5.237.5) parts compose a whole State; and furthermore, whole states can become parts of yet another whole State.

5.237.3
Defined_state_relationship
<application module: State_observed_arm> *application object* (3.1.78) that represents the defined state relationship *entity* (3.2.9)

Note 1 to entry: A **Defined_state_relationship** is a relationship that links a *State_assertion* (5.237.6) to a *State_assessment* (5.237.7).

5.237.4
Sequence_of_state
<application module: State_observed_arm> *application object* (3.1.78) that is a type of *State_relationship* (5.237.14) that represents the sequence of state *entity* (3.2.9)

Note 1 to entry: A **Sequence_of_state** is a type of State_relationship in which one set of *State* (5.237.5) precedes another set of State.

5.237.5
State
<application module: State_observed_arm> *application object* (3.1.78) that represents the state *entity* (3.2.9)

Note 1 to entry: A **State** is the mode of being in which something does or could exist or existed for a period of time.

5.237.6
State_assertion
<application module: State_observed_arm> *application object* (3.1.78) that represents the state assertion *entity* (3.2.9)

Note 1 to entry: A **State_assertion** is used to assert that the subject *State* (5.237.5) is in conformance with a *State_definition* (5.378.3).

5.237.7
State_assessment
<application module: State_observed_arm> *application object* (3.1.78) that represents the state assessment *entity* (3.2.9)

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Note 1 to entry: A **State_assessment** is used to determine whether the subject *State* (5.237.5) is comparable with a *State_definition* (5.378.3).

5.237.8
State_cause_effect
<application module: State_observed_arm> *application object* (3.1.78) that is a type of *State_relationship* (5.237.14) that represents the state cause effect *entity* (3.2.9)

Note 1 to entry: A **State_cause_effect** is a type of state relationship and it relates two or more states as one state causing resulting effect state(s).

5.237.9
State_assertion_relationship
<application module: State_observed_arm> *application object* (3.1.78) that represents the state assertion relationship *entity* (3.2.9)

Note 1 to entry: A **State_assertion_relationship** is a relationship between two *State_assertion* (5.237.6) objects.

5.237.10
Hypothesis_state_to_confirmation_state_relationship
<application module: State_observed_arm> *application object* (3.1.78) that is a type of *State_assertion_relationship* (5.237.9) that represents the hypothesis state to confirmation state relationship *entity* (3.2.9)

Note 1 to entry: A **Hypothesis_state_to_confirmation_state_relationship** is a type of State_assertion_relationship that describes a relationship between *State_assertion* (5.237.6) and *State_assessment* (5.237.7) objects.

5.237.11
State_observed
<application module: State_observed_arm> *application object* (3.1.78) that is a type of *State* (5.237.5) that represents the state observed *entity* (3.2.9)

5.237.12
State_predicted
<application module: State_observed_arm> *application object* (3.1.78) that is a type of *State* (5.237.5) that represents the state predicted *entity* (3.2.9)

Note 1 to entry: A **State_predicted** is a type of State It is a predicted actual State.

5.237.13
State_predicted_to_observed
<application module: State_observed_arm> *application object* (3.1.78) that is a type of *State_relationship* (5.237.14) that represents the state predicted to observed *entity* (3.2.9)

Note 1 to entry: A **State_predicted_to_observed** is a type of state relationship.

5.237.14
State_relationship
<application module: State_observed_arm> *application object* (3.1.78) that represents the state relationship *entity* (3.2.9)

Note 1 to entry: A **State_relationship** is a relationship between two or more *State* (5.237.5).

5.237.15

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State_role
<application module: State_observed_arm> *application object* (3.1.78) that represents the state role *entity* (3.2.9)

Note 1 to entry: A **State_role** is a specification of the purpose of the association of the *Applied_state_assignment* (5.237.1) with product or activity data.

5.237.16
State_transition
<application module: State_observed_arm> *application object* (3.1.78) that is a type of *State_relationship* (5.237.14) that represents the state transition *entity* (3.2.9)

Note 1 to entry: A **State_transition** is a type of state relationship and it relates two or more states before and after a transition in *State* (5.237.5), where at least one State is a start state and at least one State is an end state.

5.238 State_observed_mim

5.238.1
applied_state_observed_assignment
<application module: State_observed_mim> *entity data type* (3.2.10) that is a type of *state_observed_assignment* (4.121.6) that represents the applied state observed assignment *entity* (3.2.9)

Note 1 to entry: An **applied_state_observed_assignment** is an entity that relates product or activity data that are assigned a *state_observed* (4.121.5).

5.238.2
state_predicted
<application module: State_observed_mim> *entity data type* (3.2.10) that is a type of *state_observed* (4.121.5) that represents the state predicted *entity* (3.2.9)

Note 1 to entry: A **state_predicted** is a type of state_observed which is a predicted individual or actual state.

5.239 Observation_arm

5.239.1
Observation
<application module: Observation_arm> *application object* (3.1.78) that represents the observation *entity* (3.2.9)

Note 1 to entry: An **Observation** is an historical record of something that has occured during the life of a product or its support environment.

5.239.2
Observation_assignment
<application module: Observation_arm> *application object* (3.1.78) that represents the observation assignment *entity* (3.2.9)

Note 1 to entry: An **Observation_assignment** is an association of an *Observation* (5.239.1) with any item that an observation can be made about, or any item that can be used as part of the observation.

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5.239.3
Observation_consequence
<application module: Observation_arm> *application object* (3.1.78) that represents the observation consequence *entity* (3.2.9)

Note 1 to entry: An **Observation_consequence** is an association of an observation to the consequences that follow from it, where those consequences are in the form of a *Work_request* (5.49.3).

5.239.4
Observation_relationship
<application module: Observation_arm> *application object* (3.1.78) that represents the observation relationship *entity* (3.2.9)

Note 1 to entry: An **Observation_relationship** is a relationship between two observations.

5.240 Observation_mim

5.240.1
observation
<application module: Observation_mim> *entity data type* (3.2.10) that is a type of *action_actual* (5.242.1) that represents the observation *entity* (3.2.9)

Note 1 to entry: An **observation** is a type of action_actual since it is an historical record of the making of an observation.

5.240.2
observation_consequence
<application module: Observation_mim> *entity data type* (3.2.10) that is a type of *applied_action_assignment* (5.57.1) that represents the observation consequence *entity* (3.2.9)

Note 1 to entry: An **observation_consequence** is a type of applied_action_assignment that links an *observation* (5.240.1) to the action that is requested as a consequence of that observation.

5.240.3
observation_relationship
<application module: Observation_mim> *entity data type* (3.2.10) that is a type of *action_relationship* (4.1.5) that represents the observation relationship *entity* (3.2.9)

Note 1 to entry: An **observation_relationship** is a type of action_relationship that links two *observation* (5.240.1) together.

5.241 Activity_as_realized_arm

5.241.1
Activity_actual
<application module: Activity_as_realized_arm> *application object* (3.1.78) that is a type of *Activity* (5.56.1) that represents the activity actual *entity* (3.2.9)

5.241.2
Activity_happening
<application module: Activity_as_realized_arm> *application object* (3.1.78) that is a type of *Activity_relationship* (5.56.2) that represents the activity happening *entity* (3.2.9)

5.242 Activity_as_realized_mim

5.242.1

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action_actual
<application module: Activity_as_realized_mim> *entity data type* (3.2.10) that is a type of *executed_action* (4.1.14) that represents the action actual *entity* (3.2.9)

5.242.2
action_happening
<application module: Activity_as_realized_mim> *entity data type* (3.2.10) that is a type of *action_relationship* (4.1.5) that represents the action happening *entity* (3.2.9)

5.243 Scheme_arm

5.243.1
Scheme
<application module: Scheme_arm> *application object* (3.1.78) that is a type of *Activity_method* (5.58.1) that represents the scheme *entity* (3.2.9)

5.243.2
Scheme_entry
<application module: Scheme_arm> *application object* (3.1.78) that is a type of *Activity_method* (5.58.1) that represents the scheme entry *entity* (3.2.9)

Note 1 to entry: A **Scheme_entry** is a type of Activity_method that provides the identification and description of a single entry in a specific *Scheme* (5.243.1).

5.243.3
Scheme_entry_assignment
<application module: Scheme_arm> *application object* (3.1.78) that is a type of *Applied_activity_method_assignment* (5.226.2) that represents the scheme entry assignment *entity* (3.2.9)

5.243.4
Scheme_entry_relationship
<application module: Scheme_arm> *application object* (3.1.78) that is a type of *Activity_method_relationship* (5.226.1) that represents the scheme entry relationship *entity* (3.2.9)

5.243.5
Scheme_relationship
<application module: Scheme_arm> *application object* (3.1.78) that is a type of *Activity_method_relationship* (5.226.1) that represents the scheme relationship *entity* (3.2.9)

Note 1 to entry: A **Scheme_relationship** is a type of Activity_method_relationship relating two *Scheme* (5.243.1) instances.

5.243.6
Scheme_subject_assignment
<application module: Scheme_arm> *application object* (3.1.78) that is a type of *Applied_activity_method_assignment* (5.226.2) that represents the scheme subject assignment *entity* (3.2.9)

5.243.7
Scheme_version
<application module: Scheme_arm> *application object* (3.1.78) that is a type of *Activity_method* (5.58.1) that represents the scheme version *entity* (3.2.9)

5.243.8

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Scheme_version_assignment
<application module: Scheme_arm> *application object* (3.1.78) that is a type of *Applied_activity_method_assignment* (5.226.2) that represents the scheme version assignment *entity* (3.2.9)

5.243.9
Scheme_version_relationship
<application module: Scheme_arm> *application object* (3.1.78) that is a type of *Activity_method_relationship* (5.226.1) that represents the scheme version relationship *entity* (3.2.9)

Note 1 to entry: A **Scheme_version_relationship** is a type of Activity_method_relationship relating two *Scheme_version* (5.243.7) instances.

5.243.10
Sequencing_relationship
<application module: Scheme_arm> *application object* (3.1.78) that is a type of *Scheme_entry_relationship* (5.243.4) that represents the sequencing relationship *entity* (3.2.9)

5.244 Activity_method_implementation_arm

5.244.1
Activity_method_realization
<application module: Activity_method_implementation_arm> *application object* (3.1.78) that represents the activity method realization *entity* (3.2.9)

Note 1 to entry: An **Activity_method_realization** is a further specification of how an activity method is to be performed with the *Activity_method* (5.58.1).

5.244.2
Activity_method_realization_relationship
<application module: Activity_method_implementation_arm> *application object* (3.1.78) that represents the activity method realization relationship *entity* (3.2.9)

Note 1 to entry: An **Activity_method_realization_relationship** is a relationship between two *Activity_method_realization* (5.244.1) entity instances.

5.245 Task_specification_arm

5.245.1
Advisory_note
<application module: Task_specification_arm> *application object* (3.1.78) that represents the advisory note *entity* (3.2.9)

Note 1 to entry: An **Advisory_note** is the link between a task element with an advisory task step.

5.245.2
Advisory_task_step
<application module: Task_specification_arm> *application object* (3.1.78) that is a type of *Task_step* (5.393.15) that represents the advisory task step *entity* (3.2.9)

5.245.3
Element_constraint
<application module: Task_specification_arm> *application object* (3.1.78) that is a type of *Task_element_relationship* (5.393.13) that represents the element constraint *entity* (3.2.9)

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Note 1 to entry: An **Element_constraint** is a type of Task_element_relationship that signifies a constraint between *Task_element* (5.393.11) instances.

5.245.4
Simultaneous_elements
<application module: Task_specification_arm> *application object* (3.1.78) that is a type of *Concurrent_elements* (5.393.1) that represents the simultaneous elements *entity* (3.2.9)

Note 1 to entry: A **Simultaneous_elements** is a type of Concurrent_elements that represents two or more actions to be performed together.

5.245.5
Task_element_levels
<application module: Task_specification_arm> *application object* (3.1.78) that is a type of *Task_element* (5.393.11) that represents the task element levels *entity* (3.2.9)

Note 1 to entry: A **Task_element_levels** is a type of Task_element that provides two or more different descriptions in place of a single method.

5.245.6
Task_element_state_relationship
<application module: Task_specification_arm> *application object* (3.1.78) that represents the task element state relationship *entity* (3.2.9)

Note 1 to entry: A **Task_element_state_relationship** is an type of *Activity_method_relationship* (5.226.1).

5.245.7
Task_invocation
<application module: Task_specification_arm> *application object* (3.1.78) that is a type of *Task_element* (5.393.11) that represents the task invocation *entity* (3.2.9)

5.245.8
Task_method
<application module: Task_specification_arm> *application object* (3.1.78) that is a type of *Activity_method* (5.58.1) that represents the task method *entity* (3.2.9)

5.245.9
Task_method_assignment
<application module: Task_specification_arm> *application object* (3.1.78) that is a type of *Applied_activity_method_assignment* (5.226.2) that represents the task method assignment *entity* (3.2.9)

5.245.10
Task_method_relationship
<application module: Task_specification_arm> *application object* (3.1.78) that is a type of *Activity_method_relationship* (5.226.1) that represents the task method relationship *entity* (3.2.9)

5.245.11
Task_method_state_relationship
<application module: Task_specification_arm> *application object* (3.1.78) that represents the task method state relationship *entity* (3.2.9)

Note 1 to entry: A **Task_method_state_relationship** is a relationship between a state and a *Task_method* (5.245.8).

5.245.12

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Task_method_version
<application module: Task_specification_arm> *application object* (3.1.78) that is a type of *Activity_method* (5.58.1) that represents the task method version *entity* (3.2.9)

Note 1 to entry: A **Task_method_version** is a type of Activity_method which allows the explicit reference to versions of a *Task_method* (5.245.8)and to track changes against a Task_method.

5.245.13
Task_method_version_assignment
<application module: Task_specification_arm> *application object* (3.1.78) that is a type of *Applied_activity_method_assignment* (5.226.2) that represents the task method version assignment *entity* (3.2.9)

5.245.14
Task_method_version_relationship
<application module: Task_specification_arm> *application object* (3.1.78) that is a type of *Activity_method_relationship* (5.226.1) that represents the task method version relationship *entity* (3.2.9)

5.245.15
Task_objective
<application module: Task_specification_arm> *application object* (3.1.78) that represents the task objective *entity* (3.2.9)

Note 1 to entry: A **Task_objective** is a result or objective that is reached by undertaking a *Task_method* (5.245.8).

5.245.16
Task_objective_state_relationship
<application module: Task_specification_arm> *application object* (3.1.78) that represents the task objective state relationship *entity* (3.2.9)

Note 1 to entry: A **Task_objective_state_relationship** is a relationship between a state and a *Task_objective* (5.245.15).

5.246 Task_specification_mim

5.246.1
advisory_task_step
<application module: Task_specification_mim> *entity data type* (3.2.10) that is a type of *task_step* (5.394.10) that represents the advisory task step *entity* (3.2.9)

Note 1 to entry: An **advisory_task_step** is a type of task_step that provides advice to those carrying out a parent task.

5.246.2
simultaneous_task_element
<application module: Task_specification_mim> *entity data type* (3.2.10) that is a type of *concurrent_task_element* (5.394.1) that represents the simultaneous task element *entity* (3.2.9)

Note 1 to entry: A **simultaneous_task_element** is a type of concurrent_task_element that requires all the specified *task_element* (5.394.7) instances to be carried out in parallel and during the same period.

5.246.3

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task_invocation
<application module: Task_specification_mim> *entity data type* (3.2.10) that is a type of *task_element* (5.394.7) that represents the task invocation *entity* (3.2.9)

Note 1 to entry: A **task_invocation** is a type of task_element that involves carrying out a complete task.

5.246.4
task_method
<application module: Task_specification_mim> *entity data type* (3.2.10) that is a type of *action_method* (4.1.3) that represents the task method *entity* (3.2.9)

Note 1 to entry: A **task_method** is a type of action_method that is specified through one *task_method_version* (5.246.6).

5.246.5
task_method_relationship
<application module: Task_specification_mim> *entity data type* (3.2.10) that is a type of *action_method_relationship* (4.1.4) that represents the task method relationship *entity* (3.2.9)

Note 1 to entry: A **task_method_relationship** is a type of action_method_relationship that specifies the relationship between two *task_method* (5.246.4) instances.

5.246.6
task_method_version
<application module: Task_specification_mim> *entity data type* (3.2.10) that is a type of *action_method* (4.1.3) that represents the task method version *entity* (3.2.9)

Note 1 to entry: A **task_method_version** is a type of action_method that is specified by one or more *task_element* (5.394.7)

5.246.7
task_method_version_relationship
<application module: Task_specification_mim> *entity data type* (3.2.10) that is a type of *action_method_relationship* (4.1.4) that represents the task method version relationship *entity* (3.2.9)

Note 1 to entry: A **task_method_version_relationship** is a type of action_method_relationship that specifies the relationship between two *task_method_version* (5.246.6) instances.

5.246.8
task_objective
<application module: Task_specification_mim> *entity data type* (3.2.10) that is a type of *action_method* (4.1.3) that represents the task objective *entity* (3.2.9)

Note 1 to entry: A **task_objective** is a type of action_method that is specified by a description of the objective to be achieved.

5.247 Justification_arm

5.247.1
Assumption
<application module: Justification_arm> *application object* (3.1.78) that represents the assumption *entity* (3.2.9)

Note 1 to entry: An **Assumption** is the identification of something assumed to be true without proof.

5.247.2

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Assumption_assignment
<application module: Justification_arm> *application object* (3.1.78) that represents the assumption assignment *entity* (3.2.9)

Note 1 to entry: An **Assumption_assignment** is an association between an *Assumption* (5.247.1) and the context in which the assumption is made.

5.247.3
Assumption_relationship
<application module: Justification_arm> *application object* (3.1.78) that represents the assumption relationship *entity* (3.2.9)

Note 1 to entry: An **Assumption_relationship** is an association between two *Assumption* (5.247.1) instances.

5.247.4
Item_assumed
<application module: Justification_arm> *application object* (3.1.78) that represents the item assumed *entity* (3.2.9)

Note 1 to entry: An **Item_assumed** is an association between an *Assumption* (5.247.1) and the item that is being assumed.

5.247.5
Justification
<application module: Justification_arm> *application object* (3.1.78) that represents the justification *entity* (3.2.9)

Note 1 to entry: A **Justification** is the identification and description of the reasons for something.

5.247.6
Justification_assignment
<application module: Justification_arm> *application object* (3.1.78) that represents the justification assignment *entity* (3.2.9)

Note 1 to entry: A **Justification_assignment** is the association between a *Justification* (5.247.5) and the item for which the Justification is provided.

5.247.7
Justification_relationship
<application module: Justification_arm> *application object* (3.1.78) that represents the justification relationship *entity* (3.2.9)

Note 1 to entry: A **Justification_relationship** is an association between two *Justification* (5.247.5) instances.

5.247.8
Justification_support_assignment
<application module: Justification_arm> *application object* (3.1.78) that represents the justification support assignment *entity* (3.2.9)

Note 1 to entry: A **Justification_support_assignment** is the association between a *Justification* (5.247.5) and the item providing evidential support for the Justification .

5.248 Justification_mim

5.248.1

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assumption
<application module: Justification_mim> *entity data type* (3.2.10) that is a type of *state_observed* (4.121.5) that represents the assumption *entity* (3.2.9)

Note 1 to entry: An **assumption** is a type of *state_type* (4.122.1) that identifies something assumed to be true without proof.

5.248.2
assumption_assignment
<application module: Justification_mim> *entity data type* (3.2.10) that is a type of *characterized_applied_state_observed_assignment* (5.248.4) that represents the assumption assignment *entity* (3.2.9)

5.248.3
assumption_relationship
<application module: Justification_mim> *entity data type* (3.2.10) that is a type of *state_observed_relationship* (4.121.7) that represents the assumption relationship *entity* (3.2.9)

Note 1 to entry: An **assumption_relationship** is a type of state_observed_relationship that provides an association between two *assumption* (5.248.1) objects.

5.248.4
characterized_applied_state_observed_assignment
<application module: Justification_mim> *entity data type* (3.2.10) that is a type of *applied_state_observed_assignment* (5.238.1) and *characterized_object* (4.19.1) that represents the characterized applied state observed assignment *entity* (3.2.9)

5.248.5
item_assumed
<application module: Justification_mim> *entity data type* (3.2.10) that is a type of *characterized_applied_state_observed_assignment* (5.248.4) that represents the item assumed *entity* (3.2.9)

Note 1 to entry: An **item_assumed** is a type of characterized_applied_state_observed_assignment that associates an *assumption* (5.248.1) with the item that is being assumed.

5.248.6
justification_assignment
<application module: Justification_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the justification assignment *entity* (3.2.9)

5.248.7
justification_group_assignment
<application module: Justification_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the justification group assignment *entity* (3.2.9)

Note 1 to entry: A **justification_group_assignment** is a type of group_assignment that identifies the assignment of a justification (represented by a *product* (4.18.4) categorized as a justification) to a *justification_assignment* (5.248.6) or a *justification_support_assignment* (5.248.9).

5.248.8
justification_item_group_assignment
<application module: Justification_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the justification item group assignment *entity* (3.2.9)

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5.248.9
justification_support_assignment
<application module: Justification_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the justification support assignment *entity* (3.2.9)

5.248.10
justification_support_item_group_assignment
<application module: Justification_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the justification support item group assignment *entity* (3.2.9)

5.249 Envelope_arm

5.249.1
Envelope
<application module: Envelope_arm> *application object* (3.1.78) that represents the envelope *entity* (3.2.9)

Note 1 to entry: An **Envelope** is an historical record of the transmission of a *Message* (5.255.2).

5.249.2
Envelope_relationship
<application module: Envelope_arm> *application object* (3.1.78) that represents the envelope relationship *entity* (3.2.9)

Note 1 to entry: An **Envelope_relationship** is an association of one *Envelope* (5.249.1) with another.

5.250 Envelope_mim

5.250.1
envelope
<application module: Envelope_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product* (4.18.4) that represents the envelope *entity* (3.2.9)

Note 1 to entry: An **envelope** is a type of product and a type of characterized_object which provides an implementation of *Envelope* (5.249.1).

5.250.2
envelope_relationship
<application module: Envelope_mim> *entity data type* (3.2.10) that is a type of *product_relationship* (4.18.22) that represents the envelope relationship *entity* (3.2.9)

Note 1 to entry: An **envelope_relationship** is a type of product_relationship which relates two *envelope* (5.250.1)

5.251 Resource_management_arm

5.251.1
Decreasing_resource_event
<application module: Resource_management_arm> *application object* (3.1.78) that is a type of *Resource_event* (5.251.7) that represents the decreasing resource event *entity* (3.2.9)

Note 1 to entry: A **Decreasing_resource_event** is a type of Resource_event that decreases the balance of a managed resource.

5.251.2

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Increasing_resource_event
<application module: Resource_management_arm> *application object* (3.1.78) that is a type of *Resource_event* (5.251.7) that represents the increasing resource event *entity* (3.2.9)

Note 1 to entry: A **Increasing_resource_event** is a type of Resource_event that increases the balance of a managed resource.

5.251.3
Managed_resource
<application module: Resource_management_arm> *application object* (3.1.78) that represents the managed resource *entity* (3.2.9)

Note 1 to entry: A **Managed_resource** is a representation of a resource that is provided with resource management capabilities.

5.251.4
Managed_resource_by_reference
<application module: Resource_management_arm> *application object* (3.1.78) that is a type of *Managed_resource* (5.251.3) that represents the managed resource by reference *entity* (3.2.9)

Note 1 to entry: A **Managed_resource_by_reference** is a type of Managed_resource that is described in terms of an identifiable item (not referenced as a realization of a *Resource_item* (5.253.2)) which is provided with resource management capabilities.

5.251.5
Managed_resource_by_resource_item
<application module: Resource_management_arm> *application object* (3.1.78) that is a type of *Managed_resource* (5.251.3) that represents the managed resource by resource item *entity* (3.2.9)

Note 1 to entry: A **Managed_resource_by_resource_item** is a type of Managed_resource that is described in terms of an identifiable resource (within the application context) which is provided with resource management capabilities.

5.251.6
Managed_resource_relationship
<application module: Resource_management_arm> *application object* (3.1.78) that represents the managed resource relationship *entity* (3.2.9)

Note 1 to entry: A **Managed_resource_relationship** is an association between two managed resources.

5.251.7
Resource_event
<application module: Resource_management_arm> *application object* (3.1.78) that represents the resource event *entity* (3.2.9)

Note 1 to entry: A **Resource_event** is an event or action that affects the balance or availability of a managed resource.

5.251.8
Resource_event_correspondence_relationship
<application module: Resource_management_arm> *application object* (3.1.78) that represents the resource event correspondence relationship *entity* (3.2.9)

Note 1 to entry: A **Resource_event_correspondence_relationship** is an association of a resource event and a corresponding statement of *Required_resource* (5.252.1).

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5.251.9
Resource_event_relationship
<application module: Resource_management_arm> *application object* (3.1.78) that represents the resource event relationship *entity* (3.2.9)

Note 1 to entry: A **Resource_event_relationship** is a specification of how an *Resource_event* (5.251.7) may be associated with another Resource_event.

5.252 Required_resource_arm

5.252.1
Required_resource
<application module: Required_resource_arm> *application object* (3.1.78) that represents the required resource *entity* (3.2.9)

Note 1 to entry: A **Required_resource** is an identified need for resource.

5.252.2
Required_resource_assignment
<application module: Required_resource_arm> *application object* (3.1.78) that represents the required resource assignment *entity* (3.2.9)

Note 1 to entry: A **Required_resource_assignment** is an association of a resource requirement statement with one or more entities that requires the resource.

5.252.3
Required_resource_by_reference
<application module: Required_resource_arm> *application object* (3.1.78) that is a type of *Required_resource* (5.252.1) that represents the required resource by reference *entity* (3.2.9)

Note 1 to entry: A **Required_resource_by_reference** is a type of Required_resource that is described in terms of an identifiable item (not referenced as a realization of a *Resource_item* (5.253.2)) which will satisfy the requirement.

5.252.4
Required_resource_by_requirement
<application module: Required_resource_arm> *application object* (3.1.78) that is a type of *Required_resource* (5.252.1) that represents the required resource by requirement *entity* (3.2.9)

Note 1 to entry: A **Required_resource_by_requirement** is a type of Required_resource that is described in terms of a specification of a type of item which will satisfy the requirement.

5.252.5
Required_resource_by_resource_item
<application module: Required_resource_arm> *application object* (3.1.78) that is a type of *Required_resource* (5.252.1) that represents the required resource by resource item *entity* (3.2.9)

Note 1 to entry: A **Required_resource_by_resource_item** is a type of Required_resource that is described in terms of an identifiable resource (within the application context) which will satisfy the requirement.

5.252.6
Required_resource_relationship
<application module: Required_resource_arm> *application object* (3.1.78) that represents the required resource relationship *entity* (3.2.9)

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Note 1 to entry: A **Required_resource_relationship** is a relationship between two required resource statements.

5.252.7
Required_resource_requirement
<application module: Required_resource_arm> *application object* (3.1.78) that represents the required resource requirement *entity* (3.2.9)

Note 1 to entry: A **Required_resource_requirement** is an association of a required resource with one or more requirement version entities that fulfil the resource requirement.

5.253 Resource_item_arm

5.253.1
Resource_group_relationship
<application module: Resource_item_arm> *application object* (3.1.78) that is a type of *Resource_item_relationship* (5.253.5) that represents the resource group relationship *entity* (3.2.9)

Note 1 to entry: A **Resource_group_relationship** is a type of Resource_item_relationship that specifiies the means to associate two resource items that are part of a resource group.

5.253.2
Resource_item
<application module: Resource_item_arm> *application object* (3.1.78) that represents the resource item *entity* (3.2.9)

Note 1 to entry: A **Resource_item** is an item that can occur in the role of a resource within the application context.

5.253.3
Resource_item_assignment
<application module: Resource_item_arm> *application object* (3.1.78) that represents the resource item assignment *entity* (3.2.9)

Note 1 to entry: A **Resource_item_assignment** is an association of a resource item with some product information.

5.253.4
Resource_item_realization
<application module: Resource_item_arm> *application object* (3.1.78) that represents the resource item realization *entity* (3.2.9)

Note 1 to entry: A **Resource_item_realization** is a specification of how a resource item may be associated with an item that serves as the resource.

5.253.5
Resource_item_relationship
<application module: Resource_item_arm> *application object* (3.1.78) that represents the resource item relationship *entity* (3.2.9)

Note 1 to entry: A **Resource_item_relationship** is a specification of how a resource item may be associated with another resource item.

5.254 Resource_as_realized_arm

5.254.1

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Resource_as_realized
<application module: Resource_as_realized_arm> *application object* (3.1.78) that represents the resource as realized *entity* (3.2.9)

Note 1 to entry: A **Resource_as_realized** is a record of a resource that has been used or consumed.

5.254.2
Resource_as_realized_assignment
<application module: Resource_as_realized_arm> *application object* (3.1.78) that represents the resource as realized assignment *entity* (3.2.9)

Note 1 to entry: A **Resource_as_realized_assignment** is an association of a resource record statement with the entity that used or consumed the resource.

5.254.3
Resource_as_realized_by_reference
<application module: Resource_as_realized_arm> *application object* (3.1.78) that is a type of *Resource_as_realized* (5.254.1) that represents the resource as realized by reference *entity* (3.2.9)

Note 1 to entry: A **Resource_as_realized_by_reference** is a type of Resource_as_realized that is described in terms of an identifiable item (not referenced as a realization of a *Resource_item* (5.253.2)) which is provided with resource management capabilities.

5.254.4
Resource_as_realized_by_resource_item
<application module: Resource_as_realized_arm> *application object* (3.1.78) that is a type of *Resource_as_realized* (5.254.1) that represents the resource as realized by resource item *entity* (3.2.9)

Note 1 to entry: A **Resource_as_realized_by_resource_item** is a type of Resource_as_realized that is described in terms of an identifiable resource (within the application context) which is provided with resource management capabilities.

5.254.5
Resource_as_realized_relationship
<application module: Resource_as_realized_arm> *application object* (3.1.78) that represents the resource as realized relationship *entity* (3.2.9)

Note 1 to entry: A **Resource_as_realized_relationship** is a relationship between the record of used or consumed resources and the corresponding statement of *Required_resource* (5.252.1).

5.255 Message_arm

5.255.1
Content_item
<application module: Message_arm> *application object* (3.1.78) that represents the content item *entity* (3.2.9)

Note 1 to entry: A **Content_item** is a reference to any item that can be referenced as part of the message content.

5.255.2
Message
<application module: Message_arm> *application object* (3.1.78) that represents the message *entity* (3.2.9)

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Note 1 to entry: A **Message** is a collection of information, brought together by an originator (the message definer) for some particular purpose, generally the fulfillment of a process.

5.255.3
Message_relationship
<application module: Message_arm> *application object* (3.1.78) that represents the message relationship *entity* (3.2.9)

Note 1 to entry: A **Message_relationship** is a link between two related messages.

5.255.4
Referenced_content_item
<application module: Message_arm> *application object* (3.1.78) that represents the referenced content item *entity* (3.2.9)

Note 1 to entry: A **Referenced_content_item** is a means of linking to the actual content of a message.

5.256 Message_mim

5.256.1
containing_message
<application module: Message_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the containing message *entity* (3.2.9)

Note 1 to entry: A **containing_message** is a type of group_assignment that provides the link from the *structured_message* (5.256.5) to the *group* (4.12.1) that maintains the set of contents.

5.256.2
message_contents_assignment
<application module: Message_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the message contents assignment *entity* (3.2.9)

Note 1 to entry: A **message_contents_assignment** is a type of group_assignment that links the *group* (4.12.1) to the contents of the *structured_message* (5.256.5).

5.256.3
message_contents_group
<application module: Message_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the message contents group *entity* (3.2.9)

Note 1 to entry: A **message_contents_group** is a type of group that provides the mechanism to link a *structured_message* (5.256.5) with its contents.

5.256.4
message_relationship
<application module: Message_mim> *entity data type* (3.2.10) that is a type of *product_relationship* (4.18.22) that represents the message relationship *entity* (3.2.9)

Note 1 to entry: A **message_relationship** is a type of product_relationship used to implement relationships between *structured_message* (5.256.5).

5.256.5
structured_message
<application module: Message_mim> *entity data type* (3.2.10) that is a type of *product* (4.18.4) that represents the structured message *entity* (3.2.9)

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Note 1 to entry: A **structured_message** is a type of product, used to implement *Message* (5.255.2).

5.257 State_characterized_mim

5.257.1
statechar_applied_object
<application module: State_characterized_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_observed_assignment* (4.121.6) that represents the statechar applied object *entity* (3.2.9)

5.257.2
statechar_object
<application module: State_characterized_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_observed* (4.121.5) that represents the statechar object *entity* (3.2.9)

5.257.3
statechar_relationship_object
<application module: State_characterized_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_observed_relationship* (4.121.7) that represents the statechar relationship object *entity* (3.2.9)

5.257.4
statechar_type_applied_object
<application module: State_characterized_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_type_assignment* (4.122.2) that represents the statechar type applied object *entity* (3.2.9)

5.257.5
statechar_type_object
<application module: State_characterized_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_type* (4.122.1) that represents the statechar type object *entity* (3.2.9)

5.257.6
statechar_type_relationship_object
<application module: State_characterized_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_type_relationship* (4.122.3) that represents the statechar type relationship object *entity* (3.2.9)

5.258 Activity_characterized_mim

5.258.1
characterizable_applied_action_assignment
<application module: Activity_characterized_mim> *entity data type* (3.2.10) that is a type of *applied_action_assignment* (5.57.1) and *characterized_object* (4.19.1) that represents the characterizable applied action assignment *entity* (3.2.9)

Note 1 to entry: A **characterizable_applied_action_assignment** is a type of *Applied_activity_assignment* (5.56.4) and characterized_object that enables properties to be associated to the assignment of actions.

5.259 Resource_property_assignment_arm

5.259.1

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Applied_independent_resource_property
<application module: Resource_property_assignment_arm> *application object* (3.1.78) that is a type of *Resource_property* (5.259.2) that represents the applied independent resource property *entity* (3.2.9)

Note 1 to entry: An **Applied_independent_resource_property** is a type of Resource_property that is associated to a *Independent_property* (5.44.1) .

5.259.2
Resource_property
<application module: Resource_property_assignment_arm> *application object* (3.1.78) that represents the resource property *entity* (3.2.9)

Note 1 to entry: A **Resource_property** is a property of a resource related object.

5.259.3
Resource_property_representation
<application module: Resource_property_assignment_arm> *application object* (3.1.78) that represents the resource property representation *entity* (3.2.9)

Note 1 to entry: A **Resource_property_representation** is an association between an *Resource_property* (5.259.2) and one of its representations.

5.260 Probability_distribution_arm

5.260.1
Distribution_by_value
<application module: Probability_distribution_arm> *application object* (3.1.78) that is a type of *Probability_distribution* (5.260.4) that represents the distribution by value *entity* (3.2.9)

Note 1 to entry: A **Distribution_by_value** is a type of Probability_distribution that explicitly lists pairs of random variable values and function values.

5.260.2
Function_value_pair
<application module: Probability_distribution_arm> *application object* (3.1.78) that represents the function value pair *entity* (3.2.9)

Note 1 to entry: A **Function_value_pair** is a single random variable/value pair, thus defining a single point on the distribution curve of a numerically defined distribution.

5.260.3
Parameterized_distribution
<application module: Probability_distribution_arm> *application object* (3.1.78) that is a type of *Probability_distribution* (5.260.4) that represents the parameterized distribution *entity* (3.2.9)

Note 1 to entry: A **Parameterized_distribution** is a type of Probability_distribution that is used to link a named probability distribution to the parameters that define it.

5.260.4
Probability_distribution
<application module: Probability_distribution_arm> *application object* (3.1.78) that is a type of *Probability_generator* (5.232.5) that represents the probability distribution *entity* (3.2.9)

Note 1 to entry: A **Probability_distribution** is a type of Probability_generator that is a probability distribution.

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5.260.5
Probability_distribution_parameter
<application module: Probability_distribution_arm> *application object* (3.1.78) that is a type of *Numerical_item_with_global_unit* (5.118.2) that represents the probability distribution parameter *entity* (3.2.9)

Note 1 to entry: A **Probability_distribution_parameter** is a type of Numerical_item_with_global_unit that is one of the set of values that characterises a probability distribution.

5.260.6
Probability_function_value
<application module: Probability_distribution_arm> *application object* (3.1.78) that is a type of *Numerical_item_with_global_unit* (5.118.2) that represents the probability function value *entity* (3.2.9)

Note 1 to entry: A **Probability_function_value** is a type of Numerical_item_with_global_unit that is the value of the probability function at the given random variable value.

5.260.7
Random_variable
<application module: Probability_distribution_arm> *application object* (3.1.78) that is a type of *Numerical_item_with_global_unit* (5.118.2) that represents the random variable *entity* (3.2.9)

Note 1 to entry: A **Random_variable** is a type of Numerical_item_with_global_unit that is the value of a random variable.

5.260.8
Value_function
<application module: Probability_distribution_arm> *application object* (3.1.78) that represents the value function *entity* (3.2.9)

Note 1 to entry: A **Value_function** is a numerically defined function that describes the distribution function.

5.261 External_class_arm

5.261.1
External_class
<application module: External_class_arm> *application object* (3.1.78) that is a type of *Class* (5.83.1) that represents the external class *entity* (3.2.9)

Note 1 to entry: An **External_class** is a type of Class that represents a reference to a class that is not included in the data exchange file and is defined in an external class library.

5.261.2
External_class_library
<application module: External_class_arm> *application object* (3.1.78) that is a type of *External_source* (5.306.1) that represents the external class library *entity* (3.2.9)

5.262 External_class_mim

5.262.1
external_class_library
<application module: External_class_mim> *entity data type* (3.2.10) that is a type of *external_source* (4.11.1) that represents the external class library *entity* (3.2.9)

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Note 1 to entry: An **external_class_library** is a type of external_source that implements the ARM concept of *External_class_library* (5.261.2).

5.262.2
externally_defined_class
<application module: External_class_mim> *entity data type* (3.2.10) that is a type of *class* (4.75.1) and *externally_defined_item* (4.11.3) that represents the externally defined class *entity* (3.2.9)

Note 1 to entry: An **externally_defined_class** is a type of externally_defined_item and class that implements the ARM concept of *External_class* (5.261.1).

5.263 Location_arm

5.263.1
Address_based_location_representation
<application module: Location_arm> *application object* (3.1.78) that is a type of *Location_representation* (5.263.5) that represents the address based location representation *entity* (3.2.9)

Note 1 to entry: An **Address_based_location_representation** is a type of Location_representation specified by its postal identification.

5.263.2
Global_location_representation
<application module: Location_arm> *application object* (3.1.78) that is a type of *Location_representation* (5.263.5) that represents the global location representation *entity* (3.2.9)

Note 1 to entry: A **Global_location_representation** is a type of Location_representation specified using geographic means in the global system and values, which can be physical or political geographic values.

5.263.3
Location
<application module: Location_arm> *application object* (3.1.78) that represents the location *entity* (3.2.9)

Note 1 to entry: A **Location** is a place or position where an activity or event can occur or a product or resource can exist.

5.263.4
Location_relationship
<application module: Location_arm> *application object* (3.1.78) that represents the location relationship *entity* (3.2.9)

Note 1 to entry: A **Location_relationship** is a relationship between two locations.

5.263.5
Location_representation
<application module: Location_arm> *application object* (3.1.78) that represents the location representation *entity* (3.2.9)

Note 1 to entry: A **Location_representation** is a means of representing a location.

5.263.6

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Organization_based_location_representation
<application module: Location_arm> *application object* (3.1.78) that is a type of *Location_representation* (5.263.5) that represents the organization based location representation *entity* (3.2.9)

Note 1 to entry: An **Organization_based_location_representation** is a type of Location_representation that specifies a location in the context of an organization.

5.263.7
Organizational_location_identification
<application module: Location_arm> *application object* (3.1.78) that represents the organizational location identification *entity* (3.2.9)

Note 1 to entry: An **Organizational_location_identification** is location that is defined by an identification which is specific in an organization context.

5.263.8
Product_based_location_identification
<application module: Location_arm> *application object* (3.1.78) that is a type of *Location_representation* (5.263.5) that represents the product based location identification *entity* (3.2.9)

Note 1 to entry: A **Product_based_location_identification** is a type of Location_representation that specifies a location in the context of a product.

5.263.9
Regional_coordinate
<application module: Location_arm> *application object* (3.1.78) that represents the regional coordinate *entity* (3.2.9)

Note 1 to entry: A **Regional_coordinate** is a location that is specified relative to a Regional location system.

5.263.10
Regional_grid_location_representation
<application module: Location_arm> *application object* (3.1.78) that is a type of *Location_representation* (5.263.5) that represents the regional grid location representation *entity* (3.2.9)

Note 1 to entry: A **Regional_grid_location_representation** is a type of Location_representation that specifies a reference grid system.

5.264 Location_mim

5.264.1
applied_location_representation_assignment
<application module: Location_mim> *entity data type* (3.2.10) that is a type of *location_representation_assignment* (4.15.38) that represents the applied location representation assignment *entity* (3.2.9)

5.264.2
characterized_location_object
<application module: Location_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *location* (4.14.1) that represents the characterized location object *entity* (3.2.9)

Note 1 to entry: A **characterized_location_object** is a type of location and characterized_object that serves to assign *property_definition* (4.19.9) instances to location instances.

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5.265 Location_assignment_arm

5.265.1
Location_assignment
<application module: Location_assignment_arm> *application object* (3.1.78) that represents the location assignment *entity* (3.2.9)

Note 1 to entry: A **Location_assignment** is a relationship between a product, event, or person and a location.

5.266 Location_assignment_mim

5.266.1
applied_location_assignment
<application module: Location_assignment_mim> *entity data type* (3.2.10) that is a type of *location_assignment* (4.15.37) that represents the applied location assignment *entity* (3.2.9)

5.267 Product_group_arm

5.267.1
Product_group
<application module: Product_group_arm> *application object* (3.1.78) that represents the product group *entity* (3.2.9)

Note 1 to entry: A **Product_group** is an identification of a set of *Product_concept* (5.74.2) instances, *Product* (5.28.1) instances, *Product_group* (5.267.1) instances, *Product_version* (5.29.1) instances or *Product_as_individual* (5.157.1) instances that have been grouped together.

5.267.2
Product_group_membership
<application module: Product_group_arm> *application object* (3.1.78) that represents the product group membership *entity* (3.2.9)

5.267.3
Product_group_relationship
<application module: Product_group_arm> *application object* (3.1.78) that represents the product group relationship *entity* (3.2.9)

Note 1 to entry: A **Product_group_relationship** is a relationship between two *Product_group* (5.267.1) instances.

5.268 Product_group_mim

5.268.1
product_group
<application module: Product_group_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the product group *entity* (3.2.9)

Note 1 to entry: A **product_group** is a type of group that is an identification of a set of *product* (4.18.4) instances, *product_definition_formation* (4.18.11) instances, *product_concept* (4.24.5) instances that have been grouped together.

5.268.2
product_group_attribute_assignment
<application module: Product_group_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the product group attribute assignment *entity* (3.2.9)

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5.268.3
product_group_attribute_set
<application module: Product_group_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the product group attribute set *entity* (3.2.9)

5.268.4
product_group_attributes
<application module: Product_group_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the product group attributes *entity* (3.2.9)

Note 1 to entry: A **product_group_attributes** is a type of group that identifies the set of attributes that have been assigned to the *product_group* (5.268.1).

5.268.5
product_group_context
<application module: Product_group_mim> *entity data type* (3.2.10) that is a type of *descriptive_representation_item* (4.34.1) that represents the product group context *entity* (3.2.9)

5.268.6
product_group_membership
<application module: Product_group_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *group_assignment* (4.15.32) that represents the product group membership *entity* (3.2.9)

5.268.7
product_group_membership_rules
<application module: Product_group_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the product group membership rules *entity* (3.2.9)

Note 1 to entry: A **product_group_membership_rules** is a type of *group* (4.12.1) that identifies the criteria for membership of a *product_group* (5.268.1).

5.268.8
product_group_purpose
<application module: Product_group_mim> *entity data type* (3.2.10) that is a type of *descriptive_representation_item* (4.34.1) that represents the product group purpose *entity* (3.2.9)

5.268.9
product_group_relationship
<application module: Product_group_mim> *entity data type* (3.2.10) that is a type of *group_relationship* (4.12.2) that represents the product group relationship *entity* (3.2.9)

Note 1 to entry: A **product_group_relationship** is a type of group_relationship that is a relationship between two *product_group* (5.268.1) instances.

5.268.10
product_group_rule
<application module: Product_group_mim> *entity data type* (3.2.10) that is a type of *descriptive_representation_item* (4.34.1) that represents the product group rule *entity* (3.2.9)

5.268.11
product_group_rule_assignment
<application module: Product_group_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the product group rule assignment *entity* (3.2.9)

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5.268.12
product_group_rules
<application module: Product_group_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the product group rules *entity* (3.2.9)

Note 1 to entry: A **product_group_rules** is a type of group that identifies a set of *product_group_rule* (5.268.10) instances that define the criterion for membership of a *product_group* (5.268.1).

5.269 Plib_class_reference_arm

5.269.1
Plib_class_reference
<application module: Plib_class_reference_arm> *application object* (3.1.78) that represents the plib class reference *entity* (3.2.9)

Note 1 to entry: A **Plib_class_reference** is a class in a library that is compliant to ISO 13584 (Parts Library).

5.270 Plib_class_reference_mim

5.270.1
known_source
<application module: Plib_class_reference_mim> *entity data type* (3.2.10) that is a type of *external_source* (4.11.1) and *pre_defined_item* (4.11.6) that represents the known source *entity* (3.2.9)

Note 1 to entry: A **known_source** is a type of external_source and of pre_defined_item that is a source of information whose name and content are predetermined.

5.271 Ap239_part_definition_information_arm

5.271.1
Product_as_individual_effectivity
<application module: Ap239_part_definition_information_arm> *application object* (3.1.78) that is a type of *Effectivity* (5.70.2) that represents the product as individual effectivity *entity* (3.2.9)

Note 1 to entry: A **Product_as_individual_effectivity** is a type of Effectivity for which the domain of applicability is defined as a set of instances of *Product_as_individual* (5.157.1).

5.272 Ap239_part_definition_information_mim

5.272.1
applied_effectivity_context_assignment
<application module: Ap239_part_definition_information_mim> *entity data type* (3.2.10) that is a type of *effectivity_context_assignment* (4.15.21) that represents the applied effectivity context assignment *entity* (3.2.9)

Note 1 to entry: A **applied_effectivity_context_assignment** is a type of effectivity_context_assignment that identifies the context for the association of an *effectivity_assignment* (4.15.20) with product data.

5.272.2
characterized_address
<application module: Ap239_part_definition_information_mim> *entity data type* (3.2.10) that is a type of *address* (4.17.1) and *characterized_object* (4.19.1) that represents the characterized address *entity* (3.2.9)

Note 1 to entry: A **characterized_address** is a type of characterized_object and address that serves to assign *property_definition* (4.19.9) instances to *characterized_address* (5.272.2) instances.

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5.272.3
characterized_applied_organization_assignment
<application module: Ap239_part_definition_information_mim> *entity data type* (3.2.10) that is a type of *applied_organization_assignment* (5.22.1) and *characterized_object* (4.19.1) that represents the characterized applied organization assignment *entity* (3.2.9)

Note 1 to entry: A **characterized_applied_organization_assignment** is a type of characterized_object and applied_organization_assignment that serves to assign *property_definition* (4.19.9) instances to applied_organization_assignment instances.

5.272.4
characterized_applied_person_and_organization_assignment
<application module: Ap239_part_definition_information_mim> *entity data type* (3.2.10) that is a type of *applied_person_and_organization_assignment* (5.22.2) and *characterized_object* (4.19.1) that represents the characterized applied person and organization assignment *entity* (3.2.9)

Note 1 to entry: A **characterized_applied_person_and_organization_assignment** is a type of characterized_object and applied_person_and_organization_assignment that serves to assign *property_definition* (4.19.9) instances to applied_person_and_organization_assignment instances.

5.272.5
characterized_hierarchical_interface_connection
<application module: Ap239_part_definition_information_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *hierarchical_interface_connection* (5.231.1) that represents the characterized hierarchical interface connection *entity* (3.2.9)

Note 1 to entry: A **characterized_hierarchical_interface_connection** is a type of characterized_object and hierarchical_interface_connection that serves to assign *property_definition* (4.19.9) instances to *characterized_hierarchical_interface_connection* (5.272.5) instances.

5.272.6
characterized_interface_connection
<application module: Ap239_part_definition_information_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *interface_connection* (5.231.2) that represents the characterized interface connection *entity* (3.2.9)

Note 1 to entry: A **characterized_interface_connection** is a type of characterized_object and interface_connection that serves to assign *property_definition* (4.19.9) instances to *characterized_interface_connection* (5.272.6) instances.

5.272.7
characterized_interface_connector_occurrence
<application module: Ap239_part_definition_information_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *interface_connector_occurrence* (5.231.4) that represents the characterized interface connector occurrence *entity* (3.2.9)

Note 1 to entry: A **characterized_interface_connector_occurrence** is a type of characterized_object and interface_connector_occurrence that serves to assign *property_definition* (4.19.9) instances to *characterized_interface_connector_occurrence* (5.272.7) instances.

5.272.8
characterized_interface_definition_connection
<application module: Ap239_part_definition_information_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *interface_definition_connection* (5.231.6) that represents the characterized interface definition connection *entity* (3.2.9)

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Note 1 to entry: A **characterized_interface_definition_connection** is a type of characterized_object and interface_definition_connection that serves to assign *property_definition* (4.19.9) instances to *characterized_interface_definition_connection* (5.272.8) instances.

5.272.9
characterized_organizational_project
<application module: Ap239_part_definition_information_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *organizational_project* (4.17.8) that represents the characterized organizational project *entity* (3.2.9)

Note 1 to entry: A **characterized_organizational_project** is a type of characterized_object and organizational_project that serves to assign *property_definition* (4.19.9) instances to *characterized_organizational_project* (5.272.9) instances.

5.272.10
characterized_person
<application module: Ap239_part_definition_information_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *person* (4.17.10) that represents the characterized person *entity* (3.2.9)

Note 1 to entry: A **characterized_person** is a type of characterized_object and person that serves to assign *property_definition* (4.19.9) instances to *characterized_person* (5.272.10) instances.

5.272.11
characterized_person_and_organization
<application module: Ap239_part_definition_information_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *person_and_organization* (4.17.11) that represents the characterized person and organization *entity* (3.2.9)

Note 1 to entry: A **characterized_person_and_organization** is a type of characterized_object and person_and_organization that serves to assign *property_definition* (4.19.9) instances to *characterized_person_and_organization* (5.272.11) instances.

5.273 Interface_lifecycle_arm

5.273.1
Interface_connector_as_planned
<application module: Interface_lifecycle_arm> *application object* (3.1.78) that is a type of *Interface_connector_version* (5.230.6) that represents the interface connector as planned *entity* (3.2.9)

Note 1 to entry: An **Interface_connector_as_planned** is a type of Interface_connector_version that identifies an individual that is the subject of a plan to realize an *Interface_connector* (5.230.3).

5.273.2
Interface_connector_as_realized
<application module: Interface_lifecycle_arm> *application object* (3.1.78) that is a type of *Interface_connector_version* (5.230.6) that represents the interface connector as realized *entity* (3.2.9)

Note 1 to entry: An **Interface_connector_as_realized** is a type of Interface_connector_version that identifies an individual that is a realized *Interface_connector* (5.230.3).

5.273.3
Interface_connector_design
<application module: Interface_lifecycle_arm> *application object* (3.1.78) that is a type of *Interface_connector_version* (5.230.6) that represents the interface connector design *entity* (3.2.9)

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Note 1 to entry: An **Interface_connector_design** is a type of Interface_connector_version that identifies a design version of an *Interface_connector* (5.230.3).

5.273.4
Interface_connector_design_to_planned
<application module: Interface_lifecycle_arm> *application object* (3.1.78) that represents the interface connector design to planned *entity* (3.2.9)

Note 1 to entry: An **Interface_connector_design_to_planned** is a relationship between a design version of an *Interface_connector* (5.230.3) and a planned individual that is to conform to the design.

5.273.5
Interface_connector_design_to_realized
<application module: Interface_lifecycle_arm> *application object* (3.1.78) that represents the interface connector design to realized *entity* (3.2.9)

Note 1 to entry: An **Interface_connector_design_to_realized** is a relationship between a design version of an *Interface_connector* (5.230.3) and a realized individual that conforms to the design.

5.273.6
Interface_connector_planned_to_realized
<application module: Interface_lifecycle_arm> *application object* (3.1.78) that represents the interface connector planned to realized *entity* (3.2.9)

Note 1 to entry: An **Interface_connector_planned_to_realized** is a relationship between a realized individual of an *Interface_connector* (5.230.3) and a corresponding planned individual.

5.274 Interface_lifecycle_mim

5.274.1
interface_connector_as_planned
<application module: Interface_lifecycle_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) that represents the interface connector as planned *entity* (3.2.9)

Note 1 to entry: An **interface_connector_as_planned** is a type of product_definition_formation that identifies an individual that is the subject of a plan to realize an interface connector.

5.274.2
interface_connector_as_realized
<application module: Interface_lifecycle_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) that represents the interface connector as realized *entity* (3.2.9)

Note 1 to entry: An **interface_connector_as_realized** is a type of product_definition_formation that identifies an individual that is a realized interface connector.

5.274.3
interface_connector_design
<application module: Interface_lifecycle_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) that represents the interface connector design *entity* (3.2.9)

Note 1 to entry: An **interface_connector_design** is a type of product_definition_formation that identifies a design version of an interface connector.

5.274.4

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interface_connector_design_to_planned
<application module: Interface_lifecycle_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the interface connector design to planned *entity* (3.2.9)

Note 1 to entry: An **interface_connector_design_to_planned** is a type of product_definition_formation_relationship that identifies the relationship between a design version of an interface connector and a planned individual that is to conform to the design.

5.274.5
interface_connector_design_to_realized
<application module: Interface_lifecycle_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the interface connector design to realized *entity* (3.2.9)

Note 1 to entry: An **interface_connector_design_to_realized** is a type of product_definition_formation_relationship that identifies the relationship between a design version of an interface connector and a realized individual that conforms to the design.

5.274.6
interface_connector_planned_to_realized
<application module: Interface_lifecycle_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the interface connector planned to realized *entity* (3.2.9)

Note 1 to entry: An **interface_connector_planned_to_realized** is a type of product_definition_formation_relationship that identifies the relationship between a realized individual of an interface connector and a corresponding planned individual.

5.275 Ap239_document_management_mim

5.275.1
characterized_applied_document_reference
<application module: Ap239_document_management_mim> *entity data type* (3.2.10) that is a type of *applied_document_reference* (5.121.1) and *characterized_object* (4.19.1) that represents the characterized applied document reference *entity* (3.2.9)

Note 1 to entry: A **characterized_applied_document_reference** is a type of applied_document_reference and characterized_object.

5.275.2
characterized_applied_document_usage_constraint_assignment
<application module: Ap239_document_management_mim> *entity data type* (3.2.10) that is a type of *applied_document_usage_constraint_assignment* (5.121.2) and *characterized_object* (4.19.1) that represents the characterized applied document usage constraint assignment *entity* (3.2.9)

Note 1 to entry: A **characterized_applied_document_usage_constraint_assignment** is a type of applied_document_usage_constraint_assignment and characterized_object.

5.276 Work_output_arm

5.276.1
Work_output
<application module: Work_output_arm> *application object* (3.1.78) that represents the work output *entity* (3.2.9)

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Note 1 to entry: A **Work_output** is a statement of output resulting from an activity or a task.

5.276.2
Work_output_assignment
<application module: Work_output_arm> *application object* (3.1.78) that represents the work output assignment *entity* (3.2.9)

Note 1 to entry: A **Work_output_assignment** is an association of a work output statement with the source that produces or delivers the output.

5.276.3
Work_output_relationship
<application module: Work_output_arm> *application object* (3.1.78) that represents the work output relationship *entity* (3.2.9)

Note 1 to entry: A **Work_output_relationship** is a relationship between two work output statements.

5.277 Ap239_task_specification_resourced_mim

5.277.1
characterized_applied_action_method_assignment
<application module: Ap239_task_specification_resourced_mim> *entity data type* (3.2.10) that is a type of *applied_action_method_assignment* (5.227.1) and *characterized_object* (4.19.1) that represents the characterized applied action method assignment *entity* (3.2.9)

Note 1 to entry: A **characterized_applied_action_method_assignment** is a type of applied_action_method_assignment to which properties can be associated.

5.277.2
characterized_applied_state_assignment
<application module: Ap239_task_specification_resourced_mim> *entity data type* (3.2.10) that is a type of *applied_state_observed_assignment* (5.238.1) and *characterized_object* (4.19.1) that represents the characterized applied state assignment *entity* (3.2.9)

Note 1 to entry: A **characterized_applied_state_assignment** is a type of applied_state_observed_assignment and a type of characterized_object to which properties may be assigned.

5.277.3
characterized_applied_state_type_assignment
<application module: Ap239_task_specification_resourced_mim> *entity data type* (3.2.10) that is a type of *applied_state_type_assignment* (5.379.1) and *characterized_object* (4.19.1) that represents the characterized applied state type assignment *entity* (3.2.9)

Note 1 to entry: A **characterized_applied_state_type_assignment** is a type of applied_state_type_assignment and a type of characterized_object to which properties may be assigned.

5.278 Ap239_work_definition_mim

5.278.1
characterized_applied_action_assignment
<application module: Ap239_work_definition_mim> *entity data type* (3.2.10) that is a type of *applied_action_assignment* (5.57.1) and *characterized_object* (4.19.1) that represents the characterized applied action assignment *entity* (3.2.9)

Note 1 to entry: A **characterized_applied_action_assignment** is a type of applied_action_assignment and characterized_object in order to apply properties to an action assignment.

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5.279 Picture_representation_arm

5.279.1
Externally_defined_picture_representation_item
<application module: Picture_representation_arm> *application object* (3.1.78) that is a type of *Picture_representation_item* (5.279.3) that represents the externally defined picture representation item *entity* (3.2.9)

5.279.2
Picture_representation
<application module: Picture_representation_arm> *application object* (3.1.78) that is a type of *View_area* (5.304.4) that represents the picture representation *entity* (3.2.9)

5.279.3
Picture_representation_item
<application module: Picture_representation_arm> *application object* (3.1.78) that is a type of *Bytes_representation_item* (5.335.2) that represents the picture representation item *entity* (3.2.9)

5.279.4
Predefined_picture_representation_item
<application module: Picture_representation_arm> *application object* (3.1.78) that is a type of *Picture_representation_item* (5.279.3) that represents the predefined picture representation item *entity* (3.2.9)

5.280 Picture_representation_mim

5.280.1
externally_defined_picture_representation_item
<application module: Picture_representation_mim> *entity data type* (3.2.10) that is a type of *picture_representation_item* (5.280.3) that represents the externally defined picture representation item *entity* (3.2.9)

Note 1 to entry: An **externally_defined_picture_representation_item** is a type of picture_representation_item that implements the ARM concept of *Externally_defined_picture_representation_item* (5.279.1).

5.280.2
picture_representation
<application module: Picture_representation_mim> *entity data type* (3.2.10) that is a type of *presentation_view* (4.39.30) that represents the picture representation *entity* (3.2.9)

Note 1 to entry: A **picture_representation** is a type of presentation_view that implements the ARM concept of *Picture_representation* (5.279.2).

5.280.3
picture_representation_item
<application module: Picture_representation_mim> *entity data type* (3.2.10) that is a type of *bytes_representation_item* (4.41.2) that represents the picture representation item *entity* (3.2.9)

Note 1 to entry: A **picture_representation_item** is a type of bytes_representation_item that implements the ARM concept of *Picture_representation_item* (5.279.3).

5.280.4

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predefined_picture_representation_item
<application module: Picture_representation_mim> *entity data type* (3.2.10) that is a type of *picture_representation_item* (5.280.3) that represents the predefined picture representation item *entity* (3.2.9)

Note 1 to entry: A **predefined_picture_representation_item** is a type of picture_representation_item that implements the ARM concept of *Predefined_picture_representation_item* (5.279.4).

5.281 Drawing_definition_arm

5.281.1
Camera_image_2d_with_scale
<application module: Drawing_definition_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the camera image 2d with scale *entity* (3.2.9)

5.281.2
Camera_model_d2
<application module: Drawing_definition_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the camera model d2 *entity* (3.2.9)

5.281.3
Draughting_title
<application module: Drawing_definition_arm> *application object* (3.1.78) that represents the draughting title *entity* (3.2.9)

Note 1 to entry: A **Draughting_title** is a brief text describing the contents of the drawing or drawing sheet.

5.281.4
Drawing_definition
<application module: Drawing_definition_arm> *application object* (3.1.78) that represents the drawing definition *entity* (3.2.9)

Note 1 to entry: A **Drawing_definition** is an identification and categorization, by type, of a set of drawing versions.

5.281.5
Drawing
<application module: Drawing_definition_arm> *application object* (3.1.78) that is a type of *Presentation_set* (5.304.1) that represents the drawing *entity* (3.2.9)

5.281.6
Drawing_sequence
<application module: Drawing_definition_arm> *application object* (3.1.78) that represents the drawing sequence *entity* (3.2.9)

Note 1 to entry: A **Drawing_sequence** is a revision sequence between two *Drawing* (5.281.5) objects.

5.281.7
Drawing_sheet
<application module: Drawing_definition_arm> *application object* (3.1.78) that is a type of *View_area* (5.304.4) that represents the drawing sheet *entity* (3.2.9)

5.281.8

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Drawing_sheet_layout
<application module: Drawing_definition_arm> *application object* (3.1.78) that is a type of *General_symbol* (5.191.5) that represents the drawing sheet layout *entity* (3.2.9)

Note 1 to entry: A **Drawing_sheet_layout** is a type of General_symbol that presents the layout or format for a *Drawing_sheet* (5.281.7).

5.281.9
Drawing_sheet_sequence
<application module: Drawing_definition_arm> *application object* (3.1.78) that is a type of *View_area_relationship* (5.304.6) that represents the drawing sheet sequence *entity* (3.2.9)

5.282 Drawing_definition_mim

5.282.1
drawing_sheet_layout
<application module: Drawing_definition_mim> *entity data type* (3.2.10) that is a type of *draughting_symbol_representation* (4.50.4) that represents the drawing sheet layout *entity* (3.2.9)

Note 1 to entry: A **drawing_sheet_layout** is a type of draughting_symbol_representation that presents the layout or format for a *drawing_sheet_revision* (4.81.4).

5.282.2
draughting_specification_reference
<application module: Drawing_definition_mim> *entity data type* (3.2.10) that is a type of *document_reference* (4.15.17) that represents the draughting specification reference *entity* (3.2.9)

Note 1 to entry: A **draughting_specification_reference** is a type of document_reference that is the designation of an external draughting specification for a drawing revision.

5.283 Draughting_element_arm

5.283.1
Annotation_fill_area
<application module: Draughting_element_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the annotation fill area *entity* (3.2.9)

5.283.2
Annotation_plane
<application module: Draughting_element_arm> *application object* (3.1.78) that is a type of *Annotation_element* (5.134.2) that represents the annotation plane *entity* (3.2.9)

Note 1 to entry: An **Annotation_plane** is a type of Annotation_element for the purpose of grouping annotation elements within a 3D coordinate space.

5.283.3
Dimension_curve
<application module: Draughting_element_arm> *application object* (3.1.78) that is a type of *Annotation_curve* (5.134.1) that represents the dimension curve *entity* (3.2.9)

5.283.4
Dimension_curve_directed_callout
<application module: Draughting_element_arm> *application object* (3.1.78) that is a type of *Draughting_callout* (5.283.5) that represents the dimension curve directed callout *entity* (3.2.9)

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Note 1 to entry: A **Dimension_curve_directed_callout** is a type of Draughting_callout directed by a *Dimension_curve* (5.283.3) to a presented element of the product shape.

5.283.5
Draughting_callout
<application module: Draughting_element_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the draughting callout *entity* (3.2.9)

5.283.6
Fill_area
<application module: Draughting_element_arm> *application object* (3.1.78) that is a type of *Annotation_element* (5.134.2) that represents the fill area *entity* (3.2.9)

5.283.7
Generic_annotation_curve
<application module: Draughting_element_arm> *application object* (3.1.78) that is a type of *Annotation_curve* (5.134.1) that represents the generic annotation curve *entity* (3.2.9)

5.283.8
Leader
<application module: Draughting_element_arm> *application object* (3.1.78) that is a type of *Annotation_curve* (5.134.1) that represents the leader *entity* (3.2.9)

5.283.9
Leader_directed_callout
<application module: Draughting_element_arm> *application object* (3.1.78) that is a type of *Draughting_callout* (5.283.5) that represents the leader directed callout *entity* (3.2.9)

Note 1 to entry: A **Leader_directed_callout** is a type of Draughting_callout that is directed by a *Leader* (5.283.8) curve.

5.283.10
Projection_curve
<application module: Draughting_element_arm> *application object* (3.1.78) that is a type of *Annotation_curve* (5.134.1) that represents the projection curve *entity* (3.2.9)

5.283.11
Projection_directed_callout
<application module: Draughting_element_arm> *application object* (3.1.78) that is a type of *Draughting_callout* (5.283.5) that represents the projection directed callout *entity* (3.2.9)

Note 1 to entry: A **Projection_directed_callout** is a type of Draughting_callout that is directed by a *Projection_curve* (5.283.10).

5.284 Associative_draughting_elements_arm

5.284.1
Annotation_occurrence_associativity
<application module: Associative_draughting_elements_arm> *application object* (3.1.78) that represents the annotation occurrence associativity *entity* (3.2.9)

Note 1 to entry: An **Annotation_occurrence_associativity** is an annotation occurrence relationship that relates an element of annotation to the leader or projection curve which visually directs information in the drawing to the element or to the fill area whose boundary is derived from the element.

5.284.2

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Draughting_model
<application module: Associative_draughting_elements_arm> *application object* (3.1.78) that is a type of *Styled_model* (5.5.7) that represents the draughting model *entity* (3.2.9)

5.284.3
Draughting_model_item_association
<application module: Associative_draughting_elements_arm> *application object* (3.1.78) that represents the draughting model item association *entity* (3.2.9)

Note 1 to entry: A **Draughting_model_item_association** is an identification of an *Annotation_element* (5.134.2), or a *Axis_placement* (5.10.1), or a *Styled_model_replication* (5.5.8), or a *Draughting_callout* (5.283.5) within a *Draughting_model* (5.284.2) as being the element that describes a *Shape_element* (5.41.6) or a *Shape_element_relationship* (5.41.7).

5.285 Draughting_element_specialisations_arm

5.285.1
Datum_feature_callout
<application module: Draughting_element_specialisations_arm> *application object* (3.1.78) that is a type of *Draughting_element* (5.285.10) that represents the datum feature callout *entity* (3.2.9)

5.285.2
Datum_target_callout
<application module: Draughting_element_specialisations_arm> *application object* (3.1.78) that is a type of *Draughting_element* (5.285.10) that represents the datum target callout *entity* (3.2.9)

5.285.3
Dimension
<application module: Draughting_element_specialisations_arm> *application object* (3.1.78) that is a type of *Draughting_element* (5.285.10) that represents the dimension *entity* (3.2.9)

Note 1 to entry: A **Dimension** is a type of Draughting_element that is the graphical presentation of the dimension value, of associated information, and of the symbology necessary to accurately depict its area of application.

5.285.4
Dimension_callout
<application module: Draughting_element_specialisations_arm> *application object* (3.1.78) that is a type of *Dimension* (5.285.3) that represents the dimension callout *entity* (3.2.9)

5.285.5
Dimension_callout_relationship
<application module: Draughting_element_specialisations_arm> *application object* (3.1.78) that represents the dimension callout relationship *entity* (3.2.9)

Note 1 to entry: A **Dimension_callout_relationship** is a relationship of a *Dimension_value* (5.285.9) to a *Dimension_callout* (5.285.4) as either primary or secondary value.

5.285.6
Dimension_prefix
<application module: Draughting_element_specialisations_arm> *application object* (3.1.78) that is a type of *Draughting_element* (5.285.10) that represents the dimension prefix *entity* (3.2.9)

5.285.7

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Dimension_sequence_pair
<application module: Draughting_element_specialisations_arm> *application object* (3.1.78) that represents the dimension sequence pair *entity* (3.2.9)

Note 1 to entry: A **Dimension_sequence_pair** is a relationship between two adjacent dimensions that share a projection curve.

5.285.8
Dimension_suffix
<application module: Draughting_element_specialisations_arm> *application object* (3.1.78) that is a type of *Draughting_element* (5.285.10) that represents the dimension suffix *entity* (3.2.9)

5.285.9
Dimension_value
<application module: Draughting_element_specialisations_arm> *application object* (3.1.78) that is a type of *Dimension* (5.285.3) that represents the dimension value *entity* (3.2.9)

5.285.10
Draughting_element
<application module: Draughting_element_specialisations_arm> *application object* (3.1.78) that is a type of *Draughting_callout* (5.283.5) that represents the draughting element *entity* (3.2.9)

Note 1 to entry: A **Draughting_element** is a type of Draughting_callout that specifies constraints on the grouping of annotation within the context of draughting.

5.285.11
Geometric_tolerance_callout
<application module: Draughting_element_specialisations_arm> *application object* (3.1.78) that is a type of *Draughting_element* (5.285.10) that represents the geometric tolerance callout *entity* (3.2.9)

Note 1 to entry: A **Geometric_tolerance_callout** is a type of Draughting_element that is a combination of annotation elements that represents information about a geometric tolerance.

5.285.12
Structured_dimension_callout
<application module: Draughting_element_specialisations_arm> *application object* (3.1.78) that is a type of *Dimension_value* (5.285.9) that represents the structured dimension callout *entity* (3.2.9)

Note 1 to entry: A **Structured_dimension_callout** is a type of Dimension_value that presents information associated with a dimension, in which individual elements presenting different components of the dimensional information may be identified and distinguished.

5.285.13
Surface_condition_callout
<application module: Draughting_element_specialisations_arm> *application object* (3.1.78) that is a type of *Draughting_element* (5.285.10) that represents the surface condition callout *entity* (3.2.9)

Note 1 to entry: A **Surface_condition_callout** is a type of Draughting_element that is a combination of annotation elements that represents information about a surface condition.

5.286 Draughting_element_specialisations_mim

5.286.1
surface_condition_callout
<application module: Draughting_element_specialisations_mim> *entity data type* (3.2.10) that is a type of *draughting_callout* (4.80.17) that represents the surface condition callout *entity* (3.2.9)

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Note 1 to entry: A **surface_condition_callout** is a type of draughting_callout that implements the ARM concept of *Surface_condition_callout* (5.285.13).

5.287 Mechanical_design_geometric_presentation_arm

5.287.1
Mechanical_design_view_area
<application module: Mechanical_design_geometric_presentation_arm> *application object* (3.1.78) that is a type of *View_area* (5.304.4) that represents the mechanical design view area *entity* (3.2.9)

5.287.2
Mechanical_representation_styled_model
<application module: Mechanical_design_geometric_presentation_arm> *application object* (3.1.78) that is a type of *Styled_model* (5.5.7) that represents the mechanical representation styled model *entity* (3.2.9)

5.288 Mechanical_design_shaded_presentation_arm

5.288.1
Mechanical_design_shaded_presentation_area
<application module: Mechanical_design_shaded_presentation_arm> *application object* (3.1.78) that is a type of *View_area* (5.304.4) that represents the mechanical design shaded presentation area *entity* (3.2.9)

5.288.2
Mechanical_design_shaded_styled_model
<application module: Mechanical_design_shaded_presentation_arm> *application object* (3.1.78) that is a type of *Styled_model* (5.5.7) that represents the mechanical design shaded styled model *entity* (3.2.9)

5.288.3
Surface_style_rendering
<application module: Mechanical_design_shaded_presentation_arm> *application object* (3.1.78) that is a type of *Surface_appearance_element* (5.13.7) that represents the surface style rendering *entity* (3.2.9)

5.289 Mechanical_design_presentation_representation_with_draughting_arm

5.289.1
Default_model_geometric_view
<application module: Mechanical_design_presentation_representation_with_draughting_arm> *application object* (3.1.78) that is a type of *Model_geometric_view* (5.289.4) and *Shape_element* (5.41.6) that represents the default model geometric view *entity* (3.2.9)

Note 1 to entry: A **Default_model_geometric_view** is a type of Model_geometric_view and Shape_element that defines a default view.

5.289.2
Mechanical_design_and_draughting_relationship
<application module: Mechanical_design_presentation_representation_with_draughting_arm> *application object* (3.1.78) that is a type of *Definitional_representation_relationship* (5.366.1) that represents the mechanical design and draughting relationship *entity* (3.2.9)

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5.289.3
Mechanical_design_presentation_representation_with_draughting
<application module: Mechanical_design_presentation_representation_with_draughting_arm> *application object* (3.1.78) that is a type of *Styled_model* (5.5.7) that represents the mechanical design presentation representation with draughting *entity* (3.2.9)

5.289.4
Model_geometric_view
<application module: Mechanical_design_presentation_representation_with_draughting_arm> *application object* (3.1.78) that is a type of *Characterized_item_within_representation* (5.690.2) that represents the model geometric view *entity* (3.2.9)

Note 1 to entry: A **Model_geometric_view** is a type of Characterized_item_within_representation that relates a *Draughting_model* (5.284.2) and *Camera_model_d3* (5.291.1) to identify and characterize any view.

5.290 Mechanical_design_presentation_representation_with_draughting_mim

5.290.1
model_geometric_view
<application module: Mechanical_design_presentation_representation_with_draughting_mim> *entity data type* (3.2.10) that is a type of *characterized_item_within_representation* (4.20.3) that represents the model geometric view *entity* (3.2.9)

Note 1 to entry: A **model_geometric_view** is a type of characterized_item_within_representation that implements the ARM concept of *Model_geometric_view* (5.289.4).

5.290.2
default_model_geometric_view
<application module: Mechanical_design_presentation_representation_with_draughting_mim> *entity data type* (3.2.10) that is a type of *model_geometric_view* (5.290.1) and *shape_aspect* (4.19.10) that represents the default model geometric view *entity* (3.2.9)

Note 1 to entry: A **default_model_geometric_view** is a type of model_geometric_view and shape_aspect that implements the ARM concept of *Default_model_geometric_view* (5.289.1).

5.290.3
mechanical_design_presentation_representation_with_draughting
<application module: Mechanical_design_presentation_representation_with_draughting_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the mechanical design presentation representation with draughting *entity* (3.2.9)

Note 1 to entry: A **mechanical_design_presentation_representation_with_draughting** is a type of representation that implements the ARM concept of *Mechanical_design_presentation_representation_with_draughting* (5.289.3).

5.290.4
mechanical_design_and_draughting_relationship
<application module: Mechanical_design_presentation_representation_with_draughting_mim> *entity data type* (3.2.10) that is a type of *definitional_representation_relationship_with_same_context* (4.41.6) that represents the mechanical design and draughting relationship *entity* (3.2.9)

Note 1 to entry: A **mechanical_design_and_draughting_relationship** is a type of definitional_representation_relationship_with_same_context that implements the ARM concept of *Mechanical_design_and_draughting_relationship* (5.289.2).

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5.291 Camera_view_3d_arm

5.291.1
Camera_model_d3
<application module: Camera_view_3d_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the camera model d3 *entity* (3.2.9)

5.291.2
Clipping_operator
<application module: Camera_view_3d_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the clipping operator *entity* (3.2.9)

5.291.3
Light_source
<application module: Camera_view_3d_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the light source *entity* (3.2.9)

5.291.4
Model_image_3d
<application module: Camera_view_3d_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the model image 3d *entity* (3.2.9)

5.292 Camera_view_3d_mim

5.292.1
hidden_element_over_riding_styled_item
<application module: Camera_view_3d_mim> *entity data type* (3.2.10) that is a type of *context_dependent_over_riding_styled_item* (4.37.8) that represents the hidden element over riding styled item *entity* (3.2.9)

5.293 Procedural_shape_model_arm

5.293.1
Explicit_procedural_shape_representation_relationship
<application module: Procedural_shape_model_arm> *application object* (3.1.78) that is a type of *Representation_relationship* (5.12.8) that represents the explicit procedural shape representation relationship *entity* (3.2.9)

Note 1 to entry: An **Explicit_procedural_shape_representation_relationship** is a type of Representation_relationship that relates a procedural shape model to an explicit model of the same shape that is the current result.

5.293.2
Explicit_procedural_geometric_representation_item_relationship
<application module: Procedural_shape_model_arm> *application object* (3.1.78) that represents the explicit procedural geometric representation item relationship *entity* (3.2.9)

Note 1 to entry: An **Explicit_procedural_geometric_representation_item_relationship** is a relationship between two instances of *Detailed_geometric_model_element* (5.10.9), one procedurally defined and the other explicitly defined.

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5.293.3
Indirectly_selected_shape_elements
<application module: Procedural_shape_model_arm> *application object* (3.1.78) that is a type of *User_selected_shape_elements* (5.293.6) that represents the indirectly selected shape elements *entity* (3.2.9)

5.293.4
Procedural_shape_representation
<application module: Procedural_shape_model_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the procedural shape representation *entity* (3.2.9)

Note 1 to entry: A **Procedural_shape_representation** is a type of Geometric_model that represents the shape in terms of a set of *Procedural_shape_representation_sequence* (5.293.5) instances.

5.293.5
Procedural_shape_representation_sequence
<application module: Procedural_shape_model_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the procedural shape representation sequence *entity* (3.2.9)

Note 1 to entry: A **Procedural_shape_representation_sequence** is a type of Detailed_geometric_model_element that specifies a sequence of shape modification operations to create a *Procedural_shape_representation* (5.293.4).

5.293.6
User_selected_shape_elements
<application module: Procedural_shape_model_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the user selected shape elements *entity* (3.2.9)

5.294 Procedural_solid_model_arm

5.294.1
Modified_solid
<application module: Procedural_solid_model_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the modified solid *entity* (3.2.9)

5.294.2
Procedural_solid_representation_sequence
<application module: Procedural_solid_model_arm> *application object* (3.1.78) that is a type of *Procedural_shape_representation_sequence* (5.293.5) that represents the procedural solid representation sequence *entity* (3.2.9)

5.295 Solid_with_local_modification_arm

5.295.1
Advanced_open_shell
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Detailed_topological_model_element* (5.11.5) that represents the advanced open shell *entity* (3.2.9)

Note 1 to entry: An **Advanced_open_shell** is a type of Detailed_topological_model_element that is a collection of faces forming an open shell.

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5.295.2
Complex_deleted_face_solid
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Deleted_face_solid* (5.295.4) that represents the complex deleted face solid *entity* (3.2.9)

5.295.3
Conical_stepped_hole_transition
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the conical stepped hole transition *entity* (3.2.9)

Note 1 to entry: A **Conical_stepped_hole_transition** is a type of Detailed_geometric_model_element is a conical face interposed at a junction between two cylindrical segments of a *Solid_with_stepped_round_hole* (5.295.35).

5.295.4
Deleted_face_solid
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Modified_solid* (5.294.1) that represents the deleted face solid *entity* (3.2.9)

Note 1 to entry: A **Deleted_face_solid** is a type of Modified_solid in which some of the faces are removed and the remaining faces are thickened to produce a solid in the form of a thick shell.

5.295.5
Deleted_face_solid_with_offsets
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Deleted_face_solid* (5.295.4) that represents the deleted face solid with offsets *entity* (3.2.9)

Note 1 to entry: A **Deleted_face_solid_with_offsets** is a type of Deleted_face_solid for which two thickness offset values are specified to define the thickening of the remaining faces.

5.295.6
Path_modified_solid
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_edge_modification* (5.295.18) that represents the path modified solid *entity* (3.2.9)

Note 1 to entry: A **Path_modified_solid** is a type of Solid_with_edge_modification in which the edges to be modified form a continuous path.

5.295.7
Path_modified_solid_with_end_conditions
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Path_modified_solid* (5.295.6) that represents the path modified solid with end conditions *entity* (3.2.9)

Note 1 to entry: A **Path_modified_solid_with_end_conditions** is a type of Path_modified_solid for which the blend is terminated at points other than the start and end vertices of the path of selected edges.

5.295.8
Sculptured_solid
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Modified_solid* (5.294.1) that represents the sculptured solid *entity* (3.2.9)

Note 1 to entry: A **Sculptured_solid** is a type of Modified_solid in which a solid is cut by a surface, face or shell to remove part of the material leaving a smaller solid model.

5.295.9

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Sculptured_solid_with_selection
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Sculptured_solid* (5.295.8) that represents the sculptured solid with selection *entity* (3.2.9)

Note 1 to entry: A **Sculptured_solid_with_selection** is a type of Sculptured_solid to be used when the simple definition of a Sculptured_solid does not give a unique result with two or more remaining solids.

5.295.10
Solid_with_angled_chamfer
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_edge_modification* (5.295.18) that represents the solid with angled chamfer *entity* (3.2.9)

Note 1 to entry: A **Solid_with_angled_chamfer** is a type of Solid_with_edge_modification in which the chamfers are defined in terms of an offset curve on one of the faces adjoining at the edge concerned and an offset angle measured with respect to the surface of that face.

5.295.11
Solid_with_circular_pattern
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Modified_solid* (5.294.1) that represents the solid with circular pattern *entity* (3.2.9)

Note 1 to entry: A **Solid_with_circular_pattern** is a type of Modified_solid that has a regular circular pattern replicating a previously defined shape modification feature.

5.295.12
Solid_with_circular_pocket
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_pocket* (5.295.27) that represents the solid with circular pocket *entity* (3.2.9)

Note 1 to entry: A **Solid_with_circular_pocket** is a type of Solid_with_pocket in which the depression is in the form of a circular pocket.

5.295.13
Solid_with_circular_protrusion
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_protrusion* (5.295.28) that represents the solid with circular protrusion *entity* (3.2.9)

Note 1 to entry: A **Solid_with_circular_protrusion** is a type of Solid_with_protrusion such that the protrusion has a circular cross-section.

5.295.14
Solid_with_conical_bottom_hole
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_stepped_round_hole* (5.295.35) that represents the solid with conical bottom hole *entity* (3.2.9)

Note 1 to entry: A **Solid_with_conical_bottom_hole** is a type of Solid_with_stepped_round_hole having a conical bottom.

5.295.15
Solid_with_curved_slot
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_slot* (5.295.33) that represents the solid with curved slot *entity* (3.2.9)

Note 1 to entry: A **Solid_with_curved_slot** is a type of Solid_with_slot on which a slot has been created by sweeping the slot profile along a curve.

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5.295.16
Solid_with_depression
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Modified_solid* (5.294.1) that represents the solid with depression *entity* (3.2.9)

Note 1 to entry: A **Solid_with_depression** is a type of Modified_solid that has depressions in one or more faces.

5.295.17
Solid_with_double_offset_chamfer
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_edge_modification* (5.295.18) that represents the solid with double offset chamfer *entity* (3.2.9)

Note 1 to entry: A **Solid_with_double_offset_chamfer** is a type of Solid_with_edge_modification in which the modified edges are chamfered connecting points at different distances from the modified edge on adjacent faces.

5.295.18
Solid_with_edge_modification
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Modified_solid* (5.294.1) that represents the solid with edge modification *entity* (3.2.9)

Note 1 to entry: A **Solid_with_edge_modification** is a type of Modified_solid that specifies the edges to be modified and the type of modification required.

5.295.19
Solid_with_fixed_radius_edge_blend
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_edge_modification* (5.295.18) that represents the solid with fixed radius edge blend *entity* (3.2.9)

Note 1 to entry: A **Solid_with_fixed_radius_edge_blend** is a type of Solid_with_edge_modification in which the modified edges are blended in the form of a rolling ball blend of constant radius.

5.295.20
Solid_with_flat_bottom_hole
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_stepped_round_hole* (5.295.35) that represents the solid with flat bottom hole *entity* (3.2.9)

Note 1 to entry: A **Solid_with_flat_bottom_hole** is a type of Solid_with_stepped_round_hole having a flat bottom.

5.295.21
Solid_with_general_pocket
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_pocket* (5.295.27) that represents the solid with general pocket *entity* (3.2.9)

Note 1 to entry: A **Solid_with_general_pocket** is a type of Solid_with_pocket in which the depression has a user-defined profile.

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5.295.22
Solid_with_general_protrusion
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_protrusion* (5.295.28) that represents the solid with general protrusion *entity* (3.2.9)

Note 1 to entry: A **Solid_with_general_protrusion** is a type of Solid_with_protrusion such that the protrusion is a general planar area.

5.295.23
Solid_with_groove
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_depression* (5.295.16) that represents the solid with groove *entity* (3.2.9)

Note 1 to entry: A **Solid_with_groove** is a type of Solid_with_depression that results from the creation of a depression extending around a surface of revolution in such a way that its cross-sections are constant in any plane containing the axis of that surface.

5.295.24
Solid_with_incomplete_circular_pattern
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_circular_pattern* (5.295.11) that represents the solid with incomplete circular pattern *entity* (3.2.9)

Note 1 to entry: A **Solid_with_incomplete_circular_pattern** is a type of Solid_with_circular_pattern in which some of the replicates have been omitted.

5.295.25
Solid_with_incomplete_rectangular_pattern
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_rectangular_pattern* (5.295.29) that represents the solid with incomplete rectangular pattern *entity* (3.2.9)

Note 1 to entry: A **Solid_with_incomplete_rectangular_pattern** is a type of Solid_with_rectangular_pattern in which some of the replicates have been omitted.

5.295.26
Solid_with_offset_faces
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Modified_solid* (5.294.1) that represents the solid with offset faces *entity* (3.2.9)

Note 1 to entry: A **Solid_with_offset_faces** is a type of Modified_solid in which some of the faces are offset in the direction of the face normal.

5.295.27
Solid_with_pocket
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_depression* (5.295.16) that represents the solid with pocket *entity* (3.2.9)

Note 1 to entry: A **Solid_with_pocket** is a type of Solid_with_depression in which the depression is in the form of a pocket.

5.295.28
Solid_with_protrusion
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Modified_solid* (5.294.1) that represents the solid with protrusion *entity* (3.2.9)

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Note 1 to entry: A **Solid_with_protrusion** is a type of Modified_solid that results from the creation of a protrusion extending above the surface of the solid.

5.295.29
Solid_with_rectangular_pattern
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Modified_solid* (5.294.1) that represents the solid with rectangular pattern *entity* (3.2.9)

Note 1 to entry: A **Solid_with_rectangular_pattern** is a type of Modified_solid that has a regular rectangular pattern replicating a previously defined shape modification feature.

5.295.30
Solid_with_rectangular_pocket
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_pocket* (5.295.27) that represents the solid with rectangular pocket *entity* (3.2.9)

Note 1 to entry: A **Solid_with_rectangular_pocket** is a type of Solid_with_pocket in which the depression is in the form of a rectangular pocket.

5.295.31
Solid_with_rectangular_protrusion
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_protrusion* (5.295.28) that represents the solid with rectangular protrusion *entity* (3.2.9)

Note 1 to entry: A **Solid_with_rectangular_protrusion** is a type of Solid_with_protrusion such that the protrusion has a rectangular cross-section.

5.295.32
Solid_with_simple_chamfer
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_edge_modification* (5.295.18) that represents the solid with simple chamfer *entity* (3.2.9)

Note 1 to entry: A **Solid_with_simple_chamfer** is a type of Solid_with_edge_modification in which the modified edges are chamfered connecting points at equal distances from the modified edge on adjacent faces.

5.295.33
Solid_with_slot
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_depression* (5.295.16) that represents the solid with slot *entity* (3.2.9)

Note 1 to entry: A **Solid_with_slot** is a type of Solid_with_depression on which a slot has been created.

5.295.34
Solid_with_spherical_bottom_hole
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_stepped_round_hole* (5.295.35) that represents the solid with spherical bottom hole *entity* (3.2.9)

Note 1 to entry: A **Solid_with_spherical_bottom_hole** is a type of Solid_with_stepped_round_hole having a spherical bottom.

5.295.35
Solid_with_stepped_round_hole
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_depression* (5.295.16) that represents the solid with stepped round hole *entity* (3.2.9)

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Note 1 to entry: A **Solid_with_stepped_round_hole** is a type of Solid_with_depression in for which the depression has the shape of a round hole which may be stepped.

5.295.36
Solid_with_stepped_round_hole_and_conical_transitions
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_stepped_round_hole* (5.295.35) that represents the solid with stepped round hole and conical transitions *entity* (3.2.9)

Note 1 to entry: A **Solid_with_stepped_round_hole_and_conical_transitions** is a type of Solid_with_stepped_round_hole with conical transitions between some of the cylindrical sections of the hole.

5.295.37
Solid_with_straight_slot
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_slot* (5.295.33) that represents the solid with straight slot *entity* (3.2.9)

Note 1 to entry: A **Solid_with_straight_slot** is a type of Solid_with_slot on which a slot has been created by sweeping the slot profile along a straight line.

5.295.38
Solid_with_tee_slot
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_slot* (5.295.33) that represents the solid with tee slot *entity* (3.2.9)

Note 1 to entry: A **Solid_with_tee_slot** is a type of Solid_with_slot on which a slot has been created by sweeping a profile of tee shape.

5.295.39
Solid_with_through_depression
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_depression* (5.295.16) that represents the solid with through depression *entity* (3.2.9)

Note 1 to entry: A **Solid_with_through_depression** is a type of Solid_with_depression in which the depression penetrates completely through one or more of the faces of the solid.

5.295.40
Solid_with_trapezoidal_slot
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Solid_with_slot* (5.295.33) that represents the solid with trapezoidal slot *entity* (3.2.9)

Note 1 to entry: A **Solid_with_trapezoidal_slot** is a type of Solid_with_slot on which a slot has been created by sweeping a profile of trapezoidal shape.

5.295.41
Solid_with_variable_radius_edge_blend
<application module: Solid_with_local_modification_arm> *application object* (3.1.78) that is a type of *Path_modified_solid* (5.295.6) that represents the solid with variable radius edge blend *entity* (3.2.9)

Note 1 to entry: A **Solid_with_variable_radius_edge_blend** is a type of Path_modified_solid in which the modified edges are blended in the form of a rolling ball blend whose radius varies as it traverses the path of edges.

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5.296 Thickened_face_solid_arm

5.296.1
Solid_model_element
<application module: Thickened_face_solid_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the solid model element *entity* (3.2.9)

5.296.2
Thickened_face_solid_model_element
<application module: Thickened_face_solid_arm> *application object* (3.1.78) that is a type of *Solid_model_element* (5.296.1) that represents the thickened face solid model element *entity* (3.2.9)

Note 1 to entry: A **Thickened_face_solid_model_element** is a type of Solid_model_element that defines a solid by thickening a face on one or two sides.

5.297 Swept_solid_arm

5.297.1
Extruded_solid
<application module: Swept_solid_arm> *application object* (3.1.78) that is a type of *Swept_solid* (5.297.3) that represents the extruded solid *entity* (3.2.9)

5.297.2
Solid_of_revolution
<application module: Swept_solid_arm> *application object* (3.1.78) that is a type of *Swept_solid* (5.297.3) that represents the solid of revolution *entity* (3.2.9)

Note 1 to entry: A **Solid_of_revolution** is a type of Swept_solid formed by revolving the swept planar face about an axis in the plane of the face.

5.297.3
Swept_solid
<application module: Swept_solid_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the swept solid *entity* (3.2.9)

Note 1 to entry: A **Swept_solid** is a type of Detailed_geometric_model_element that defines a solid produced by sweeping a face.

5.298 Modified_swept_solid_arm

5.298.1
Extruded_solid_with_draft_angle
<application module: Modified_swept_solid_arm> *application object* (3.1.78) that is a type of *Extruded_solid_with_trim_conditions* (5.298.3) that represents the extruded solid with draft angle *entity* (3.2.9)

Note 1 to entry: An **Extruded_solid_with_draft_angle** is a type of Extruded_solid_with_trim_conditions to which a draft angle is applied along the length of the extrusion.

5.298.2
Extruded_solid_with_multiple_draft_angles
<application module: Modified_swept_solid_arm> *application object* (3.1.78) that is a type of *Extruded_solid_with_trim_conditions* (5.298.3) that represents the extruded solid with multiple draft angles *entity* (3.2.9)

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Note 1 to entry: An **Extruded_solid_with_multiple_draft_angles** is a type of Extruded_solid_with_trim_conditions to which draft angles are applied along the length of the extrusion.

5.298.3
Extruded_solid_with_trim_conditions
<application module: Modified_swept_solid_arm> *application object* (3.1.78) that is a type of *Extruded_solid* (5.297.1) that represents the extruded solid with trim conditions *entity* (3.2.9)

Note 1 to entry: An **Extruded_solid_with_trim_conditions** is a type of Extruded_solid that has been modified by trimming to change the extruded length.

5.298.4
Solid_of_revolution_with_trim_conditions
<application module: Modified_swept_solid_arm> *application object* (3.1.78) that is a type of *Solid_of_revolution* (5.297.2) that represents the solid of revolution with trim conditions *entity* (3.2.9)

Note 1 to entry: A **Solid_of_revolution_with_trim_conditions** is a type of Solid_of_revolution that has been modified by trimming to change the angle of revolution.

5.299 Basic_geometric_topology_arm

5.299.1
Edge_curve
<application module: Basic_geometric_topology_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) and *Edge* (5.11.6) that represents the edge curve *entity* (3.2.9)

Note 1 to entry: An **Edge_curve** is a type of Detailed_geometric_model_element and a type of Edge that has its geometry defined by a geometric curve.

5.299.2
Face_surface
<application module: Basic_geometric_topology_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) and *Face* (5.11.8) that represents the face surface *entity* (3.2.9)

Note 1 to entry: A **Face_surface** is a type of Detailed_geometric_model_element and a type of Face that has its geometry defined by a geometric *Surface* (5.470.18).

5.299.3
Poly_loop
<application module: Basic_geometric_topology_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) and *Loop* (5.11.11) that represents the poly loop *entity* (3.2.9)

Note 1 to entry: A **Poly_loop** is a type of Detailed_geometric_model_element and a type of Loop with straight edges bounding a planar region in space.

5.299.4
Vertex_point
<application module: Basic_geometric_topology_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) and *Vertex* (5.11.16) that represents the vertex point *entity* (3.2.9)

Note 1 to entry: A **Vertex_point** is a type of Detailed_geometric_model_element and a type of Vertex that has its geometry location defined by a point in Cartesian space.

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5.300 Non_manifold_surface_arm

5.300.1
Non_manifold_shape_representation
<application module: Non_manifold_surface_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the non manifold shape representation *entity* (3.2.9)

5.301 Compound_shape_representation_arm

5.301.1
Compound_shape_representation
<application module: Compound_shape_representation_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the compound shape representation *entity* (3.2.9)

5.302 Compound_shape_representation_mim

5.302.1
compound_shape_representation
<application module: Compound_shape_representation_mim> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the compound shape representation *entity* (3.2.9)

Note 1 to entry: A **compound_shape_representation** is a type of shape_representation that implements the ARM concept of *Compound_shape_representation* (5.301.1).

5.303 Elementary_boundary_representation_arm

5.303.1
Elementary_brep_shape_representation
<application module: Elementary_boundary_representation_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the elementary brep shape representation *entity* (3.2.9)

Note 1 to entry: An **Elementary_brep_shape_representation** is a type of Geometric_model composed of one or more manifold solid breps, each of which is defined with elementary geometry and complete explicit topology.

5.304 Presentation_hierarchy_arm

5.304.1
Presentation_set
<application module: Presentation_hierarchy_arm> *application object* (3.1.78) that represents the presentation set *entity* (3.2.9)

Note 1 to entry: A **Presentation_set** is a collection of *View_area* (5.304.4).

5.304.2
Presentation_set_assignment
<application module: Presentation_hierarchy_arm> *application object* (3.1.78) that represents the presentation set assignment *entity* (3.2.9)

Note 1 to entry: A **Presentation_set_assignment** is a mechanism to associate a *Presentation_set* (5.304.1) with the object that is presented in this set.

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5.304.3
View
<application module: Presentation_hierarchy_arm> *application object* (3.1.78) that is a type of *Styled_model* (5.5.7) that represents the view *entity* (3.2.9)

5.304.4
View_area
<application module: Presentation_hierarchy_arm> *application object* (3.1.78) that is a type of *Styled_model* (5.5.7) that represents the view area *entity* (3.2.9)

5.304.5
View_area_assignment
<application module: Presentation_hierarchy_arm> *application object* (3.1.78) that represents the view area assignment *entity* (3.2.9)

Note 1 to entry: A **View_area_assignment** is an association of a *View_area* (5.304.4) with the object that is presented on the View_area.

5.304.6
View_area_relationship
<application module: Presentation_hierarchy_arm> *application object* (3.1.78) that represents the view area relationship *entity* (3.2.9)

Note 1 to entry: A **View_area_relationship** is a relationship between two *View_area* (5.304.4) objects.

5.304.7
View_area_replication
<application module: Presentation_hierarchy_arm> *application object* (3.1.78) that is a type of *Styled_model_replication* (5.5.8) that represents the view area replication *entity* (3.2.9)

5.304.8
View_relationship
<application module: Presentation_hierarchy_arm> *application object* (3.1.78) that represents the view relationship *entity* (3.2.9)

Note 1 to entry: A **View_relationship** is a relationship between two *View* (5.304.3) objects.

5.305 Presentation_hierarchy_mim

5.305.1
applied_presented_item
<application module: Presentation_hierarchy_mim> *entity data type* (3.2.10) that is a type of *presented_item* (4.39.31) that represents the applied presented item *entity* (3.2.9)

5.306 External_source_arm

5.306.1
External_source
<application module: External_source_arm> *application object* (3.1.78) that represents the external source *entity* (3.2.9)

Note 1 to entry: An **External_source** is an identification of a source of product data that is not the EXPRESS schema to which the exchange conforms.

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5.307 Name_assignment_arm

5.307.1
Name_assignment
<application module: Name_assignment_arm> *application object* (3.1.78) that represents the name assignment *entity* (3.2.9)

Note 1 to entry: A **Name_assignment** is an identification of a name used to designate product data.

5.308 Name_assignment_mim

5.308.1
applied_name_assignment
<application module: Name_assignment_mim> *entity data type* (3.2.10) that is a type of *name_assignment* (4.15.41) that represents the applied name assignment *entity* (3.2.9)

5.309 Generic_expression_arm

5.309.1
Binary_generic_expression
<application module: Generic_expression_arm> *application object* (3.1.78) that is a type of *Generic_expression* (5.309.3) that represents the binary generic expression *entity* (3.2.9)

Note 1 to entry: A **Binary_generic_expression** is a type of Generic_expression and is the ABSTRACT SUPERTYPE of all the binary operators.

5.309.2
Environment
<application module: Generic_expression_arm> *application object* (3.1.78) that represents the environment *entity* (3.2.9)

Note 1 to entry: An **Environment** is an association between syntax and semantics.

5.309.3
Generic_expression
<application module: Generic_expression_arm> *application object* (3.1.78) that represents the generic expression *entity* (3.2.9)

Note 1 to entry: A **Generic_expression** is the information model of a **Generic_expression**.

5.309.4
Generic_literal
<application module: Generic_expression_arm> *application object* (3.1.78) that is a type of *Simple_generic_expression* (5.309.7) that represents the generic literal *entity* (3.2.9)

5.309.5
Generic_variable
<application module: Generic_expression_arm> *application object* (3.1.78) that is a type of *Simple_generic_expression* (5.309.7) that represents the generic variable *entity* (3.2.9)

Note 1 to entry: A **Generic_variable** is a type of Simple_generic_expression and is an abstract variable that can be involved in a generic expression.

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5.309.6
Multiple_arity_generic_expression
<application module: Generic_expression_arm> *application object* (3.1.78) that is a type of *Generic_expression* (5.309.3) that represents the multiple arity generic expression *entity* (3.2.9)

Note 1 to entry: A **Multiple_arity_generic_expression** is a type of Generic_expression and is the ABSTRACT SUPERTYPE of all the multiple-arity operators.

5.309.7
Simple_generic_expression
<application module: Generic_expression_arm> *application object* (3.1.78) that is a type of *Generic_expression* (5.309.3) that represents the simple generic expression *entity* (3.2.9)

Note 1 to entry: A **Simple_generic_expression** is a type of Generic_expression that a represents the connection.

5.309.8
Unary_generic_expression
<application module: Generic_expression_arm> *application object* (3.1.78) that is a type of *Generic_expression* (5.309.3) that represents the unary generic expression *entity* (3.2.9)

Note 1 to entry: An **Unary_generic_expression** is a type of Generic_expression and is the ABSTRACT SUPERTYPE of all the unary operators.

5.309.9
Variable
<application module: Generic_expression_arm> *application object* (3.1.78) that is a type of *Generic_variable* (5.309.5) that represents the variable *entity* (3.2.9)

Note 1 to entry: A **Variable** is a type of a Generic_variable and stands for a value interpreted from some context.

5.309.10
Variable_semantics
<application module: Generic_expression_arm> *application object* (3.1.78) that represents the variable semantics *entity* (3.2.9)

Note 1 to entry: A **Variable_semantics** is used to represent the meaning of a *Generic_variable* (5.309.5).

5.310 Expression_arm

5.310.1
Concat_expression
<application module: Expression_arm> *application object* (3.1.78) that is a type of *String_expression* (5.310.8) and *Multiple_arity_generic_expression* (5.309.6) that represents the concat expression *entity* (3.2.9)

Note 1 to entry: A **Concat_expression** is a type of String_expression and Multiple_arity_generic_expression .

5.310.2
Format_function
<application module: Expression_arm> *application object* (3.1.78) that is a type of *String_expression* (5.310.8) and *Binary_generic_expression* (5.309.1) that represents the format function *entity* (3.2.9)

Note 1 to entry: A **Format_function** is a type of String_expression and Binary_generic_expression.

5.310.3

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Index_expression
<application module: Expression_arm> *application object* (3.1.78) that is a type of *String_expression* (5.310.8) and *Binary_generic_expression* (5.309.1) that represents the index expression *entity* (3.2.9)

Note 1 to entry: An **Index_expression** is a type of String_expression and Binary_generic_expression.

5.310.4
Like_expression
<application module: Expression_arm> *application object* (3.1.78) that is a type of *Comparison_expression* (5.424.9) that represents the like expression *entity* (3.2.9)

5.310.5
Simple_string_expression
<application module: Expression_arm> *application object* (3.1.78) that is a type of *String_expression* (5.310.8) and *Simple_generic_expression* (5.309.7) that represents the simple string expression *entity* (3.2.9)

Note 1 to entry: A **Simple_string_expression** is a type of *Expression* (5.424.18) and is an unary operator of whose range is EXPRESS STRING data type defined in ISO 10303-11.

5.310.6
Sql_mappable_defined_function
<application module: Expression_arm> *application object* (3.1.78) that is a type of *Defined_function* (5.424.15) that represents the sql mappable defined function *entity* (3.2.9)

5.310.7
String_defined_function
<application module: Expression_arm> *application object* (3.1.78) that is a type of *Defined_function* (5.424.15) and *String_expression* (5.310.8) that represents the string defined function *entity* (3.2.9)

Note 1 to entry: A **String_defined_function** is a type of Defined_function and String_expression.

5.310.8
String_expression
<application module: Expression_arm> *application object* (3.1.78) that is a type of *Expression* (5.424.18) that represents the string expression *entity* (3.2.9)

Note 1 to entry: A **String_expression** is a type of Expression and whose range is the EXPRESS STRING data type defined in ISO 10303-11.

5.310.9
String_literal
<application module: Expression_arm> *application object* (3.1.78) that is a type of *Simple_string_expression* (5.310.5) and *Generic_literal* (5.309.4) that represents the string literal *entity* (3.2.9)

Note 1 to entry: A **String_literal** is a type of Simple_string_expression and Generic_literal.

5.310.10
String_variable
<application module: Expression_arm> *application object* (3.1.78) that is a type of *Simple_string_expression* (5.310.5) and *Variable* (5.309.9) that represents the string variable *entity* (3.2.9)

Note 1 to entry: A **String_variable** is a type of Simple_string_expression and Variable.

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5.310.11
Substring_expression
<application module: Expression_arm> *application object* (3.1.78) that is a type of *String_expression* (5.310.8) and *Multiple_arity_generic_expression* (5.309.6) that represents the substring expression *entity* (3.2.9)

Note 1 to entry: A **Substring_expression** is a type of String_expression and Multiple_arity_generic_expression.

5.311 Product_placement_arm

5.311.1
Occurrence_placement
<application module: Product_placement_arm> *application object* (3.1.78) that represents the occurrence placement *entity* (3.2.9)

Note 1 to entry: An **Occurrence_placement** is the specification of the placement of a *Product_occurrence* (5.79.2), which is defined in its own coordinate space, in the coordinate space of a reference physical element.

5.311.2
Part_occurrence_placement
<application module: Product_placement_arm> *application object* (3.1.78) that is a type of *Occurrence_placement* (5.311.1) that represents the part occurrence placement *entity* (3.2.9)

Note 1 to entry: A **Part_occurrence_placement** is a type of Occurrence_placement that specifies the placement of a single part occurrence.

5.311.3
Physical_element_placement
<application module: Product_placement_arm> *application object* (3.1.78) that is a type of *Occurrence_placement* (5.311.1) that represents the physical element placement *entity* (3.2.9)

Note 1 to entry: A **Physical_element_placement** is a type of Occurrence_placement that specifies the placement of an occurrence of a version of physical element.

5.312 Numerical_interface_arm

5.312.1
Expression_extension
<application module: Numerical_interface_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the expression extension *entity* (3.2.9)

5.312.2
Variable_expression
<application module: Numerical_interface_arm> *application object* (3.1.78) that is a type of *Variable_semantics* (5.309.10) that represents the variable expression *entity* (3.2.9)

5.313 Numerical_interface_mim

5.313.1
expression_extension_numeric
<application module: Numerical_interface_mim> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) and *numeric_expression* (4.95.20) that represents the expression extension numeric *entity* (3.2.9)

Note 1 to entry: An **expression_extension_numeric** is a type of measure_with_unit and numeric_expression and is the conceptual representation of an expression in the numeric format.

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5.313.2
expression_extension_string
<application module: Numerical_interface_mim> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) and *string_expression* (4.95.24) that represents the expression extension string *entity* (3.2.9)

Note 1 to entry: An **expression_extension_string** is a type of measure_with_unit and string_expression and is the conceptual representation of an expression in the string format.

5.313.3
expression_extension_to_select
<application module: Numerical_interface_mim> *entity data type* (3.2.10) that represents the expression extension to select *entity* (3.2.9)

Note 1 to entry: An **expression_extension_to_select** is a kind of *generic_expression* (4.95.1) and trought the type of expression associated gives the possibility to select which type of expression to represent in order to support string and numeric representations.

5.313.4
variable_expression
<application module: Numerical_interface_mim> *entity data type* (3.2.10) that is a type of *variable_semantics* (4.95.5) that represents the variable expression *entity* (3.2.9)

5.314 Item_definition_structure_arm

5.314.1
Assembled_part_association
<application module: Item_definition_structure_arm> *application object* (3.1.78) that is a type of *Assembly_component_relationship* (5.38.1) that represents the assembled part association *entity* (3.2.9)

Note 1 to entry: An **Assembled_part_association** is a type of Assembly_component_relationship that relates an *Assembly_definition* (5.314.2) with an occurrence of one of its components.

5.314.2
Assembly_definition
<application module: Item_definition_structure_arm> *application object* (3.1.78) that is a type of *Part_view_definition* (5.35.1) that represents the assembly definition *entity* (3.2.9)

Note 1 to entry: An **Assembly_definition** is a type of Part_view_definition that characterizes a part version which may contain several components.

5.314.3
Effectivity_controlled_assembly_definition
<application module: Item_definition_structure_arm> *application object* (3.1.78) that is a type of *Assembly_definition* (5.314.2) that represents the effectivity controlled assembly definition *entity* (3.2.9)

Note 1 to entry: An **Effectivity_controlled_assembly_definition** is a type of Assembly_definition where all *Product_occurrence* (5.79.2) that are related to it by a *View_definition_usage* (5.48.2) (or subtype) must have an *Manufacturing_configuration* (5.148.3) to be valid for this assembly.

5.314.4
Geometrical_relationship
<application module: Item_definition_structure_arm> *application object* (3.1.78) that is a type of *Part_definition_relationship* (5.314.5) that represents the geometrical relationship *entity* (3.2.9)

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Note 1 to entry: A **Geometrical_relationship** is a type of Part_definition_relationship that specifies that the shape and location of the relating part version is derived from the shape and location of the related part version.

5.314.5
Part_definition_relationship
<application module: Item_definition_structure_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the part definition relationship *entity* (3.2.9)

5.315 Numeric_function_arm

5.315.1
Function_parameter_value
<application module: Numeric_function_arm> *application object* (3.1.78) that is a type of *Numeric_expression* (5.424.30) and *Unary_generic_expression* (5.309.8) that represents the function parameter value *entity* (3.2.9)

Note 1 to entry: A **Function_parameter_value** is a type of Numeric_expression and a type of Unary_generic_expression.

5.315.2
Int_value_function
<application module: Numeric_function_arm> *application object* (3.1.78) that is a type of *Function_parameter_value* (5.315.1) that represents the int value function *entity* (3.2.9)

5.315.3
Length_function
<application module: Numeric_function_arm> *application object* (3.1.78) that is a type of *Numeric_expression* (5.424.30) and *Unary_generic_expression* (5.309.8) that represents the length function *entity* (3.2.9)

Note 1 to entry: A **Length_function** is a type of a Numeric_expression and a type of Unary_generic_expression.

5.315.4
Odd_function
<application module: Numeric_function_arm> *application object* (3.1.78) that is a type of *Unary_boolean_expression* (5.424.40) that represents the odd function *entity* (3.2.9)

5.316 Wireframe_2d_arm

5.316.1
Geometrically_bounded_2d_wireframe_shape_representation
<application module: Wireframe_2d_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the geometrically bounded 2d wireframe shape representation *entity* (3.2.9)

Note 1 to entry: A **Geometrically_bounded_2d_wireframe_shape_representation** is a type of Geometric_model that contains 2D points and curves.

5.317 Requirement_management_arm

5.317.1
Representation_proxy_item
<application module: Requirement_management_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the representation proxy item *entity* (3.2.9)

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Note 1 to entry: A **Representation_proxy_item** is a type of Representation_item that allows other constructs in the modules to act as representation items.

5.318 Incomplete_data_reference_mechanism_arm

5.318.1
Incomplete_reference_marking

<application module: Incomplete_data_reference_mechanism_arm> *application object* (3.1.78) that is a type of *Classification_assignment* (5.115.1) that represents the incomplete reference marking *entity* (3.2.9)

5.319 Incomplete_data_reference_mechanism_mim

5.319.1
idrm_classification_assignment

<application module: Incomplete_data_reference_mechanism_mim> *entity data type* (3.2.10) that is a type of *classification_assignment* (4.15.11) that represents the idrm classification assignment *entity* (3.2.9)

Note 1 to entry: An **idrm_classification_assignment** is a type of classification_assignment that enables the specification of partially exchanged items in an exchange structure.

5.320 Inertia_characteristics_arm

5.320.1
Centre_of_mass

<application module: Inertia_characteristics_arm> *application object* (3.1.78) that is a type of *Shape_dependent_property_representation* (5.41.3) that represents the centre of mass *entity* (3.2.9)

Note 1 to entry: A **Centre_of_mass** is a type of Shape_dependent_property_representation that represents the point characterizing a center of mass in a geometric coordinate space.

5.320.2
Inertia_matrix_item

<application module: Inertia_characteristics_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the inertia matrix item *entity* (3.2.9)

Note 1 to entry: An **Inertia_matrix_item** is a type of Representation_item that specifies the six distinct values of an inertia matrix which represents the angular mass of a rigid body about a particular point and their common unit.

5.320.3
Moments_of_inertia

<application module: Inertia_characteristics_arm> *application object* (3.1.78) that is a type of *Shape_dependent_property_representation* (5.41.3) that represents the moments of inertia *entity* (3.2.9)

Note 1 to entry: A **Moments_of_inertia** is a type of Shape_dependent_property_representation which measures the solid's ability to resist changes in rotational speed about a specific axis.

5.321 Inertia_characteristics_mim

5.321.1
moments_of_inertia_representation

<application module: Inertia_characteristics_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the moments of inertia representation *entity* (3.2.9)

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Note 1 to entry: A **moments_of_inertia_representation** is a type of representation that describes the law of inertia of a rigid body.

5.322 Selected_item_arm

5.322.1
Selected_item
<application module: Selected_item_arm> *application object* (3.1.78) that is a type of *Class* (5.83.1) that represents the selected item *entity* (3.2.9)

Note 1 to entry: A **Selected_item** is a type of Class used to classify identified product or activity data as being significant for configuration management purposes.

5.322.2
Selected_item_assignment
<application module: Selected_item_arm> *application object* (3.1.78) that represents the selected item assignment *entity* (3.2.9)

5.323 Selected_item_mim

5.323.1
selected_item
<application module: Selected_item_mim> *entity data type* (3.2.10) that is a type of *class* (4.75.1) that represents the selected item *entity* (3.2.9)

Note 1 to entry: A **selected_item** is a type of class used to classify identified product or activity data as being significant for configuration management purposes.

5.323.2
selected_item_assignment
<application module: Selected_item_mim> *entity data type* (3.2.10) that represents the selected item assignment *entity* (3.2.9)

5.323.3
selected_items_assignment_in_context_group
<application module: Selected_item_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the selected items assignment in context group *entity* (3.2.9)

Note 1 to entry: A **selected_items_assignment_in_context_group** is a type of group_assignment that relates a *selected_item_assignment* (5.323.2) to its context which is identified by a *selected_items_context_group* (5.323.4).

5.323.4
selected_items_context_group
<application module: Selected_item_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the selected items context group *entity* (3.2.9)

5.323.5
selected_items_context_group_to_context
<application module: Selected_item_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the selected items context group to context *entity* (3.2.9)

Note 1 to entry: A **selected_items_context_group_to_context** is a type of group_assignment that identifies the product data that is providing a context for the selected item identified by a *selected_item_assignment* (5.323.2)

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5.324 Location_assignment_characterized_mim

5.324.1
characterized_applied_location_assignment
<application module: Location_assignment_characterized_mim> *entity data type* (3.2.10) that is a type of *applied_location_assignment* (5.266.1) and *characterized_object* (4.19.1) that represents the characterized applied location assignment *entity* (3.2.9)

Note 1 to entry: A **characterized_applied_location_assignment** is a type of characterized_object and applied_location_assignment that serves to assign *property_definition* (4.19.9) instances to applied_location_assignment instances.

5.325 Dimension_and_tolerance_callouts_arm

5.325.1
Annotation_placeholder_occurrence
<application module: Dimension_and_tolerance_callouts_arm> *application object* (3.1.78) that is a type of *Annotation_element* (5.134.2) that represents the annotation placeholder occurrence *entity* (3.2.9)

Note 1 to entry: An **Annotation_placeholder_occurrence** is a type of Annotation_element that provides a placeholder with information about the position, orientation, and organization of a PMI annotation.

5.325.2
Associated_dimension_text
<application module: Dimension_and_tolerance_callouts_arm> *application object* (3.1.78) that is a type of *Dimension_text* (5.134.4) that represents the associated dimension text *entity* (3.2.9)

Note 1 to entry: An **Associated_dimension_text** is a type of Dimension_text that relates graphical text presentation to a dimension tolerance.

5.325.3
Dimension_curve_terminator_to_projection_curve_associativity
<application module: Dimension_and_tolerance_callouts_arm> *application object* (3.1.78) that is a type of *Annotation_occurrence_associativity* (5.284.1) that represents the dimension curve terminator to projection curve associativity *entity* (3.2.9)

Note 1 to entry: An **Dimension_curve_terminator_to_projection_curve_associativity** is a type of Annotation_occurrence_associativity that relates an element of annotation to the leader or projection curve.

5.325.4
Draughting_model_item_association_with_placeholder
<application module: Dimension_and_tolerance_callouts_arm> *application object* (3.1.78) that is a type of *Draughting_model_item_association* (5.284.3) that represents the draughting model item association with placeholder *entity* (3.2.9)

Note 1 to entry: A **Draughting_model_item_association_with_placeholder** is a type of Draughting_model_item_association that specifies a placeholder in a presentation model for product and manufacturing information annotation.

5.325.5
Geometric_placeholder_set
<application module: Dimension_and_tolerance_callouts_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the geometric placeholder set *entity* (3.2.9)

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Note 1 to entry: A **Geometric_placeholder_set** is a type of Detailed_geometric_model_element that collects detail model geometric elements including Cartesian_point, Point_on_curve, Point_on_surface, Planar_box and Axis_placement.

5.326 Dimension_and_tolerance_callouts_mim

5.326.1
dimension_curve_terminator_to_projection_curve_associativity

<application module: Dimension_and_tolerance_callouts_mim> *entity data type* (3.2.10) that is a type of *annotation_occurrence_associativity* (4.47.1) that represents the dimension curve terminator to projection curve associativity *entity* (3.2.9)

Note 1 to entry: A **dimension_curve_terminator_to_projection_curve_associativity** is a type of annotation_occurrence_associativity that implements the ARM concept of *Dimension_curve_terminator_to_projection_curve_associativity* (5.325.3).

5.327 Event_assignment_arm

5.327.1
Event_assignment

<application module: Event_assignment_arm> *application object* (3.1.78) that represents the event assignment *entity* (3.2.9)

Note 1 to entry: An **Event_assignment** is assignment of an *Event* (5.80.1) to product or activity data.

5.328 Event_assignment_mim

5.328.1
applied_event_occurrence_assignment

<application module: Event_assignment_mim> *entity data type* (3.2.10) that is a type of *event_occurrence_assignment* (4.15.23) that represents the applied event occurrence assignment *entity* (3.2.9)

5.329 Time_interval_assignment_arm

5.329.1
Time_interval_assignment

<application module: Time_interval_assignment_arm> *application object* (3.1.78) that represents the time interval assignment *entity* (3.2.9)

Note 1 to entry: A **Time_interval_assignment** is an association of a *Time_interval* (5.81.1) with product data.

5.329.2
Time_interval_role

<application module: Time_interval_assignment_arm> *application object* (3.1.78) that represents the time interval role *entity* (3.2.9)

Note 1 to entry: A **Time_interval_role** is a role for an *Time_interval_assignment* (5.329.1) and a description of that role.

5.330 Time_interval_assignment_mim

5.330.1
applied_time_interval_assignment

<application module: Time_interval_assignment_mim> *entity data type* (3.2.10) that is a type of *time_interval_assignment* (4.15.63) that represents the applied time interval assignment *entity* (3.2.9)

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5.331 Tagged_text_representation_arm

5.331.1
Included_text_block
<application module: Tagged_text_representation_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the included text block *entity* (3.2.9)

Note 1 to entry: An **Included_text_block** is a type of Representation_item that refers to a *Structured_text_representation* (5.331.3) that is explicitly included in the data set.

5.331.2
Structured_text_composition
<application module: Tagged_text_representation_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the structured text composition *entity* (3.2.9)

5.331.3
Structured_text_representation
<application module: Tagged_text_representation_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the structured text representation *entity* (3.2.9)

Note 1 to entry: A **Structured_text_representation** is a type of Representation where the contents of the representation is a structure.

5.331.4
Tagged_text_item
<application module: Tagged_text_representation_arm> *application object* (3.1.78) that is a type of *String_representation_item* (5.12.9) that represents the tagged text item *entity* (3.2.9)

Note 1 to entry: A **Tagged_text_item** is a type of String_representation_item where the text content and markup appear in the text string.

5.331.5
Tagged_text_format
<application module: Tagged_text_representation_arm> *application object* (3.1.78) that is a type of *Representation_context* (5.12.3) that represents the tagged text format *entity* (3.2.9)

Note 1 to entry: A **Tagged_text_format** is a type of Representation_context which defines a text format specification.

5.331.6
Uniform_resource_identifier
<application module: Tagged_text_representation_arm> *application object* (3.1.78) that is a type of *String_representation_item* (5.12.9) that represents the uniform resource identifier *entity* (3.2.9)

Note 1 to entry: A **Uniform_resource_identifier** is a type of String_representation_item that is defined in Internet Engineering Task Force RFC 3986:2005.

5.332 Tagged_text_representation_mim

5.332.1
included_text_block
<application module: Tagged_text_representation_mim> *entity data type* (3.2.10) that is a type of *mapped_item* (4.41.11) that represents the included text block *entity* (3.2.9)

Note 1 to entry: An **included_text_block** is a type of mapped_item that implements the ARM concept of *Included_text_block* (5.331.1).

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5.332.2
structured_text_composition
<application module: Tagged_text_representation_mim> *entity data type* (3.2.10) that is a type of *compound_representation_item* (4.41.3) that represents the structured text composition *entity* (3.2.9)

Note 1 to entry: An **structured_text_composition** is a type of compound_representation_item that implements the ARM concept of *Structured_text_composition* (5.331.2).

5.332.3
structured_text_representation
<application module: Tagged_text_representation_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the structured text representation *entity* (3.2.9)

Note 1 to entry: An **structured_text_representation** is a type of representation that implements the ARM concept of *Structured_text_representation* (5.331.3).

5.332.4
tagged_text_item
<application module: Tagged_text_representation_mim> *entity data type* (3.2.10) that is a type of *descriptive_representation_item* (4.34.1) that represents the tagged text item *entity* (3.2.9)

Note 1 to entry: A **tagged_text_item** is a type of descriptive_representation_item that implements the ARM concept of *Tagged_text_item* (5.331.4).

5.332.5
tagged_text_format
<application module: Tagged_text_representation_mim> *entity data type* (3.2.10) that is a type of *representation_context* (4.41.14) that represents the tagged text format *entity* (3.2.9)

Note 1 to entry: An **tagged_text_format** is a type of representation_context that implements the ARM concept of *Tagged_text_format* (5.331.5).

5.332.6
uniform_resource_identifier
<application module: Tagged_text_representation_mim> *entity data type* (3.2.10) that is a type of *descriptive_representation_item* (4.34.1) that represents the uniform resource identifier *entity* (3.2.9)

Note 1 to entry: A **uniform_resource_identifier** is a type of descriptive_representation_item that implements the ARM concept of *Uniform_resource_identifier* (5.331.6).

5.333 Textual_expression_representation_arm

5.333.1
Included_text_based_representation
<application module: Textual_expression_representation_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the included text based representation *entity* (3.2.9)

Note 1 to entry: A **Included_text_based_representation** is a type of Representation_item where one *Text_based_representation* (5.333.2) is included as a constituent of a Representation_item.

5.333.2
Text_based_representation
<application module: Textual_expression_representation_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the text based representation *entity* (3.2.9)

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Note 1 to entry: A **Text_based_representation** is a type of Representation where the representation is written using text.

5.333.3
Text_based_representation_context
<application module: Textual_expression_representation_arm> *application object* (3.1.78) that is a type of *Representation_context* (5.12.3) that represents the text based representation context *entity* (3.2.9)

Note 1 to entry: A **Text_based_representation_context** is a type of Representation_context where the representations are text-based.

5.333.4
Textual_expression_composition
<application module: Textual_expression_representation_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the textual expression composition *entity* (3.2.9)

Note 1 to entry: A **Textual_expression_composition** is a type of Representation_item where that is made up of constituent *Textual_expression_representation_item* (5.333.5)'s.

5.333.5
Textual_expression_representation_item
<application module: Textual_expression_representation_arm> *application object* (3.1.78) that is a type of *String_representation_item* (5.12.9) that represents the textual expression representation item *entity* (3.2.9)

Note 1 to entry: A **Textual_expression_representation_item** is a type of String_representation_item that is written using text.

5.334 Textual_expression_representation_mim

5.334.1
included_text_based_representation
<application module: Textual_expression_representation_mim> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the included text based representation *entity* (3.2.9)

Note 1 to entry: A **included_text_based_representation** is a type of representation_item where a *text_based_representation* (5.334.2) is included as a constituent of a representation_item.

5.334.2
text_based_representation
<application module: Textual_expression_representation_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the text based representation *entity* (3.2.9)

Note 1 to entry: A **text_based_representation** is a type of representation where the representation is textual in character.

5.334.3
text_based_representation_context
<application module: Textual_expression_representation_mim> *entity data type* (3.2.10) that is a type of *representation_context* (4.41.14) that represents the text based representation context *entity* (3.2.9)

Note 1 to entry: A **text_based_representation_context** is a type of representation_context where the context for representations is text.

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5.334.4
textual_expression_composition
<application module: Textual_expression_representation_mim> *entity data type* (3.2.10) that is a type of *compound_representation_item* (4.41.3) that represents the textual expression composition *entity* (3.2.9)

Note 1 to entry: A **textual_expression_composition** is a type of compound_representation_item where the elements of the composition are text.

5.334.5
textual_expression_representation_item
<application module: Textual_expression_representation_mim> *entity data type* (3.2.10) that is a type of *descriptive_representation_item* (4.34.1) that represents the textual expression representation item *entity* (3.2.9)

Note 1 to entry: A **textual_expression_representation_item** is a type of descriptive_representation_item where the item is text.

5.335 Binary_representation_arm

5.335.1
Binary_representation_item
<application module: Binary_representation_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the binary representation item *entity* (3.2.9)

Note 1 to entry: A **Binary_representation_item** is a type of Representation_item which is used to represent a property using binary information.

5.335.2
Bytes_representation_item
<application module: Binary_representation_arm> *application object* (3.1.78) that is a type of *Binary_representation_item* (5.335.1) that represents the bytes representation item *entity* (3.2.9)

5.336 State_based_behaviour_mim

5.336.1
sbb_characterized_applied_action_method_assignment
<application module: State_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *applied_action_method_assignment* (5.227.1) and *characterized_object* (4.19.1) that represents the sbb characterized applied action method assignment *entity* (3.2.9)

Note 1 to entry: A **sbb_characterized_applied_action_method_assignment** is a type of characterized_object and applied_action_method_assignment

5.336.2
sbb_characterized_general_property_relationship
<application module: State_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *general_property_relationship* (4.19.7) that represents the sbb characterized general property relationship *entity* (3.2.9)

Note 1 to entry: A **sbb_characterized_general_property_relationship** is a type of characterized_object and general_property_relationship

5.336.3

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sbb_characterized_generic_expression
<application module: State_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *generic_expression* (4.95.1) that represents the sbb characterized generic expression *entity* (3.2.9)

Note 1 to entry: A **sbb_characterized_generic_expression** is a type of characterized_object and generic_expression

5.336.4
sbb_characterized_product
<application module: State_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product* (4.18.4) that represents the sbb characterized product *entity* (3.2.9)

Note 1 to entry: A **sbb_characterized_product** is a type of characterized_object and product

5.336.5
sbb_characterized_product_definition_formation
<application module: State_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_definition_formation* (4.18.11) that represents the sbb characterized product definition formation *entity* (3.2.9)

Note 1 to entry: A **sbb_characterized_product_definition_formation** is a type of characterized_object and product_definition_formation

5.336.6
sbb_characterized_product_definition_formation_relationship
<application module: State_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_definition_formation_relationship* (4.18.13) that represents the sbb characterized product definition formation relationship *entity* (3.2.9)

Note 1 to entry: A **sbb_characterized_product_definition_formation_relationship** is a type of characterized_object and product_definition_formation_relationship

5.336.7
sbb_characterized_property_definition_representation
<application module: State_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *property_definition_representation* (4.20.6) that represents the sbb characterized property definition representation *entity* (3.2.9)

Note 1 to entry: A **sbb_characterized_property_definition_representation** is a type of characterized_object and property_definition_representation

5.336.8
sbb_characterized_representation
<application module: State_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *representation* (4.41.13) that represents the sbb characterized representation *entity* (3.2.9)

Note 1 to entry: A **sbb_characterized_representation** is a type of characterized_object and representation

5.336.9
sbb_characterized_representation_context
<application module: State_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *representation_context* (4.41.14) that represents the sbb characterized representation context *entity* (3.2.9)

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Note 1 to entry: A **sbb_characterized_representation_context** is a type of characterized_object and representation_context

5.336.10
sbb_characterized_representation_item
<application module: State_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *representation_item* (4.41.16) that represents the sbb characterized representation item *entity* (3.2.9)

Note 1 to entry: A **sbb_characterized_representation_item** is a type of characterized_object and representation_item

5.336.11
sbb_characterized_state_type
<application module: State_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_type* (4.122.1) that represents the sbb characterized state type *entity* (3.2.9)

Note 1 to entry: A **sbb_characterized_state_type** is a type of characterized_object and state_type

5.336.12
sbb_characterized_state_type_assignment
<application module: State_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_type_assignment* (4.122.2) that represents the sbb characterized state type assignment *entity* (3.2.9)

Note 1 to entry: A **sbb_characterized_state_type_assignment** is a type of characterized_object and state_type_assignment

5.336.13
sbb_characterized_state_type_relationship
<application module: State_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_type_relationship* (4.122.3) that represents the sbb characterized state type relationship *entity* (3.2.9)

Note 1 to entry: A **sbb_characterized_state_type_relationship** is a type of characterized_object and state_type_relationship

5.337 Analysis_arm

5.337.1
Behavioural_decomposition_of_numerical_model
<application module: Analysis_arm> *application object* (3.1.78) that represents the behavioural decomposition of numerical model *entity* (3.2.9)

Note 1 to entry: A **Behavioural_decomposition_of_numerical_model** is a decomposition of a *Numerical_model* (5.337.7) into differnet subbehaviours.

5.337.2
Model_action_domain
<application module: Analysis_arm> *application object* (3.1.78) that is a type of *Numerical_model* (5.337.7) that represents the model action domain *entity* (3.2.9)

5.337.3

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Model_product_domain
<application module: Analysis_arm> *application object* (3.1.78) that is a type of *Numerical_model* (5.337.7) that represents the model product domain *entity* (3.2.9)

Note 1 to entry: A **Model_product_domain** is a type of Numerical_model that is only a spatial decomposition and that has an indefinite time dimension.

5.337.4
Model_product_domain_with_mesh
<application module: Analysis_arm> *application object* (3.1.78) that is a type of *Model_product_domain* (5.337.3) that represents the model product domain with mesh *entity* (3.2.9)

Note 1 to entry: A **Model_product_domain_with_mesh** is a type of Model_product_domain that has a *Mesh* (5.352.13).

5.337.5
Model_property_distribution
<application module: Analysis_arm> *application object* (3.1.78) that represents the model property distribution *entity* (3.2.9)

Note 1 to entry: A **Model_property_distribution** is a function that has a *Numerical_model* (5.337.7) and a property space as its range.

5.337.6
Model_state_domain
<application module: Analysis_arm> *application object* (3.1.78) that is a type of *Numerical_model* (5.337.7) that represents the model state domain *entity* (3.2.9)

Note 1 to entry: A **Model_state_domain** is a type of Numerical_model that has no time dimension.

5.337.7
Numerical_model
<application module: Analysis_arm> *application object* (3.1.78) that represents the numerical model *entity* (3.2.9)

Note 1 to entry: A **Numerical_model** is an aspect of a physical object relevant to a particular type of behavoir.

5.337.8
Simulation_run
<application module: Analysis_arm> *application object* (3.1.78) that represents the simulation run *entity* (3.2.9)

Note 1 to entry: A **Simulation_run** is an individual activity that simulates a *Numerical_model* (5.337.7).

5.337.9
Spatial_decomposition_of_numerical_model
<application module: Analysis_arm> *application object* (3.1.78) that represents the spatial decomposition of numerical model *entity* (3.2.9)

Note 1 to entry: A **Spatial_decomposition_of_numerical_model** is a is a decomposition of a *Numerical_model* (5.337.7) into different subspaces.

5.337.10
Temporal_decomposition_of_model_action
<application module: Analysis_arm> *application object* (3.1.78) that represents the temporal decomposition of model action *entity* (3.2.9)

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Note 1 to entry: A **Temporal_decomposition_of_model_action** is a decomposition of a *Model_action_domain* (5.337.2) into different time instants.

5.338 Analysis_product_relationships_arm

5.338.1
Idealisation_relationship
<application module: Analysis_product_relationships_arm> *application object* (3.1.78) that represents the idealisation relationship *entity* (3.2.9)

Note 1 to entry: An **Idealisation_relationship** is a particular *Temporal_spatial_domain* (5.353.8) that is an idealisation of a particular *product_definition* (4.18.7).

5.338.2
Analysis_view_relationship
<application module: Analysis_product_relationships_arm> *application object* (3.1.78) that represents the analysis view relationship *entity* (3.2.9)

Note 1 to entry: An **Analysis_view_relationship** is a particular *Numerical_model* (5.337.7) that is a view of a particular *Temporal_spatial_domain* (5.353.8).

5.339 Analysis_shape_arm

5.339.1
Idealized_analysis_shape
<application module: Analysis_shape_arm> *application object* (3.1.78) that is a type of *Shape_description_association* (5.41.4) that represents the idealized analysis shape *entity* (3.2.9)

5.339.2
Nominal_design_shape
<application module: Analysis_shape_arm> *application object* (3.1.78) that is a type of *Shape_description_association* (5.41.4) that represents the nominal design shape *entity* (3.2.9)

Note 1 to entry: A **Nominal_design_shape** is a type of Shape_description_association that is defined by the design discipline.

5.340 Cfd_conditions_arm

5.340.1
Elements_bc
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Mbna_bc* (5.340.7) that represents the elements bc *entity* (3.2.9)

Note 1 to entry: A n **Elements_bc** is a type of Mbna_bc containing boundary-condition information for a group of elements in an unstructured mesh.

5.340.2
Fd_bc
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Mbna_bc* (5.340.7) that represents the fd bc *entity* (3.2.9)

Note 1 to entry: A **Fd_bc** is a type of Mbna_bc containing boundary-condition information for a single BC surface patch of a CFD zone.

5.340.3

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Fd_bc_dataset
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Mbna_bc_dataset* (5.340.11) that represents the fd bc dataset *entity* (3.2.9)

Note 1 to entry: A **Fd_bc_dataset** is a type of Mbna_bc_dataset dataset for CFD.

5.340.4
Fd_zone_bc
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Mbna_zone_bc* (5.340.16) that represents the fd zone bc *entity* (3.2.9)

Note 1 to entry: A **Fd_zone_bc** is a type of Mbna_zone_bc that is the boundary-condition information pertaining to a zone.

5.340.5
Indexed_elements_bc
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Mbna_bc* (5.340.7) that represents the indexed elements bc *entity* (3.2.9)

Note 1 to entry: An **Indexed_elements_bc** is a type of Mbna_bc containing boundary-condition information for cells in a structured mesh.

5.340.6
Indexed_points_bc
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Mbna_bc* (5.340.7) that represents the indexed points bc *entity* (3.2.9)

Note 1 to entry: An **Indexed_points_bc** is a type of Mbna_bc containing boundary-condition information for points in a structured mesh.

5.340.7
Mbna_bc
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Mbna_condition* (5.340.12) that represents the mbna bc *entity* (3.2.9)

Note 1 to entry: A **Mbna_bc** is a type of Mbna_condition that is is boundary-condition information for a single BC surface patch of a zone.

5.340.8
Mbna_bc_data
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Mbna_condition* (5.340.12) that represents the mbna bc data *entity* (3.2.9)

Note 1 to entry: A **Mbna_bc_data** is a type of Mbna_condition that is boundary-condition data.

5.340.9
Mbna_bc_data_global
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Mbna_bc_data* (5.340.8) that represents the mbna bc data global *entity* (3.2.9)

Note 1 to entry: A **Mbna_bc_data_global** is a type of Mbna_bc_data that is global boundary-condition data.

5.340.10
Mbna_bc_data_local
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Mbna_bc_data* (5.340.8) that represents the mbna bc data local *entity* (3.2.9)

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Note 1 to entry: A **Mbna_bc_data_local** is a type of Mbna_bc_data that is is local boundary condition data.

5.340.11
Mbna_bc_dataset
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Mbna_condition* (5.340.12) that represents the mbna bc dataset *entity* (3.2.9)

Note 1 to entry: A **Mbna_bc_dataset** is a type of Mbna_condition that is Dirichlet or Neumann data for a single set of boundary-condition equations.

5.340.12
Mbna_condition
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Model_state_domain* (5.337.6) that represents the mbna condition *entity* (3.2.9)

Note 1 to entry: A **Mbna_condition** is a type of Model_state_domain that represents the concept of conditions or constraints pertinent to an analysis.

5.340.13
Mbna_dirichlet_bc_dataset
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Mbna_bc_dataset* (5.340.11) that represents the mbna dirichlet bc dataset *entity* (3.2.9)

Note 1 to entry: A **Mbna_dirichlet_bc_dataset** is a type of Mbna_bc_dataset that contains Dirichlet boundary condition data.

5.340.14
Mbna_neumann_bc_dataset
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Mbna_bc_dataset* (5.340.11) that represents the mbna neumann bc dataset *entity* (3.2.9)

Note 1 to entry: A **Mbna_neumann_bc_dataset** is a type of Mbna_bc_dataset that contains Neumann boundary condition data.

5.340.15
Mbna_reference_state
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Mbna_condition* (5.340.12) that represents the mbna reference state *entity* (3.2.9)

Note 1 to entry: A **Mbna_reference_state** is a type of Mbna_condition which is a list of geometric or state quantities defined at a common location or condition.

5.340.16
Mbna_zone_bc
<application module: Cfd_conditions_arm> *application object* (3.1.78) that is a type of *Mbna_condition* (5.340.12) that represents the mbna zone bc *entity* (3.2.9)

Note 1 to entry: A **Mbna_zone_bc** is a type of Mbna_condition that is the boundary-condition information for a zone.

5.341 Cfd_equations_arm

5.341.1
Fd_diffusion_equation
<application module: Cfd_equations_arm> *application object* (3.1.78) that is a type of *Fd_governing_equation* (5.341.3) that represents the fd diffusion equation *entity* (3.2.9)

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Note 1 to entry: A **Fd_diffusion_equation** is a type of Fd_governing_equation which includes diffusion.

5.341.2
Fd_diffusion_model
<application module: Cfd_equations_arm> *application object* (3.1.78) that represents the fd diffusion model *entity* (3.2.9)

Note 1 to entry: A **Fd_diffusion_model** is the viscous diffusion terms modelled in the flow equations, and is applicable only to Navier-Stokes equations.

5.341.3
Fd_governing_equation
<application module: Cfd_equations_arm> *application object* (3.1.78) that is a type of *Mbna_governing_equation* (5.341.9) that represents the fd governing equation *entity* (3.2.9)

Note 1 to entry: A **Fd_governing_equation** is a type of Mbna_governing_equation describing the class of governing flow equations associated with the solution.

5.341.4
Flow_equation_set
<application module: Cfd_equations_arm> *application object* (3.1.78) that is a type of *Mbna_equation_set* (5.341.8) that represents the flow equation set *entity* (3.2.9)

Note 1 to entry: A **Flow_equation_set** is a type of Mbna_equation_set set providing a general description of governing flow equations.

5.341.5
Gas_model
<application module: Cfd_equations_arm> *application object* (3.1.78) that is a type of *Mbna_behaviour_model* (5.341.6) that represents the gas model *entity* (3.2.9)

Note 1 to entry: A **Gas_model** is a type of Mbna_behaviour_model that is the equation of state model used in the governing equations to relate pressure, temperature and density.

5.341.6
Mbna_behaviour_model
<application module: Cfd_equations_arm> *application object* (3.1.78) that is a type of *Mbna_equation* (5.341.7) that represents the mbna behaviour model *entity* (3.2.9)

Note 1 to entry: A **Mbna_behaviour_model** is a type of Mbna_equation that is a model for relating physical or mathematical quantities.

5.341.7
Mbna_equation
<application module: Cfd_equations_arm> *application object* (3.1.78) that is a type of *Model_product_domain* (5.337.3) that represents the mbna equation *entity* (3.2.9)

Note 1 to entry: A **Mbna_equation** is a type of Model_product_domain that represents the concept of a mathematical formulation of a physics phenonema.

5.341.8
Mbna_equation_set
<application module: Cfd_equations_arm> *application object* (3.1.78) that is a type of *Mbna_equation* (5.341.7) that represents the mbna equation set *entity* (3.2.9)

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Note 1 to entry: A **Mbna_equation_set** is a type of Mbna_equation that gives a general description of governing equations.

5.341.9
Mbna_governing_equation
<application module: Cfd_equations_arm> *application object* (3.1.78) that is a type of *Mbna_equation* (5.341.7) that represents the mbna governing equation *entity* (3.2.9)

Note 1 to entry: A **Mbna_governing_equation** is a type of Mbna_equation describing the class of governing equations associated with the analysis solution.

5.341.10
Thermal_conductivity_model
<application module: Cfd_equations_arm> *application object* (3.1.78) that is a type of *Mbna_behaviour_model* (5.341.6) that represents the thermal conductivity model *entity* (3.2.9)

Note 1 to entry: A **Thermal_conductivity_model** is a type of Mbna_behaviour_model that is the model for relating the thermal-conductivity coefficient (k) to temperature.

5.341.11
Turbulence_closure
<application module: Cfd_equations_arm> *application object* (3.1.78) that is a type of *Mbna_behaviour_model* (5.341.6) that represents the turbulence closure *entity* (3.2.9)

Note 1 to entry: A **Turbulence_closure** is a type of Mbna_behaviour_model that is the turbulence closure for the Reynolds stress terms of the Navier-Stokes equations.

5.341.12
Turbulence_model
<application module: Cfd_equations_arm> *application object* (3.1.78) that is a type of *Mbna_behaviour_model* (5.341.6) that represents the turbulence model *entity* (3.2.9)

Note 1 to entry: A **Turbulence_model** is a type of Mbna_behaviour_model that is the equation set used to model the turbulence quantities.

5.341.13
Viscosity_model
<application module: Cfd_equations_arm> *application object* (3.1.78) that is a type of *Mbna_behaviour_model* (5.341.6) that represents the viscosity model *entity* (3.2.9)

Note 1 to entry: A **Viscosity_model** is a type of Mbna_behaviour_model is the model for relating molecular viscosity (?) to temperature.

5.342 Cfd_model_arm

5.342.1
Fd_step
<application module: Cfd_model_arm> *application object* (3.1.78) that is a type of *Mbna_step* (5.342.7) that represents the fd step *entity* (3.2.9)

Note 1 to entry: A **Fd_step** is a type of Mbna_step that is a single step, or one of a series of steps, in a CFD analysis.

5.342.2

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Fd_zone
<application module: Cfd_model_arm> *application object* (3.1.78) that is a type of *Mbna_zone* (5.342.10) that represents the fd zone *entity* (3.2.9)

Note 1 to entry: A **Fd_zone** is a type of Mbna_zone specifically for a CFD analysis.

5.342.3
Grid_coordinates
<application module: Cfd_model_arm> *application object* (3.1.78) that is a type of *Model_property_distribution* (5.337.5) that represents the grid coordinates *entity* (3.2.9)

Note 1 to entry: A **Grid_coordinates** is a type of Model_property_distribution that is the physical coordinates of the vertices of a grid.

5.342.4
Grid_coordinates_with_rind
<application module: Cfd_model_arm> *application object* (3.1.78) that is a type of *Grid_coordinates* (5.342.3) that represents the grid coordinates with rind *entity* (3.2.9)

Note 1 to entry: A **Grid_coordinates_with_rind** is a type of Grid_coordinates that is the physical coordinates of the vertices of a grid with a *Rind* (5.352.16).

5.342.5
Mbna_model
<application module: Cfd_model_arm> *application object* (3.1.78) that is a type of *Model_product_domain* (5.337.3) that represents the mbna model *entity* (3.2.9)

Note 1 to entry: A **Mbna_model** is a type of Model_product_domain that is the highest level structure in an analysis database.

5.342.6
Mbna_state
<application module: Cfd_model_arm> *application object* (3.1.78) that is a type of *model_state_domain* (4.67.6) that represents the mbna state *entity* (3.2.9)

5.342.7
Mbna_step
<application module: Cfd_model_arm> *application object* (3.1.78) that is a type of *Model_action_domain* (5.337.2) that represents the mbna step *entity* (3.2.9)

Note 1 to entry: A **Mbna_step** is a type of Model_action_domain that is a single step, or one of a series of steps, in an analysis.

5.342.8
Mbna_structured_zone
<application module: Cfd_model_arm> *application object* (3.1.78) that is a type of *Mbna_zone* (5.342.10) that represents the mbna structured zone *entity* (3.2.9)

Note 1 to entry: A **Mbna_structured_zone** is a type of Mbna_zone that contains the information pertinent to an individual structured multiblock zone.

5.342.9
Mbna_unstructured_zone
<application module: Cfd_model_arm> *application object* (3.1.78) that is a type of *Mbna_zone* (5.342.10) that represents the mbna unstructured zone *entity* (3.2.9)

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Note 1 to entry: A **Mbna_unstructured_zone** is a type of Mbna_zone that contains the information pertinent to an individual unstructured zone.

5.342.10
Mbna_zone
<application module: Cfd_model_arm> *application object* (3.1.78) that is a type of *Model_product_domain_with_mesh* (5.337.4) that represents the mbna zone *entity* (3.2.9)

Note 1 to entry: A **Mbna_zone** is a type of Model_product_domain_with_mesh that collects the information pertinent to an individual multiblock zone.

5.343 Cfd_results_arm

5.343.1
Mbna_discrete_data
<application module: Cfd_results_arm> *application object* (3.1.78) that is a type of *Mbna_result* (5.343.4) that represents the mbna discrete data *entity* (3.2.9)

Note 1 to entry: A **Mbna_discrete_data** is a type of Mbna_result that is generic discrete data (i.e.

5.343.2
Mbna_discrete_data_with_rind
<application module: Cfd_results_arm> *application object* (3.1.78) that is a type of *Mbna_discrete_data* (5.343.1) that represents the mbna discrete data with rind *entity* (3.2.9)

Note 1 to entry: An **Mbna_discrete_data_with_rind** is a type of Mbna_discrete_data that is an Mbna_discrete_data with rind point data.

5.343.3
Mbna_history
<application module: Cfd_results_arm> *application object* (3.1.78) that is a type of *Mbna_result* (5.343.4) that represents the mbna history *entity* (3.2.9)

Note 1 to entry: A **Mbna_history** is a type of Mbna_result that is solver convergence history information.

5.343.4
Mbna_result
<application module: Cfd_results_arm> *application object* (3.1.78) that is a type of *Model_property_distribution* (5.337.5) that represents the mbna result *entity* (3.2.9)

Note 1 to entry: A **Mbna_result** is a type of Model_property_distribution that represents the concept of a solution to an analysis problem and/or other data resulting from an analysis.

5.343.5
Mbna_solution
<application module: Cfd_results_arm> *application object* (3.1.78) that is a type of *Mbna_result* (5.343.4) that represents the mbna solution *entity* (3.2.9)

Note 1 to entry: A **Mbna_solution** is a type of Mbna_result that is the solution within a zone.

5.343.6
Mbna_solution_with_rind
<application module: Cfd_results_arm> *application object* (3.1.78) that is a type of *Mbna_solution* (5.343.5) that represents the mbna solution with rind *entity* (3.2.9)

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Note 1 to entry: A **Mbna_solution_with_rind** is a type of Mbna_solution that is a Mbna_solution with rind point data.

5.344 Cfd_specified_general_property_arm

5.344.1
Geometry_reference
<application module: Cfd_specified_general_property_arm> *application object* (3.1.78) that represents the geometry reference *entity* (3.2.9)

Note 1 to entry: A **Geometry_reference** is a reference to geometric data with means of describing the purpose or meaning of the reference.

5.344.2
Specified_general_property
<application module: Cfd_specified_general_property_arm> *application object* (3.1.78) that is a type of *Independent_property* (5.44.1) that represents the specified general property *entity* (3.2.9)

Note 1 to entry: A **Specified_general_property** is a type of Independent_property where the identifier is one of a pre-defined set.

5.344.3
Specified_representation_context
<application module: Cfd_specified_general_property_arm> *application object* (3.1.78) that is a type of *Representation_context* (5.12.3) that represents the specified representation context *entity* (3.2.9)

Note 1 to entry: A **Specified_representation_context** is a type of Representation_context where the identifier is one of a pre-defined set.

5.345 Fea_definition_relationships_arm

5.345.1
Action_view_relationship
<application module: Fea_definition_relationships_arm> *application object* (3.1.78) that represents the action view relationship *entity* (3.2.9)

Note 1 to entry: An **Action_view_relationship** is a relationship between:

— an idealisation of an action for analysis; and

— a discretised action analysis model.

5.345.2
Element_topological_relationship
<application module: Fea_definition_relationships_arm> *application object* (3.1.78) that represents the element topological relationship *entity* (3.2.9)

Note 1 to entry: An **Element_topological_relationship** is a relationship between:

— an *Element_shape_aspect* (5.349.9); and

— a *Detailed_topological_model_element* (5.11.5)

that indicates the **element_ref** has the topological relationships of the Detailed_topological_model_element.

5.345.3

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Fea_beam_section_idealisation_relationship
<application module: Fea_definition_relationships_arm> *application object* (3.1.78) that represents the fea beam section idealisation relationship *entity* (3.2.9)

Note 1 to entry: A **Fea_beam_section_idealisation_relationship** is a relationship between a beam property and the idealization of that beam property.

5.345.4
Fea_model_topological_relationship
<application module: Fea_definition_relationships_arm> *application object* (3.1.78) that represents the fea model topological relationship *entity* (3.2.9)

Note 1 to entry: A **Fea_model_topological_relationship** is a relationship between:

— an *Fea_model* (5.349.12); and

— a mesh

that indicates the Fea_model has the topological relationships of the mesh.

5.345.5
Fea_shell_section_distribution_idealisation_relationship
<application module: Fea_definition_relationships_arm> *application object* (3.1.78) that represents the fea shell section distribution idealisation relationship *entity* (3.2.9)

Note 1 to entry: A **Fea_shell_section_distribution_idealisation_relationship** is a relationship between:

— the *Assigned_property* (5.40.2) that is the variation of structural behaviour from point to point over a shell; and

— a *Surface_property* (5.349.27)

that indicates the Surface_property is an idealisation of the *property_definition* (4.19.9) for the purpose of analysis.

5.345.6
Fea_shell_section_idealisation_relationship
<application module: Fea_definition_relationships_arm> *application object* (3.1.78) that represents the fea shell section idealisation relationship *entity* (3.2.9)

Note 1 to entry: A **Fea_shell_section_idealisation_relationship** is a relationship between:

— an *Independent_property* (5.44.1) that is the structural behaviour at a point on a shell; and

— a *Surface_property* (5.349.27)

that indicates the Surface_property is an idealisation of the Independent_property for the purpose of analysis.

5.345.7
Node_topological_relationship
<application module: Fea_definition_relationships_arm> *application object* (3.1.78) that represents the node topological relationship *entity* (3.2.9)

Note 1 to entry: A **Node_topological_relationship** is a relationship between:

— a node representation; and

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— a vertex

that indicates the node representation has the topological relationships of the vertex.

5.345.8
Product_view_relationship
<application module: Fea_definition_relationships_arm> *application object* (3.1.78) that represents the product view relationship *entity* (3.2.9)

Note 1 to entry: A **Product_view_relationship** is a relationship between:

— an idealisation of a product for analysis; and

— a discretised analysis model.

5.345.9
Same_discretised_action_model
<application module: Fea_definition_relationships_arm> *application object* (3.1.78) that represents the same discretised action model *entity* (3.2.9)

Note 1 to entry: A **Same_discretised_action_model** is a relationship between records of a discretised action model, and that states they each have the same meaning.

5.345.10
Same_discretised_state_model
<application module: Fea_definition_relationships_arm> *application object* (3.1.78) that represents the same discretised state model *entity* (3.2.9)

Note 1 to entry: A **Same_discretised_state_model** is a is a relationship between records of a discretised state model, and that states they each have the same meaning.

5.345.11
Same_idealised_action
<application module: Fea_definition_relationships_arm> *application object* (3.1.78) that represents the same idealised action *entity* (3.2.9)

Note 1 to entry: A **Same_idealised_action** is a relationship between records of an idealisation of action for analysis, and that states they each have the same meaning.

5.345.12
Same_idealised_state
<application module: Fea_definition_relationships_arm> *application object* (3.1.78) that represents the same idealised state *entity* (3.2.9)

Note 1 to entry: A **Same_idealised_state** is a relationship is between records of an idealisation of state for analysis, and that states they each have the same meaning.

5.345.13
State_view_relationship
<application module: Fea_definition_relationships_arm> *application object* (3.1.78) that represents the state view relationship *entity* (3.2.9)

Note 1 to entry: A **State_view_relationship** is a relationship between:

— an idealisation of a state for analysis; and

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— a discretised state analysis model.

5.346 Finite_element_analysis_arm

5.346.1
Analysis_message
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Fe_analysis_state_definition* (5.346.12) that represents the analysis message *entity* (3.2.9)

Note 1 to entry: An **Analysis_message** is a type of Fe_analysis_state_definition that is an information message such as a note, warning, or error message.

5.346.2
Analysis_report_representation
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that represents the analysis report representation *entity* (3.2.9)

Note 1 to entry: An **Analysis_report_representation** is the text and graphical information documenting the finite element and associated detail analyses.

5.346.3
Calculated_state
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Fe_analysis_state* (5.346.11) that represents the calculated state *entity* (3.2.9)

Note 1 to entry: A **Calculated_state** is a type of Fe_analysis_state representing information that has been calculated by an analysis step.

5.346.4
Constraint
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that represents the constraint *entity* (3.2.9)

Note 1 to entry: A **Constraint** is a specified value of a degree of freedom at a node or a relationship between freedoms at many nodes for an *Fe_analysis_control_step* (5.346.8).

5.346.5
Element_field_variable_definition
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Fe_analysis_state_definition* (5.346.12) that represents the element field variable definition *entity* (3.2.9)

Note 1 to entry: An **Element_field_variable_definition** is a type of Fe_analysis_state_definition that specifies values for a field variable pertaining to the elements of the model.

5.346.6
Element_nodal_freedom_actions
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Fe_analysis_state_definition* (5.346.12) that represents the element nodal freedom actions *entity* (3.2.9)

Note 1 to entry: An **Element_nodal_freedom_actions** is a type of Fe_analysis_state_definition that represents the values of nodal action for an element.

5.346.7

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Fe_analysis
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that represents the fe analysis *entity* (3.2.9)

Note 1 to entry: An **Fe_analysis** is an analysis that describes the operations carried out upon the finite element model as a series of analysis steps.

5.346.8
Fe_analysis_control_step
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that represents the fe analysis control step *entity* (3.2.9)

Note 1 to entry: An **Fe_analysis_control_step** is a single step in an *Fe_analysis* (5.346.7).

5.346.9
Fe_analysis_results
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that represents the fe analysis results *entity* (3.2.9)

Note 1 to entry: An **Fe_analysis_results** is administrative information for a finite element analysis.

5.346.10
Fe_analysis_results_step
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that represents the fe analysis results step *entity* (3.2.9)

Note 1 to entry: An **Fe_analysis_results_step** is the state of the node and element analysis variables at the end of a step.

5.346.11
Fe_analysis_state
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that represents the fe analysis state *entity* (3.2.9)

Note 1 to entry: An **Fe_analysis_state** is a state that represents the values of information defining the node and element variables within a finite element model at an instant in time.

5.346.12
Fe_analysis_state_definition
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that represents the fe analysis state definition *entity* (3.2.9)

Note 1 to entry: An **Fe_analysis_state_definition** is the variables and their values for the nodes and elements in the finite element model.

5.346.13
Graphical_representation
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Analysis_report_representation* (5.346.2) that represents the graphical representation *entity* (3.2.9)

5.346.14
Linear_constraint_equation
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Constraint* (5.346.4) that represents the linear constraint equation *entity* (3.2.9)

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Note 1 to entry: A **Linear_constraint_equation** is a type of Constraint that is a linear multi-point constraint equation that specifies the nodal freedoms and their coefficients.

5.346.15
Linear_constraint_equation_value
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Fe_analysis_state_definition* (5.346.12) that represents the linear constraint equation value *entity* (3.2.9)

Note 1 to entry: A **Linear_constraint_equation_value** is a type of Fe_analysis_state_definition that defines the constraint equation coefficient associated with the freedoms and their coefficients.

5.346.16
Linearly_superimposed_state
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Fe_analysis_state* (5.346.11) that represents the linearly superimposed state *entity* (3.2.9)

Note 1 to entry: A **Linearly_superimposed_state** is a type of Fe_analysis_state that is obtained by a combination of previously calculated and specified states.

5.346.17
Modes_and_frequencies_control_step
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Fe_analysis_control_step* (5.346.8) that represents the modes and frequencies control step *entity* (3.2.9)

Note 1 to entry: A **Modes_and_frequencies_control_step** is a type of Fe_analysis_control_step that represents a single step in a modes and frequencies analysis.

5.346.18
Modes_and_frequencies_results_step
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Fe_analysis_results_step* (5.346.10) that represents the modes and frequencies results step *entity* (3.2.9)

Note 1 to entry: A **Modes_and_frequencies_results_step** is a type of Fe_analysis_results_step that defines the state of node and element variables at the end of a modes and frequencies analysis step.

5.346.19
Nodal_degree_of_freedom_reduction
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Constraint* (5.346.4) that represents the nodal degree of freedom reduction *entity* (3.2.9)

Note 1 to entry: A **Nodal_degree_of_freedom_reduction** is a type of Constraint that constrains the degrees of freedom for a node, for a group, or for the nodes associated with a *Detailed_geometric_model_element* (5.10.9), in an *Fea_model* (5.349.12).

5.346.20
Nodal_freedom_definitions
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Fe_analysis_state_definition* (5.346.12) that represents the nodal freedom definitions *entity* (3.2.9)

Note 1 to entry: A **Nodal_freedom_definitions** is a type of Fe_analysis_state_definition that specifies information at a node of the model with respect to the solution degrees of freedom.

5.346.21

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Output_request_state
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Fe_analysis_state* (5.346.11) that represents the output request state *entity* (3.2.9)

Note 1 to entry: An **Output_request_state** is a type of Fe_analysis_state requesting information in the form of computer readable *Fe_analysis_state_definition* (5.346.12) objects.

5.346.22
Single_point_constraint
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Constraint* (5.346.4) that represents the single point constraint *entity* (3.2.9)

Note 1 to entry: A **Single_point_constraint** is a type of Constraint that constrains for one or more degrees of freedom at a single node.

5.346.23
Single_point_constraint_values
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Fe_analysis_state_definition* (5.346.12) that represents the single point constraint values *entity* (3.2.9)

Note 1 to entry: A **Single_point_constraint_values** is a type of Fe_analysis_state_definition that defines the value of a *Single_point_constraint* (5.346.22).

5.346.24
Specified_state
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Fe_analysis_state* (5.346.11) that represents the specified state *entity* (3.2.9)

Note 1 to entry: A **Specified_state** is a type of Fe_analysis_state representing information that is specified.

5.346.25
Static_control_step
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Fe_analysis_control_step* (5.346.8) that represents the static control step *entity* (3.2.9)

Note 1 to entry: A **Static_control_step** is a type of Fe_analysis_control_step that defines a single step in a static *Fe_analysis* (5.346.7).

5.346.26
Static_results_step
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Fe_analysis_results_step* (5.346.10) that represents the static results step *entity* (3.2.9)

Note 1 to entry: A **Static_results_step** is a type of Fe_analysis_results_step that defines the state of node and element variables at the end of a static analysis step.

5.346.27
Tabular_representation
<application module: Finite_element_analysis_arm> *application object* (3.1.78) that is a type of *Analysis_report_representation* (5.346.2) that represents the tabular representation *entity* (3.2.9)

5.347 Finite_element_shape_arm

5.347.1

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Node_shape
<application module: Finite_element_shape_arm> *application object* (3.1.78) that is a type of *Shape_description_association* (5.41.4) that represents the node shape *entity* (3.2.9)

Note 1 to entry: A **Node_shape** is a type of Shape_description_association that is defined by the points of the nodes in an *Fea_model* (5.349.12).

5.347.2
Point_model
<application module: Finite_element_shape_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the point model *entity* (3.2.9)

Note 1 to entry: A **Point_model** is a type of Geometric_model that is composed of either points or vertices that are the defining points for the nodes of an *Fea_model* (5.349.12).

5.348 Finite_element_shape_mim

5.348.1
point_representation
<application module: Finite_element_shape_mim> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the point representation *entity* (3.2.9)

5.349 Finite_elements_arm

5.349.1
Curve_element
<application module: Finite_elements_arm> *application object* (3.1.78) that is a type of *Element* (5.349.6) that represents the curve element *entity* (3.2.9)

Note 1 to entry: A **Curve_element** is a type of Element that is an idealization of a portion of a part by a curve segment with a specified cross section.

5.349.2
Curve_property
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the curve property *entity* (3.2.9)

Note 1 to entry: A **Curve_property** is the association of material and geometric properties to a set of *Curve_element* (5.349.1) objects.

5.349.3
Curve_section_properties
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the curve section properties *entity* (3.2.9)

Note 1 to entry: A **Curve_section_properties** is the cross-sectional property information for a curve element.

5.349.4
Damping_matrix
<application module: Finite_elements_arm> *application object* (3.1.78) that is a type of *Matrix* (5.349.17) that represents the damping matrix *entity* (3.2.9)

5.349.5
Directionally_explicit_element
<application module: Finite_elements_arm> *application object* (3.1.78) that is a type of *Element* (5.349.6) that represents the directionally explicit element *entity* (3.2.9)

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5.349.6
Element
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the element *entity* (3.2.9)

Note 1 to entry: An **Element** is a basic building block of an *Fea_model* (5.349.12).

5.349.7
Element_description
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the element description *entity* (3.2.9)

Note 1 to entry: An **Element_description** is a description of the aspect of a product's shape that an element represents.

5.349.8
Element_property_geometric_relationship
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the element property geometric relationship *entity* (3.2.9)

Note 1 to entry: An **Element_property_geometric_relationship** is the association of an element property definition to a geometric shape representation.

5.349.9
Element_shape_aspect
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the element shape aspect *entity* (3.2.9)

Note 1 to entry: An **Element_shape_aspect** is an aspect of a finite element, such as an element edge, face, or volume.

5.349.10
Element_shape_relationship
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the element shape relationship *entity* (3.2.9)

Note 1 to entry: An **Element_shape_relationship** is the association of an aspect of a finite element (an edge, face, or volume) to a corresponding type of geometry.

5.349.11
Explicit_element
<application module: Finite_elements_arm> *application object* (3.1.78) that is a type of *Element* (5.349.6) that represents the explicit element *entity* (3.2.9)

5.349.12
Fea_model
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the fea model *entity* (3.2.9)

Note 1 to entry: An **Fea_model** is a collection of information that represents the finite element analysis of a product.

5.349.13
Fea_model_description
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the fea model description *entity* (3.2.9)

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Note 1 to entry: An **Fea_model_description** is the aspect of a product's shape that a finite element model represents.

5.349.14
Fea_group
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the fea group *entity* (3.2.9)

Note 1 to entry: An **Fea_group** is an aggregation of elements or nodes.

5.349.15
Fea_group_relationship
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the fea group relationship *entity* (3.2.9)

Note 1 to entry: An **Fea_group_relationship** is an association between *Fea_group* (5.349.14) objects.

5.349.16
Mass_matrix
<application module: Finite_elements_arm> *application object* (3.1.78) that is a type of *Matrix* (5.349.17) that represents the mass matrix *entity* (3.2.9)

5.349.17
Matrix
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the matrix *entity* (3.2.9)

Note 1 to entry: A **Matrix** is an explicit representation of the damping, mass, or stiffness information for a point or explicit element.

5.349.18
Nodal_results_coordinate_system
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the nodal results coordinate system *entity* (3.2.9)

Note 1 to entry: A **Nodal_results_coordinate_system** is the coordinate system for the node analysis variables in an *Fea_model* (5.349.12).

5.349.19
Node
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the node *entity* (3.2.9)

Note 1 to entry: A **Node** is a discretization point for the field variables of the *Fea_model* (5.349.12).

5.349.20
Node_description
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the node description *entity* (3.2.9)

Note 1 to entry: A **Node_description** is the aspect of a product's shape that a node represents.

5.349.21
Node_shape_relationship
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the node shape relationship *entity* (3.2.9)

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Note 1 to entry: A **Node_shape_relationship** is the association of the position of a *Node* (5.349.19) to any type of geometry.

5.349.22
Point_element
<application module: Finite_elements_arm> *application object* (3.1.78) that is a type of *Element* (5.349.6) that represents the point element *entity* (3.2.9)

Note 1 to entry: A **Point_element** is a type of Element that represents a single node explicit element.

5.349.23
Stiffness_matrix
<application module: Finite_elements_arm> *application object* (3.1.78) that is a type of *Matrix* (5.349.17) that represents the stiffness matrix *entity* (3.2.9)

Note 1 to entry: A **Stiffness_matrix** is a type of Matrix that is an explicit representation of stiffness at a node, between two nodes in a direction, or for many nodes.

5.349.24
Substructure_element
<application module: Finite_elements_arm> *application object* (3.1.78) that is a type of *Element* (5.349.6) that represents the substructure element *entity* (3.2.9)

Note 1 to entry: A **Substructure_element** is a type of Element that contains a finite element model that may be assembled into another finite element model.

5.349.25
Substructure_node_relationship
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the substructure node relationship *entity* (3.2.9)

Note 1 to entry: A **Substructure_node_relationship** is the relationship of a node in one substructure to a node in another substructure.

5.349.26
Surface_element
<application module: Finite_elements_arm> *application object* (3.1.78) that is a type of *Element* (5.349.6) that represents the surface element *entity* (3.2.9)

Note 1 to entry: A **Surface_element** is a type of Element that models a surface with a specified section (thickness).

5.349.27
Surface_property
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the surface property *entity* (3.2.9)

Note 1 to entry: A **Surface_property** is the material and section properties for a *Surface_element* (5.349.26).

5.349.28
Surface_thickness
<application module: Finite_elements_arm> *application object* (3.1.78) that represents the surface thickness *entity* (3.2.9)

Note 1 to entry: A **Surface_thickness** is the thickness of a *Surface_element* (5.349.26).

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5.349.29
Volume_element
<application module: Finite_elements_arm> *application object* (3.1.78) that is a type of *Element* (5.349.6) that represents the volume element *entity* (3.2.9)

Note 1 to entry: A **Volume_element** is a type of Element that models an elemental portion of continuum.

5.350 Mesh_connectivity_arm

5.350.1
Listed_real_data
<application module: Mesh_connectivity_arm> *application object* (3.1.78) that represents the listed real data *entity* (3.2.9)

Note 1 to entry: A **Listed_real_data** is a multi-dimensional array of real numbers.

5.350.2
Matched_mesh_connection
<application module: Mesh_connectivity_arm> *application object* (3.1.78) that is a type of *Mesh_connectivity* (5.350.3) that represents the matched mesh connection *entity* (3.2.9)

Note 1 to entry: A **Matched_mesh_connection** is a type of Mesh_connectivity that contains connectivity information for a mesh interface patch that is abutting with 1-to-1 matching between adjacent structured mesh indices (also referred to as C0 connectivity).

5.350.3
Mesh_connectivity
<application module: Mesh_connectivity_arm> *application object* (3.1.78) that represents the mesh connectivity *entity* (3.2.9)

Note 1 to entry: A **Mesh_connectivity** is the connectivity of a mesh interface.

5.350.4
Mesh_overset_hole
<application module: Mesh_connectivity_arm> *application object* (3.1.78) that is a type of *Mismatched_mesh_connection* (5.350.6) that represents the mesh overset hole *entity* (3.2.9)

Note 1 to entry: A **Mesh_overset_hole** is a type of Mismatched_mesh_connection that is a hole, or holes, in an overset mesh.

5.350.5
Mismatched_donor_mesh
<application module: Mesh_connectivity_arm> *application object* (3.1.78) that represents the mismatched donor mesh *entity* (3.2.9)

Note 1 to entry: A **Mismatched_donor_mesh** is a mesh that acts as a donor for a *Mismatched_mesh_region* (5.350.7).

5.350.6
Mismatched_mesh_connection
<application module: Mesh_connectivity_arm> *application object* (3.1.78) that is a type of *Mesh_connectivity* (5.350.3) that represents the mismatched mesh connection *entity* (3.2.9)

Note 1 to entry: A **Mismatched_mesh_connection** is a type of Mesh_connectivity that contains conectivity information for generalized mesh interfaces.

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5.350.7
Mismatched_mesh_region
<application module: Mesh_connectivity_arm> *application object* (3.1.78) that is a type of *Mismatched_mesh_connection* (5.350.6) that represents the mismatched mesh region *entity* (3.2.9)

Note 1 to entry: A **Mismatched_mesh_region** is a type of Mismatched_mesh_connection that is abutting or overset.

5.350.8
Multiple_mesh_block
<application module: Mesh_connectivity_arm> *application object* (3.1.78) that represents the multiple mesh block *entity* (3.2.9)

Note 1 to entry: A **Multiple_mesh_block** is a grouping of connected meshes.

5.350.9
Property_distribution_description
<application module: Mesh_connectivity_arm> *application object* (3.1.78) that represents the property distribution description *entity* (3.2.9)

5.350.10
Structured_donor_mesh
<application module: Mesh_connectivity_arm> *application object* (3.1.78) that is a type of *Mismatched_donor_mesh* (5.350.5) that represents the structured donor mesh *entity* (3.2.9)

Note 1 to entry: A **Structured_donor_mesh** is a type of Mismatched_donor_mesh that is structured.

5.350.11
Unstructured_donor_mesh
<application module: Mesh_connectivity_arm> *application object* (3.1.78) that is a type of *Mismatched_donor_mesh* (5.350.5) that represents the unstructured donor mesh *entity* (3.2.9)

Note 1 to entry: An **Unstructured_donor_mesh** is a type of *Mesh_connectivity* (5.350.3) that is unstructured.

5.351 Mesh_function_arm

5.351.1
Mesh_function
<application module: Mesh_function_arm> *application object* (3.1.78) that represents the mesh function *entity* (3.2.9)

Note 1 to entry: A **Mesh_function** is an application defined function that:

— has a domain that consists of a table of real tuple spaces;

— has a set of control values, such that the function within each cell is determined by a subset of the control values and basis for that cell;

— interpolates or extrapolates separately within each cell from the control values assigned to that cell.

5.351.2
Mesh_function_basis
<application module: Mesh_function_arm> *application object* (3.1.78) that represents the mesh function basis *entity* (3.2.9)

Note 1 to entry: A **Mesh_function_basis** is an application defined function that has:

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— a domain that is a real tuple space; and

— a range that is a space of table functions.

5.352 Mesh_topology_arm

5.352.1
Array_based_unstructured_mesh
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *Unstructured_mesh* (5.352.20) that represents the array based unstructured mesh *entity* (3.2.9)

Note 1 to entry: An **Array_based_unstructured_mesh** is a type of Unstructured_mesh that is a representation of an unstructured mesh designed to minimise the amount of data by not requiring explicit identification of the vertices of the cells in the mesh.

5.352.2
Array_based_unstructured_mesh_and_vertices
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *Array_based_unstructured_mesh* (5.352.1) that represents the array based unstructured mesh and vertices *entity* (3.2.9)

Note 1 to entry: An **Array_based_unstructured_mesh_and_vertices** is a type of Array_based_unstructured_mesh where the vertices of the mesh are explicitly identified and ordered.

5.352.3
Cell
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *Detailed_topological_model_element* (5.11.5) that represents the cell *entity* (3.2.9)

Note 1 to entry: A **Cell** is a type of Detailed_topological_model_element that is a manifold with a boundary.

5.352.4
Cell_of_structured_mesh
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *Cell* (5.352.3) that represents the cell of structured mesh *entity* (3.2.9)

Note 1 to entry: A **Cell_of_structured_mesh** is a type of Cell that is an identified cell of a structured mesh.

5.352.5
Cell_with_explicit_boundary
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *Cell* (5.352.3) that represents the cell with explicit boundary *entity* (3.2.9)

Note 1 to entry: A **Cell_with_explicit_boundary** is a type of Cell that has a specified boundary.

5.352.6
Explicit_unstructured_mesh
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *Unstructured_mesh* (5.352.20) that represents the explicit unstructured mesh *entity* (3.2.9)

Note 1 to entry: An **Explicit_unstructured_mesh** is a type of Unstructured_mesh that is a representation of an unstructured mesh that is similar, but not entirely identical to, that specified in ISO 10303-104.

5.352.7

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Extraction_of_structured_submesh
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *Extraction_of_submesh* (5.352.8) that represents the extraction of structured submesh *entity* (3.2.9)

Note 1 to entry: An **Extraction_of_structured_submesh** is a type of Extraction_of_submesh and is a relationship between two *Structured_mesh* (5.352.17) that indicates one is part of the other.

5.352.8
Extraction_of_submesh
<application module: Mesh_topology_arm> *application object* (3.1.78) that represents the extraction of submesh *entity* (3.2.9)

Note 1 to entry: An **Extraction_of_submesh** is a relationship between a *Mesh* (5.352.13) and a *Submesh* (5.352.19) that defines the Submesh as being part of the Mesh.

5.352.9
Extraction_of_submesh_by_cells
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *Extraction_of_submesh* (5.352.8) that represents the extraction of submesh by cells *entity* (3.2.9)

Note 1 to entry: An **Extraction_of_submesh_by_cells** is a type of Extraction_of_submesh that extracts a submesh by listing the cells.

5.352.10
Extraction_of_submesh_by_vertices
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *Extraction_of_submesh* (5.352.8) that represents the extraction of submesh by vertices *entity* (3.2.9)

Note 1 to entry: An **Extraction_of_submesh_by_vertices** is a type of Extraction_of_submesh that extracts a submesh by listing the vertices.

5.352.11
Indices_list
<application module: Mesh_topology_arm> *application object* (3.1.78) that represents the indices list *entity* (3.2.9)

Note 1 to entry: An **Indices_list** is a list of indices into a multi-dimensional array.

5.352.12
Indices_range
<application module: Mesh_topology_arm> *application object* (3.1.78) that represents the indices range *entity* (3.2.9)

Note 1 to entry: An **Indices_range** is the beginning and ending indices of a subrange in a multi-dimensional array.

5.352.13
Mesh
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *Detailed_topological_model_element* (5.11.5) that represents the mesh *entity* (3.2.9)

Note 1 to entry: A **Mesh** is a type of Detailed_topological_model_element consisting of one or more cells.

5.352.14

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Mesh_derived_maths_space
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *Maths_space* (5.93.1) that represents the mesh derived maths space *entity* (3.2.9)

Note 1 to entry: A **Mesh_derived_maths_space** is a type of Maths_space that associates data values and a *Mesh* (5.352.13).

5.352.15
Product_of_mesh
<application module: Mesh_topology_arm> *application object* (3.1.78) that represents the product of mesh *entity* (3.2.9)

Note 1 to entry: A **Product_of_mesh** is a relationship that is between: two operands that are a 1-dimensional *Mesh* (5.352.13) and an *n*-dimensional Mesh, and a product that is an (*n* + 1)-dimensional Mesh, which indicates the (*n* + 1)-dimensional Mesh is the Cartesian product of the operands.

5.352.16
Rind
<application module: Mesh_topology_arm> *application object* (3.1.78) that represents the rind *entity* (3.2.9)

Note 1 to entry: A **Rind** is the number of rind planes associated with a structured mesh.

5.352.17
Structured_mesh
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *mesh* (4.99.13) that represents the structured mesh *entity* (3.2.9)

Note 1 to entry: A **Structured_mesh** is a type of *Mesh* (5.352.13) that has a regular topology.

5.352.18
Structured_mesh_with_rind
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *Structured_mesh* (5.352.17) that represents the structured mesh with rind *entity* (3.2.9)

Note 1 to entry: A **Structured_mesh_with_rind** is a type of Structured_mesh with specified rind planes.

5.352.19
Submesh
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *Mesh* (5.352.13) that represents the submesh *entity* (3.2.9)

Note 1 to entry: A **Submesh** is a type of Mesh that is part of another Mesh.

5.352.20
Unstructured_mesh
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *Mesh* (5.352.13) that represents the unstructured mesh *entity* (3.2.9)

5.352.21
Vertex_defined_cell
<application module: Mesh_topology_arm> *application object* (3.1.78) that is a type of *Cell* (5.352.3) that represents the vertex defined cell *entity* (3.2.9)

Note 1 to entry: A **Vertex_defined_cell** is a type of Cell that is defined by its vertices.

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5.353 Product_analysis_arm

5.353.1
Behavioural_decomposition_of_temporal_spatial_domain
<application module: Product_analysis_arm> *application object* (3.1.78) that represents the behavioural decomposition of temporal spatial domain *entity* (3.2.9)

Note 1 to entry: A **Behavioural_decomposition_of_temporal_spatial_domain** is a decomposition of a *Temporal_spatial_domain* (5.353.8) into specifications for different behaviours.

5.353.2
Domain_property
<application module: Product_analysis_arm> *application object* (3.1.78) that represents the domain property *entity* (3.2.9)

Note 1 to entry: A **Domain_property** is a specification of a property within a *Temporal_spatial_domain* (5.353.8).

5.353.3
Physical_action_domain
<application module: Product_analysis_arm> *application object* (3.1.78) that is a type of *Temporal_spatial_domain* (5.353.8) that represents the physical action domain *entity* (3.2.9)

Note 1 to entry: A **Physical_action_domain** is a type of Temporal_spatial_domain that has a finite time dimension.

5.353.4
Physical_product_domain
<application module: Product_analysis_arm> *application object* (3.1.78) that is a type of *Temporal_spatial_domain* (5.353.8) that represents the physical product domain *entity* (3.2.9)

Note 1 to entry: A **Physical_product_domain** is a type of Temporal_spatial_domain that has an indefinite time dimension and that performs a number of activities during its life.

5.353.5
Physical_state_domain
<application module: Product_analysis_arm> *application object* (3.1.78) that is a type of *Temporal_spatial_domain* (5.353.8) that represents the physical state domain *entity* (3.2.9)

Note 1 to entry: A **Physical_state_domain** is a type of Temporal_spatial_domain that has no time dimension.

5.353.6
Spatial_decomposition_of_temporal_spatial_domain
<application module: Product_analysis_arm> *application object* (3.1.78) that represents the spatial decomposition of temporal spatial domain *entity* (3.2.9)

Note 1 to entry: A **Spatial_decomposition_of_temporal_spatial_domain** is a decomposition of *Temporal_spatial_domain* (5.353.8) into specifications for different spatial regions.

5.353.7
Temporal_decomposition_of_action_domain
<application module: Product_analysis_arm> *application object* (3.1.78) that represents the temporal decomposition of action domain *entity* (3.2.9)

Note 1 to entry: A **Temporal_decomposition_of_action_domain** is a decomposition of a *Physical_action_domain* (5.353.3) into specifications for different times.

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5.353.8
Temporal_spatial_domain
<application module: Product_analysis_arm> *application object* (3.1.78) that represents the temporal spatial domain *entity* (3.2.9)

Note 1 to entry: A **Temporal_spatial_domain** is a specification of a quantity of space, time or both, which may or may not contain matter.

5.354 Collection_identification_and_version_arm

5.354.1
Collection
<application module: Collection_identification_and_version_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the collection *entity* (3.2.9)

Note 1 to entry: An **Collection** is a type of Product that identifies a set of data.

5.354.2
Collection_assignment
<application module: Collection_identification_and_version_arm> *application object* (3.1.78) that represents the collection assignment *entity* (3.2.9)

Note 1 to entry: An **Collection_assignment** is an association of an *Collection_view_definition* (5.354.8) with the object to which the collection has relevance.

5.354.3
Collection_membership
<application module: Collection_identification_and_version_arm> *application object* (3.1.78) that represents the collection membership *entity* (3.2.9)

Note 1 to entry: An **Collection_membership** is an association of an *Collection_view_definition* (5.354.8) with an object that represents a member of the collection.

5.354.4
Collection_relationship
<application module: Collection_identification_and_version_arm> *application object* (3.1.78) that is a type of *Product_relationship* (5.36.1) that represents the collection relationship *entity* (3.2.9)

Note 1 to entry: An **Collection_relationship** is a type of Product_relationship that represents an association between two *Collection* (5.354.1) objects.

5.354.5
Collection_version
<application module: Collection_identification_and_version_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the collection version *entity* (3.2.9)

Note 1 to entry: An **Collection_version** is a type of Product_version that represents a revision of an *Collection* (5.354.1).

5.354.6
Collection_version_relationship
<application module: Collection_identification_and_version_arm> *application object* (3.1.78) that is a type of *Product_version_relationship* (5.31.1) that represents the collection version relationship *entity* (3.2.9)

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Note 1 to entry: An **Collection_version_relationship** is a type of Product_version_relationship that represents an association between two *Collection_version* (5.354.5) objects.

5.354.7
Collection_version_sequence_relationship
<application module: Collection_identification_and_version_arm> *application object* (3.1.78) that is a type of *Collection_version_relationship* (5.354.6) that represents the collection version sequence relationship *entity* (3.2.9)

Note 1 to entry: An **Collection_version_sequence_relationship** is a type of Collection_version_relationship that represents a sequential association between two *Collection_version* (5.354.5) objects.

5.354.8
Collection_view_definition
<application module: Collection_identification_and_version_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the collection view definition *entity* (3.2.9)

Note 1 to entry: An **Collection_view_definition** is a type of Product_view_definition that represents a characterization of an *Collection_version* (5.354.5) relevant in one or more application domains and for one or more life cycle stages.

5.355 Collection_identification_and_version_mim

5.355.1
collection
<application module: Collection_identification_and_version_mim> *entity data type* (3.2.10) that is a type of *product* (4.18.4) that represents the collection *entity* (3.2.9)

Note 1 to entry: An **collection** is a type of product that identifies a set of data.

5.355.2
collection_assignment
<application module: Collection_identification_and_version_mim> *entity data type* (3.2.10) that is a type of *applied_group_assignment* (5.114.1) that represents the collection assignment *entity* (3.2.9)

Note 1 to entry: An **collection_assignment** is a type of applied_group_assignment that is an association of an *collection_view_definition* (5.355.8) with the object to which the information collection has relevance.

5.355.3
collection_membership
<application module: Collection_identification_and_version_mim> *entity data type* (3.2.10) that is a type of *applied_group_assignment* (5.114.1) that represents the collection membership *entity* (3.2.9)

Note 1 to entry: A **collection_membership** is a type of applied_group_assignment that is an association of an *collection_view_definition* (5.355.8) with an object that represents a member of the information collection.

5.355.4
collection_relationship
<application module: Collection_identification_and_version_mim> *entity data type* (3.2.10) that is a type of *product_relationship* (4.18.22) that represents the collection relationship *entity* (3.2.9)

Note 1 to entry: An **collection_relationship** is a type of product_relationship that represents an association between two *collection* (5.355.1) objects.

5.355.5

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collection_version
<application module: Collection_identification_and_version_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) that represents the collection version *entity* (3.2.9)

Note 1 to entry: A **collection_version** is a type of product_definition_formation that represents a revision of an *collection* (5.355.1).

5.355.6
collection_version_relationship
<application module: Collection_identification_and_version_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the collection version relationship *entity* (3.2.9)

Note 1 to entry: An **collection_version_relationship** is a type of product_definition_formation_relationship that represents an association between two *collection_version* (5.355.5) objects.

5.355.7
collection_version_sequence_relationship
<application module: Collection_identification_and_version_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the collection version sequence relationship *entity* (3.2.9)

Note 1 to entry: An **collection_version_sequence_relationship** is a type of product_definition_formation_relationship that represents a sequential association between two *collection_version* (5.355.5) objects.

5.355.8
collection_view_definition
<application module: Collection_identification_and_version_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the collection view definition *entity* (3.2.9)

Note 1 to entry: A **collection_view_definition** is a type of product_definition that represents a characterization of an *collection_version* (5.355.5) relevant in one or more application domains and for one or more life cycle stages.

5.356 Conditional_effectivity_arm

5.356.1
Conditional_effectivity
<application module: Conditional_effectivity_arm> *application object* (3.1.78) that is a type of *Effectivity* (5.70.2) that represents the conditional effectivity *entity* (3.2.9)

Note 1 to entry: A **Conditional_effectivity** is a type of Effectivity for which the domain of applicability is defined by an explicit condition.

5.356.2
Conditional_configuration
<application module: Conditional_effectivity_arm> *application object* (3.1.78) that is a type of *Conditional_effectivity* (5.356.1) that represents the conditional configuration *entity* (3.2.9)

Note 1 to entry: A **Conditional_configuration** is a type of Conditional_effectivity and represents an association of a *Class_condition_association* (5.96.2) or *Class_specification_association* (5.96.4) object with a design or process to define a valid usage of it in the context of a certain *Product_class* (5.96.5).

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5.357 Identification_relationship_arm

5.357.1
Identification_relationship
<application module: Identification_relationship_arm> *application object* (3.1.78) that represents the identification relationship *entity* (3.2.9)

Note 1 to entry: A **Identification_relationship** is a relationship between a pair of *Identification_assignment* (5.32.1) instances.

5.358 Property_as_definition_arm

5.358.1
Single_property_is_definition
<application module: Property_as_definition_arm> *application object* (3.1.78) that is a type of *Assigned_property* (5.40.2) that represents the single property is definition *entity* (3.2.9)

Note 1 to entry: A **Single_property_is_definition** is a type of Assigned_property that identifies this property as being the *Product_view_definition* (5.30.1) itself.

5.359 Property_as_definition_mim

5.359.1
single_property_is_definition
<application module: Property_as_definition_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) that represents the single property is definition *entity* (3.2.9)

Note 1 to entry: A **single_property_is_definition** is a type of property_definition that identifies this property as being the property_definition itself.

5.360 Product_environment_definition_arm

5.360.1
Environment_assignment
<application module: Product_environment_definition_arm> *application object* (3.1.78) that represents the environment assignment *entity* (3.2.9)

Note 1 to entry: A **Environment_assignment** is an assignment of a product to the environment in which it operates or is supported.

5.360.2
Environment_definition
<application module: Product_environment_definition_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the environment definition *entity* (3.2.9)

Note 1 to entry: An **Environment_definition** is a type of Product that is used to identify the definition of typical environment in which a product is to be, has been or is planned to be deployed in, operated in, or supported in.

5.360.3
Environment_definition_version
<application module: Product_environment_definition_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the environment definition version *entity* (3.2.9)

Note 1 to entry: A **Environment_definition_version** is a type of Product_version that identifies a particular version of an *Environment_definition* (5.360.2).

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5.360.4
Environment_definition_view
<application module: Product_environment_definition_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the environment definition view *entity* (3.2.9)

Note 1 to entry: A **Environment_definition_view** is a type of Product_view_definition that provides a view of a version of an environment definition relevant for one or more application domains.

5.360.5
Environment_view_definition_relationship
<application module: Product_environment_definition_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the environment view definition relationship *entity* (3.2.9)

Note 1 to entry: A **Environment_view_definition_relationship** is a type of View_definition_relationship that represents an association between two *Environment_definition_view* (5.360.4) objects.

5.361 Product_environment_definition_mim

5.361.1
environment_assignment
<application module: Product_environment_definition_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the environment assignment *entity* (3.2.9)

Note 1 to entry: A **environment_assignment** is a type of group that assigns a product to the environment in which it operates or it is supported.

5.361.2
environment_definition
<application module: Product_environment_definition_mim> *entity data type* (3.2.10) that is a type of *product* (4.18.4) that represents the environment definition *entity* (3.2.9)

Note 1 to entry: A **environment_definition** is a type of product that is used to identify the definition of typical environment in which a product is to be, has been or is planned to be deployed in, operated in, or supported in.

5.361.3
environment_definition_version
<application module: Product_environment_definition_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) that represents the environment definition version *entity* (3.2.9)

Note 1 to entry: A **environment_definition_version** is a type of product_definition_formation that identifies a particular version of an *environment_definition* (5.361.2).

5.361.4
environment_definition_view
<application module: Product_environment_definition_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_definition* (4.18.7) that represents the environment definition view *entity* (3.2.9)

Note 1 to entry: A **environment_definition_view** is a type of product_definition and a type of characterized_object that provides a view of a version of an environment definition relevant for one or more application domains.

5.361.5

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environment_view_definition_relationship
<application module: Product_environment_definition_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the environment view definition relationship *entity* (3.2.9)

Note 1 to entry: A **environment_view_definition_relationship** is a type of product_definition_relationship that represents an association between two *environment_definition_view* (5.361.4) objects.

5.362 Product_environment_observed_arm

5.362.1
Observed_environment
<application module: Product_environment_observed_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the observed environment *entity* (3.2.9)

Note 1 to entry: An **Observed_environment** is a type of Product that represents a record of observations about the environment in which a product is or has been operating.

5.362.2
Observed_environment_assignment
<application module: Product_environment_observed_arm> *application object* (3.1.78) that represents the observed environment assignment *entity* (3.2.9)

Note 1 to entry: An **Observed_environment_assignment** is an assignment of a product to the environment in which is or has operated.

5.362.3
Observed_environment_to_definition
<application module: Product_environment_observed_arm> *application object* (3.1.78) that represents the observed environment to definition *entity* (3.2.9)

Note 1 to entry: An **Observed_environment_to_definition** is a relationship between a record of a set of observations about an environment, represented by an *Observed_environment* (5.362.1), and a typical environment, represented by an *Environment_definition* (5.360.2).

5.362.4
Observed_environment_to_definition_version
<application module: Product_environment_observed_arm> *application object* (3.1.78) that represents the observed environment to definition version *entity* (3.2.9)

Note 1 to entry: An **Observed_environment_to_definition_version** is a relationship between a version of the record of a set of observations about an environment, represented by an *Observed_environment_version* (5.362.6), and a version of the typical environment, represented by *Environment_definition_version* (5.360.3).

5.362.5
Observed_environment_to_definition_view
<application module: Product_environment_observed_arm> *application object* (3.1.78) that represents the observed environment to definition view *entity* (3.2.9)

Note 1 to entry: An **Observed_environment_to_definition_view** is a relationship between a view of the record of a set of observations about an environment, represented by an *Observed_environment_view* (5.362.7), and a view of the typical environment, represented by *Environment_definition_view* (5.360.4).

5.362.6

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Observed_environment_version
<application module: Product_environment_observed_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the observed environment version *entity* (3.2.9)

Note 1 to entry: An **Observed_environment_version** is a type of Product_version that identifies a particular version of an *Observed_environment* (5.362.1).

5.362.7
Observed_environment_view
<application module: Product_environment_observed_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the observed environment view *entity* (3.2.9)

Note 1 to entry: An **Observed_environment_view** is a type of Product_view_definition that provides a view of a version of an observed environment relevant for one or more application domains.

5.362.8
Observed_environment_view_definition_relationship
<application module: Product_environment_observed_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the observed environment view definition relationship *entity* (3.2.9)

Note 1 to entry: An **Observed_environment_view_definition_relationship** is a type of View_definition_relationship that represents an association between two *Observed_environment_view* (5.362.7) objects.

5.363 Product_environment_observed_mim

5.363.1
observed_environment
<application module: Product_environment_observed_mim> *entity data type* (3.2.10) that is a type of *product* (4.18.4) that represents the observed environment *entity* (3.2.9)

Note 1 to entry: A **observed_environment** is a type of product that represents a record of observations about the environment in which a product is or has been operating.

5.363.2
observed_environment_assignment
<application module: Product_environment_observed_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the observed environment assignment *entity* (3.2.9)

Note 1 to entry: A **observed_environment_assignment** is a type of group that assigns a product to the environment in which is or has operated.

5.363.3
observed_environment_to_definition
<application module: Product_environment_observed_mim> *entity data type* (3.2.10) that is a type of *product_relationship* (4.18.22) that represents the observed environment to definition *entity* (3.2.9)

Note 1 to entry: A **observed_environment_to_definition** is a type of product_relationship that relates an *observed_environment* (5.363.1) to an *environment_definition* (5.361.2).

5.363.4
observed_environment_to_definition_version
<application module: Product_environment_observed_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation_relationship* (4.18.13) that represents the observed environment to definition version *entity* (3.2.9)

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Note 1 to entry: A **observed_environment_to_definition_version** is a type of product_definition_formation_relationship that relates an *environment_definition_version* (5.361.3) to an *observed_environment_version* (5.363.6).

5.363.5
observed_environment_to_definition_view

<application module: Product_environment_observed_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the observed environment to definition view *entity* (3.2.9)

Note 1 to entry: A **observed_environment_to_definition_view** is a type of product_definition_relationship that relates an *environment_definition_view* (5.361.4) to an *observed_environment_view* (5.363.7).

5.363.6
observed_environment_version

<application module: Product_environment_observed_mim> *entity data type* (3.2.10) that is a type of *product_definition_formation* (4.18.11) that represents the observed environment version *entity* (3.2.9)

Note 1 to entry: A **observed_environment_version** is a type of product_definition_formation that represents a version of the record of observations about an environment.

5.363.7
observed_environment_view

<application module: Product_environment_observed_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_definition* (4.18.7) that represents the observed environment view *entity* (3.2.9)

Note 1 to entry: A **observed_environment_view** is a type of product_definition and a type of characterized_object that represents a view of the record of observations about an environment.

5.363.8
observed_environment_view_definition_relationship

<application module: Product_environment_observed_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the observed environment view definition relationship *entity* (3.2.9)

Note 1 to entry: A **observed_environment_view_definition_relationship** is a type of product_definition_relationship that represents an association between two *observed_environment_view* (5.363.7) objects.

5.364 Same_as_external_item_arm

5.364.1
Same_as_external_item

<application module: Same_as_external_item_arm> *application object* (3.1.78) that represents the same as external item *entity* (3.2.9)

Note 1 to entry: A **Same_as_external_item** is a statement that one or more data instances are the same as an item external to the dataset.

5.365 Same_as_external_item_mim

5.365.1

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same_as_external_item_assignment
<application module: Same_as_external_item_mim> *entity data type* (3.2.10) that is a type of *external_identification_assignment* (4.15.29) that represents the same as external item assignment *entity* (3.2.9)

Note 1 to entry: An **same_as_external_item_assignment** is a type of external_identification_assignment that is applied to product data.

5.366 Geometric_model_relationship_arm

5.366.1
Definitional_representation_relationship
<application module: Geometric_model_relationship_arm> *application object* (3.1.78) that is a type of *Representation_relationship* (5.12.8) that represents the definitional representation relationship *entity* (3.2.9)

5.366.2
Geometric_model_relationship
<application module: Geometric_model_relationship_arm> *application object* (3.1.78) that is a type of *Representation_relationship* (5.12.8) that represents the geometric model relationship *entity* (3.2.9)

5.367 Geometric_model_2d_3d_relationship_arm

5.367.1
Axis_placement_2d_3d_mapping
<application module: Geometric_model_2d_3d_relationship_arm> *application object* (3.1.78) that represents the axis placement 2d 3d mapping *entity* (3.2.9)

Note 1 to entry: An **Axis_placement_2d_3d_mapping** is a geometric transformation defined by a source *Axis_placement_2d* (5.10.2) and a target *Axis_placement_3d* (5.10.3).

5.367.2
Coordinated_geometric_relationship_with_2d_3d_placement_transformation
<application module: Geometric_model_2d_3d_relationship_arm> *application object* (3.1.78) that is a type of *Geometric_model_relationship_with_transformation* (5.39.6) that represents the coordinated geometric relationship with 2d 3d placement transformation *entity* (3.2.9)

5.368 Geometric_model_2d_3d_relationship_mim

5.368.1
coordinated_geometric_relationship_with_2d_3d_placement_transformation
<application module: Geometric_model_2d_3d_relationship_mim> *entity data type* (3.2.10) that is a type of *shape_representation_relationship* (4.20.10) and *representation_relationship_with_transformation* (4.41.21) that represents the coordinated geometric relationship with 2d 3d placement transformation *entity* (3.2.9)

Note 1 to entry: A **coordinated_geometric_relationship_with_2d_3d_placement_transformation** is a type of shape_representation_relationship and a type of representation_relationship_with_transformation that implements the ARM concept of *Coordinated_geometric_relationship_with_2d_3d_placement_transformation* (5.367.2).

5.368.2
axis_placement_2d_3d_mapping
<application module: Geometric_model_2d_3d_relationship_mim> *entity data type* (3.2.10) that is a type of *item_defined_transformation* (4.41.10) that represents the axis placement 2d 3d mapping *entity* (3.2.9)

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Note 1 to entry: An **axis_placement_2d_3d_mapping** is a type of item_defined_transformation that implements the ARM concept of *Axis_placement_2d_3d_mapping* (5.367.1).

5.369 Project_management_mim

5.369.1
prjm_characterizable_action_directive

<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *action_directive* (4.1.2) and *characterized_object* (4.19.1) that represents the prjm characterizable action directive *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_action_directive** is a type of characterized_object and action_directive

5.369.2
prjm_characterizable_ascribable_state

<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *ascribable_state* (4.121.1) and *characterized_object* (4.19.1) that represents the prjm characterizable ascribable state *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_ascribable_state** is a type of characterized_object and ascribable_state

5.369.3
prjm_characterizable_configuration_item

<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *configuration_item* (4.23.4) that represents the prjm characterizable configuration item *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_configuration_item** is a type of characterized_object and configuration_item

5.369.4
prjm_characterizable_event_occurrence

<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *event_occurrence* (4.7.7) that represents the prjm characterizable event occurrence *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_event_occurrence** is a type of characterized_object and event_occurrence

5.369.5
prjm_characterizable_general_property_relationship

<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *general_property_relationship* (4.19.7) that represents the prjm characterizable general property relationship *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_general_property_relationship** is a type of characterized_object and general_property_relationship

5.369.6
prjm_characterizable_group

<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *group* (4.12.1) that represents the prjm characterizable group *entity* (3.2.9)

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Note 1 to entry: A **prjm_characterizable_group** is a type of characterized_object and group

5.369.7
prjm_characterizable_information_usage_right
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *information_usage_right* (5.213.3) that represents the prjm characterizable information usage right *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_information_usage_right** is a type of characterized_object and information_usage_right

5.369.8
prjm_characterizable_product
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product* (4.18.4) that represents the prjm characterizable product *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_product** is a type of characterized_object and product

5.369.9
prjm_characterizable_product_concept
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_concept* (4.24.5) that represents the prjm characterizable product concept *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_product_concept** is a type of characterized_object and product_concept

5.369.10
prjm_characterizable_product_definition_formation
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_definition_formation* (4.18.11) that represents the prjm characterizable product definition formation *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_product_definition_formation** is a type of characterized_object and product_definition_formation

5.369.11
prjm_characterizable_product_definition_formation_relationship
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_definition_formation_relationship* (4.18.13) that represents the prjm characterizable product definition formation relationship *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_product_definition_formation_relationship** is a type of characterized_object and product_definition_formation_relationship

5.369.12
prjm_characterizable_property_definition_representation
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *property_definition_representation* (4.20.6) that represents the prjm characterizable property definition representation *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_property_definition_representation** is a type of characterized_object and property_definition_representation

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5.369.13
prjm_characterizable_representation
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *representation* (4.41.13) that represents the prjm characterizable representation *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_representation** is a type of characterized_object and representation

5.369.14
prjm_characterizable_representation_context
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *representation_context* (4.41.14) that represents the prjm characterizable representation context *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_representation_context** is a type of characterized_object and representation_context

5.369.15
prjm_characterizable_representation_item
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *representation_item* (4.41.16) that represents the prjm characterizable representation item *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_representation_item** is a type of characterized_object and representation_item

5.369.16
prjm_characterizable_security_classification
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *security_classification* (4.22.1) that represents the prjm characterizable security classification *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_security_classification** is a type of characterized_object and security_classification

5.369.17
prjm_characterizable_state_observed
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_observed* (4.121.5) that represents the prjm characterizable state observed *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_state_observed** is a type of characterized_object and state_observed

5.369.18
prjm_characterizable_state_observed_assignment
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_observed_assignment* (4.121.6) that represents the prjm characterizable state observed assignment *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_state_observed_assignment** is a type of characterized_object and state_observed_assignment

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5.369.19
prjm_characterizable_state_observed_relationship
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_observed_relationship* (4.121.7) that represents the prjm characterizable state observed relationship *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_state_observed_relationship** is a type of characterized_object and state_observed_relationship

5.369.20
prjm_characterizable_state_type
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_type* (4.122.1) that represents the prjm characterizable state type *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_state_type** is a type of characterized_object and state_type

5.369.21
prjm_characterizable_state_type_assignment
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_type_assignment* (4.122.2) that represents the prjm characterizable state type assignment *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_state_type_assignment** is a type of characterized_object and state_type_assignment

5.369.22
prjm_characterizable_state_type_relationship
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_type_relationship* (4.122.3) that represents the prjm characterizable state type relationship *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_state_type_relationship** is a type of characterized_object and state_type_relationship

5.369.23
prjm_characterizable_task_objective
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *task_objective* (5.246.8) that represents the prjm characterizable task objective *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_task_objective** is a type of characterized_object and task_objective

5.369.24
prjm_characterizable_versioned_action_request
<application module: Project_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *versioned_action_request* (4.1.15) that represents the prjm characterizable versioned action request *entity* (3.2.9)

Note 1 to entry: A **prjm_characterizable_versioned_action_request** is a type of characterized_object and versioned_action_request

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5.370 Project_management_resource_information_mim

5.370.1
pmri_characterizable_applied_document_reference
<application module: Project_management_resource_information_mim> *entity data type* (3.2.10) that is a type of *applied_document_reference* (5.121.1) and *characterized_object* (4.19.1) that represents the pmri characterizable applied document reference *entity* (3.2.9)

Note 1 to entry: A **pmri_characterizable_applied_document_reference** is a type of characterized_object and applied_document_reference

5.370.2
pmri_characterizable_applied_document_usage_constraint_assignment
<application module: Project_management_resource_information_mim> *entity data type* (3.2.10) that is a type of *applied_document_usage_constraint_assignment* (5.121.2) and *characterized_object* (4.19.1) that represents the pmri characterizable applied document usage constraint assignment *entity* (3.2.9)

Note 1 to entry: A **pmri_characterizable_applied_document_usage_constraint_assignment** is a type of characterized_object and applied_document_usage_constraint_assignment

5.370.3
pmri_characterizable_applied_location_assignment
<application module: Project_management_resource_information_mim> *entity data type* (3.2.10) that is a type of *applied_location_assignment* (5.266.1) and *characterized_object* (4.19.1) that represents the pmri characterizable applied location assignment *entity* (3.2.9)

Note 1 to entry: A **pmri_characterizable_applied_location_assignment** is a type of characterized_object and applied_location_assignment

5.370.4
pmri_characterizable_applied_organization_assignment
<application module: Project_management_resource_information_mim> *entity data type* (3.2.10) that is a type of *applied_organization_assignment* (5.22.1) and *characterized_object* (4.19.1) that represents the pmri characterizable applied organization assignment *entity* (3.2.9)

Note 1 to entry: A **pmri_characterizable_applied_organization_assignment** is a type of characterized_object and applied_organization_assignment

5.370.5
pmri_characterizable_applied_person_and_organization_assignment
<application module: Project_management_resource_information_mim> *entity data type* (3.2.10) that is a type of *applied_person_and_organization_assignment* (5.22.2) and *characterized_object* (4.19.1) that represents the pmri characterizable applied person and organization assignment *entity* (3.2.9)

Note 1 to entry: A **pmri_characterizable_applied_person_and_organization_assignment** is a type of characterized_object and applied_person_and_organization_assignment

5.370.6
pmri_characterizable_organizational_project
<application module: Project_management_resource_information_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *organizational_project* (4.17.8) that represents the pmri characterizable organizational project *entity* (3.2.9)

Note 1 to entry: A **pmri_characterizable_organizational_project** is a type of characterized_object and organizational_project

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5.371 Organization_structure_mim

5.371.1
os_characterizable_address
<application module: Organization_structure_mim> *entity data type* (3.2.10) that is a type of *address* (4.17.1) and *characterized_object* (4.19.1) that represents the os characterizable address *entity* (3.2.9)

Note 1 to entry: A **os_characterizable_address** is a type of characterized_object and address.

5.371.2
os_characterizable_person
<application module: Organization_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *person* (4.17.10) that represents the os characterizable person *entity* (3.2.9)

Note 1 to entry: A **os_characterizable_person** is a type of characterized_object and person

5.371.3
os_characterizable_person_and_organization
<application module: Organization_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *person_and_organization* (4.17.11) that represents the os characterizable person and organization *entity* (3.2.9)

Note 1 to entry: A **os_characterizable_person_and_organization** is a type of characterized_object and person_and_organization

5.372 Schedule_mim

5.372.1
ss_characterizable_applied_action_assignment
<application module: Schedule_mim> *entity data type* (3.2.10) that is a type of *applied_action_assignment* (5.57.1) and *characterized_object* (4.19.1) that represents the ss characterizable applied action assignment *entity* (3.2.9)

Note 1 to entry: A **ss_characterizable_applied_action_assignment** is a type of characterized_object and applied_action_assignment

5.372.2
ss_characterizable_applied_action_method_assignment
<application module: Schedule_mim> *entity data type* (3.2.10) that is a type of *applied_action_method_assignment* (5.227.1) and *characterized_object* (4.19.1) that represents the ss characterizable applied action method assignment *entity* (3.2.9)

Note 1 to entry: A **ss_characterizable_applied_action_method_assignment** is a type of characterized_object and applied_action_method_assignment

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5.373 System_structure_mim

5.373.1
syss_characterizable_action_directive
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *action_directive* (4.1.2) and *characterized_object* (4.19.1) that represents the syss characterizable action directive *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_action_directive** is a type of characterized_object and action_directive

5.373.2
syss_characterizable_address
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *address* (4.17.1) and *characterized_object* (4.19.1) that represents the syss characterizable address *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_address** is a type of characterized_object and address

5.373.3
syss_characterizable_alternate_product_relationship
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *alternate_product_relationship* (4.25.1) and *characterized_object* (4.19.1) that represents the syss characterizable alternate product relationship *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_alternate_product_relationship** is a type of characterized_object and alternate_product_relationship

5.373.4
syss_characterizable_applied_action_assignment
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *applied_action_assignment* (5.57.1) and *characterized_object* (4.19.1) that represents the syss characterizable applied action assignment *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_applied_action_assignment** is a type of characterized_object and applied_action_assignment

5.373.5
syss_characterizable_applied_document_reference
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *applied_document_reference* (5.121.1) and *characterized_object* (4.19.1) that represents the syss characterizable applied document reference *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_applied_document_reference** is a type of characterized_object and applied_document_reference

5.373.6
syss_characterizable_applied_document_usage_constraint_assignment
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *applied_document_usage_constraint_assignment* (5.121.2) and *characterized_object* (4.19.1) that represents the syss characterizable applied document usage constraint assignment *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_applied_document_usage_constraint_assignment** is a type of characterized_object and applied_document_usage_constraint_assignment

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5.373.7
syss_characterizable_applied_organization_assignment
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *applied_organization_assignment* (5.22.1) and *characterized_object* (4.19.1) that represents the syss characterizable applied organization assignment *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_applied_organization_assignment** is a type of characterized_object and applied_organization_assignment

5.373.8
syss_characterizable_applied_person_and_organization_assignment
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *applied_person_and_organization_assignment* (5.22.2) and *characterized_object* (4.19.1) that represents the syss characterizable applied person and organization assignment *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_applied_person_and_organization_assignment** is a type of characterized_object and applied_person_and_organization_assignment

5.373.9
syss_characterizable_assembly_component_usage
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *assembly_component_usage* (4.25.2) and *characterized_object* (4.19.1) that represents the syss characterizable assembly component usage *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_assembly_component_usage** is a type of characterized_object and assembly_component_usage

5.373.10
syss_characterizable_configuration_item
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *configuration_item* (4.23.4) that represents the syss characterizable configuration item *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_configuration_item** is a type of characterized_object and configuration_item

5.373.11
syss_characterizable_general_property_relationship
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *general_property_relationship* (4.19.7) that represents the syss characterizable general property relationship *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_general_property_relationship** is a type of characterized_object and general_property_relationship

5.373.12
syss_characterizable_group
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *group* (4.12.1) that represents the syss characterizable group *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_group** is a type of characterized_object and group

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5.373.13
syss_characterizable_organizational_project
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *organizational_project* (4.17.8) that represents the syss characterizable organizational project *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_organizational_project** is a type of characterized_object and organizational_project

5.373.14
syss_characterizable_person
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *person* (4.17.10) that represents the syss characterizable person *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_person** is a type of characterized_object and person

5.373.15
syss_characterizable_person_and_organization
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *person_and_organization* (4.17.11) that represents the syss characterizable person and organization *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_person_and_organization** is a type of characterized_object and person_and_organization

5.373.16
syss_characterizable_product
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product* (4.18.4) that represents the syss characterizable product *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_product** is a type of characterized_object and product

5.373.17
syss_characterizable_product_concept
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_concept* (4.24.5) that represents the syss characterizable product concept *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_product_concept** is a type of characterized_object and product_concept

5.373.18
syss_characterizable_product_definition_formation
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_definition_formation* (4.18.11) that represents the syss characterizable product definition formation *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_product_definition_formation** is a type of characterized_object and product_definition_formation

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5.373.19
syss_characterizable_product_definition_formation_relationship
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_definition_formation_relationship* (4.18.13) that represents the syss characterizable product definition formation relationship *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_product_definition_formation_relationship** is a type of characterized_object and product_definition_formation_relationship

5.373.20
syss_characterizable_property_definition_representation
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *property_definition_representation* (4.20.6) that represents the syss characterizable property definition representation *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_property_definition_representation** is a type of characterized_object and property_definition_representation

5.373.21
syss_characterizable_representation
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *representation* (4.41.13) that represents the syss characterizable representation *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_representation** is a type of characterized_object and representation

5.373.22
syss_characterizable_representation_context
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *representation_context* (4.41.14) that represents the syss characterizable representation context *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_representation_context** is a type of characterized_object and representation_context

5.373.23
syss_characterizable_representation_item
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *representation_item* (4.41.16) that represents the syss characterizable representation item *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_representation_item** is a type of characterized_object and representation_item

5.373.24
syss_characterizable_security_classification
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *security_classification* (4.22.1) that represents the syss characterizable security classification *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_security_classification** is a type of characterized_object and security_classification

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5.373.25
syss_characterizable_versioned_action_request
<application module: System_structure_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *versioned_action_request* (4.1.15) that represents the syss characterizable versioned action request *entity* (3.2.9)

Note 1 to entry: A **syss_characterizable_versioned_action_request** is a type of characterized_object and versioned_action_request

5.374 Function_based_behaviour_mim

5.374.1
fbb_characterized_action_method_assignment_relationship
<application module: Function_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *action_method_assignment_relationship* (4.125.1) and *characterized_object* (4.19.1) that represents the fbb characterized action method assignment relationship *entity* (3.2.9)

Note 1 to entry: A **fbb_characterized_action_method_assignment_relationship** is a type of characterized_object and action_method_assignment_relationship

5.374.2
fbb_characterized_applied_action_method_assignment
<application module: Function_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *applied_action_method_assignment* (5.227.1) and *characterized_object* (4.19.1) that represents the fbb characterized applied action method assignment *entity* (3.2.9)

Note 1 to entry: A **fbb_characterized_applied_action_method_assignment** is a type of characterized_object and applied_action_method_assignment

5.374.3
fbb_characterized_general_property_relationship
<application module: Function_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *general_property_relationship* (4.19.7) that represents the fbb characterized general property relationship *entity* (3.2.9)

Note 1 to entry: A **fbb_characterized_general_property_relationship** is a type of characterized_object and general_property_relationship

5.374.4
fbb_characterized_generic_expression
<application module: Function_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *generic_expression* (4.95.1) that represents the fbb characterized generic expression *entity* (3.2.9)

Note 1 to entry: A **fbb_characterized_generic_expression** is a type of characterized_object and generic_expression

5.374.5
fbb_characterized_product
<application module: Function_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product* (4.18.4) that represents the fbb characterized product *entity* (3.2.9)

Note 1 to entry: A **fbb_characterized_product** is a type of characterized_object and product

5.374.6

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fbb_characterized_product_definition_formation
<application module: Function_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_definition_formation* (4.18.11) that represents the fbb characterized product definition formation *entity* (3.2.9)

Note 1 to entry: A **fbb_characterized_product_definition_formation** is a type of characterized_object and product_definition_formation

5.374.7
fbb_characterized_product_definition_formation_relationship
<application module: Function_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_definition_formation_relationship* (4.18.13) that represents the fbb characterized product definition formation relationship *entity* (3.2.9)

Note 1 to entry: A **fbb_characterized_product_definition_formation_relationship** is a type of characterized_object and product_definition_formation_relationship

5.374.8
fbb_characterized_property_definition_representation
<application module: Function_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *property_definition_representation* (4.20.6) that represents the fbb characterized property definition representation *entity* (3.2.9)

Note 1 to entry: A **fbb_characterized_property_definition_representation** is a type of characterized_object and property_definition_representation

5.374.9
fbb_characterized_representation
<application module: Function_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *representation* (4.41.13) that represents the fbb characterized representation *entity* (3.2.9)

Note 1 to entry: A **fbb_characterized_representation** is a type of characterized_object and representation

5.374.10
fbb_characterized_representation_context
<application module: Function_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *representation_context* (4.41.14) that represents the fbb characterized representation context *entity* (3.2.9)

Note 1 to entry: A **fbb_characterized_representation_context** is a type of characterized_object and representation_context

5.374.11
fbb_characterized_representation_item
<application module: Function_based_behaviour_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *representation_item* (4.41.16) that represents the fbb characterized representation item *entity* (3.2.9)

Note 1 to entry: A **fbb_characterized_representation_item** is a type of characterized_object and representation_item

5.375 Risk_management_mim

5.375.1

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rm_characterizable_address
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *address* (4.17.1) and *characterized_object* (4.19.1) that represents the rm characterizable address *entity* (3.2.9)

5.375.2
rm_characterizable_applied_action_assignment
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *applied_action_assignment* (5.57.1) and *characterized_object* (4.19.1) that represents the rm characterizable applied action assignment *entity* (3.2.9)

5.375.3
rm_characterizable_applied_action_method_assignment
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *applied_action_method_assignment* (5.227.1) and *characterized_object* (4.19.1) that represents the rm characterizable applied action method assignment *entity* (3.2.9)

5.375.4
rm_characterizable_applied_document_reference
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *applied_document_reference* (5.121.1) and *characterized_object* (4.19.1) that represents the rm characterizable applied document reference *entity* (3.2.9)

5.375.5
rm_characterizable_applied_document_usage_constraint_assignment
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *applied_document_usage_constraint_assignment* (5.121.2) and *characterized_object* (4.19.1) that represents the rm characterizable applied document usage constraint assignment *entity* (3.2.9)

5.375.6
rm_characterizable_applied_organization_assignment
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *applied_organization_assignment* (5.22.1) and *characterized_object* (4.19.1) that represents the rm characterizable applied organization assignment *entity* (3.2.9)

5.375.7
rm_characterizable_applied_person_and_organization_assignment
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *applied_person_and_organization_assignment* (5.22.2) and *characterized_object* (4.19.1) that represents the rm characterizable applied person and organization assignment *entity* (3.2.9)

5.375.8
rm_characterizable_person
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *person* (4.17.10) that represents the rm characterizable person *entity* (3.2.9)

5.375.9
rm_characterizable_person_and_organization
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *person_and_organization* (4.17.11) that represents the rm characterizable person and organization *entity* (3.2.9)

5.375.10

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rm_characterizable_risk_impact_assignment
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *risk_impact_assignment* (4.115.26) that represents the rm characterizable risk impact assignment *entity* (3.2.9)

5.375.11
rm_characterizable_state_observed
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_observed* (4.121.5) that represents the rm characterizable state observed *entity* (3.2.9)

5.375.12
rm_characterizable_state_observed_assignment
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_observed_assignment* (4.121.6) that represents the rm characterizable state observed assignment *entity* (3.2.9)

5.375.13
rm_characterizable_state_observed_relationship
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_observed_relationship* (4.121.7) that represents the rm characterizable state observed relationship *entity* (3.2.9)

5.375.14
rm_characterizable_state_type
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_type* (4.122.1) that represents the rm characterizable state type *entity* (3.2.9)

5.375.15
rm_characterizable_state_type_assignment
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_type_assignment* (4.122.2) that represents the rm characterizable state type assignment *entity* (3.2.9)

5.375.16
rm_characterizable_state_type_relationship
<application module: Risk_management_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_type_relationship* (4.122.3) that represents the rm characterizable state type relationship *entity* (3.2.9)

5.376 External_state_based_behaviour_model_arm

5.376.1
External_state_based_behaviour_model
<application module: External_state_based_behaviour_model_arm> *application object* (3.1.78) that is a type of *State_based_behaviour_model* (5.382.1) that represents the external state based behaviour model *entity* (3.2.9)

Note 1 to entry: An **External_state_based_behaviour_model** is a type of State_based_behaviour_model where an external digital file contains the model.

5.377 External_state_based_behaviour_model_mim

5.377.1

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external_state_based_behaviour_model
<application module: External_state_based_behaviour_model_mim> *entity data type* (3.2.10) that is a type of *state_based_behaviour_model* (4.125.17) that represents the external state based behaviour model *entity* (3.2.9)

Note 1 to entry: A **external_state_based_behaviour_model** is a type of state_based_behaviour_model which is contained in an external digital file.

5.378 Foundation_state_definition_arm

5.378.1
Applied_state_definition_assignment
<application module: Foundation_state_definition_arm> *application object* (3.1.78) that represents the applied state definition assignment *entity* (3.2.9)

Note 1 to entry: An **Applied_state_definition_assignment** is a mechanism that enables an object to have or to be in a *State_definition* (5.378.3).

5.378.2
Composition_of_state_definition
<application module: Foundation_state_definition_arm> *application object* (3.1.78) that is a type of *State_definition_relationship* (5.378.4) that represents the composition of state definition *entity* (3.2.9)

5.378.3
State_definition
<application module: Foundation_state_definition_arm> *application object* (3.1.78) that represents the state definition *entity* (3.2.9)

Note 1 to entry: A **State_definition is** a mode of being.

5.378.4
State_definition_relationship
<application module: Foundation_state_definition_arm> *application object* (3.1.78) that represents the state definition relationship *entity* (3.2.9)

Note 1 to entry: A **State_definition_relationship** is an association between two or more instances of *State_definition* (5.378.3).

5.378.5
State_definition_role
<application module: Foundation_state_definition_arm> *application object* (3.1.78) that represents the state definition role *entity* (3.2.9)

Note 1 to entry: A **State_definition_role** is the purpose of the association of the *Applied_state_definition_assignment* (5.378.1) with product or activity data.

5.378.6
State_transition_definition
<application module: Foundation_state_definition_arm> *application object* (3.1.78) that is a type of *State_definition_relationship* (5.378.4) that represents the state transition definition *entity* (3.2.9)

5.379 Foundation_state_definition_mim

5.379.1

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applied_state_type_assignment
<application module: Foundation_state_definition_mim> *entity data type* (3.2.10) that is a type of *state_type_assignment* (4.122.2) that represents the applied state type assignment *entity* (3.2.9)

Note 1 to entry: An **applied_state_type_assignment** is an entity that relates product or activity data that are assigned a *state_type* (4.122.1).

5.380 Parameter_value_specification_arm

5.380.1
Named_variable_semantics
<application module: Parameter_value_specification_arm> *application object* (3.1.78) that is a type of *Variable_semantics* (5.309.10) that represents the named variable semantics *entity* (3.2.9)

Note 1 to entry: A **Named_variable_semantics** is a type of Variable_semantics that is the definition of the context and name for a variable in an expression.

5.381 Parameter_value_specification_mim

5.381.1
named_variable_semantics
<application module: Parameter_value_specification_mim> *entity data type* (3.2.10) that is a type of *variable_semantics* (4.95.5) that represents the named variable semantics *entity* (3.2.9)

Note 1 to entry: A **named_variable_semantics** is a type of variable_semantics that is the definition of the context and name for a variable in an expression.

5.382 State_based_behaviour_representation_arm

5.382.1
State_based_behaviour_model
<application module: State_based_behaviour_representation_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the state based behaviour model *entity* (3.2.9)

Note 1 to entry: A **State_based_behaviour_model** is a type of Representation used in the definition of state-based behaviour model.

5.382.2
State_based_behaviour_representation_context
<application module: State_based_behaviour_representation_arm> *application object* (3.1.78) that is a type of *Representation_context* (5.12.3) that represents the state based behaviour representation context *entity* (3.2.9)

Note 1 to entry: A **State_based_behaviour_representation_context** is a type of Representation_context used in the definition of state-based behaviour model.

5.382.3
State_based_behaviour_representation_item
<application module: State_based_behaviour_representation_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the state based behaviour representation item *entity* (3.2.9)

Note 1 to entry: A **State_based_behaviour_representation_item** is a type of Representation_item used in the definition of state-based behaviour model.

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5.383 General_model_parameter_arm

5.383.1
Constrained_general_parameter_relationship

<application module: General_model_parameter_arm> *application object* (3.1.78) that is a type of *Independent_property_relationship* (5.44.2) that represents the constrained general parameter relationship *entity* (3.2.9)

Note 1 to entry: An **Constrained_general_parameter_relationship** is a type of Independent_property_relationship that constrains the properties involved to be of a particular type or classified using a particular class.

5.383.2
General_model_parameter

<application module: General_model_parameter_arm> *application object* (3.1.78) that is a type of *Independent_property* (5.44.1) that represents the general model parameter *entity* (3.2.9)

Note 1 to entry: An **General_model_parameter** is a type of Independent_property that is a named input/output of a model used in the definition of the interface, in the sense of exposed method of communicating with the model, to the model which is or may be provided with or result in an actual value when the model is used or invoked.

5.383.3
Parameter_value_representation_item

<application module: General_model_parameter_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the parameter value representation item *entity* (3.2.9)

Note 1 to entry: A **Parameter_value_representation_item** is a type of Representation_item that adds to the set of items used to represent the value of a *General_model_parameter* (5.383.2).

5.384 General_model_parameter_mim

5.384.1
constrained_general_parameter_relationship

<application module: General_model_parameter_mim> *entity data type* (3.2.10) that is a type of *general_property_relationship* (4.19.7) that represents the constrained general parameter relationship *entity* (3.2.9)

Note 1 to entry: A **constrained_general_parameter_relationship** is a type of general_property_relationship that constrains the properties involved to be of a particular type or classified using a particular class.

5.384.2
general_model_parameter

<application module: General_model_parameter_mim> *entity data type* (3.2.10) that is a type of *general_property* (4.19.5) that represents the general model parameter *entity* (3.2.9)

Note 1 to entry: A **general_model_parameter** is a type of *general_property_relationship* (4.19.7) that constrains the properties involved to be of a particular type or classified using a particular class.

5.384.3
parameter_value_representation_item

<application module: General_model_parameter_mim> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the parameter value representation item *entity* (3.2.9)

Note 1 to entry: A **parameter_value_representation_item** is a type of representation_item that that is a named input/output of a model used in the definition of the interface (the exposed method of communicating

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with the model) to the model which is or may be provided with or result in an actual value when the model is used or invoked.

5.385 Description_assignment_arm

5.385.1
Description_text
<application module: Description_assignment_arm> *application object* (3.1.78) that represents the description text *entity* (3.2.9)

Note 1 to entry: A **Description_text** is a set of words that describe something.

5.385.2
Description_text_assignment
<application module: Description_assignment_arm> *application object* (3.1.78) that represents the description text assignment *entity* (3.2.9)

Note 1 to entry: A **Description_text_assignment** is the assignment of a description to something.

5.385.3
Description_text_assignment_relationship
<application module: Description_assignment_arm> *application object* (3.1.78) that represents the description text assignment relationship *entity* (3.2.9)

Note 1 to entry: A **Description_text_assignment_relationship** is a relationship between two *Description_text_assignment* (5.385.2) objects.

5.386 Description_assignment_mim

5.386.1
applied_description_text_assignment
<application module: Description_assignment_mim> *entity data type* (3.2.10) that is a type of *description_text_assignment* (4.125.6) that represents the applied description text assignment *entity* (3.2.9)

Note 1 to entry: An **applied_description_text_assignment** is a type of description_text_assignment relating a text description to product data.

5.386.2
applied_description_text_assignment_relationship
<application module: Description_assignment_mim> *entity data type* (3.2.10) that is a type of *description_text_assignment_relationship* (4.125.7) that represents the applied description text assignment relationship *entity* (3.2.9)

Note 1 to entry: An **applied_description_text_assignment_relationship** is a type of description_text_assignment_relationship that describes a relationship between two *applied_description_text_assignment* (5.386.1) objects.

5.387 Analysis_assignment_arm

5.387.1
Analysis_assignment
<application module: Analysis_assignment_arm> *application object* (3.1.78) that represents the analysis assignment *entity* (3.2.9)

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Note 1 to entry: An **Analysis_assignment** is a relationship that relates a specific version of an analysis to the item being analyzed.

5.387.2
Analysis_design_version_relationship
<application module: Analysis_assignment_arm> *application object* (3.1.78) that is a type of *Analysis_assignment* (5.387.1) that represents the analysis design version relationship *entity* (3.2.9)

Note 1 to entry: An **Analysis_design_version_relationship** is a type of Analysis_assignment that is used when analysing a version of a product.

5.388 Analysis_assignment_mim

5.388.1
analysis_assignment
<application module: Analysis_assignment_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the analysis assignment *entity* (3.2.9)

Note 1 to entry: A **analysis_assignment** is a type of group that is used to identify the item analysed.

5.388.2
analysis_item
<application module: Analysis_assignment_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the analysis item *entity* (3.2.9)

Note 1 to entry: A **analysis_item** is a type of group_assignment which identifies the item to which the analysis is assigned.

5.388.3
assigned_analysis
<application module: Analysis_assignment_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the assigned analysis *entity* (3.2.9)

Note 1 to entry: A **assigned_analysis** is a type of group_assignment which identifies the analysis which is being assigned.

5.389 Analysis_identification_arm

5.389.1
Analysis
<application module: Analysis_identification_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the analysis *entity* (3.2.9)

5.389.2
Analysis_discipline_definition
<application module: Analysis_identification_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the analysis discipline definition *entity* (3.2.9)

5.389.3
Analysis_version
<application module: Analysis_identification_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the analysis version *entity* (3.2.9)

Note 1 to entry: An **Analysis_version** is a type of Product_version that identifies a particular version of an analysis.

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5.389.4
Analysis_version_relationship
<application module: Analysis_identification_arm> *application object* (3.1.78) that is a type of *Product_version_relationship* (5.31.1) that represents the analysis version relationship *entity* (3.2.9)

Note 1 to entry: A **Analysis_version_relationship** is a type of Product_version_relationship that is used to assert an association between two versions of an analysis.

5.389.5
Analysis_version_sequence
<application module: Analysis_identification_arm> *application object* (3.1.78) that is a type of *Analysis_version_relationship* (5.389.4) that represents the analysis version sequence *entity* (3.2.9)

Note 1 to entry: A **Analysis_version_sequence** is a type of Analysis_version_relationship that is used to assert that the one analysis version (the successor) replaces another (its predecessor).

5.390 System_modelling_mim

5.390.1
sysm_characterizable_applied_location_assignment
<application module: System_modelling_mim> *entity data type* (3.2.10) that is a type of *applied_location_assignment* (5.266.1) and *characterized_object* (4.19.1) that represents the sysm characterizable applied location assignment *entity* (3.2.9)

Note 1 to entry: A **sysm_characterizable_applied_location_assignment** is a type of characterized_object and applied_location_assignment

5.391 External_functional_model_arm

5.391.1
External_functional_model
<application module: External_functional_model_arm> *application object* (3.1.78) that is a type of *Function_based_behaviour_model* (5.407.1) that represents the external functional model *entity* (3.2.9)

Note 1 to entry: An **External_functional_model** is a type of Function_based_behaviour_model where an external digital file contains the model.

5.392 Extended_task_element_arm

5.392.1
Decision_path
<application module: Extended_task_element_arm> *application object* (3.1.78) that represents the decision path *entity* (3.2.9)

Note 1 to entry: A **Decision_path** is a component of a *Multiple_decision_point* (5.392.2) that identifies the *Condition* (5.234.1) associated with a particular path from the decision point and the *Task_element* (5.393.11) to be executed if the condition is TRUE.

5.392.2
Multiple_decision_point
<application module: Extended_task_element_arm> *application object* (3.1.78) that is a type of *Structured_task_element* (5.393.10) that represents the multiple decision point *entity* (3.2.9)

5.392.3

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Task_io
<application module: Extended_task_element_arm> *application object* (3.1.78) that is a type of *Task_element_assignment* (5.393.12) that represents the task io *entity* (3.2.9)

5.392.4
Task_io_hierarchy
<application module: Extended_task_element_arm> *application object* (3.1.78) that represents the task io hierarchy *entity* (3.2.9)

Note 1 to entry: A **Task_io_hierarchy** is a relationship between two *Task_io* (5.392.3) that asserts that the **parent** task io is represented by the **child** task io at the next level of breakdown.

5.392.5
Task_step_hierarchy
<application module: Extended_task_element_arm> *application object* (3.1.78) that is a type of *Task_element_relationship* (5.393.13) that represents the task step hierarchy *entity* (3.2.9)

Note 1 to entry: A **Task_step_hierarchy** is a type of Task_element_relationship that represents the fact that a **parent** is broken down into a lower level **child**.

5.393 Task_element_arm

5.393.1
Concurrent_elements
<application module: Task_element_arm> *application object* (3.1.78) that is a type of *Structured_task_element* (5.393.10) that represents the concurrent elements *entity* (3.2.9)

Note 1 to entry: A **Concurrent_elements** is a type of Structured_task_element that comprises a set of actions to be performed during the time required for the longest task.

5.393.2
Decision_point
<application module: Task_element_arm> *application object* (3.1.78) that is a type of *Structured_task_element* (5.393.10) that represents the decision point *entity* (3.2.9)

5.393.3
End_task
<application module: Task_element_arm> *application object* (3.1.78) that is a type of *Task_element* (5.393.11) that represents the end task *entity* (3.2.9)

5.393.4
Exit_loop
<application module: Task_element_arm> *application object* (3.1.78) that is a type of *Task_element* (5.393.11) that represents the exit loop *entity* (3.2.9)

5.393.5
Looping_element
<application module: Task_element_arm> *application object* (3.1.78) that is a type of *Structured_task_element* (5.393.10) that represents the looping element *entity* (3.2.9)

5.393.6
Repeat_count
<application module: Task_element_arm> *application object* (3.1.78) that is a type of *Looping_element* (5.393.5) that represents the repeat count *entity* (3.2.9)

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5.393.7
Repeat_until
<application module: Task_element_arm> *application object* (3.1.78) that is a type of *Looping_element* (5.393.5) that represents the repeat until *entity* (3.2.9)

5.393.8
Repeat_while
<application module: Task_element_arm> *application object* (3.1.78) that is a type of *Looping_element* (5.393.5) that represents the repeat while *entity* (3.2.9)

5.393.9
Start_task
<application module: Task_element_arm> *application object* (3.1.78) that is a type of *Task_element* (5.393.11) that represents the start task *entity* (3.2.9)

5.393.10
Structured_task_element
<application module: Task_element_arm> *application object* (3.1.78) that is a type of *Task_element* (5.393.11) that represents the structured task element *entity* (3.2.9)

5.393.11
Task_element
<application module: Task_element_arm> *application object* (3.1.78) that is a type of *Activity_method* (5.58.1) that represents the task element *entity* (3.2.9)

5.393.12
Task_element_assignment
<application module: Task_element_arm> *application object* (3.1.78) that is a type of *Applied_activity_method_assignment* (5.226.2) that represents the task element assignment *entity* (3.2.9)

5.393.13
Task_element_relationship
<application module: Task_element_arm> *application object* (3.1.78) that is a type of *Activity_method_relationship* (5.226.1) that represents the task element relationship *entity* (3.2.9)

5.393.14
Task_element_sequence
<application module: Task_element_arm> *application object* (3.1.78) that is a type of *Structured_task_element* (5.393.10) that represents the task element sequence *entity* (3.2.9)

Note 1 to entry: A **Task_element_sequence** is a type of *Task_element* (5.393.11) that comprises a sequence of steps to be followed in a specified order.

5.393.15
Task_step
<application module: Task_element_arm> *application object* (3.1.78) that is a type of *Task_element* (5.393.11) that represents the task step *entity* (3.2.9)

Note 1 to entry: A **Task_step** is a type of Task_element that is not further sub-divided.

5.394 Task_element_mim

5.394.1

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concurrent_task_element
<application module: Task_element_mim> *entity data type* (3.2.10) that is a type of *task_element* (5.394.7) that represents the concurrent task element *entity* (3.2.9)

Note 1 to entry: A **concurrent_task_element** is a type of task_element that involves carrying out multiple task_element instances during the time taken to perform the longest of the task_element instances.

5.394.2
decision_point
<application module: Task_element_mim> *entity data type* (3.2.10) that is a type of *action_method_to_select_from* (4.100.3) and *task_element* (5.394.7) that represents the decision point *entity* (3.2.9)

5.394.3
end_task
<application module: Task_element_mim> *entity data type* (3.2.10) that is a type of *task_element* (5.394.7) that represents the end task *entity* (3.2.9)

Note 1 to entry: An **end_task** is a type of task_element that indicates that execution of the parent task is to end.

5.394.4
exit_loop
<application module: Task_element_mim> *entity data type* (3.2.10) that is a type of *task_element* (5.394.7) that represents the exit loop *entity* (3.2.9)

Note 1 to entry: An **exit_loop** is a type of task_element that indicates that execution of the parent *looping_element* (5.394.5) is to end.

5.394.5
looping_element
<application module: Task_element_mim> *entity data type* (3.2.10) that is a type of *task_element* (5.394.7) that represents the looping element *entity* (3.2.9)

Note 1 to entry: A **looping_element** is a type of task_element that involves repeating another task_element

5.394.6
start_task
<application module: Task_element_mim> *entity data type* (3.2.10) that is a type of *task_element* (5.394.7) that represents the start task *entity* (3.2.9)

Note 1 to entry: A **start_task** is a type of task_element that indicates the start point in the execution of the parent task.

5.394.7
task_element
<application module: Task_element_mim> *entity data type* (3.2.10) that is a type of *action_method* (4.1.3) that represents the task element *entity* (3.2.9)

Note 1 to entry: A **task_element** is a type of action_method that prescribes how a task or part of a task is to be carried out.

5.394.8
task_element_relationship
<application module: Task_element_mim> *entity data type* (3.2.10) that is a type of *action_method_relationship* (4.1.4) that represents the task element relationship *entity* (3.2.9)

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Note 1 to entry: A **task_element_relationship** is a type of action_method_relationship the specificies the relationship between two *task_element* (5.394.7) instances.

5.394.9
task_element_sequence
<application module: Task_element_mim> *entity data type* (3.2.10) that is a type of *task_element* (5.394.7) that represents the task element sequence *entity* (3.2.9)

Note 1 to entry: A **task_element_sequence** is a type of task_element that involves carrying out a sequence of task_element instances in order.

5.394.10
task_step
<application module: Task_element_mim> *entity data type* (3.2.10) that is a type of *task_element* (5.394.7) that represents the task step *entity* (3.2.9)

Note 1 to entry: A **task_step** is a type of task_element that represents one stage within a task and is not further broken down.

5.395 Behaviour_view_definition_arm

5.395.1
Behaviour_view_definition
<application module: Behaviour_view_definition_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the behaviour view definition *entity* (3.2.9)

Note 1 to entry: A **Behaviour_view_definition** is a type of Product_view_definition that provides a characterized view of a behaviour version for a particular domain.

5.396 Behaviour_identification_and_version_arm

5.396.1
Behaviour
<application module: Behaviour_identification_and_version_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the behaviour *entity* (3.2.9)

Note 1 to entry: A **Behaviour** is a type of Product that collects the definitional information of the versions of behaviour.

5.396.2
Behaviour_version
<application module: Behaviour_identification_and_version_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the behaviour version *entity* (3.2.9)

Note 1 to entry: A **Behaviour_version** is a type of Product_version that identifies a version of a behaviour.

5.396.3
Behaviour_version_sequence
<application module: Behaviour_identification_and_version_arm> *application object* (3.1.78) that is a type of *Product_version_relationship* (5.31.1) that represents the behaviour version sequence *entity* (3.2.9)

Note 1 to entry: A **Behaviour_version_sequence** is a type of Product_version_relationship that is used to assert that the one behaviour version (the successor) replaces another (its predecessor).

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5.397 Behaviour_description_assignment_arm

5.397.1
Behaviour_description_association
<application module: Behaviour_description_assignment_arm> *application object* (3.1.78) that represents the behaviour description association *entity* (3.2.9)

Note 1 to entry: A **Behaviour_description_association** is used to define the item to which a behaviour model is associated.

5.398 System_identification_and_version_arm

5.398.1
System
<application module: System_identification_and_version_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the system *entity* (3.2.9)

Note 1 to entry: A **System** is a type of Product used to identify a conceptual solution to a collection of reqirements.

5.398.2
System_version
<application module: System_identification_and_version_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the system version *entity* (3.2.9)

Note 1 to entry: A **System_version** is a type of Product_version that represents a particular version of a system.

5.398.3
System_version_relationship
<application module: System_identification_and_version_arm> *application object* (3.1.78) that is a type of *Product_version_relationship* (5.31.1) that represents the system version relationship *entity* (3.2.9)

Note 1 to entry: A **System_version_relationship** is a type of Product_version_relationship used to relate versions of a system.

5.398.4
System_version_sequence
<application module: System_identification_and_version_arm> *application object* (3.1.78) that is a type of *System_version_relationship* (5.398.3) that represents the system version sequence *entity* (3.2.9)

Note 1 to entry: A **System_version_sequence** is a type of System_version_relationship used to relate a previous version of a system to the version that replaces it.

5.399 System_view_definition_arm

5.399.1
System_view_definition
<application module: System_view_definition_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the system view definition *entity* (3.2.9)

Note 1 to entry: A **System_view_definition** is a type of Product_view_definition that provides a view of a system version relevant for one or more application domains.

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5.400 Decision_support_mim

5.400.1
ds_characterizable_person
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *person* (4.17.10) that represents the ds characterizable person *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_person** is a type of person and characterized_object.

5.400.2
ds_characterizable_person_and_organization
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *person_and_organization* (4.17.11) that represents the ds characterizable person and organization *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_person_and_organization** is a type of person_and_organization and characterized_object.

5.400.3
ds_characterizable_product
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product* (4.18.4) that represents the ds characterizable product *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_product** is a type of product and characterized_object.

5.400.4
ds_characterizable_product_definition_formation
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_definition_formation* (4.18.11) that represents the ds characterizable product definition formation *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_product_definition_formation** is a type of product_definition_formation and characterized_object.

5.400.5
ds_characterizable_product_definition_formation_relationship
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_definition_formation_relationship* (4.18.13) that represents the ds characterizable product definition formation relationship *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_product_definition_formation_relationship** is a type of product_definition_formation_relationship and characterized_object.

5.400.6
ds_characterizable_property_definition_representation
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *property_definition_representation* (4.20.6) that represents the ds characterizable property definition representation *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_property_definition_representation** is a type of property_definition_representation and characterized_object.

5.400.7

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ds_characterizable_representation
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *representation* (4.41.13) that represents the ds characterizable representation *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_representation** is a type of representation and characterized_object.

5.400.8
ds_characterizable_representation_context
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *representation_context* (4.41.14) that represents the ds characterizable representation context *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_representation_context** is a type of representation_context and characterized_object.

5.400.9
ds_characterizable_representation_item
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *representation_item* (4.41.16) that represents the ds characterizable representation item *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_representation_item** is a type of representation_item and characterized_object.

5.400.10
ds_characterizable_security_classification
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *security_classification* (4.22.1) that represents the ds characterizable security classification *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_security_classification** is a type of security_classification and characterized_object.

5.400.11
ds_characterizable_state_observed
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_observed* (4.121.5) that represents the ds characterizable state observed *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_state_observed** is a type of state_observed and characterized_object.

5.400.12
ds_characterizable_state_observed_assignment
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_observed_assignment* (4.121.6) that represents the ds characterizable state observed assignment *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_state_observed_assignment** is a type of state_observed_assignment and characterized_object.

5.400.13
ds_characterizable_state_observed_relationship
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_observed_relationship* (4.121.7) that represents the ds characterizable state observed relationship *entity* (3.2.9)

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Note 1 to entry: A **ds_characterizable_state_observed_relationship** is a type of state_observed_relationship and characterized_object.

5.400.14
ds_characterizable_state_type
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_type* (4.122.1) that represents the ds characterizable state type *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_state_type** is a type of state_type and characterized_object.

5.400.15
ds_characterizable_state_type_assignment
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_type_assignment* (4.122.2) that represents the ds characterizable state type assignment *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_state_type_assignment** is a type of state_type_assignment and characterized_object.

5.400.16
ds_characterizable_state_type_relationship
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *state_type_relationship* (4.122.3) that represents the ds characterizable state type relationship *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_state_type_relationship** is a type of state_type_relationship and characterized_object.

5.400.17
ds_characterizable_verification_relationship
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *verification_relationship* (5.402.4) that represents the ds characterizable verification relationship *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_verification_relationship** is a type of verification_relationship and characterized_object.

5.400.18
ds_characterizable_address
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *address* (4.17.1) and *characterized_object* (4.19.1) that represents the ds characterizable address *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_address** is a type of address and characterized_object.

5.400.19
ds_characterizable_applied_action_assignment
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *applied_action_assignment* (5.57.1) and *characterized_object* (4.19.1) that represents the ds characterizable applied action assignment *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_applied_action_assignment** is a type of applied_action_assignment and characterized_object.

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ds_characterizable_applied_document_reference
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *applied_document_reference* (5.121.1) and *characterized_object* (4.19.1) that represents the ds characterizable applied document reference *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_applied_document_reference** is a type of applied_document_reference and characterized_object.

5.400.21
ds_characterizable_applied_document_usage_constraint_assignment
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *applied_document_usage_constraint_assignment* (5.121.2) and *characterized_object* (4.19.1) that represents the ds characterizable applied document usage constraint assignment *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_applied_document_usage_constraint_assignment** is a type of applied_document_usage_constraint_assignment and characterized_object.

5.400.22
ds_characterizable_applied_organization_assignment
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *applied_organization_assignment* (5.22.1) and *characterized_object* (4.19.1) that represents the ds characterizable applied organization assignment *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_applied_organization_assignment** is a type of applied_organization_assignment and characterized_object.

5.400.23
ds_characterizable_applied_person_and_organization_assignment
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *applied_person_and_organization_assignment* (5.22.2) and *characterized_object* (4.19.1) that represents the ds characterizable applied person and organization assignment *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_applied_person_and_organization_assignment** is a type of applied_person_and_organization_assignment and characterized_object.

5.400.24
ds_characterizable_ascribable_state
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *ascribable_state* (4.121.1) and *characterized_object* (4.19.1) that represents the ds characterizable ascribable state *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_ascribable_state** is a type of ascribable_state and characterized_object.

5.400.25
ds_characterizable_event_occurrence
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *event_occurrence* (4.7.7) that represents the ds characterizable event occurrence *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_event_occurrence** is a type of event_occurrence and characterized_object.

5.400.26

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ds_characterizable_evidence
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *evidence* (5.402.1) that represents the ds characterizable evidence *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_evidence** is a type of evidence and characterized_object.

5.400.27
ds_characterizable_general_property_relationship
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *general_property_relationship* (4.19.7) that represents the ds characterizable general property relationship *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_general_property_relationship** is a type of general_property_relationship and characterized_object.

5.400.28
ds_characterizable_group
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *group* (4.12.1) that represents the ds characterizable group *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_group** is a type of group and characterized_object.

5.400.29
ds_characterizable_information_usage_right
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *information_usage_right* (5.213.3) that represents the ds characterizable information usage right *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_information_usage_right** is a type of information_usage_right and characterized_object.

5.400.30
ds_characterizable_organizational_project
<application module: Decision_support_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *organizational_project* (4.17.8) that represents the ds characterizable organizational project *entity* (3.2.9)

Note 1 to entry: A **ds_characterizable_organizational_project** is a type of organizational_project and characterized_object.

5.401 Verification_and_validation_arm

5.401.1
Evidence
<application module: Verification_and_validation_arm> *application object* (3.1.78) that represents the evidence *entity* (3.2.9)

Note 1 to entry: An **Evidence** is a collector of items used together to provide a single piece of evidence within a validation or verification.

5.401.2
Validation
<application module: Verification_and_validation_arm> *application object* (3.1.78) that represents the validation *entity* (3.2.9)

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Note 1 to entry: A **Validation** is a subjective assertion that an item is "fit for purpose".

5.401.3
Verification
<application module: Verification_and_validation_arm> *application object* (3.1.78) that represents the verification *entity* (3.2.9)

Note 1 to entry: A **Verification** is an objective assertion of a claim that requirement is satisfied by a particular item represented in a *Requirement_satisfied_by* (5.208.2) has been verified.

5.401.4
Verification_relationship
<application module: Verification_and_validation_arm> *application object* (3.1.78) that represents the verification relationship *entity* (3.2.9)

Note 1 to entry: A **Verification_relationship** is an association between two verifications.

5.402 Verification_and_validation_mim

5.402.1
evidence
<application module: Verification_and_validation_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the evidence *entity* (3.2.9)

Note 1 to entry: An **evidence** is a type of group_assignment which assigns a collection of items to verification or validation as evidence.

5.402.2
validation
<application module: Verification_and_validation_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the validation *entity* (3.2.9)

Note 1 to entry: A **validation** is a type of group that is used to assert an item has been validated.

5.402.3
verification
<application module: Verification_and_validation_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the verification *entity* (3.2.9)

Note 1 to entry: A **verification** is a type of group that is used to assert a claim that a requirement satisfied is by an item has been verified.

5.402.4
verification_relationship
<application module: Verification_and_validation_mim> *entity data type* (3.2.10) that is a type of *group_relationship* (4.12.2) that represents the verification relationship *entity* (3.2.9)

Note 1 to entry: A **verification_relationship** is a type of group_relationship that identifies a relationship between two verifications.

5.403 Issue_arm

5.403.1
Issue
<application module: Issue_arm> *application object* (3.1.78) that is a type of *Observation* (5.239.1) that represents the issue *entity* (3.2.9)

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5.403.2
Issue_consequence
<application module: Issue_arm> *application object* (3.1.78) that is a type of *Observation_consequence* (5.239.3) that represents the issue consequence *entity* (3.2.9)

Note 1 to entry: A **Issue_consequence** is a type of Observation_consequence which links an issue to the request to resolve the issue.

5.403.3
Issue_reference
<application module: Issue_arm> *application object* (3.1.78) that is a type of *Observation_assignment* (5.239.2) that represents the issue reference *entity* (3.2.9)

Note 1 to entry: A **Issue_reference** is a type of Observation_assignment that explicitly identifies one or more items that are related to the issue.

5.404 Issue_mim

5.404.1
issue
<application module: Issue_mim> *entity data type* (3.2.10) that is a type of *observation* (5.240.1) that represents the issue *entity* (3.2.9)

5.404.2
issue_consequence
<application module: Issue_mim> *entity data type* (3.2.10) that is a type of *observation_consequence* (5.240.2) that represents the issue consequence *entity* (3.2.9)

Note 1 to entry: An **issue_consequence** is a type of observation_consequence that links an issue to the request to resolve the issue.

5.405 Expression_assignment_arm

5.405.1
Expression_assignment
<application module: Expression_assignment_arm> *application object* (3.1.78) that represents the expression assignment *entity* (3.2.9)

Note 1 to entry: An **Expression_assignment** is the assignment of an expression to one or more things.

5.406 Expression_assignment_mim

5.406.1
applied_expression_assignment
<application module: Expression_assignment_mim> *entity data type* (3.2.10) that is a type of *expression_assignment* (4.125.8) that represents the applied expression assignment *entity* (3.2.9)

5.407 Function_based_behaviour_representation_arm

5.407.1
Function_based_behaviour_model
<application module: Function_based_behaviour_representation_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the function based behaviour model *entity* (3.2.9)

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Note 1 to entry: A **Function_based_behaviour_model** is a type of Representation used to represnt behaviour in the form of a functional model.

5.407.2
Function_based_behaviour_representation_context
<application module: Function_based_behaviour_representation_arm> *application object* (3.1.78) that is a type of *Representation_context* (5.12.3) that represents the function based behaviour representation context *entity* (3.2.9)

Note 1 to entry: A **Function_based_behaviour_representation_context** is a type of Representation_context used in the definition of functional models, this will include information regarding functional modelling paradigm.

5.407.3
Function_based_behaviour_representation_item
<application module: Function_based_behaviour_representation_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the function based behaviour representation item *entity* (3.2.9)

Note 1 to entry: A **Function_based_behaviour_representation_item** is a type of Representation_item used in the definition of a functional model.

5.408 Disposition_arm

5.408.1
Disposition
<application module: Disposition_arm> *application object* (3.1.78) that is a type of *Approval* (5.19.1) that represents the disposition *entity* (3.2.9)

5.409 Disposition_mim

5.409.1
disposition
<application module: Disposition_mim> *entity data type* (3.2.10) that is a type of *approval* (4.3.1) that represents the disposition *entity* (3.2.9)

Note 1 to entry: A **disposition** is a type of approval which is reords the approvied disposition on an *Issue* (5.403.1).

5.410 Edge_based_wireframe_arm

5.410.1
Edge_based_wireframe_shape_representation
<application module: Edge_based_wireframe_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the edge based wireframe shape representation *entity* (3.2.9)

Note 1 to entry: An **Edge_based_wireframe_shape_representation** is a type of Geometric_model that represents a three dimensional shape, or a portion of the shape, of a product by wireframes that are trimmed by edge topology.

5.411 Shell_based_wireframe_arm

5.411.1

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Shell_based_wireframe_shape_representation
<application module: Shell_based_wireframe_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the shell based wireframe shape representation *entity* (3.2.9)

Note 1 to entry: A **Shell_based_wireframe_shape_representation** is a type of three dimensional Geometric_model defined by wireframe shells that define an implicit volume.

5.412 Geometrically_bounded_surface_arm

5.412.1
Boundary_curve
<application module: Geometrically_bounded_surface_arm> *application object* (3.1.78) that is a type of *Closed_composite_curve* (5.469.1) that represents the boundary curve *entity* (3.2.9)

Note 1 to entry: A **Boundary_curve** is a type of Closed_composite_curve that lies on a surface and is suitable for the definition of a surface boundary.

5.412.2
Curve_bounded_surface
<application module: Geometrically_bounded_surface_arm> *application object* (3.1.78) that is a type of *Bounded_surface* (5.470.2) that represents the curve bounded surface *entity* (3.2.9)

Note 1 to entry: A **Curve_bounded_surface** is a type of Bounded_surface with explicit geometric boundaries defined by curves lying on the surface.

5.412.3
Geometrically_bounded_surface_shape_representation
<application module: Geometrically_bounded_surface_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the geometrically bounded surface shape representation *entity* (3.2.9)

Note 1 to entry: A **Geometrically_bounded_surface_shape_representation** is a type of Geometric_model that consists of one or many surface models defined as *Surface_set* (5.412.4) instances, and transformations, if needed.

5.412.4
Surface_set
<application module: Geometrically_bounded_surface_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the surface set *entity* (3.2.9)

Note 1 to entry: A **Surface_set** is a type of Detailed_geometric_model_element that consists of one or many surfaces used to define a surface model.

5.413 Manifold_surface_arm

5.413.1
Manifold_surface_shape_representation
<application module: Manifold_surface_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the manifold surface shape representation *entity* (3.2.9)

Note 1 to entry: A **Manifold_surface_shape_representation** is a type of Geometric_model that consists of one or many shell-based surface models, and transformations, if needed.

5.413.2

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Open_shell
<application module: Manifold_surface_arm> *application object* (3.1.78) that is a type of *Connected_face_set* (5.11.3) that represents the open shell *entity* (3.2.9)

Note 1 to entry: An **Open_shell** is a type of Connected_face_set that is a shell defined by a collection of faces and containing at least one hole.

5.413.3
Shell_based_surface_model
<application module: Manifold_surface_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the shell based surface model *entity* (3.2.9)

Note 1 to entry: A **Shell_based_surface_model** is a type of Detailed_geometric_model_element that is a collection of shells.

5.414 Geometrically_bounded_wireframe_arm

5.414.1
Geometrically_bounded_wireframe_shape_representation
<application module: Geometrically_bounded_wireframe_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the geometrically bounded wireframe shape representation *entity* (3.2.9)

Note 1 to entry: A **Geometrically_bounded_wireframe_shape_representation** is a type of Geometric_model that represents a shape by wireframe geometry without topology.

5.415 Topologically_bounded_surface_arm

5.415.1
Advanced_face
<application module: Topologically_bounded_surface_arm> *application object* (3.1.78) that is a type of *Face_surface* (5.299.2) that represents the advanced face *entity* (3.2.9)

Note 1 to entry: An **Advanced_face** is a type of *Detailed_geometric_model_element* (5.10.9) that defines an oriented face.

5.416 Faceted_boundary_representation_arm

5.416.1
Faceted_brep_shape_representation
<application module: Faceted_boundary_representation_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the faceted brep shape representation *entity* (3.2.9)

5.417 Advanced_boundary_representation_arm

5.417.1
Advanced_brep_shape_representation
<application module: Advanced_boundary_representation_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the advanced brep shape representation *entity* (3.2.9)

Note 1 to entry: An **Advanced_brep_shape_representation** is a type of Geometric_model in which the representation **items** are specializations of the *Manifold_solid_brep* (5.417.3) entity.

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5.417.2
Closed_shell
<application module: Advanced_boundary_representation_arm> *application object* (3.1.78) that is a type of *Connected_face_set* (5.11.3) that represents the closed shell *entity* (3.2.9)

Note 1 to entry: A **Closed_shell** is a type of Connected_face_set that encloses a finite volume of space.

5.417.3
Manifold_solid_brep
<application module: Advanced_boundary_representation_arm> *application object* (3.1.78) that is a type of *Solid_model* (5.676.1) that represents the manifold solid brep *entity* (3.2.9)

Note 1 to entry: A **Manifold_solid_brep** is a type of Solid_model that may contain multiple elements, faces or surfaces organized into shells.

5.417.4
Oriented_closed_shell
<application module: Advanced_boundary_representation_arm> *application object* (3.1.78) that is a type of *Closed_shell* (5.417.2) that represents the oriented closed shell *entity* (3.2.9)

Note 1 to entry: An **Oriented_closed_shell** is a type of Closed_shell constructed by referencing another Closed_shell and contains a BOOLEAN orientation flag to indicate whether or not the orientation of the constructed Closed_shell agrees with, or is opposite to, the orientation of the original Closed_shell.

5.418 Product_data_quality_definition_arm

5.418.1
Data_quality_definition
<application module: Product_data_quality_definition_arm> *application object* (3.1.78) that represents the data quality definition *entity* (3.2.9)

Note 1 to entry: A **Data_quality_definition** is a description of the aspects of product data quality. Identification of the pertinent product data quality information described will be given by *Data_quality_definition_representation_relationship* (5.418.2). Information on the inspected product data and management data for product data quality shall be related to this entity as required.

5.418.2
Data_quality_definition_representation_relationship
<application module: Product_data_quality_definition_arm> *application object* (3.1.78) that represents the data quality definition representation relationship *entity* (3.2.9)

Note 1 to entry: A **Data_quality_definition_representation_relationship** is a relationship from a *Data_quality_definition* (5.418.1) to a representation of quality data.

5.418.3
Product_data_and_data_quality_relationship
<application module: Product_data_quality_definition_arm> *application object* (3.1.78) that represents the product data and data quality relationship *entity* (3.2.9)

Note 1 to entry: A **Product_data_and_data_quality_relationship** is a relationship from a *Data_quality_definition* (5.418.1) to a *Product_view_definition* (5.30.1).

5.418.4
Software_for_data_quality_check
<application module: Product_data_quality_definition_arm> *application object* (3.1.78) that represents the software for data quality check *entity* (3.2.9)

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Note 1 to entry: A **Software_for_data_quality_check** is an identification of software required to be used, or used in data quality inspection.

5.418.5
Data_quality_definition_relationship
<application module: Product_data_quality_definition_arm> *application object* (3.1.78) that represents the data quality definition relationship *entity* (3.2.9)

Note 1 to entry: A **Data_quality_definition_relationship** is a relationship between two *Data_quality_definition* (5.418.1) instances.

5.419 Product_data_quality_criteria_arm

5.419.1
Data_quality_criteria_representation
<application module: Product_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the data quality criteria representation *entity* (3.2.9)

Note 1 to entry: A **Data_quality_criteria_representation** is a type of Representation that represents a selected set of criteria on product data quality.

5.419.2
Data_quality_criterion
<application module: Product_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the data quality criterion *entity* (3.2.9)

Note 1 to entry: A **Data_quality_criterion** is a type of Representation_item that represents a criterion that is an aspect of a requirement on product data quality.

5.419.3
Data_quality_measurement_requirement
<application module: Product_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the data quality measurement requirement *entity* (3.2.9)

Note 1 to entry: A **Data_quality_measurement_requirement** is a type of Representation_item that represents requirements on acceptable measurement for testing whether the criterion on data quality is satisfied (quality defect exists) or not.

5.419.4
Data_quality_criterion_measurement_association
<application module: Product_data_quality_criteria_arm> *application object* (3.1.78) that represents the data quality criterion measurement association *entity* (3.2.9)

Note 1 to entry: A **Data_quality_criterion_measurement_association** is the representation of a relationship between a criterion and its corresponding measurement requirement.

5.419.5
Data_quality_assessment_specification
<application module: Product_data_quality_criteria_arm> *application object* (3.1.78) that represents the data quality assessment specification *entity* (3.2.9)

Note 1 to entry: A **Data_quality_assessment_specification** is the representation of a specification to be applied to evaluate inspection results for each criterion.

5.419.6

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Data_quality_criterion_assessment_association
<application module: Product_data_quality_criteria_arm> *application object* (3.1.78) that represents the data quality criterion assessment association *entity* (3.2.9)

Note 1 to entry: A **Data_quality_criterion_assessment_association** is the representation of a relationship between a criterion and an assessment specification.

5.419.7
Data_quality_assessment_measurement_association
<application module: Product_data_quality_criteria_arm> *application object* (3.1.78) that represents the data quality assessment measurement association *entity* (3.2.9)

Note 1 to entry: A **Data_quality_assessment_measurement_association** is the representation of a relationship between a measurement requirement and its corresponding assessment specification.

5.419.8
Data_quality_report_request
<application module: Product_data_quality_criteria_arm> *application object* (3.1.78) that represents the data quality report request *entity* (3.2.9)

Note 1 to entry: A **Data_quality_report_request** is the representation of the specification of a report to be generated as a result of inspection for a *Data_quality_criterion* (5.419.2).

5.419.9
Summary_report_request
<application module: Product_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *data_quality_report_request* (4.110.8) that represents the summary report request *entity* (3.2.9)

Note 1 to entry: A **Summary_report_request** is a type of *Data_quality_report_request* (5.419.8) that requests a summarized inspection report on the criterion concerned.

5.419.10
Detailed_report_request
<application module: Product_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *data_quality_report_request* (4.110.8) that represents the detailed report request *entity* (3.2.9)

Note 1 to entry: A **Detailed_report_request** is a type of *Data_quality_report_request* (5.419.8) that requests a detailed inspection report on the criterion concerned.

5.419.11
Detailed_report_request_with_number_of_data
<application module: Product_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *detailed_report_request* (4.110.10) that represents the detailed report request with number of data *entity* (3.2.9)

Note 1 to entry: A **Detailed_report_request_with_number_of_data** is a type of *Detailed_report_request* (5.419.10) that controls maximum number of instances reported.

5.420 Product_data_quality_inspection_result_arm

5.420.1
Data_quality_inspection_result_representation
<application module: Product_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the data quality inspection result representation *entity* (3.2.9)

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Note 1 to entry: A **Data_quality_inspection_result_representation** is a type of Representation that represents inspection results for the specified product data quality criteria against specific product data instance.

5.420.2
Data_quality_inspection_result
<application module: Product_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the data quality inspection result *entity* (3.2.9)

Note 1 to entry: A **Data_quality_inspection_result** is a type of Representation_item that represents the result of inspection regarding a single specified criterion.

5.420.3
Data_quality_inspection_result_with_judgement
<application module: Product_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Data_quality_inspection_result* (5.420.2) that represents the data quality inspection result with judgement *entity* (3.2.9)

Note 1 to entry: A **Data_quality_inspection_result_with_judgement** is a type of Data_quality_inspection_result that contains information on whether the data inspected have passed or failed the test for the criterion.

5.420.4
Data_quality_inspection_report
<application module: Product_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the data quality inspection report *entity* (3.2.9)

Note 1 to entry: A **Data_quality_inspection_report** is a type of Representation_item that represents an inspection report with respect to one specific criterion.

5.420.5
Data_quality_inspection_criterion_report
<application module: Product_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Data_quality_inspection_report* (5.420.4) that represents the data quality inspection criterion report *entity* (3.2.9)

Note 1 to entry: A **Data_quality_inspection_criterion_report** is a type of Data_quality_inspection_report that represents summary information of the inspection results for one specific criterion.

5.420.6
Data_quality_inspection_criterion_report_item
<application module: Product_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the data quality inspection criterion report item *entity* (3.2.9)

5.420.7
Data_quality_inspection_instance_report
<application module: Product_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Data_quality_inspection_report* (5.420.4) that represents the data quality inspection instance report *entity* (3.2.9)

Note 1 to entry: A **Data_quality_inspection_instance_report** is a type of Data_quality_inspection_report that represents detailed information of inspection result in entity instance level for one specific criterion.

5.420.8

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Data_quality_inspection_instance_report_item
<application module: Product_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the data quality inspection instance report item *entity* (3.2.9)

Note 1 to entry: A **Data_quality_inspection_instance_report_item** is a type of Representation_item that represents a detailed inspection result for an inspected element or a pair of inspected elements of the specified product data.

5.420.9
Data_quality_report_measurement_association
<application module: Product_data_quality_inspection_result_arm> *application object* (3.1.78) that represents the data quality report measurement association *entity* (3.2.9)

Note 1 to entry: A **Data_quality_report_measurement_association** is the representation of the correspondence between a *Data_quality_inspection_report* (5.420.4) and the *Data_quality_measurement_requirement* (5.419.3) used for the inspection.

5.421 Shape_data_quality_criteria_arm

5.421.1
Shape_data_quality_criteria_representation
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Data_quality_criteria_representation* (5.419.1) that represents the shape data quality criteria representation *entity* (3.2.9)

5.421.2
Shape_data_quality_assessment_by_numerical_test
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Data_quality_assessment_specification* (5.419.5) that represents the shape data quality assessment by numerical test *entity* (3.2.9)

5.421.3
Shape_data_quality_value_range
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Measure_item* (5.118.1) that represents the shape data quality value range *entity* (3.2.9)

Note 1 to entry: A **Shape_data_quality_value_range** is a type of Measure_item that is a pair of numbers representing the range in which the value shall lie for use in specifying thresholds of criteria or accuracies for measurements.

5.421.4
Shape_data_quality_value_limit
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Numerical_item_with_unit* (5.118.3) and *Qualified_representation_item* (5.666.8) that represents the shape data quality value limit *entity* (3.2.9)

Note 1 to entry: A **Shape_data_quality_value_limit** is a type of Numerical_item_with_unit and a type of Qualified_representation_item that specifies a qualified numerical value representing either the lower limit or the upper limit of a particular quantifiable characteristic.

5.421.5
Shape_data_quality_upper_value_limit
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Shape_data_quality_value_limit* (5.421.4) that represents the shape data quality upper value limit *entity* (3.2.9)

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5.421.6
Shape_data_quality_lower_value_limit
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Shape_data_quality_value_limit* (5.421.4) that represents the shape data quality lower value limit *entity* (3.2.9)

5.421.7
Shape_data_quality_assessment_by_logical_test
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Data_quality_assessment_specification* (5.419.5) that represents the shape data quality assessment by logical test *entity* (3.2.9)

5.421.8
Shape_data_quality_criterion
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Data_quality_criterion* (5.419.2) and *Data_quality_measurement_requirement* (5.419.3) that represents the shape data quality criterion *entity* (3.2.9)

Note 1 to entry: A **Shape_data_quality_criterion** is a type of Data_quality_criterion and a type of Data_quality_measurement_requirement.

5.421.9
Erroneous_data
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Shape_data_quality_criterion* (5.421.8) that represents the erroneous data *entity* (3.2.9)

Note 1 to entry: An **Erroneous_data** is a type of Shape_data_quality_criterion that is a supertype of criteria for detecting mathematically invalid shape data.

5.421.10
Erroneous_topology
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_data* (5.421.9) that represents the erroneous topology *entity* (3.2.9)

Note 1 to entry: An **Erroneous_topology** is a type of Erroneous_data that is a supertype of criteria for detecting topologically invalid shape data.

5.421.11
Open_edge_loop
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_topology* (5.421.10) that represents the open edge loop *entity* (3.2.9)

5.421.12
Open_closed_shell
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_topology* (5.421.10) that represents the open closed shell *entity* (3.2.9)

5.421.13
Inconsistent_adjacent_face_normals
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_topology* (5.421.10) that represents the inconsistent adjacent face normals *entity* (3.2.9)

5.421.14

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Disconnected_face_set
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_topology* (5.421.10) that represents the disconnected face set *entity* (3.2.9)

5.421.15
Erroneous_geometry
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_data* (5.421.9) that represents the erroneous geometry *entity* (3.2.9)

Note 1 to entry: An **Erroneous_geometry** is a type of Erroneous_data that is a supertype of criteria for detecting geometrically invalid shape data.

5.421.16
Inconsistent_curve_transition_code
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_geometry* (5.421.15) that represents the inconsistent curve transition code *entity* (3.2.9)

5.421.17
Erroneous_b_spline_curve_definition
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_geometry* (5.421.15) that represents the erroneous b spline curve definition *entity* (3.2.9)

5.421.18
Inconsistent_surface_transition_code
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_geometry* (5.421.15) that represents the inconsistent surface transition code *entity* (3.2.9)

5.421.19
Erroneous_b_spline_surface_definition
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_geometry* (5.421.15) that represents the erroneous b spline surface definition *entity* (3.2.9)

5.421.20
Erroneous_topology_and_geometry_relationship
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_data* (5.421.9) that represents the erroneous topology and geometry relationship *entity* (3.2.9)

Note 1 to entry: An **Erroneous_topology_and_geometry_relationship** is a type of Erroneous_data that is a supertype of criteria for detecting mathematically invalid geometry and topology relationship.

5.421.21
Inconsistent_edge_and_curve_directions
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_topology_and_geometry_relationship* (5.421.20) that represents the inconsistent edge and curve directions *entity* (3.2.9)

5.421.22
Inconsistent_face_and_surface_normals
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_topology_and_geometry_relationship* (5.421.20) that represents the inconsistent face and surface normals *entity* (3.2.9)

5.421.23

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Inconsistent_face_and_closed_shell_normals
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_topology_and_geometry_relationship* (5.421.20) that represents the inconsistent face and closed shell normals *entity* (3.2.9)

5.421.24
Intersecting_loops_in_face
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_topology_and_geometry_relationship* (5.421.20) that represents the intersecting loops in face *entity* (3.2.9)

5.421.25
Wrongly_placed_loop
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_topology_and_geometry_relationship* (5.421.20) that represents the wrongly placed loop *entity* (3.2.9)

5.421.26
Erroneous_manifold_solid_brep
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_data* (5.421.9) that represents the erroneous manifold solid brep *entity* (3.2.9)

Note 1 to entry: An **Erroneous_manifold_solid_brep** is a type of Erroneous_data that is a supertype of criteria for detecting mathematically invalid *Manifold_solid_brep* (5.417.3).

5.421.27
Wrongly_oriented_void
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_manifold_solid_brep* (5.421.26) that represents the wrongly oriented void *entity* (3.2.9)

5.421.28
Wrongly_placed_void
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_manifold_solid_brep* (5.421.26) that represents the wrongly placed void *entity* (3.2.9)

5.421.29
Intersecting_shells_in_solid
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_manifold_solid_brep* (5.421.26) that represents the intersecting shells in solid *entity* (3.2.9)

5.421.30
Solid_with_wrong_number_of_voids
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Erroneous_manifold_solid_brep* (5.421.26) that represents the solid with wrong number of voids *entity* (3.2.9)

5.421.31
Inapt_data
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Shape_data_quality_criterion* (5.421.8) that represents the inapt data *entity* (3.2.9)

Note 1 to entry: An **Inapt_data** is a type of Shape_data_quality_criterion that is a supertype of criteria for detecting potential problem data from application point of view.

5.421.32

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Inapt_topology
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_data* (5.421.31) that represents the inapt topology *entity* (3.2.9)

Note 1 to entry: An **Inapt_topology** is a type of Inapt_data that is a supertype of criteria for detecting topologically inappropriate shape data.

5.421.33
Free_edge
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_topology* (5.421.32) that represents the free edge *entity* (3.2.9)

5.421.34
Non_manifold_at_edge
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_topology* (5.421.32) that represents the non manifold at edge *entity* (3.2.9)

5.421.35
Non_manifold_at_vertex
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_topology* (5.421.32) that represents the non manifold at vertex *entity* (3.2.9)

5.421.36
Over_used_vertex
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_topology* (5.421.32) that represents the over used vertex *entity* (3.2.9)

5.421.37
Inapt_geometry
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_data* (5.421.31) that represents the inapt geometry *entity* (3.2.9)

Note 1 to entry: An **Inapt_geometry** is a type of Inapt_data that is a supertype of criteria for detecting geometrically inappropriate shape data.

5.421.38
Nearly_degenerate_geometry
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_geometry* (5.421.37) that represents the nearly degenerate geometry *entity* (3.2.9)

Note 1 to entry: A **Nearly_degenerate_geometry** is a type of Inapt_geometry that is a supertype of criteria for detecting nearly degenerate geometry data.

5.421.39
Small_area_surface
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Nearly_degenerate_geometry* (5.421.38) that represents the small area surface *entity* (3.2.9)

5.421.40
Short_length_curve
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Nearly_degenerate_geometry* (5.421.38) that represents the short length curve *entity* (3.2.9)

5.421.41

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Entirely_narrow_surface
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Nearly_degenerate_geometry* (5.421.38) that represents the entirely narrow surface *entity* (3.2.9)

5.421.42
Discontinuous_geometry
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_geometry* (5.421.37) that represents the discontinuous geometry *entity* (3.2.9)

Note 1 to entry: A **Discontinuous_geometry** is a type of Inapt_geometry that is a supertype of criteria for detecting geometry data with discontinuity.

5.421.43
G1_discontinuous_curve
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Discontinuous_geometry* (5.421.42) that represents the g1 discontinuous curve *entity* (3.2.9)

5.421.44
G2_discontinuous_curve
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Discontinuous_geometry* (5.421.42) that represents the g2 discontinuous curve *entity* (3.2.9)

5.421.45
G1_discontinuous_surface
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Discontinuous_geometry* (5.421.42) that represents the g1 discontinuous surface *entity* (3.2.9)

5.421.46
G2_discontinuous_surface
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Discontinuous_geometry* (5.421.42) that represents the g2 discontinuous surface *entity* (3.2.9)

5.421.47
Self_intersecting_geometry
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_geometry* (5.421.37) that represents the self intersecting geometry *entity* (3.2.9)

Note 1 to entry: A **Self_intersecting_geometry** is a type of Inapt_geometry that is a supertype of criteria for detecting self-intersecting geometry data.

5.421.48
Self_intersecting_curve
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Self_intersecting_geometry* (5.421.47) that represents the self intersecting curve *entity* (3.2.9)

5.421.49
Self_intersecting_surface
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Self_intersecting_geometry* (5.421.47) that represents the self intersecting surface *entity* (3.2.9)

Note 1 to entry: A **Self_intersecting_surface** is a type of Self_intersecting_geometry This entity asserts that a surface has self-intersection within its domain.

5.421.50

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Geometry_with_local_near_degeneracy
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_geometry* (5.421.37) that represents the geometry with local near degeneracy *entity* (3.2.9)

Note 1 to entry: A **Geometry_with_local_near_degeneracy** is a type of Inapt_geometry that is a supertype of criteria for detecting geometry including locally infinitesimal characteristics.

5.421.51
Curve_with_small_curvature_radius
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometry_with_local_near_degeneracy* (5.421.50) that represents the curve with small curvature radius *entity* (3.2.9)

5.421.52
Short_length_curve_segment
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometry_with_local_near_degeneracy* (5.421.50) that represents the short length curve segment *entity* (3.2.9)

5.421.53
Surface_with_small_curvature_radius
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometry_with_local_near_degeneracy* (5.421.50) that represents the surface with small curvature radius *entity* (3.2.9)

5.421.54
Small_area_surface_patch
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometry_with_local_near_degeneracy* (5.421.50) that represents the small area surface patch *entity* (3.2.9)

5.421.55
Narrow_surface_patch
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometry_with_local_near_degeneracy* (5.421.50) that represents the narrow surface patch *entity* (3.2.9)

5.421.56
Indistinct_surface_knots
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometry_with_local_near_degeneracy* (5.421.50) that represents the indistinct surface knots *entity* (3.2.9)

5.421.57
Indistinct_curve_knots
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometry_with_local_near_degeneracy* (5.421.50) that represents the indistinct curve knots *entity* (3.2.9)

5.421.58
Nearly_degenerate_surface_boundary
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometry_with_local_near_degeneracy* (5.421.50) that represents the nearly degenerate surface boundary *entity* (3.2.9)

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5.421.59
Nearly_degenerate_surface_patch
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometry_with_local_near_degeneracy* (5.421.50) that represents the nearly degenerate surface patch *entity* (3.2.9)

5.421.60
Overlapping_geometry
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_geometry* (5.421.37) that represents the overlapping geometry *entity* (3.2.9)

Note 1 to entry: A **Overlapping_geometry** is a type of Inapt_geometry that is a supertype of criteria for detecting partly overlapping geometric entities.

5.421.61
Partly_overlapping_curves
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Overlapping_geometry* (5.421.60) that represents the partly overlapping curves *entity* (3.2.9)

5.421.62
Partly_overlapping_surfaces
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Overlapping_geometry* (5.421.60) that represents the partly overlapping surfaces *entity* (3.2.9)

5.421.63
Multiply_defined_geometry
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_geometry* (5.421.37) that represents the multiply defined geometry *entity* (3.2.9)

Note 1 to entry: A **Multiply_defined_geometry** is a type of Inapt_geometry that is a supertype of criteria for detecting multiply defined geometry data.

5.421.64
Multiply_defined_curves
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Multiply_defined_geometry* (5.421.63) that represents the multiply defined curves *entity* (3.2.9)

5.421.65
Multiply_defined_surfaces
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Multiply_defined_geometry* (5.421.63) that represents the multiply defined surfaces *entity* (3.2.9)

5.421.66
Multiply_defined_cartesian_points
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Multiply_defined_geometry* (5.421.63) that represents the multiply defined cartesian points *entity* (3.2.9)

5.421.67
Multiply_defined_directions
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Multiply_defined_geometry* (5.421.63) that represents the multiply defined directions *entity* (3.2.9)

5.421.68

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Multiply_defined_placements
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Multiply_defined_geometry* (5.421.63) that represents the multiply defined placements *entity* (3.2.9)

5.421.69
Geometry_with_local_irregularity
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_geometry* (5.421.37) that represents the geometry with local irregularity *entity* (3.2.9)

Note 1 to entry: A **Geometry_with_local_irregularity** is a type of Inapt_geometry that is a supertype of criteria for detecting geometry data that have local inappropriate characteristics.

5.421.70
Extreme_patch_width_variation
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometry_with_local_irregularity* (5.421.69) that represents the extreme patch width variation *entity* (3.2.9)

5.421.71
Zero_surface_normal
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometry_with_local_irregularity* (5.421.69) that represents the zero surface normal *entity* (3.2.9)

5.421.72
Abrupt_change_of_surface_normal
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometry_with_local_irregularity* (5.421.69) that represents the abrupt change of surface normal *entity* (3.2.9)

5.421.73
Overcomplex_geometry
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_geometry* (5.421.37) that represents the overcomplex geometry *entity* (3.2.9)

Note 1 to entry: A **Overcomplex_geometry** is a type of Inapt_geometry and is a supertype of criteria for detecting overcomplex geometry data.

5.421.74
Excessively_high_degree_curve
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Overcomplex_geometry* (5.421.73) that represents the excessively high degree curve *entity* (3.2.9)

5.421.75
Excessively_high_degree_surface
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Overcomplex_geometry* (5.421.73) that represents the excessively high degree surface *entity* (3.2.9)

5.421.76
Surface_with_excessive_patches_in_one_direction
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Overcomplex_geometry* (5.421.73) that represents the surface with excessive patches in one direction *entity* (3.2.9)

5.421.77

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Curve_with_excessive_segments
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Overcomplex_geometry* (5.421.73) that represents the curve with excessive segments *entity* (3.2.9)

5.421.78
High_degree_linear_curve
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Overcomplex_geometry* (5.421.73) that represents the high degree linear curve *entity* (3.2.9)

5.421.79
High_degree_planar_surface
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Overcomplex_geometry* (5.421.73) that represents the high degree planar surface *entity* (3.2.9)

5.421.80
High_degree_conic
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Overcomplex_geometry* (5.421.73) that represents the high degree conic *entity* (3.2.9)

5.421.81
High_degree_axi_symmetric_surface
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Overcomplex_geometry* (5.421.73) that represents the high degree axi symmetric surface *entity* (3.2.9)

5.421.82
Inapt_topology_and_geometry_relationship
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_data* (5.421.31) that represents the inapt topology and geometry relationship *entity* (3.2.9)

Note 1 to entry: An **Inapt_topology_and_geometry_relationship** is a type of Inapt_data that is a supertype of criteria for detecting inappropriate relationship between topology and geometry.

5.421.83
Topology_related_to_nearly_degenerate_geometry
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_topology_and_geometry_relationship* (5.421.82) that represents the topology related to nearly degenerate geometry *entity* (3.2.9)

Note 1 to entry: A **Topology_related_to_nearly_degenerate_geometry** is a type of Inapt_topology_and_geometry_relationship and is a supertype of criteria for detecting topology related to nearly degenerate geometry of various types.

5.421.84
Short_length_edge
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Topology_related_to_nearly_degenerate_geometry* (5.421.83) that represents the short length edge *entity* (3.2.9)

5.421.85
Small_area_face
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Topology_related_to_nearly_degenerate_geometry* (5.421.83) that represents the small area face *entity* (3.2.9)

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5.421.86
Entirely_narrow_face
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Topology_related_to_nearly_degenerate_geometry* (5.421.83) that represents the entirely narrow face *entity* (3.2.9)

5.421.87
Geometric_gap_in_topology
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_topology_and_geometry_relationship* (5.421.82) that represents the geometric gap in topology *entity* (3.2.9)

Note 1 to entry: A **Geometric_gap_in_topology** is a type of Inapt_topology_and_geometry_relationship that is a supertype of criteria for detecting various types of gap between geometry and topology.

5.421.88
Gap_between_adjacent_edges_in_loop
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometric_gap_in_topology* (5.421.87) that represents the gap between adjacent edges in loop *entity* (3.2.9)

5.421.89
Gap_between_vertex_and_base_surface
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometric_gap_in_topology* (5.421.87) that represents the gap between vertex and base surface *entity* (3.2.9)

5.421.90
Gap_between_vertex_and_edge
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometric_gap_in_topology* (5.421.87) that represents the gap between vertex and edge *entity* (3.2.9)

5.421.91
Gap_between_edge_and_base_surface
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometric_gap_in_topology* (5.421.87) that represents the gap between edge and base surface *entity* (3.2.9)

5.421.92
Gap_between_pcurves_related_to_an_edge
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometric_gap_in_topology* (5.421.87) that represents the gap between pcurves related to an edge *entity* (3.2.9)

5.421.93
Gap_between_faces_related_to_an_edge
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Geometric_gap_in_topology* (5.421.87) that represents the gap between faces related to an edge *entity* (3.2.9)

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5.421.94
Non_smooth_geometry_transition_across_edge
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_topology_and_geometry_relationship* (5.421.82) that represents the non smooth geometry transition across edge *entity* (3.2.9)

Note 1 to entry: A **Non_smooth_geometry_transition_across_edge** is a type of Inapt_topology_and_geometry_relationship that is a supertype of criteria for detecting two types of non smooth geometric transition across edge.

5.421.95
G1_discontinuity_between_adjacent_faces
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Non_smooth_geometry_transition_across_edge* (5.421.94) that represents the g1 discontinuity between adjacent faces *entity* (3.2.9)

5.421.96
G2_discontinuity_between_adjacent_faces
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Non_smooth_geometry_transition_across_edge* (5.421.94) that represents the g2 discontinuity between adjacent faces *entity* (3.2.9)

5.421.97
Topology_related_to_self_intersecting_geometry
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_topology_and_geometry_relationship* (5.421.82) that represents the topology related to self intersecting geometry *entity* (3.2.9)

Note 1 to entry: A **Topology_related_to_self_intersecting_geometry** is a type of Inapt_topology_and_geometry_relationship and is a supertype of several criteria for detecting topology related to self-intersecting geometry.

5.421.98
Self_intersecting_loop
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Topology_related_to_self_intersecting_geometry* (5.421.97) that represents the self intersecting loop *entity* (3.2.9)

5.421.99
Self_intersecting_shell
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Topology_related_to_self_intersecting_geometry* (5.421.97) that represents the self intersecting shell *entity* (3.2.9)

5.421.100
Intersecting_connected_face_sets
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Topology_related_to_self_intersecting_geometry* (5.421.97) that represents the intersecting connected face sets *entity* (3.2.9)

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5.421.101
Steep_geometry_transition_across_edge
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_topology_and_geometry_relationship* (5.421.82) that represents the steep geometry transition across edge *entity* (3.2.9)

Note 1 to entry: A **Steep_geometry_transition_across_edge** is a type of Inapt_topology_and_geometry_relationship criterion that is a supertype of criteria for detecting a portion of shape data where adjacent topological elements are steeply connected.

5.421.102
Steep_angle_between_adjacent_edges
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Steep_geometry_transition_across_edge* (5.421.101) that represents the steep angle between adjacent edges *entity* (3.2.9)

5.421.103
Steep_angle_between_adjacent_faces
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Steep_geometry_transition_across_edge* (5.421.101) that represents the steep angle between adjacent faces *entity* (3.2.9)

5.421.104
Topology_related_to_overlapping_geometry
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_topology_and_geometry_relationship* (5.421.82) that represents the topology related to overlapping geometry *entity* (3.2.9)

Note 1 to entry: A **Topology_related_to_overlapping_geometry** is a type of Inapt_topology_and_geometry_relationship and is a supertype of criteria for detecting topological entities whose underlying geometry partially overlaps.

5.421.105
Partly_overlapping_faces
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Topology_related_to_overlapping_geometry* (5.421.104) that represents the partly overlapping faces *entity* (3.2.9)

5.421.106
Partly_overlapping_edges
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Topology_related_to_overlapping_geometry* (5.421.104) that represents the partly overlapping edges *entity* (3.2.9)

5.421.107
Topology_related_to_multiply_defined_geometry
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_topology_and_geometry_relationship* (5.421.82) that represents the topology related to multiply defined geometry *entity* (3.2.9)

Note 1 to entry: A **Topology_related_to_multiply_defined_geometry** is a type of Inapt_topology_and_geometry_relationship and is a supertype of criteria for detecting topological entities whose underlying geometry completely overlaps.

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5.421.108
Multiply_defined_faces
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Topology_related_to_multiply_defined_geometry* (5.421.107) that represents the multiply defined faces *entity* (3.2.9)

5.421.109
Multiply_defined_vertices
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Topology_related_to_multiply_defined_geometry* (5.421.107) that represents the multiply defined vertices *entity* (3.2.9)

5.421.110
Multiply_defined_edges
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Topology_related_to_multiply_defined_geometry* (5.421.107) that represents the multiply defined edges *entity* (3.2.9)

5.421.111
Overcomplex_topology_and_geometry_relationship
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_topology_and_geometry_relationship* (5.421.82) that represents the overcomplex topology and geometry relationship *entity* (3.2.9)

Note 1 to entry: A **Overcomplex_topology_and_geometry_relationship** is a type of Inapt_topology_and_geometry_relationship and is a supertype of criteria for detecting topology related to overcomplex geometry data.

5.421.112
Unused_patches
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Overcomplex_topology_and_geometry_relationship* (5.421.111) that represents the unused patches *entity* (3.2.9)

5.421.113
Edge_with_excessive_segments
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Overcomplex_topology_and_geometry_relationship* (5.421.111) that represents the edge with excessive segments *entity* (3.2.9)

5.421.114
Face_surface_with_excessive_patches_in_one_direction
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Overcomplex_topology_and_geometry_relationship* (5.421.111) that represents the face surface with excessive patches in one direction *entity* (3.2.9)

5.421.115
Inapt_manifold_solid_brep
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_data* (5.421.31) that represents the inapt manifold solid brep *entity* (3.2.9)

Note 1 to entry: An **Inapt_manifold_solid_brep** is a type of Inapt_data and is a supertype of criteria for detecting some types of inappropriate geometric model.

5.421.116

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Partly_overlapping_solids
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_manifold_solid_brep* (5.421.115) that represents the partly overlapping solids *entity* (3.2.9)

5.421.117
Small_volume_solid
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_manifold_solid_brep* (5.421.115) that represents the small volume solid *entity* (3.2.9)

5.421.118
Multiply_defined_solids
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_manifold_solid_brep* (5.421.115) that represents the multiply defined solids *entity* (3.2.9)

5.421.119
Entirely_narrow_solid
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_manifold_solid_brep* (5.421.115) that represents the entirely narrow solid *entity* (3.2.9)

5.421.120
Solid_with_excessive_number_of_voids
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Inapt_manifold_solid_brep* (5.421.115) that represents the solid with excessive number of voids *entity* (3.2.9)

5.421.121
Shape_summary_request_with_representative_value
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Summary_report_request* (5.419.9) that represents the shape summary request with representative value *entity* (3.2.9)

Note 1 to entry: A **Shape_summary_request_with_representative_value** is a type of Summary_report_request that requests a summarized inspection report with representative measured value on the criterion concerned.

5.421.122
Shape_criteria_representation_with_accuracy
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that is a type of *Shape_data_quality_criteria_representation* (5.421.1) that represents the shape criteria representation with accuracy *entity* (3.2.9)

Note 1 to entry: A **Shape_criteria_representation_with_accuracy** is a type of Shape_data_quality_criteria_representation that contains accuracy information to be applied for measurement.

5.421.123
Shape_measurement_accuracy
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that represents the shape measurement accuracy *entity* (3.2.9)

Note 1 to entry: A **Shape_measurement_accuracy** is a representation of the accuracy of the numerical calculation for use in the measurement.

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5.421.124
Shape_data_quality_criterion_and_accuracy_association
<application module: Shape_data_quality_criteria_arm> *application object* (3.1.78) that represents the shape data quality criterion and accuracy association *entity* (3.2.9)

Note 1 to entry: A **Shape_data_quality_criterion_and_accuracy_association** is the representation of a relationship between a *Shape_data_quality_criterion* (5.421.8) and a *Shape_measurement_accuracy* (5.421.123) required for the measurement of the criterion.

5.422 Shape_data_quality_inspection_result_arm

5.422.1
Shape_data_quality_inspection_criterion_report
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Data_quality_inspection_criterion_report* (5.420.5) that represents the shape data quality inspection criterion report *entity* (3.2.9)

Note 1 to entry: A **Shape_data_quality_inspection_criterion_report** is a type of Data_quality_inspection_criterion_report and represents summarized information on the result of inspection for a specific shape data quality criterion.

5.422.2
Plane_angle_and_ratio_pair
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that represents the plane angle and ratio pair *entity* (3.2.9)

5.422.3
B_spline_curve_segment
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that represents the b spline curve segment *entity* (3.2.9)

5.422.4
Point_on_edge_curve
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *point_on_curve* (4.28.8) that represents the point on edge curve *entity* (3.2.9)

Note 1 to entry: A **Point_on_edge_curve** is a type of *Point_on_curve* (5.470.15) and represents the location on the identified *Edge_curve* (5.299.1) where the extreme value was measured.

5.422.5
Point_on_face_surface
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *point_on_surface* (4.28.9) that represents the point on face surface *entity* (3.2.9)

Note 1 to entry: A **Point_on_face_surface** is a type of *Point_on_surface* (5.470.16) and represents the location on the identified *Face_surface* (5.299.2) where the extreme value was measured.

5.422.6
B_spline_curve_knot_locator
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that represents the b spline curve knot locator *entity* (3.2.9)

Note 1 to entry: A **B_spline_curve_knot_locator** is the representation of a location by specifying an index of the knot array of the identified *B_spline_curve* (5.683.1). This entity is used to represent the location where the extreme value was measured.

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5.422.7
Composite_curve_transition_locator
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that represents the composite curve transition locator *entity* (3.2.9)

Note 1 to entry: A **Composite_curve_transition_locator** is the representation of a location by specifying an index of connecting point between two segments in the identified *Composite_curve* (5.469.2). This entity is used to represent the location where the extreme value was measured.

5.422.8
B_spline_surface_knot_locator
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that represents the b spline surface knot locator *entity* (3.2.9)

Note 1 to entry: A **B_spline_surface_knot_locator** is the representation of a location by specifying an index of the knot array and a direction in the parametric space of the identified *B_spline_surface* (5.683.2). This entity is used to represent the location where the extreme value was measured.

5.422.9
B_spline_surface_strip
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that represents the b spline surface strip *entity* (3.2.9)

Note 1 to entry: A **B_spline_surface_strip** is the representation of a location by specifying a surface strip of the identified *B_spline_surface* (5.683.2). This entity is used to represent the location where the extreme value was measured.

5.422.10
B_spline_surface_patch
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that represents the b spline surface patch *entity* (3.2.9)

Note 1 to entry: A **B_spline_surface_patch** is the representation of a location by specifying a patch with *u*, *v* knot indices on the identified *B_spline_surface* (5.683.2). This entity is used to represent where the extreme value was measured.

5.422.11
Rectangular_composite_surface_transition_locator
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that represents the rectangular composite surface transition locator *entity* (3.2.9)

Note 1 to entry: A **Rectangular_composite_surface_transition_locator** is the representation of a location by specifying an index of connecting segments between two patches in the identified *Rectangular_composite_surface* (5.423.1). This entity is used to represent the location where the extreme value was measured.

5.422.12
Boundary_curve_of_b_spline_or_rectangular_composite_surface
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that represents the boundary curve of b spline or rectangular composite surface *entity* (3.2.9)

Note 1 to entry: A **Boundary_curve_of_b_spline_or_rectangular_composite_surface** is the representation of a location by specifying a boundary of the parametric space of the identified surface. The entity is used to represent the location where the extreme value is measured.

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5.422.13
Plane_angle_and_length_pair
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that represents the plane angle and length pair *entity* (3.2.9)

5.422.14
Shape_data_quality_inspection_instance_report
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Data_quality_inspection_instance_report* (5.420.7) that represents the shape data quality inspection instance report *entity* (3.2.9)

Note 1 to entry: A **Shape_data_quality_inspection_instance_report** is a type of Data_quality_inspection_instance_report and represents detailed inspection report of the product shape data for a specific criterion.

5.422.15
Shape_data_quality_inspection_instance_report_item
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Data_quality_inspection_instance_report_item* (5.420.8) that represents the shape data quality inspection instance report item *entity* (3.2.9)

Note 1 to entry: A **Shape_data_quality_inspection_instance_report_item** is a type of Data_quality_inspection_instance_report_item and represents the detailed information obtained for each inspected element or a pair of elements of product shape data.

5.422.16
Instance_report_item_with_extreme_instances
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Shape_data_quality_inspection_instance_report_item* (5.422.15) that represents the instance report item with extreme instances *entity* (3.2.9)

Note 1 to entry: An **Instance_report_item_with_extreme_instances** is a type of Shape_data_quality_inspection_instance_report_item and has the information on pairs of extreme value and its location.

5.422.17
Extreme_instance
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that represents the extreme instance *entity* (3.2.9)

Note 1 to entry: An **Extreme_instance** is the representation of a pair of extreme measured value and related location information where it was detected.

5.422.18
Shape_data_quality_inspection_result
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Data_quality_inspection_result* (5.420.2) that represents the shape data quality inspection result *entity* (3.2.9)

5.422.19
Shape_data_quality_inspection_result_representation
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Data_quality_inspection_result_representation* (5.420.1) that represents the shape data quality inspection result representation *entity* (3.2.9)

5.422.20

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Shape_inspection_result_representation_with_accuracy
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Shape_data_quality_inspection_result_representation* (5.422.19) that represents the shape inspection result representation with accuracy *entity* (3.2.9)

Note 1 to entry: A **Shape_inspection_result_representation_with_accuracy** is a type of Shape_data_quality_inspection_result_representation and has the information of common accuracy applied to all the measurements.

5.422.21
Shape_inspection_result_accuracy_association
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that represents the shape inspection result accuracy association *entity* (3.2.9)

Note 1 to entry: A **Shape_inspection_result_accuracy_association** is the representation of the relationship between *Shape_data_quality_inspection_result* (5.422.18) and the accuracy applied by the inspection.

5.422.22
Shape_data_quality_inspected_shape_and_result_relationship
<application module: Shape_data_quality_inspection_result_arm> *application object* (3.1.78) that is a type of *Representation_relationship* (5.12.8) that represents the shape data quality inspected shape and result relationship *entity* (3.2.9)

Note 1 to entry: A **Shape_data_quality_inspected_shape_and_result_relationship** is a type of Representation_relationship and it represents the relationship between *Shape_data_quality_inspection_result_representation* (5.422.19) representing the inspection results and *Geometric_model* (5.10.12) representing the inspection target product shape data.

5.423 Composite_surface_arm

5.423.1
Rectangular_composite_surface
<application module: Composite_surface_arm> *application object* (3.1.78) that is a type of *Bounded_surface* (5.470.2) that represents the rectangular composite surface *entity* (3.2.9)

Note 1 to entry: A **Rectangular_composite_surface** is a type of Bounded_surface composed of a rectangular array of **n_u** by **n_v** segments or patches.

5.423.2
Surface_patch
<application module: Composite_surface_arm> *application object* (3.1.78) that represents the surface patch *entity* (3.2.9)

Note 1 to entry: A **Surface_patch** is a *Bounded_surface* (5.470.2) with additional transition and sense data suitable for use as part of a composite surface.

5.423.3
Trimmed_surface
<application module: Composite_surface_arm> *application object* (3.1.78) that is a type of *Bounded_surface* (5.470.2) that represents the trimmed surface *entity* (3.2.9)

Note 1 to entry: A **Trimmed_surface** is a type of Bounded_surface in which the boundaries are the constant parametric lines u1 = u1, u2 = u2, v1 = v1 and v2 = v2.

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5.424 Numeric_expression_arm

5.424.1
And_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Multiple_arity_boolean_expression* (5.424.26) that represents the and expression *entity* (3.2.9)

5.424.2
Binary_boolean_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Boolean_expression* (5.424.5) and *Binary_generic_expression* (5.309.1) that represents the binary boolean expression *entity* (3.2.9)

Note 1 to entry: A **Binary_boolean_expression** is a type of Boolean_expression and Binary_generic_expression.

5.424.3
Binary_numeric_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Numeric_expression* (5.424.30) and *Binary_generic_expression* (5.309.1) that represents the binary numeric expression *entity* (3.2.9)

Note 1 to entry: A **Binary_numeric_expression** is a type of Numeric_expression and Binary_generic_expression.

5.424.4
Boolean_defined_function
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Defined_function* (5.424.15) and *Boolean_expression* (5.424.5) that represents the boolean defined function *entity* (3.2.9)

Note 1 to entry: A **Boolean_defined_function** is a type of Defined_function and Boolean_expression.

5.424.5
Boolean_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Expression* (5.424.18) that represents the boolean expression *entity* (3.2.9)

Note 1 to entry: A **Boolean_expression** is a type of Expression for which the range is the BOOLEAN data type defined in ISO 10303-11.

5.424.6
Boolean_literal
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Simple_boolean_expression* (5.424.37) and *Generic_literal* (5.309.4) that represents the boolean literal *entity* (3.2.9)

Note 1 to entry: A **Boolean_literal** is a type of Simple_boolean_expression and Generic_literal.

5.424.7
Boolean_variable
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Simple_boolean_expression* (5.424.37) and *Variable* (5.309.9) that represents the boolean variable *entity* (3.2.9)

Note 1 to entry: A **Boolean_variable** is a type of Simple_boolean_expression and Variable.

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5.424.8
Comparison_equal
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Comparison_expression* (5.424.9) that represents the comparison equal *entity* (3.2.9)

Note 1 to entry: A **Comparison_equal** is a type of Comparison_expression carries the semantics of the value equal ('=') operator defined in ISO 10303-11 restricted to the NUMBER, BOOLEAN and STRING EXPRESS data types.

5.424.9
Comparison_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Boolean_expression* (5.424.5) and *Binary_generic_expression* (5.309.1) that represents the comparison expression *entity* (3.2.9)

Note 1 to entry: A **Comparison_expression** is a type of Boolean_expression and a Binary_generic_expression.

5.424.10
Comparison_greater
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Comparison_expression* (5.424.9) that represents the comparison greater *entity* (3.2.9)

5.424.11
Comparison_greater_equal
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Comparison_expression* (5.424.9) that represents the comparison greater equal *entity* (3.2.9)

5.424.12
Comparison_less
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Comparison_expression* (5.424.9) that represents the comparison less *entity* (3.2.9)

5.424.13
Comparison_less_equal
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Comparison_expression* (5.424.9) that represents the comparison less equal *entity* (3.2.9)

5.424.14
Comparison_not_equal
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Comparison_expression* (5.424.9) that represents the comparison not equal *entity* (3.2.9)

5.424.15
Defined_function
<application module: Numeric_expression_arm> *application object* (3.1.78) that represents the defined function *entity* (3.2.9)

5.424.16
Div_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Binary_numeric_expression* (5.424.3) that represents the div expression *entity* (3.2.9)

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5.424.17
Equals_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Binary_boolean_expression* (5.424.2) that represents the equals expression *entity* (3.2.9)

5.424.18
Expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Generic_expression* (5.309.3) that represents the expression *entity* (3.2.9)

5.424.19
Int_literal
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Literal_number* (5.424.22) that represents the int literal *entity* (3.2.9)

5.424.20
Int_numeric_variable
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Numeric_variable* (5.424.31) that represents the int numeric variable *entity* (3.2.9)

5.424.21
Interval_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Boolean_expression* (5.424.5) and *Multiple_arity_generic_expression* (5.309.6) that represents the interval expression *entity* (3.2.9)

Note 1 to entry: An **Interval_expression** is a type of Boolean_expression and Multiple_arity_generic_expression.

5.424.22
Literal_number
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Simple_numeric_expression* (5.424.38) and *Generic_literal* (5.309.4) that represents the literal number *entity* (3.2.9)

Note 1 to entry: A **Literal_number** is a type of Simple_numeric_expression and Generic_literal.

5.424.23
Minus_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Binary_numeric_expression* (5.424.3) that represents the minus expression *entity* (3.2.9)

5.424.24
Mod_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Binary_numeric_expression* (5.424.3) that represents the mod expression *entity* (3.2.9)

5.424.25
Mult_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Multiple_arity_numeric_expression* (5.424.28) that represents the mult expression *entity* (3.2.9)

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5.424.26
Multiple_arity_boolean_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Boolean_expression* (5.424.5) and *Multiple_arity_generic_expression* (5.309.6) that represents the multiple arity boolean expression *entity* (3.2.9)

Note 1 to entry: A **Multiple_arity_boolean_expression** is a type of Boolean_expression and Multiple_arity_generic_expression.

5.424.27
Multiple_arity_function_call
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Multiple_arity_numeric_expression* (5.424.28) that represents the multiple arity function call *entity* (3.2.9)

5.424.28
Multiple_arity_numeric_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Numeric_expression* (5.424.30) and *Multiple_arity_generic_expression* (5.309.6) that represents the multiple arity numeric expression *entity* (3.2.9)

Note 1 to entry: A **Multiple_arity_numeric_expression** is a type of Numeric_expression and Multiple_arity_generic_expression.

5.424.29
Not_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Unary_boolean_expression* (5.424.40) that represents the not expression *entity* (3.2.9)

5.424.30
Numeric_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Expression* (5.424.18) that represents the numeric expression *entity* (3.2.9)

5.424.31
Numeric_variable
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Simple_numeric_expression* (5.424.38) and *Variable* (5.309.9) that represents the numeric variable *entity* (3.2.9)

Note 1 to entry: A **Numeric_variable** is a type of Simple_numeric_expression and Variable.

5.424.32
Or_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Multiple_arity_boolean_expression* (5.424.26) that represents the or expression *entity* (3.2.9)

Note 1 to entry: An **Or_expression** is a type of Multiple_arity_boolean_expression entity carries the semantics of the 'OR' operator defined in ISO 10303-11 and uses its associativity property to handle multiple arity.

5.424.33
Plus_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Multiple_arity_numeric_expression* (5.424.28) that represents the plus expression *entity* (3.2.9)

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5.424.34
Power_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Binary_numeric_expression* (5.424.3) that represents the power expression *entity* (3.2.9)

5.424.35
Real_literal
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Literal_number* (5.424.22) that represents the real literal *entity* (3.2.9)

5.424.36
Real_numeric_variable
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Numeric_variable* (5.424.31) that represents the real numeric variable *entity* (3.2.9)

5.424.37
Simple_boolean_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Boolean_expression* (5.424.5) and *Simple_generic_expression* (5.309.7) that represents the simple boolean expression *entity* (3.2.9)

Note 1 to entry: A **Simple_boolean_expression** is a type of Boolean_expression and Simple_generic_expression.

5.424.38
Simple_numeric_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Numeric_expression* (5.424.30) and *Simple_generic_expression* (5.309.7) that represents the simple numeric expression *entity* (3.2.9)

Note 1 to entry: A **Simple_numeric_expression** is a type of Numeric_expression and Simple_generic_expression.

5.424.39
Slash_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Binary_numeric_expression* (5.424.3) that represents the slash expression *entity* (3.2.9)

5.424.40
Unary_boolean_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Boolean_expression* (5.424.5) and *Unary_generic_expression* (5.309.8) that represents the unary boolean expression *entity* (3.2.9)

Note 1 to entry: A **Unary_boolean_expression** is a type of Boolean_expression and Unary_generic_expression.

5.424.41
Unary_numeric_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Numeric_expression* (5.424.30) and *Unary_generic_expression* (5.309.8) that represents the unary numeric expression *entity* (3.2.9)

Note 1 to entry: A **Unary_numeric_expression** is a type of Numeric_expression and Unary_generic_expression.

5.424.42

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Xor_expression
<application module: Numeric_expression_arm> *application object* (3.1.78) that is a type of *Binary_boolean_expression* (5.424.2) that represents the xor expression *entity* (3.2.9)

5.425 Elementary_function_arm

5.425.1
Abs_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Unary_function_call* (5.425.20) that represents the abs function *entity* (3.2.9)

Note 1 to entry: An **Abs_function** is a type of an Unary_function_call.

5.425.2
Acos_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Unary_function_call* (5.425.20) that represents the acos function *entity* (3.2.9)

5.425.3
Asin_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Unary_function_call* (5.425.20) that represents the asin function *entity* (3.2.9)

5.425.4
Atan_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Binary_function_call* (5.425.5) that represents the atan function *entity* (3.2.9)

5.425.5
Binary_function_call
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Binary_numeric_expression* (5.424.3) that represents the binary function call *entity* (3.2.9)

5.425.6
Cos_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Unary_function_call* (5.425.20) that represents the cos function *entity* (3.2.9)

5.425.7
Exp_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Unary_function_call* (5.425.20) that represents the exp function *entity* (3.2.9)

Note 1 to entry: An **Exp_function** is a type of Unary_function_call entity carries the semantics of the EXPRESS 'EXP' function defined in ISO 10303-11.

5.425.8
Integer_defined_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Numeric_defined_function* (5.425.15) that represents the integer defined function *entity* (3.2.9)

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5.425.9
Log10_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Unary_function_call* (5.425.20) that represents the log10 function *entity* (3.2.9)

Note 1 to entry: A **Log10_function** is a type of Unary_function_call.It carries the semantics of the EXPRESS 'LOG10' function defined in ISO 10303-11.

5.425.10
Log2_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Unary_function_call* (5.425.20) that represents the log2 function *entity* (3.2.9)

5.425.11
Log_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Unary_function_call* (5.425.20) that represents the log function *entity* (3.2.9)

5.425.12
Maximum_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Multiple_arity_function_call* (5.424.27) that represents the maximum function *entity* (3.2.9)

5.425.13
Minimum_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Multiple_arity_function_call* (5.424.27) that represents the minimum function *entity* (3.2.9)

5.425.14
Minus_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Unary_function_call* (5.425.20) that represents the minus function *entity* (3.2.9)

5.425.15
Numeric_defined_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Numeric_expression* (5.424.30) and *Defined_function* (5.424.15) that represents the numeric defined function *entity* (3.2.9)

Note 1 to entry: A **Numeric_defined_function** is a type of Numeric_expression and a type of Defined_function.

5.425.16
Real_defined_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Numeric_defined_function* (5.425.15) that represents the real defined function *entity* (3.2.9)

5.425.17
Sin_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Unary_function_call* (5.425.20) that represents the sin function *entity* (3.2.9)

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5.425.18
Square_root_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Unary_function_call* (5.425.20) that represents the square root function *entity* (3.2.9)

5.425.19
Tan_function
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Unary_function_call* (5.425.20) that represents the tan function *entity* (3.2.9)

5.425.20
Unary_function_call
<application module: Elementary_function_arm> *application object* (3.1.78) that is a type of *Unary_numeric_expression* (5.424.41) that represents the unary function call *entity* (3.2.9)

Note 1 to entry: A **Unary_function_call** is a type of Unary_numeric_expression and is an unary operator on NUMBER data type defined in ISO 10303-11.

5.426 Altered_package_arm

5.426.1
Altered_package
<application module: Altered_package_arm> *application object* (3.1.78) that is a type of *Package* (5.551.5) that represents the altered package *entity* (3.2.9)

5.426.2
Altered_package_terminal
<application module: Altered_package_arm> *application object* (3.1.78) that is a type of *Package_terminal* (5.551.13) that represents the altered package terminal *entity* (3.2.9)

5.426.3
Length_trimmed_terminal
<application module: Altered_package_arm> *application object* (3.1.78) that is a type of *Altered_package_terminal* (5.426.2) that represents the length trimmed terminal *entity* (3.2.9)

5.426.4
Shape_formed_terminal
<application module: Altered_package_arm> *application object* (3.1.78) that is a type of *Altered_package_terminal* (5.426.2) that represents the shape formed terminal *entity* (3.2.9)

Note 1 to entry: A **Shape_formed_terminal** is a type of a Altered_package_terminal that defines the result of a modification of its shape from its original *Package_terminal* (5.551.13) shape.

5.426.5
Surface_prepped_terminal
<application module: Altered_package_arm> *application object* (3.1.78) that is a type of *Altered_package_terminal* (5.426.2) that represents the surface prepped terminal *entity* (3.2.9)

Note 1 to entry: A **Surface_prepped_terminal** is a type of Altered_package_terminal that defines the result of a modification to its surface condition, for solderability or other reasons, prior to its installation on an *Interconnect_module_component* (5.453.8) during the assembly of a *Layered_assembly_module_design_view* (5.453.13).

5.427 Altered_package_mim

5.427.1

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altered_package_terminal
<application module: Altered_package_mim> *entity data type* (3.2.10) that is a type of *package_terminal* (5.552.11) that represents the altered package terminal *entity* (3.2.9)

Note 1 to entry: A **altered_package_terminal** is a type of package_terminal that implements the ARM concept of *Altered_package_terminal* (5.426.2).

5.427.2
length_trimmed_terminal
<application module: Altered_package_mim> *entity data type* (3.2.10) that is a type of *altered_package_terminal* (5.427.1) that represents the length trimmed terminal *entity* (3.2.9)

Note 1 to entry: A **length_trimmed_terminal** is a type of altered_package_terminal that implements the ARM concept of *Length_trimmed_terminal* (5.426.3).

5.427.3
shape_formed_terminal
<application module: Altered_package_mim> *entity data type* (3.2.10) that is a type of *altered_package_terminal* (5.427.1) that represents the shape formed terminal *entity* (3.2.9)

Note 1 to entry: A **shape_formed_terminal** is a type of altered_package_terminal that implements the ARM concept of *Shape_formed_terminal* (5.426.4).

5.427.4
surface_prepped_terminal
<application module: Altered_package_mim> *entity data type* (3.2.10) that is a type of *altered_package_terminal* (5.427.1) that represents the surface prepped terminal *entity* (3.2.9)

Note 1 to entry: A **surface_prepped_terminal** is a type of altered_package_terminal that implements the ARM concept of *Surface_prepped_terminal* (5.426.5).

5.428 Altered_part_arm

5.428.1
Altered_packaged_part
<application module: Altered_part_arm> *application object* (3.1.78) that is a type of *Packaged_part* (5.557.1) that represents the altered packaged part *entity* (3.2.9)

5.429 Analytical_model_arm

5.429.1
Digital_analytical_model_scalar_port
<application module: Analytical_model_arm> *application object* (3.1.78) that is a type of *Digital_analytical_model_vector_port* (5.429.2) and *Analytical_model_scalar_port* (5.429.18) that represents the digital analytical model scalar port *entity* (3.2.9)

Note 1 to entry: A **Digital_analytical_model_scalar_port** is a type of Digital_analytical_model_vector_port and a type of Analytical_model_scalar_port.

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5.429.2
Digital_analytical_model_vector_port
<application module: Analytical_model_arm> *application object* (3.1.78) that is a type of *Digital_analytical_model_port* (5.429.21) and *Analytical_model_vector_port* (5.429.19) that represents the digital analytical model vector port *entity* (3.2.9)

Note 1 to entry: A **Digital_analytical_model_vector_port** is a type of Digital_analytical_model_port and a type of Analytical_model_vector_port that inherits cardinality from Analytical_model_vector_port and context from Digital_analytical_model_port.

5.429.3
Reference_part_template_for_analytical_model
<application module: Analytical_model_arm> *application object* (3.1.78) that represents the reference part template for analytical model *entity* (3.2.9)

Note 1 to entry: A **Reference_part_template_for_analytical_model** is the association of a template definition with an *Analytical_model_definition* (5.429.12) to enable referencing explicit product data including reference geometric model for a simulation model.

5.429.4
Terminal_pair_port_equivalence_relationship
<application module: Analytical_model_arm> *application object* (3.1.78) that represents the terminal pair port equivalence relationship *entity* (3.2.9)

Note 1 to entry: A **Terminal_pair_port_equivalence_relationship** is the association between a pair of scalar ports and a single distributed port that declares an equivalence relationship in some simulation context.

5.429.5
Through_port_variable
<application module: Analytical_model_arm> *application object* (3.1.78) that is a type of *Port_variable* (5.429.9) that represents the through port variable *entity* (3.2.9)

5.429.6
Transform_port_variable
<application module: Analytical_model_arm> *application object* (3.1.78) that is a type of *Port_variable* (5.429.9) that represents the transform port variable *entity* (3.2.9)

5.429.7
Across_port_variable
<application module: Analytical_model_arm> *application object* (3.1.78) that is a type of *Port_variable* (5.429.9) that represents the across port variable *entity* (3.2.9)

5.429.8
Analog_analytical_model_port
<application module: Analytical_model_arm> *application object* (3.1.78) that is a type of *Analytical_model_port* (5.429.15) that represents the analog analytical model port *entity* (3.2.9)

Note 1 to entry: An **Analog_analytical_model_port** is a type of Analytical_model_port that defines an analog context.

5.429.9
Port_variable
<application module: Analytical_model_arm> *application object* (3.1.78) that represents the port variable *entity* (3.2.9)

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Note 1 to entry: A **Port_variable** is a mapping of a unit to an interface point for an *Analytical_model_definition* (5.429.12) and assigns an identifier to the mapping.

5.429.10
Analytical_model
<application module: Analytical_model_arm> *application object* (3.1.78) that is a type of *Information_product* (5.638.1) that represents the analytical model *entity* (3.2.9)

Note 1 to entry: An **Analytical_model** is a type of Information_product that is a mathematical description of the properties of a system.

5.429.11
Analytical_model_application
<application module: Analytical_model_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the analytical model application *entity* (3.2.9)

5.429.12
Analytical_model_definition
<application module: Analytical_model_arm> *application object* (3.1.78) that is a type of *Information_definition* (5.638.3) that represents the analytical model definition *entity* (3.2.9)

5.429.13
Analytical_model_make_from_relationship
<application module: Analytical_model_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the analytical model make from relationship *entity* (3.2.9)

5.429.14
Analytical_model_parameter
<application module: Analytical_model_arm> *application object* (3.1.78) that is a type of *Applied_independent_property* (5.40.1) that represents the analytical model parameter *entity* (3.2.9)

5.429.15
Analytical_model_port
<application module: Analytical_model_arm> *application object* (3.1.78) that represents the analytical model port *entity* (3.2.9)

Note 1 to entry: An **Analytical_model_port** is a description of an interface point for an *Analytical_model_definition* (5.429.12).

5.429.16
Analytical_model_port_assignment
<application module: Analytical_model_arm> *application object* (3.1.78) that represents the analytical model port assignment *entity* (3.2.9)

Note 1 to entry: An **Analytical_model_port_assignment** is a relationship established between an *Analytical_model_port* (5.429.15) and an **assigned_item**.

5.429.17
Analytical_model_port_make_from_relationship
<application module: Analytical_model_arm> *application object* (3.1.78) that represents the analytical model port make from relationship *entity* (3.2.9)

Note 1 to entry: An **Analytical_model_port_make_from_relationship** is a make from relationship between a reused port and a resultant port that supports the reuse of a model definition in a different context where it is useful to have traceability to the source model.

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5.429.18
Analytical_model_scalar_port
<application module: Analytical_model_arm> *application object* (3.1.78) that is a type of *Analytical_model_vector_port* (5.429.19) that represents the analytical model scalar port *entity* (3.2.9)

Note 1 to entry: An **Analytical_model_scalar_port** is a type of Analytical_model_vector_port that has a size of exactly one.

5.429.19
Analytical_model_vector_port
<application module: Analytical_model_arm> *application object* (3.1.78) that is a type of *Analytical_model_port* (5.429.15) that represents the analytical model vector port *entity* (3.2.9)

Note 1 to entry: An **Analytical_model_vector_port** is a type of Analytical_model_port that has a **size** that may be greater than one.

5.429.20
Analytical_model_version
<application module: Analytical_model_arm> *application object* (3.1.78) that is a type of *Information_version* (5.638.2) that represents the analytical model version *entity* (3.2.9)

Note 1 to entry: An **Analytical_model_version** is a type of Information_version that provides a string indicating the revision of the analytical model for configuration control purposes.

5.429.21
Digital_analytical_model_port
<application module: Analytical_model_arm> *application object* (3.1.78) that is a type of *Analytical_model_port* (5.429.15) that represents the digital analytical model port *entity* (3.2.9)

Note 1 to entry: A **Digital_analytical_model_port** is a type of Analytical_model_port that defines a digital context.

5.430 Analytical_model_mim

5.430.1
across_port_variable
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *port_variable* (5.430.15) that represents the across port variable *entity* (3.2.9)

Note 1 to entry: An **across_port_variable** is a type of port_variable that implements the ARM concept of *Across_port_variable* (5.429.7).

5.430.2
analog_analytical_model_port
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *analytical_model_port* (5.430.6) that represents the analog analytical model port *entity* (3.2.9)

Note 1 to entry: An **analog_analytical_model_port** is a type of analytical_model_port that implements the ARM concept of *Analog_analytical_model_port* (5.429.8).

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5.430.3
analytical_model_definition
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the analytical model definition *entity* (3.2.9)

Note 1 to entry: An **analytical_model_definition** is a type of product_definition that implements the ARM concept of *Analytical_model_definition* (5.429.12).

5.430.4
analytical_model_make_from_relationship
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the analytical model make from relationship *entity* (3.2.9)

Note 1 to entry: An **analytical_model_make_from_relationship** is a type of product_definition_relationship that implements the ARM concept of *Analytical_model_make_from_relationship* (5.429.13).

5.430.5
analytical_model_parameter
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) that represents the analytical model parameter *entity* (3.2.9)

Note 1 to entry: A **analytical_model_parameter** is a type of property_definition that implements the ARM concept of *Analytical_model_parameter* (5.429.14).

5.430.6
analytical_model_port
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) and *property_definition_representation* (4.20.6) and *representation* (4.41.13) that represents the analytical model port *entity* (3.2.9)

Note 1 to entry: An **analytical_model_port** is a type of property_definition, property_definition_representation and representation that implements the ARM concept of *Analytical_model_port* (5.429.15).

5.430.7
analytical_model_port_assignment
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *property_definition_representation* (4.20.6) and *representation_relationship* (4.41.20) that represents the analytical model port assignment *entity* (3.2.9)

Note 1 to entry: An **analytical_model_port_assignment** is a type of property_definition_representation and representation_relationship that implements the ARM concept of *Analytical_model_port_assignment* (5.429.16).

5.430.8
analytical_model_scalar_port
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *analytical_model_vector_port* (5.430.9) that represents the analytical model scalar port *entity* (3.2.9)

Note 1 to entry: An **analytical_model_scalar_port** is a type of analytical_model_vector_port that implements the ARM concept of *Analytical_model_scalar_port* (5.429.18).

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5.430.9
analytical_model_vector_port
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *analytical_model_port* (5.430.6) and *compound_representation_item* (4.41.3) that represents the analytical model vector port *entity* (3.2.9)

Note 1 to entry: An **analytical_model_vector_port** is a type of analytical_model_port and compound_representation_item that implements the ARM concept of *Analytical_model_vector_port* (5.429.19).

5.430.10
analytical_representation
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the analytical representation *entity* (3.2.9)

Note 1 to entry: An **analytical_representation** is a type of representation that implements the ARM concept of *Analytical_model_application* (5.429.11).

5.430.11
digital_analytical_model_port
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *analytical_model_port* (5.430.6) that represents the digital analytical model port *entity* (3.2.9)

Note 1 to entry: A **digital_analytical_model_port** is a type of analytical_model_port that implements the ARM concept of *Digital_analytical_model_port* (5.429.21).

5.430.12
digital_analytical_model_scalar_port
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *digital_analytical_model_vector_port* (5.430.13) and *analytical_model_scalar_port* (5.430.8) that represents the digital analytical model scalar port *entity* (3.2.9)

Note 1 to entry: A **digital_analytical_model_scalar_port** is a type of digital_analytical_model_vector_port and analytical_model_scalar_port that implements the ARM concept of *Digital_analytical_model_scalar_port* (5.429.1).

5.430.13
digital_analytical_model_vector_port
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *analytical_model_vector_port* (5.430.9) that represents the digital analytical model vector port *entity* (3.2.9)

Note 1 to entry: A **digital_analytical_model_vector_port** is a type of analytical_model_vector_port that implements the ARM concept of *Digital_analytical_model_vector_port* (5.429.2).

5.430.14
make_from_model_port_relationship
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) and *representation_relationship* (4.41.20) that represents the make from model port relationship *entity* (3.2.9)

Note 1 to entry: A **make_from_model_port_relationship** is a type of representation and representation_relationship that implements the ARM concept of *Analytical_model_port_make_from_relationship* (5.429.17).

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5.430.15
port_variable
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) and *representation_item* (4.41.16) that represents the port variable *entity* (3.2.9)

Note 1 to entry: A **port_variable** is a type of representation and representation_item that implements the ARM concept of *Port_variable* (5.429.9).

5.430.16
through_port_variable
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *port_variable* (5.430.15) that represents the through port variable *entity* (3.2.9)

Note 1 to entry: A **through_port_variable** is a type of port_variable that implements the ARM concept of *Through_port_variable* (5.429.5).

5.430.17
transform_port_variable
<application module: Analytical_model_mim> *entity data type* (3.2.10) that is a type of *port_variable* (5.430.15) that represents the transform port variable *entity* (3.2.9)

Note 1 to entry: A **transform_port_variable** is a type of port_variable that implements the ARM concept of *Transform_port_variable* (5.429.6).

5.431 Physical_unit_non_planar_design_view_arm

5.431.1
Assembly_component_non_planar_shape_model
<application module: Physical_unit_non_planar_design_view_arm> *application object* (3.1.78) that is a type of *Manifold_subsurface_model* (5.542.1) that represents the assembly component non planar shape model *entity* (3.2.9)

5.432 Design_product_data_management_arm

5.432.1
Part_with_additional_categories
<application module: Design_product_data_management_arm> *application object* (3.1.78) that is a type of *Part* (5.34.1) that represents the part with additional categories *entity* (3.2.9)

5.432.2
Document_with_additional_categories
<application module: Design_product_data_management_arm> *application object* (3.1.78) that is a type of *Document* (5.119.1) that represents the document with additional categories *entity* (3.2.9)

5.432.3
Retention_period
<application module: Design_product_data_management_arm> *application object* (3.1.78) that represents the retention period *entity* (3.2.9)

Note 1 to entry: A **Retention_period** is the definition of a period of time that product data needs to be maintained due to organizational policy or legal requirements.

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5.433 Design_product_data_management_mim

5.433.1
retention
<application module: Design_product_data_management_mim> *entity data type* (3.2.10) that is a type of *action* (4.1.1) that represents the retention *entity* (3.2.9)

Note 1 to entry: A **retention** is a type of action that implements the ARM concept of *Retention_period* (5.432.3).

5.434 Area_2d_arm

5.434.1
Circular_area
<application module: Area_2d_arm> *application object* (3.1.78) that is a type of *Primitive_2d* (5.434.4) that represents the circular area *entity* (3.2.9)

Note 1 to entry: A **Circular_area** is a type of Primitive_2d containing the information necessary to determine the two-dimensional area of a circle.

5.434.2
Elliptic_area
<application module: Area_2d_arm> *application object* (3.1.78) that is a type of *Primitive_2d* (5.434.4) that represents the elliptic area *entity* (3.2.9)

Note 1 to entry: An **Elliptic_area** is a type of Primitive_2d that is the surface area of an ellipsis.

5.434.3
Polygonal_area
<application module: Area_2d_arm> *application object* (3.1.78) that is a type of *Primitive_2d* (5.434.4) that represents the polygonal area *entity* (3.2.9)

Note 1 to entry: A **Polygonal_area** is a type of Primitive_2d that has three distinct points as boundaries in the same plane.

5.434.4
Primitive_2d
<application module: Area_2d_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the primitive 2d *entity* (3.2.9)

5.434.5
Rectangular_area
<application module: Area_2d_arm> *application object* (3.1.78) that is a type of *Primitive_2d* (5.434.4) that represents the rectangular area *entity* (3.2.9)

Note 1 to entry: A **Rectangular_area** is a type of Primitive_2d that is the surface area of a rectangle.

5.435 Assembly_2d_shape_arm

5.435.1
Bond_assembly_2d_position
<application module: Assembly_2d_shape_arm> *application object* (3.1.78) that represents the bond assembly 2d position *entity* (3.2.9)

Note 1 to entry: A **Bond_assembly_2d_position** is a means to provide information about the shape and position of a bond in an assembly in two-dimensional space.

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5.435.2
Component_2d_edge_location
<application module: Assembly_2d_shape_arm> *application object* (3.1.78) that is a type of *Component_2d_location* (5.582.2) that represents the component 2d edge location *entity* (3.2.9)

5.435.3
Component_2d_stacked_location
<application module: Assembly_2d_shape_arm> *application object* (3.1.78) that is a type of *Component_2d_location* (5.582.2) that represents the component 2d stacked location *entity* (3.2.9)

Note 1 to entry: A **Component_2d_stacked_location** is a type of Component_2d_location where the components are vertically stacked.

5.435.4
Component_2d_surface_location
<application module: Assembly_2d_shape_arm> *application object* (3.1.78) that is a type of *Component_2d_location* (5.582.2) that represents the component 2d surface location *entity* (3.2.9)

5.436 Assembly_3d_shape_arm

5.436.1
Bond_assembly_position
<application module: Assembly_3d_shape_arm> *application object* (3.1.78) that represents the bond assembly position *entity* (3.2.9)

Note 1 to entry: A **Bond_assembly_position** is the placement of an *Assembled_with_bonding* (5.465.1) within the *Physical_unit_3d_shape_model* (5.587.2) of an assembly.

5.437 Assembly_component_placement_requirements_arm

5.437.1
Assembly_group_spacing_requirement
<application module: Assembly_component_placement_requirements_arm> *application object* (3.1.78) that is a type of *Predefined_requirement_view_definition* (5.607.6) that represents the assembly group spacing requirement *entity* (3.2.9)

5.437.2
Assembly_spacing_requirement
<application module: Assembly_component_placement_requirements_arm> *application object* (3.1.78) that is a type of *Predefined_requirement_view_definition* (5.607.6) that represents the assembly spacing requirement *entity* (3.2.9)

5.437.3
Component_group_assignment
<application module: Assembly_component_placement_requirements_arm> *application object* (3.1.78) that represents the component group assignment *entity* (3.2.9)

Note 1 to entry: A **Component_group_assignment** is the relationship between an *Assembly_component* (5.684.1) and the *Placement_group_requirement_definition* (5.437.8) to which it is assigned.

5.437.4
Component_placement_restriction_assignment
<application module: Assembly_component_placement_requirements_arm> *application object* (3.1.78) that represents the component placement restriction assignment *entity* (3.2.9)

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Note 1 to entry: A **Component_placement_restriction_assignment** is the relationship between the area or volume of an entire *Interconnect_module_component* (5.453.8) or a portion thereof and restrictions to placement of other components in that area or volume due to an item in the design.

5.437.5
Item_restricted_requirement
<application module: Assembly_component_placement_requirements_arm> *application object* (3.1.78) that is a type of *Predefined_requirement_view_definition* (5.607.6) that represents the item restricted requirement *entity* (3.2.9)

5.437.6
Mounting_restriction_area
<application module: Assembly_component_placement_requirements_arm> *application object* (3.1.78) that is a type of *Non_feature_shape_element* (5.549.4) that represents the mounting restriction area *entity* (3.2.9)

5.437.7
Mounting_restriction_volume
<application module: Assembly_component_placement_requirements_arm> *application object* (3.1.78) that is a type of *Non_feature_shape_element* (5.549.4) that represents the mounting restriction volume *entity* (3.2.9)

5.437.8
Placement_group_requirement_definition
<application module: Assembly_component_placement_requirements_arm> *application object* (3.1.78) that is a type of *Requirement_view_definition* (5.138.1) that represents the placement group requirement definition *entity* (3.2.9)

5.437.9
Placement_group_area_assignment
<application module: Assembly_component_placement_requirements_arm> *application object* (3.1.78) that represents the placement group area assignment *entity* (3.2.9)

Note 1 to entry: A **Placement_group_area_assignment** is the relationship between a *Placement_group_area_assignment* (5.437.9) and the *Mounting_restriction_area* (5.437.6) on the interconnect substrate instance to which it is restricted.

5.437.10
Placement_group_volume_assignment
<application module: Assembly_component_placement_requirements_arm> *application object* (3.1.78) that represents the placement group volume assignment *entity* (3.2.9)

Note 1 to entry: A **Placement_group_volume_assignment** is the relationship between a *Placement_group_requirement_definition* (5.437.8) and the *Mounting_restriction_volume* (5.437.7) on the interconnect substrate instance to which it is restricted.

5.438 Assembly_component_placement_requirements_mim

5.438.1
assembly_group_spacing_requirement
<application module: Assembly_component_placement_requirements_mim> *entity data type* (3.2.10) that is a type of *predefined_requirement_view_definition* (5.608.3) that represents the assembly group spacing requirement *entity* (3.2.9)

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Note 1 to entry: A **assembly_group_spacing_requirement** is a type of predefined_requirement_view_definition that implements the ARM concept of *Assembly_group_spacing_requirement* (5.437.1).

5.438.2
assembly_spacing_requirement

<application module: Assembly_component_placement_requirements_mim> *entity data type* (3.2.10) that is a type of *predefined_requirement_view_definition* (5.608.3) that represents the assembly spacing requirement *entity* (3.2.9)

Note 1 to entry: A **assembly_spacing_requirement** is a type of predefined_requirement_view_definition that implements the ARM concept of *Assembly_spacing_requirement* (5.437.2).

5.438.3
group_product_definition

<application module: Assembly_component_placement_requirements_mim> *entity data type* (3.2.10) that is a type of *component_definition* (5.685.2) that represents the group product definition *entity* (3.2.9)

Note 1 to entry: A **group_product_definition** is a type of component_definition that implements the ARM concept of *Placement_group_requirement_definition* (5.437.8).

5.438.4
item_restricted_requirement

<application module: Assembly_component_placement_requirements_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) and *predefined_requirement_view_definition* (5.608.3) that represents the item restricted requirement *entity* (3.2.9)

Note 1 to entry: A **item_restricted_requirement** is a type of group and a type of predefined_requirement_view_definition that implements the ARM concept of *Item_restricted_requirement* (5.437.5).

5.438.5
mounting_restriction_area

<application module: Assembly_component_placement_requirements_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the mounting restriction area *entity* (3.2.9)

Note 1 to entry: A **mounting_restriction_area** is a type of shape_aspect that implements the ARM concept of *Mounting_restriction_area* (5.437.6).

5.438.6
mounting_restriction_volume

<application module: Assembly_component_placement_requirements_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the mounting restriction volume *entity* (3.2.9)

Note 1 to entry: A **mounting_restriction_volume** is a type of shape_aspect that implements the ARM concept of *Mounting_restriction_volume* (5.437.7).

5.439 Assembly_functional_interface_requirement_arm

5.439.1
Minimally_defined_connector

<application module: Assembly_functional_interface_requirement_arm> *application object* (3.1.78) that is a type of *Packaged_part* (5.557.1) that represents the minimally defined connector *entity* (3.2.9)

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Note 1 to entry: A **Minimally_defined_connector** is a type of Packaged_part whose functionality is defined by a communications protocol.

5.439.2
Protocol_physical_layer_definition
<application module: Assembly_functional_interface_requirement_arm> *application object* (3.1.78) that is a type of *Requirement_view_definition* (5.138.1) that represents the protocol physical layer definition *entity* (3.2.9)

5.439.3
Protocol_physical_layer_definition_with_characterization
<application module: Assembly_functional_interface_requirement_arm> *application object* (3.1.78) that is a type of *Protocol_physical_layer_definition* (5.439.2) that represents the protocol physical layer definition with characterization *entity* (3.2.9)

5.440 Assembly_functional_interface_requirement_mim

5.440.1
minimally_defined_connector
<application module: Assembly_functional_interface_requirement_mim> *entity data type* (3.2.10) that is a type of *packaged_part* (5.558.1) that represents the minimally defined connector *entity* (3.2.9)

Note 1 to entry: A **minimally_defined_connector** is a type of packaged_part that implements the ARM concept of *Minimally_defined_connector* (5.439.1).

5.440.2
protocol_physical_layer_definition
<application module: Assembly_functional_interface_requirement_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the protocol physical layer definition *entity* (3.2.9)

Note 1 to entry: A **protocol_physical_layer_definition** is a type of product_definition that implements the ARM concept of *Protocol_physical_layer_definition* (5.439.2).

5.440.3
protocol_physical_layer_definition_with_characterization
<application module: Assembly_functional_interface_requirement_mim> *entity data type* (3.2.10) that is a type of *protocol_physical_layer_definition* (5.440.2) that represents the protocol physical layer definition with characterization *entity* (3.2.9)

Note 1 to entry: A **protocol_physical_layer_definition_with_characterization** is a type of protocol_physical_layer_definition that implements the ARM concept of *Protocol_physical_layer_definition_with_characterization* (5.439.3).

5.441 Assembly_module_design_arm

5.441.1
Assembly_module_design_view
<application module: Assembly_module_design_arm> *application object* (3.1.78) that is a type of *Assembly_definition* (5.314.2) and *Part_design_view* (5.588.8) that represents the assembly module design view *entity* (3.2.9)

Note 1 to entry: An **Assembly_module_design_view** is a type of Assembly_definition and a type of Part_design_view.

5.441.2

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Component_external_reference
<application module: Assembly_module_design_arm> *application object* (3.1.78) that represents the component external reference *entity* (3.2.9)

Note 1 to entry: A **Component_external_reference** is an unambiguous reference to a *Next_assembly_usage* (5.38.4) in a different design.

5.441.3
Component_feature_external_reference
<application module: Assembly_module_design_arm> *application object* (3.1.78) that represents the component feature external reference *entity* (3.2.9)

Note 1 to entry: A **Component_feature_external_reference** is an unambiguous reference to a *Component_feature* (5.478.1) in a different design.

5.441.4
Component_mounting_clearance_relationship
<application module: Assembly_module_design_arm> *application object* (3.1.78) that represents the component mounting clearance relationship *entity* (3.2.9)

Note 1 to entry: A **Component_mounting_clearance_relationship** is the relationship between the features of one component and another in their next assembly, with respect to the clearance between them.

5.441.5
Component_mounting_feature
<application module: Assembly_module_design_arm> *application object* (3.1.78) that is a type of *Physical_component_feature* (5.576.1) that represents the component mounting feature *entity* (3.2.9)

Note 1 to entry: A **Component_mounting_feature** is a type of Physical_component_feature intended for mounting purposes where the definition is a *Port_mounting_feature* (5.561.4).

5.441.6
Minimally_defined_component_terminal
<application module: Assembly_module_design_arm> *application object* (3.1.78) that is a type of *Physical_component_terminal* (5.576.2) that represents the minimally defined component terminal *entity* (3.2.9)

Note 1 to entry: A **Minimally_defined_component_terminal** is a type of Physical_component_terminal that is included to permit references to terminals without including geometric representations of the terminals.

5.442 Assembly_module_design_mim

5.442.1
assembly_module_design_view
<application module: Assembly_module_design_mim> *entity data type* (3.2.10) that is a type of *physical_unit* (5.596.4) that represents the assembly module design view *entity* (3.2.9)

Note 1 to entry: An **assembly_module_design_view** is a type of physical_unit that implements the ARM concept of *Assembly_module_design_view* (5.441.1).

5.442.2
component_mounting_feature
<application module: Assembly_module_design_mim> *entity data type* (3.2.10) that is a type of *physical_component_feature* (5.577.1) that represents the component mounting feature *entity* (3.2.9)

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Note 1 to entry: A **component_mounting_feature** is a type of physical_component_feature that implements the ARM concept of *Component_mounting_feature* (5.441.5).

5.443 Assembly_module_macro_definition_arm

5.443.1
Assembly_module_macro_terminal
<application module: Assembly_module_macro_definition_arm> *application object* (3.1.78) that is a type of *Assembly_module_terminal* (5.451.2) that represents the assembly module macro terminal *entity* (3.2.9)

Note 1 to entry: An **Assembly_module_macro_terminal** is a type of Assembly_module_terminal that is populated only in the case of a macro definition.

5.443.2
Component_terminal_to_assembly_module_macro_terminal_assignment
<application module: Assembly_module_macro_definition_arm> *application object* (3.1.78) that is a type of *Component_feature_to_physical_usage_view_assignment* (5.588.5) that represents the component terminal to assembly module macro terminal assignment *entity* (3.2.9)

Note 1 to entry: A **Component_terminal_to_assembly_module_macro_terminal_assignment** is a type of Component_feature_to_physical_usage_view_assignment that is populated only in the case of a macro definition.

5.444 Assembly_module_macro_definition_mim

5.444.1
assembly_module_macro_terminal
<application module: Assembly_module_macro_definition_mim> *entity data type* (3.2.10) that is a type of *assembly_module_terminal* (5.452.2) that represents the assembly module macro terminal *entity* (3.2.9)

Note 1 to entry: An **assembly_module_macro_terminal** is a type of assembly_module_terminal that implement the ARM concept of *Assembly_module_macro_terminal* (5.443.1)

5.445 Assembly_module_with_cable_component_2d_arm

5.445.1
Routed_cable_component_2d_shape_model
<application module: Assembly_module_with_cable_component_2d_arm> *application object* (3.1.78) that is a type of *Assembly_component_2d_shape_model* (5.582.1) that represents the routed cable component 2d shape model *entity* (3.2.9)

5.445.2
Sub_model_placement_2d
<application module: Assembly_module_with_cable_component_2d_arm> *application object* (3.1.78) that represents the sub model placement 2d *entity* (3.2.9)

Note 1 to entry: A **Sub_model_placement_2d** is the **placement** of the shape of a *Packaged_connector* (5.553.2) from a cable shape sub model in a usage view into the current design view as referenced by an instance of *Routed_cable_component_2d_shape_model* (5.445.1).

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5.446 Assembly_module_with_cable_component_3d_arm

5.446.1
Routed_cable_component_3d_shape_model
<application module: Assembly_module_with_cable_component_3d_arm> *application object* (3.1.78) that is a type of *Assembly_component_3d_shape_model* (5.584.1) that represents the routed cable component 3d shape model *entity* (3.2.9)

5.446.2
Sub_model_placement_3d
<application module: Assembly_module_with_cable_component_3d_arm> *application object* (3.1.78) that represents the sub model placement 3d *entity* (3.2.9)

Note 1 to entry: A **Sub_model_placement_3d** is the **placement** of the shape of a *Packaged_connector* (5.553.2) from a cable shape sub model in a usage view into the current design view as referenced by an instance of *Routed_cable_component_2d_shape_model* (5.445.1) or *Routed_cable_component_3d_shape_model* (5.446.1).

5.447 Assembly_module_with_macro_component_arm

5.447.1
Assembly_module_macro_component
<application module: Assembly_module_with_macro_component_arm> *application object* (3.1.78) that is a type of *Physical_component* (5.684.3) and *Single_instance* (5.79.6) that represents the assembly module macro component *entity* (3.2.9)

Note 1 to entry: An **Assembly_module_macro_component** is a type of Physical_component and a type of Single_instance that is intended to support design reuse.

5.447.2
Assembly_module_macro_component_join_terminal
<application module: Assembly_module_with_macro_component_arm> *application object* (3.1.78) that is a type of *Physical_component_terminal* (5.576.2) that represents the assembly module macro component join terminal *entity* (3.2.9)

5.448 Assembly_module_with_macro_component_mim

5.448.1
assembly_module_macro_component
<application module: Assembly_module_with_macro_component_mim> *entity data type* (3.2.10) that is a type of *physical_component* (5.685.3) that represents the assembly module macro component *entity* (3.2.9)

Note 1 to entry: An **assembly_module_macro_component** is a type of physical_component that implements the ARM concept of *Assembly_module_macro_component* (5.447.1).

5.448.2
assembly_module_macro_component_join_terminal
<application module: Assembly_module_with_macro_component_mim> *entity data type* (3.2.10) that is a type of *physical_component_terminal* (5.577.2) that represents the assembly module macro component join terminal *entity* (3.2.9)

Note 1 to entry: An **assembly_module_macro_component_join_terminal** is a type of physical_component_terminal that implements the ARM concept of *Assembly_module_macro_component_join_terminal* (5.447.2).

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5.449 Assembly_module_with_subassembly_arm

5.449.1
Assembly_module_component
<application module: Assembly_module_with_subassembly_arm> *application object* (3.1.78) that is a type of *Physical_component* (5.684.3) and *Single_instance* (5.79.6) that represents the assembly module component *entity* (3.2.9)

Note 1 to entry: An **Assembly_module_component** is a type of Physical_component and a type of Single_instance.

5.449.2
Assembly_module_component_terminal
<application module: Assembly_module_with_subassembly_arm> *application object* (3.1.78) that is a type of *Physical_component_terminal* (5.576.2) that represents the assembly module component terminal *entity* (3.2.9)

5.450 Assembly_module_with_subassembly_mim

5.450.1
assembly_module_component
<application module: Assembly_module_with_subassembly_mim> *entity data type* (3.2.10) that is a type of *physical_component* (5.685.3) that represents the assembly module component *entity* (3.2.9)

Note 1 to entry: An **assembly_module_component** is a type of physical_component that implements the ARM concept of *Assembly_module_component* (5.449.1).

5.451 Assembly_module_usage_view_arm

5.451.1
Assembly_module_interface_terminal
<application module: Assembly_module_usage_view_arm> *application object* (3.1.78) that is a type of *Assembly_module_terminal* (5.451.2) that represents the assembly module interface terminal *entity* (3.2.9)

5.451.2
Assembly_module_terminal
<application module: Assembly_module_usage_view_arm> *application object* (3.1.78) that is a type of *Part_terminal* (5.500.8) that represents the assembly module terminal *entity* (3.2.9)

Note 1 to entry: An **Assembly_module_terminal** is a type of Part_terminal for an *Assembly_module_usage_view* (5.451.3) that provides a replication of an interface terminal associated with an *Assembly_component* (5.684.1).

5.451.3
Assembly_module_usage_view
<application module: Assembly_module_usage_view_arm> *application object* (3.1.78) that is a type of *Part_usage_view* (5.595.8) that represents the assembly module usage view *entity* (3.2.9)

5.452 Assembly_module_usage_view_mim

5.452.1
assembly_module_interface_terminal
<application module: Assembly_module_usage_view_mim> *entity data type* (3.2.10) that is a type of *assembly_module_terminal* (5.452.2) that represents the assembly module interface terminal *entity* (3.2.9)

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Note 1 to entry: An **assembly_module_interface_terminal** is a type of assembly_module_terminal that implement the ARM concept of *Assembly_module_interface_terminal* (5.451.1).

5.452.2
assembly_module_terminal

<application module: Assembly_module_usage_view_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the assembly module terminal *entity* (3.2.9)

Note 1 to entry: An **assembly_module_terminal** is a type of shape_aspect that implement the ARM concepts of:

— *Assembly_module_terminal* (5.451.2);

— *Part_terminal* (5.500.8);

— *Layered_assembly_module_terminal* (5.453.11).

5.452.3
assembly_module_usage_view

<application module: Assembly_module_usage_view_mim> *entity data type* (3.2.10) that is a type of *physical_unit* (5.596.4) that represents the assembly module usage view *entity* (3.2.9)

Note 1 to entry: An **assembly_module_usage_view** is a type of physical_unit that implement the ARM concept of *Assembly_module_usage_view* (5.451.3).

5.453 Assembly_module_with_interconnect_component_arm

5.453.1
Assembly_connection_zone_position_relationship

<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that represents the assembly connection zone position relationship *entity* (3.2.9)

Note 1 to entry: An **Assembly_connection_zone_position_relationship** is the association between a geometric model of an *Assembly_module_design_view* (5.441.1), as a target, and a geometric model of a *Connection_zone_in_design_view* (5.588.6), as the source.

5.453.2
Bare_die_component

<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that is a type of *Physical_component* (5.684.3) and *Single_instance* (5.79.6) that represents the bare die component *entity* (3.2.9)

Note 1 to entry: A **Bare_die_component** is a type of Physical_component and a type of Single_instance that is defined by a *Bare_die* (5.467.1).

5.453.3
Bare_die_component_terminal

<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that is a type of *Physical_component_terminal* (5.576.2) that represents the bare die component terminal *entity* (3.2.9)

Note 1 to entry: A **Bare_die_component_terminal** is a type of Physical_component_terminal that is an instance of a *Bare_die_terminal* (5.467.6).

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5.453.4
Component_overlap_relationship
<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that represents the component overlap relationship *entity* (3.2.9)

Note 1 to entry: A **Component_overlap_relationship** is the relationship between one component and another in their next assembly, with respect to the physical overlap between them.

5.453.5
Design_view_terminal_component_shape_relationship
<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that represents the design view terminal component shape relationship *entity* (3.2.9)

Note 1 to entry: A **Design_view_terminal_component_shape_relationship** is the association between the following pairs where the individual relationship is a (source,target) pair: (*Interconnect_component_join_terminal* (5.453.7), *Physical_component* (5.684.3)), (*Interconnect_component_interface_terminal* (5.453.6), Physical_component), (*Movable_packaged_component_join_terminal* (5.453.15), *Packaged_component* (5.720.1)).

5.453.6
Interconnect_component_interface_terminal
<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that is a type of *Physical_component_interface_terminal* (5.527.1) that represents the interconnect component interface terminal *entity* (3.2.9)

Note 1 to entry: An **Interconnect_component_interface_terminal** is a type of Physical_component_interface_terminal that represents some aspect of a generic *Assembly_component* (5.684.1) participate in a **connection** for an assembly.

5.453.7
Interconnect_component_join_terminal
<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that is a type of *Physical_component_terminal* (5.576.2) that represents the interconnect component join terminal *entity* (3.2.9)

Note 1 to entry: An **Interconnect_component_join_terminal** is a type of Physical_component_terminal that represents some aspect of a generic *Assembly_component* (5.684.1) participating in a connection for an assembly.

5.453.8
Interconnect_module_component
<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that is a type of *Physical_component* (5.684.3) and *Single_instance* (5.79.6) that represents the interconnect module component *entity* (3.2.9)

Note 1 to entry: An **Interconnect_module_component** is a type of Physical_component and a type of Single_instance.

5.453.9
Interconnect_module_component_surface_feature
<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that is a type of *Physical_component_feature* (5.576.1) that represents the interconnect module component surface feature *entity* (3.2.9)

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5.453.10
Interconnect_module_component_terminal
<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that is a type of *Physical_component_terminal* (5.576.2) that represents the interconnect module component terminal *entity* (3.2.9)

5.453.11
Layered_assembly_module_terminal
<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that is a type of *Assembly_module_terminal* (5.451.2) that represents the layered assembly module terminal *entity* (3.2.9)

Note 1 to entry: A **Layered_assembly_module_terminal** is a type of Assembly_module_terminal that is part of the interface between the *Layered_assembly_module_design_view* (5.453.13) and its next higher assembly.

5.453.12
Layered_assembly_module_usage_view
<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that is a type of *Assembly_module_usage_view* (5.451.3) that represents the layered assembly module usage view *entity* (3.2.9)

5.453.13
Layered_assembly_module_design_view
<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that is a type of *Assembly_module_design_view* (5.441.1) that represents the layered assembly module design view *entity* (3.2.9)

5.453.14
Layered_assembly_panel_design_view
<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that is a type of *Assembly_module_design_view* (5.441.1) that represents the layered assembly panel design view *entity* (3.2.9)

5.453.15
Movable_packaged_component_join_terminal
<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that is a type of *Packaged_component_join_terminal* (5.720.2) that represents the movable packaged component join terminal *entity* (3.2.9)

5.453.16
Routed_interconnect_component
<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that is a type of *Physical_component* (5.684.3) that represents the routed interconnect component *entity* (3.2.9)

5.453.17
Routed_physical_component
<application module: Assembly_module_with_interconnect_component_arm> *application object* (3.1.78) that is a type of *Physical_component* (5.684.3) that represents the routed physical component *entity* (3.2.9)

Note 1 to entry: A **Routed_physical_component** is a type of Physical_component whose shape is design specific and is routed along a path described by a centreline.

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5.454 Assembly_module_with_interconnect_component_mim

5.454.1
bare_die_component
<application module: Assembly_module_with_interconnect_component_mim> *entity data type* (3.2.10) that is a type of *physical_component* (5.685.3) that represents the bare die component *entity* (3.2.9)

Note 1 to entry: A **bare_die_component** is a type of physical_component that implements the ARM concept of *Bare_die_component* (5.453.2).

5.454.2
interconnect_module_component
<application module: Assembly_module_with_interconnect_component_mim> *entity data type* (3.2.10) that is a type of *physical_component* (5.685.3) that represents the interconnect module component *entity* (3.2.9)

Note 1 to entry: A **interconnect_module_component** is a type of physical_component that implements the ARM concept of *Interconnect_module_component* (5.453.8).

5.454.3
interconnect_module_component_surface_feature
<application module: Assembly_module_with_interconnect_component_mim> *entity data type* (3.2.10) that is a type of *physical_component_feature* (5.577.1) that represents the interconnect module component surface feature *entity* (3.2.9)

Note 1 to entry: An **interconnect_module_component_surface_feature** is a type of physical_component_feature that implements the ARM concept of *Interconnect_module_component_surface_feature* (5.453.9).

5.454.4
layered_assembly_module_design_view
<application module: Assembly_module_with_interconnect_component_mim> *entity data type* (3.2.10) that is a type of *assembly_module_design_view* (5.442.1) that represents the layered assembly module design view *entity* (3.2.9)

Note 1 to entry: A **layered_assembly_module_design_view** is a type of assembly_module_design_view that implements the ARM concept of *Layered_assembly_module_design_view* (5.453.13).

5.454.5
layered_assembly_module_usage_view
<application module: Assembly_module_with_interconnect_component_mim> *entity data type* (3.2.10) that is a type of *assembly_module_usage_view* (5.452.3) that represents the layered assembly module usage view *entity* (3.2.9)

Note 1 to entry: An **layered_assembly_module_usage_view** is a type of assembly_module_usage_view that implement the ARM concept of *Layered_assembly_module_usage_view* (5.453.12).

5.454.6
layered_assembly_panel_design_view
<application module: Assembly_module_with_interconnect_component_mim> *entity data type* (3.2.10) that is a type of *assembly_module_design_view* (5.442.1) that represents the layered assembly panel design view *entity* (3.2.9)

Note 1 to entry: A **layered_assembly_panel_design_view** is a type of assembly_module_design_view that implements the ARM concept of *Layered_assembly_panel_design_view* (5.453.14).

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5.454.7
routed_interconnect_component
<application module: Assembly_module_with_interconnect_component_mim> *entity data type* (3.2.10) that is a type of *item_identified_representation_usage* (4.20.5) and *physical_component* (5.685.3) that represents the routed interconnect component *entity* (3.2.9)

Note 1 to entry: A **routed_interconnect_component** is a type of item_identified_representation_usage and a type of physical_component that implements the ARm concept of *Routed_interconnect_component* (5.453.16).

5.454.8
routed_physical_component
<application module: Assembly_module_with_interconnect_component_mim> *entity data type* (3.2.10) that is a type of *item_identified_representation_usage* (4.20.5) and *physical_component* (5.685.3) that represents the routed physical component *entity* (3.2.9)

Note 1 to entry: A **routed_physical_component** is a type of item_identified_representation_usage and a type of physical_component that implements the ARM concept of *Routed_physical_component* (5.453.17).

5.455 Assembly_module_with_cable_component_arm

5.455.1
Cable_component
<application module: Assembly_module_with_cable_component_arm> *application object* (3.1.78) that is a type of *Physical_component* (5.684.3) and *Single_instance* (5.79.6) that represents the cable component *entity* (3.2.9)

Note 1 to entry: A **Cable_component** is a type of Physical_component and a type of Single_instance.

5.456 Assembly_module_with_cable_component_mim

5.456.1
cable_component
<application module: Assembly_module_with_cable_component_mim> *entity data type* (3.2.10) that is a type of *physical_component* (5.685.3) that represents the cable component *entity* (3.2.9)

Note 1 to entry: A **cable_component** is a type of physical_component that implements the ARM concept of *Cable_component* (5.455.1).

5.457 Assembly_module_with_packaged_connector_component_arm

5.457.1
Interface_mounted_join
<application module: Assembly_module_with_packaged_connector_component_arm> *application object* (3.1.78) that represents the interface mounted join *entity* (3.2.9)

Note 1 to entry: An **Interface_mounted_join** is the relationship that specifies the connectivity between a terminal on a component and the terminal on a socket in the assembly that directly mates with that component terminal.

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5.457.2
Packaged_connector_component
<application module: Assembly_module_with_packaged_connector_component_arm> *application object* (3.1.78) that is a type of *Interface_component* (5.527.2) and *Packaged_component* (5.720.1) that represents the packaged connector component *entity* (3.2.9)

Note 1 to entry: A **Packaged_connector_component** is a type of Interface_component and a type of Packaged_component that is an occurrence of a *Packaged_connector* (5.553.2).

5.457.3
Packaged_connector_component_interface_terminal
<application module: Assembly_module_with_packaged_connector_component_arm> *application object* (3.1.78) that is a type of *Physical_component_interface_terminal* (5.527.1) that represents the packaged connector component interface terminal *entity* (3.2.9)

5.458 Assembly_module_with_packaged_connector_component_mim

5.458.1
interface_mounted_join
<application module: Assembly_module_with_packaged_connector_component_mim> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) and *shape_aspect* (4.19.10) that represents the interface mounted join *entity* (3.2.9)

Note 1 to entry: An **interface_mounted_join** is a type of shape_aspect and a type of shape_aspect_relationship that implements the ARM concept of *Interface_mounted_join* (5.457.1).

5.458.2
packaged_connector_component
<application module: Assembly_module_with_packaged_connector_component_mim> *entity data type* (3.2.10) that is a type of *interface_component* (5.528.2) and *packaged_component* (5.721.1) that represents the packaged connector component *entity* (3.2.9)

Note 1 to entry: A **packaged_connector_component** is a type of interface_component and a type of packaged_component that implements the ARM concept of *Packaged_connector_component* (5.457.2).

5.459 Footprint_definition_arm

5.459.1
Breakout_footprint_definition
<application module: Footprint_definition_arm> *application object* (3.1.78) that is a type of *Generic_footprint_definition* (5.459.5) that represents the breakout footprint definition *entity* (3.2.9)

Note 1 to entry: A **Breakout_footprint_definition** is a type of Generic_footprint_definition provided to support re-use of patterns necessary to adapt a footprint to a design layout.

5.459.2
Breakout_footprint_definition_shape_model
<application module: Footprint_definition_arm> *application object* (3.1.78) that is a type of *Structured_template_planar_shape_model* (5.567.26) that represents the breakout footprint definition shape model *entity* (3.2.9)

5.459.3
Footprint_definition
<application module: Footprint_definition_arm> *application object* (3.1.78) that is a type of *Generic_footprint_definition* (5.459.5) that represents the footprint definition *entity* (3.2.9)

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5.459.4
Footprint_definition_shape_model
<application module: Footprint_definition_arm> *application object* (3.1.78) that is a type of *Structured_template_planar_shape_model* (5.567.26) that represents the footprint definition shape model *entity* (3.2.9)

5.459.5
Generic_footprint_definition
<application module: Footprint_definition_arm> *application object* (3.1.78) that is a type of *Multi_stratum_structured_template* (5.567.11) that represents the generic footprint definition *entity* (3.2.9)

5.459.6
Package_footprint_relationship_definition
<application module: Footprint_definition_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the package footprint relationship definition *entity* (3.2.9)

Note 1 to entry: A **Package_footprint_relationship_definition** is a type of Product_view_definition provided to explicitly define the geometric relationship between a planar shape of a *Footprint_definition* (5.459.3) and a planar shape of a *Package* (5.551.5).

5.459.7
Part_feature_based_template_location
<application module: Footprint_definition_arm> *application object* (3.1.78) that is a type of *Template_location_in_structured_template* (5.567.27) that represents the part feature based template location *entity* (3.2.9)

Note 1 to entry: A **Part_feature_based_template_location** is a type of Template_location_in_structured_template that supports the case that properties of a specific element of a *Footprint_definition* (5.459.3) are dependent on properties of a specific *Part_feature* (5.595.4).

5.459.8
Stratum_feature_template_location_in_breakout_footprint_definition
<application module: Footprint_definition_arm> *application object* (3.1.78) that is a type of *Stratum_specific_template_location* (5.567.22) that represents the stratum feature template location in breakout footprint definition *entity* (3.2.9)

Note 1 to entry: A **Stratum_feature_template_location_in_breakout_footprint_definition** is a type of Stratum_specific_template_location that also provides an explicit map between a padstack location in a *Breakout_footprint_definition* (5.459.1) and the source requirement padstack location in a *Footprint_definition* (5.459.3).

5.460 Footprint_definition_mim

5.460.1
breakout_footprint_definition
<application module: Footprint_definition_mim> *entity data type* (3.2.10) that is a type of *generic_footprint_definition* (5.460.3) that represents the breakout footprint definition *entity* (3.2.9)

Note 1 to entry: A **breakout_footprint_definition** is a type of generic_footprint_definition that implements the ARM concepts of *Breakout_footprint_definition* (5.459.1).

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5.460.2
footprint_definition
<application module: Footprint_definition_mim> *entity data type* (3.2.10) that is a type of *generic_footprint_definition* (5.460.3) that represents the footprint definition *entity* (3.2.9)

Note 1 to entry: A **footprint_definition** is a type of generic_footprint_definition that implements the ARM concepts of *Footprint_definition* (5.459.3).

5.460.3
generic_footprint_definition
<application module: Footprint_definition_mim> *entity data type* (3.2.10) that is a type of *multi_stratum_structured_template* (5.568.9) that represents the generic footprint definition *entity* (3.2.9)

Note 1 to entry: A **generic_footprint_definition** is a type of multi_stratum_structured_template that implements the ARM concepts of *Generic_footprint_definition* (5.459.5).

5.460.4
package_footprint_relationship_definition
<application module: Footprint_definition_mim> *entity data type* (3.2.10) that is a type of *part_template_definition* (5.579.1) that represents the package footprint relationship definition *entity* (3.2.9)

Note 1 to entry: A **package_footprint_relationship_definition** is a type of part_template_definition that implements the ARM concepts of *Package_footprint_relationship_definition* (5.459.6).

5.461 Assembly_physical_interface_requirement_arm

5.461.1
Interface_requirement
<application module: Assembly_physical_interface_requirement_arm> *application object* (3.1.78) that is a type of *Predefined_requirement_view_definition* (5.607.6) that represents the interface requirement *entity* (3.2.9)

5.461.2
Mating_connector_usage
<application module: Assembly_physical_interface_requirement_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the mating connector usage *entity* (3.2.9)

5.461.3
Mating_connector_placement_relationship
<application module: Assembly_physical_interface_requirement_arm> *application object* (3.1.78) that represents the mating connector placement relationship *entity* (3.2.9)

Note 1 to entry: A **Mating_connector_placement_relationship** is an association between the connector that the interface connector on the assembly must mate with in the next higher assembly, and the resultant placement of that mating connector in the assembly being designed for test and evaluation.

5.461.4
Mating_connector_termination
<application module: Assembly_physical_interface_requirement_arm> *application object* (3.1.78) that represents the mating connector termination *entity* (3.2.9)

Note 1 to entry: A **Mating_connector_termination** is a single terminal of a *Mating_connector_usage* (5.461.2).

5.461.5

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Next_higher_assembly_interface_requirement
<application module: Assembly_physical_interface_requirement_arm> *application object* (3.1.78) that represents the next higher assembly interface requirement *entity* (3.2.9)

Note 1 to entry: A **Next_higher_assembly_interface_requirement** is an association between the version of the next higher assembly and a **shape** that simulates the fit characteristics of the next higher assembly.

5.461.6
Protocol_requirement_allocation_to_part_terminal
<application module: Assembly_physical_interface_requirement_arm> *application object* (3.1.78) that is a type of *Requirement_assignment* (5.208.1) that represents the protocol requirement allocation to part terminal *entity* (3.2.9)

Note 1 to entry: A **Protocol_requirement_allocation_to_part_terminal** is a type of Requirement_assignment for which the *Interface_requirement* (5.461.1) is the allocated requirement.

5.461.7
Termination_constraint
<application module: Assembly_physical_interface_requirement_arm> *application object* (3.1.78) that is a type of *Constraint_occurrence* (5.607.1) that represents the termination constraint *entity* (3.2.9)

5.462 Assembly_physical_interface_requirement_mim

5.462.1
protocol_requirement_allocation_to_part_terminal
<application module: Assembly_physical_interface_requirement_mim> *entity data type* (3.2.10) that is a type of *requirement_assignment* (5.209.3) that represents the protocol requirement allocation to part terminal *entity* (3.2.9)

Note 1 to entry: A **protocol_requirement_allocation_to_part_terminal** is a type of requirement_assignment that implements the ARM concept of *Protocol_requirement_allocation_to_part_terminal* (5.461.6).

5.463 Assembly_physical_requirement_allocation_arm

5.463.1
Assembly_shield_allocation
<application module: Assembly_physical_requirement_allocation_arm> *application object* (3.1.78) that is a type of *Requirement_assignment* (5.208.1) that represents the assembly shield allocation *entity* (3.2.9)

Note 1 to entry: An **Assembly_shield_allocation** is a type of Requirement_assignment that assigns a *Predefined_requirement_view_definition* (5.607.6) to a *Physical_shield* (5.614.1).

5.463.2
Assembly_requirement_allocation
<application module: Assembly_physical_requirement_allocation_arm> *application object* (3.1.78) that is a type of *Requirement_assignment* (5.208.1) that represents the assembly requirement allocation *entity* (3.2.9)

5.463.3
Assembly_separation_requirement_allocation
<application module: Assembly_physical_requirement_allocation_arm> *application object* (3.1.78) that is a type of *Assembly_requirement_allocation* (5.463.2) that represents the assembly separation requirement allocation *entity* (3.2.9)

5.463.4

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Electromagnetic_compatibility_requirement_allocation
<application module: Assembly_physical_requirement_allocation_arm> *application object* (3.1.78) that is a type of *Assembly_requirement_allocation* (5.463.2) that represents the electromagnetic compatibility requirement allocation *entity* (3.2.9)

Note 1 to entry: An **Electromagnetic_compatibility_requirement_allocation** is a type of Assembly_requirement_allocation that allocates an electromagnetic compatibility requirement to product data.

5.463.5
Interface_component_allocation
<application module: Assembly_physical_requirement_allocation_arm> *application object* (3.1.78) that represents the interface component allocation *entity* (3.2.9)

Note 1 to entry: An **Interface_component_allocation** is the assignment relationship between an *Interface_component* (5.527.2) on an assembly and the *Mating_connector_usage* (5.461.2) to which the Interface_component must mechanically and electrically mate in the next assembly level.

5.463.6
Thermal_requirement_allocation
<application module: Assembly_physical_requirement_allocation_arm> *application object* (3.1.78) that is a type of *Assembly_requirement_allocation* (5.463.2) that represents the thermal requirement allocation *entity* (3.2.9)

Note 1 to entry: A **Thermal_requirement_allocation** is a type of Assembly_requirement_allocation for which the *Predefined_requirement_view_definition* (5.607.6) has thermal characteristics.

5.464 Assembly_physical_requirement_allocation_mim

5.464.1
electromagnetic_compatibility_requirement_allocation
<application module: Assembly_physical_requirement_allocation_mim> *entity data type* (3.2.10) that is a type of *requirement_assignment* (5.209.3) that represents the electromagnetic compatibility requirement allocation *entity* (3.2.9)

Note 1 to entry: An **electromagnetic_compatibility_requirement_allocation** is a type of requirement_assignment that implements the ARM concept of *Electromagnetic_compatibility_requirement_allocation* (5.463.4).

5.464.2
assembly_shield_allocation
<application module: Assembly_physical_requirement_allocation_mim> *entity data type* (3.2.10) that is a type of *electromagnetic_compatibility_requirement_allocation* (5.464.1) that represents the assembly shield allocation *entity* (3.2.9)

Note 1 to entry: A **assembly_shield_allocation** is a type of electromagnetic_compatibility_requirement_allocation that implements the ARM concept of *Assembly_shield_allocation* (5.463.1).

5.464.3
thermal_requirement_allocation
<application module: Assembly_physical_requirement_allocation_mim> *entity data type* (3.2.10) that is a type of *requirement_assignment* (5.209.3) that represents the thermal requirement allocation *entity* (3.2.9)

Note 1 to entry: A **thermal_requirement_allocation** is a type of requirement_assignment that implements the ARM concept of *Thermal_requirement_allocation* (5.463.6).

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5.465 Assembly_technology_arm

5.465.1
Assembled_with_bonding
<application module: Assembly_technology_arm> *application object* (3.1.78) that is a type of *Assembly_joint* (5.465.4) that represents the assembled with bonding *entity* (3.2.9)

Note 1 to entry: An **Assembled_with_bonding** is a type of Assembly_joint that establishes the joint by bonding.

5.465.2
Assembled_with_fasteners
<application module: Assembly_technology_arm> *application object* (3.1.78) that is a type of *Assembly_joint* (5.465.4) that represents the assembled with fasteners *entity* (3.2.9)

Note 1 to entry: An **Assembled_with_fasteners** is a type of Assembly_joint that establishes the assembly by using fasteners to mechanically position a component so that its component mounting features are connected to component mounting features of another component in the assembly.

5.465.3
Assembly_bond_definition
<application module: Assembly_technology_arm> *application object* (3.1.78) that represents the assembly bond definition *entity* (3.2.9)

Note 1 to entry: An **Assembly_bond_definition** is the definition of the joint that uses bulk material to bond together portions of the assembly.

5.465.4
Assembly_joint
<application module: Assembly_technology_arm> *application object* (3.1.78) that is a type of *Component_feature_joint* (5.478.2) that represents the assembly joint *entity* (3.2.9)

5.465.5
Component_mating_constraint_condition
<application module: Assembly_technology_arm> *application object* (3.1.78) that represents the component mating constraint condition *entity* (3.2.9)

Note 1 to entry: A **Component_mating_constraint_condition** is a means to identify the degrees of freedom that have been constrained by a set of members of *Assembly_joint* (5.465.4).

5.465.6
Connection_zone_based_assembly_joint
<application module: Assembly_technology_arm> *application object* (3.1.78) that is a type of *Assembly_joint* (5.465.4) that represents the connection zone based assembly joint *entity* (3.2.9)

Note 1 to entry: A **Connection_zone_based_assembly_joint** is a type of Assembly_joint that provides a finer degree of granularity by specifying the actual connection zones that are involved in the Assembly_joint.

5.465.7
Default_assembly_bond_shape_model
<application module: Assembly_technology_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the default assembly bond shape model *entity* (3.2.9)

Note 1 to entry: A **Default_assembly_bond_shape_model** is a type of Geometric_model that is the shape of an *Assembly_bond_definition* (5.465.3).

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5.466 Assembly_technology_mim

5.466.1
assembly_bond_definition
<application module: Assembly_technology_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the assembly bond definition *entity* (3.2.9)

Note 1 to entry: An **assembly_bond_definition** is a type of shape_aspect that implements the ARM concept of *Assembly_bond_definition* (5.465.3).

5.466.2
assembly_joint
<application module: Assembly_technology_mim> *entity data type* (3.2.10) that is a type of *component_feature_joint* (5.479.2) that represents the assembly joint *entity* (3.2.9)

Note 1 to entry: An **assembly_joint** is a type of component_feature_joint that implements the ARM concepts of:

— *Assembly_joint* (5.465.4);

— *Assembled_with_bonding* (5.465.1);

— *Assembled_with_fasteners* (5.465.2).

5.466.3
component_mating_constraint_condition
<application module: Assembly_technology_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the component mating constraint condition *entity* (3.2.9)

Note 1 to entry: A **component_mating_constraint_condition** is a type of shape_aspect that implements the ARM concept of *Component_mating_constraint_condition* (5.465.5).

5.466.4
connection_zone_based_assembly_joint
<application module: Assembly_technology_mim> *entity data type* (3.2.10) that is a type of *assembly_joint* (5.466.2) that represents the connection zone based assembly joint *entity* (3.2.9)

Note 1 to entry: A **connection_zone_based_assembly_joint** is a type of assembly_joint that implements the ARM concept of *Connection_zone_based_assembly_joint* (5.465.6).

5.467 Bare_die_arm

5.467.1
Bare_die
<application module: Bare_die_arm> *application object* (3.1.78) that is a type of *Part_usage_view* (5.595.8) that represents the bare die *entity* (3.2.9)

Note 1 to entry: A **Bare_die** is a type of Part_usage_view that is used to describe the physical shape and function of a semiconductor device.

5.467.2
Bare_die_bottom_surface
<application module: Bare_die_arm> *application object* (3.1.78) that is a type of *Bare_die_surface* (5.467.5) that represents the bare die bottom surface *entity* (3.2.9)

Note 1 to entry: A **Bare_die_bottom_surface** is a type of Bare_die_surface that specifies the bottom surface of a *Bare_die* (5.467.1).

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5.467.3
Bare_die_edge_segment_surface
<application module: Bare_die_arm> *application object* (3.1.78) that is a type of *Bare_die_surface* (5.467.5) that represents the bare die edge segment surface *entity* (3.2.9)

Note 1 to entry: A **Bare_die_edge_segment_surface** is a type of Bare_die_surface that is included to support the description of specific segments of the edge of a die.

5.467.4
Bare_die_edge_surface
<application module: Bare_die_arm> *application object* (3.1.78) that is a type of *Bare_die_surface* (5.467.5) that represents the bare die edge surface *entity* (3.2.9)

Note 1 to entry: A **Bare_die_edge_surface** is a type of Bare_die_surface that specifies the edge surface of a *Bare_die* (5.467.1).

5.467.5
Bare_die_surface
<application module: Bare_die_arm> *application object* (3.1.78) that is a type of *Part_mounting_feature* (5.561.4) that represents the bare die surface *entity* (3.2.9)

Note 1 to entry: A **Bare_die_surface** is a type of Part_mounting_feature that specifies the surface area of a *Bare_die* (5.467.1).

5.467.6
Bare_die_terminal
<application module: Bare_die_arm> *application object* (3.1.78) that is a type of *Minimally_defined_bare_die_terminal* (5.467.12) and *Placed_feature* (5.641.3) that represents the bare die terminal *entity* (3.2.9)

Note 1 to entry: A **Bare_die_terminal** is a type of Minimally_defined_bare_die_terminal and a type of Placed_feature.

5.467.7
Bare_die_template_terminal
<application module: Bare_die_arm> *application object* (3.1.78) that is a type of *Part_feature_template_definition* (5.595.6) and *Shape_element* (5.41.6) that represents the bare die template terminal *entity* (3.2.9)

5.467.8
Bare_die_terminal_surface_constituent_relationship
<application module: Bare_die_arm> *application object* (3.1.78) that is a type of *Shape_element_relationship* (5.41.7) that represents the bare die terminal surface constituent relationship *entity* (3.2.9)

Note 1 to entry: A **Bare_die_terminal_surface_constituent_relationship** is a type of Shape_element_relationship that identifies the surface on a *Bare_die* (5.467.1) in which the *Bare_die_terminal* (5.467.6) is located.

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5.467.9
Bare_die_top_surface
<application module: Bare_die_arm> *application object* (3.1.78) that is a type of *Bare_die_surface* (5.467.5) that represents the bare die top surface *entity* (3.2.9)

Note 1 to entry: A **Bare_die_top_surface** is a type of Bare_die_surface that specifies the top surface of a *Bare_die* (5.467.1).

5.467.10
Connection_zone_bare_die_interface_plane_relationship
<application module: Bare_die_arm> *application object* (3.1.78) that represents the connection zone bare die interface plane relationship *entity* (3.2.9)

Note 1 to entry: A **Connection_zone_bare_die_interface_plane_relationship** is a product structure relationship that may be represented in a geometric context for the purpose of deriving a 2D or 3D representation of the intersection of a terminal interface.

5.467.11
Guided_wave_bare_die_terminal
<application module: Bare_die_arm> *application object* (3.1.78) that is a type of *Minimally_defined_bare_die_terminal* (5.467.12) that represents the guided wave bare die terminal *entity* (3.2.9)

Note 1 to entry: A **Guided_wave_bare_die_terminal** is a type of Minimally_defined_bare_die_terminal used with guided waves in high frequency or fiber-optic applications.

5.467.12
Minimally_defined_bare_die_terminal
<application module: Bare_die_arm> *application object* (3.1.78) that is a type of *Part_terminal* (5.500.8) that represents the minimally defined bare die terminal *entity* (3.2.9)

5.468 Bare_die_mim

5.468.1
bare_die
<application module: Bare_die_mim> *entity data type* (3.2.10) that is a type of *physical_unit* (5.596.4) that represents the bare die *entity* (3.2.9)

Note 1 to entry: A **bare_die** is a type of physical_unit that implements the ARM concept of *Bare_die* (5.467.1).

5.468.2
bare_die_bottom_surface
<application module: Bare_die_mim> *entity data type* (3.2.10) that is a type of *bare_die_surface* (5.468.5) that represents the bare die bottom surface *entity* (3.2.9)

Note 1 to entry: A **bare_die_bottom_surface** is a type of bare_die_surface that implements the ARM concept of *Bare_die_bottom_surface* (5.467.2).

5.468.3
bare_die_edge_segment_surface
<application module: Bare_die_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the bare die edge segment surface *entity* (3.2.9)

Note 1 to entry: A **bare_die_edge_segment_surface** is a type of shape_aspect and shape_aspect_relationship that implements the ARM concept of *Bare_die_edge_segment_surface* (5.467.3).

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5.468.4
bare_die_edge_surface
<application module: Bare_die_mim> *entity data type* (3.2.10) that is a type of *bare_die_surface* (5.468.5) that represents the bare die edge surface *entity* (3.2.9)

Note 1 to entry: A **bare_die_edge_surface** is a type of bare_die_surface that implements the ARM concept of *Bare_die_edge_surface* (5.467.4).

5.468.5
bare_die_surface
<application module: Bare_die_mim> *entity data type* (3.2.10) that is a type of *part_mounting_feature* (5.562.4) that represents the bare die surface *entity* (3.2.9)

Note 1 to entry: A **bare_die_surface** is a type of part_mounting_feature that implements the ARM concept of *Bare_die_surface* (5.467.5).

5.468.6
bare_die_terminal
<application module: Bare_die_mim> *entity data type* (3.2.10) that is a type of *minimally_defined_bare_die_terminal* (5.468.9) and *placed_feature* (5.642.2) that represents the bare die terminal *entity* (3.2.9)

Note 1 to entry: A **bare_die_terminal** is a type of minimally_defined_bare_die_terminal and a type of placed_feature that implements the ARM concept of *Bare_die_terminal* (5.467.6).

5.468.7
bare_die_template_terminal
<application module: Bare_die_mim> *entity data type* (3.2.10) that is a type of *part_feature_template_definition* (5.596.3) and *shape_aspect* (4.19.10) that represents the bare die template terminal *entity* (3.2.9)

Note 1 to entry: A **bare_die_template_terminal** is a type of part_feature_template_definition and a type of shape_aspect that implements the ARM concept of *Bare_die_template_terminal* (5.467.7).

5.468.8
bare_die_top_surface
<application module: Bare_die_mim> *entity data type* (3.2.10) that is a type of *bare_die_surface* (5.468.5) that represents the bare die top surface *entity* (3.2.9)

Note 1 to entry: A **bare_die_top_surface** is a type of bare_die_surface that implements the ARM concept of *Bare_die_top_surface* (5.467.9).

5.468.9
minimally_defined_bare_die_terminal
<application module: Bare_die_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the minimally defined bare die terminal *entity* (3.2.9)

Note 1 to entry: A **minimally_defined_bare_die_terminal** is a type of shape_aspect that implements the ARM concepts of *Guided_wave_bare_die_terminal* (5.467.11) or *Minimally_defined_bare_die_terminal* (5.467.12).

5.469 Basic_curve_arm

5.469.1
Closed_composite_curve
<application module: Basic_curve_arm> *application object* (3.1.78) that is a type of *Composite_curve* (5.469.2) that represents the closed composite curve *entity* (3.2.9)

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Note 1 to entry: A **Closed_composite_curve** is a type of Composite_curve that is closed.

5.469.2
Composite_curve
<application module: Basic_curve_arm> *application object* (3.1.78) that is a type of *Bounded_curve* (5.470.1) that represents the composite curve *entity* (3.2.9)

Note 1 to entry: A **Composite_curve** is a type of *Curve* (5.470.6) that combines more than one Curve into its structure.

5.469.3
Composite_curve_segment
<application module: Basic_curve_arm> *application object* (3.1.78) that represents the composite curve segment *entity* (3.2.9)

Note 1 to entry: A **Composite_curve_segment** is a segment of a *Composite_curve* (5.469.2).

5.469.4
Trimmed_curve
<application module: Basic_curve_arm> *application object* (3.1.78) that is a type of *Bounded_curve* (5.470.1) that represents the trimmed curve *entity* (3.2.9)

Note 1 to entry: A **Trimmed_curve** is a type of *Curve* (5.470.6) that has a defined, finite extent.

5.470 Basic_geometry_arm

5.470.1
Bounded_curve
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Curve* (5.470.6) that represents the bounded curve *entity* (3.2.9)

Note 1 to entry: A **Bounded_curve** is a type of Curve which has finite arc length and identifiable start and end points.

5.470.2
Bounded_surface
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Surface* (5.470.18) that represents the bounded surface *entity* (3.2.9)

Note 1 to entry: A **Bounded_surface** is a type of Surface which has finite area and identifiable boundaries.

5.470.3
Circle
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Conic* (5.470.4) that represents the circle *entity* (3.2.9)

Note 1 to entry: A **Circle** is a type of Conic in which all points are equidistant from the centre.

5.470.4
Conic
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Curve* (5.470.6) that represents the conic *entity* (3.2.9)

Note 1 to entry: A **Conic** is a type of Curve that is the intersection of a cone and a plane.

5.470.5

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Conical_surface
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Surface* (5.470.18) that represents the conical surface *entity* (3.2.9)

Note 1 to entry: A **Conical_surface** is a type of Surface that has the shape of a cone.

5.470.6
Curve
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the curve *entity* (3.2.9)

5.470.7
Cylindrical_surface
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Surface* (5.470.18) that represents the cylindrical surface *entity* (3.2.9)

Note 1 to entry: A **Cylindrical_surface** is a type of Surface that has the shape of a circular cylinder.

5.470.8
Degenerate_pcurve
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Point* (5.10.5) that represents the degenerate pcurve *entity* (3.2.9)

Note 1 to entry: A **Degenerate_pcurve** is a type of Point that is defined as a parameter space curve, but in three-dimensional model space it collapses to a single point.

5.470.9
Ellipse
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Conic* (5.470.4) that represents the ellipse *entity* (3.2.9)

Note 1 to entry: An **Ellipse** is a type of Conic which is a closed curve defined by the lengths of its two diameters.

5.470.10
Extruded_surface
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Swept_surface* (5.470.20) that represents the extruded surface *entity* (3.2.9)

5.470.11
Hyperbola
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Conic* (5.470.4) that represents the hyperbola *entity* (3.2.9)

Note 1 to entry: An **Hyperbola** is a type of Conic which is a curve with two branches produced by intersecting a double cone with a plane at an acute angle to its central axis.

5.470.12
Line
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Curve* (5.470.6) that represents the line *entity* (3.2.9)

Note 1 to entry: A **Line** is a type of Curve that is straight.

5.470.13

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Parabola
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Conic* (5.470.4) that represents the parabola *entity* (3.2.9)

Note 1 to entry: A **Parabola** is a type of Conic which is an unbounded curve produced by intersecting a cone with a plane parallel to a generating line at an angle to its central axis equal to the semi-angle.

5.470.14
Plane
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Surface* (5.470.18) that represents the plane *entity* (3.2.9)

Note 1 to entry: A **Plane** is a type of Surface that is flat.

5.470.15
Point_on_curve
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Point* (5.10.5) that represents the point on curve *entity* (3.2.9)

Note 1 to entry: A **Point_on_curve** is a type of *Detailed_geometric_model_element* (5.10.9) that characterizes a point which lies on a curve.

5.470.16
Point_on_surface
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Point* (5.10.5) that represents the point on surface *entity* (3.2.9)

Note 1 to entry: A **Point_on_surface** is a type of *Detailed_geometric_model_element* (5.10.9) that characterizes a point that lies on a surface.

5.470.17
Spherical_surface
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Surface* (5.470.18) that represents the spherical surface *entity* (3.2.9)

Note 1 to entry: A **Spherical_surface** is a type of Surface that has the shape of a sphere.

5.470.18
Surface
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the surface *entity* (3.2.9)

Note 1 to entry: A **Surface** is a type of Detailed_geometric_model_element that is a continuous 2D subspace of a 3D space.

5.470.19
Surface_of_revolution
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Swept_surface* (5.470.20) that represents the surface of revolution *entity* (3.2.9)

5.470.20
Swept_surface
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Surface* (5.470.18) that represents the swept surface *entity* (3.2.9)

Note 1 to entry: A **Swept_surface** is a type of Surface that is the result of sweeping a *Curve* (5.470.6).

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5.470.21
Toroidal_surface
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Surface* (5.470.18) that represents the toroidal surface *entity* (3.2.9)

Note 1 to entry: A **Toroidal_surface** is a type of Surface that has the shape of a torus.

5.470.22
Cylindrical_point
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Cartesian_point* (5.10.6) that represents the cylindrical point *entity* (3.2.9)

Note 1 to entry: A **Cylindrical_point** is a type of Cartesian_point which uses a three dimensional cylindrical polar coordinate system, centred at the origin of the corresponding Cartesian coordinate system, to define its location.

5.470.23
Spherical_point
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Cartesian_point* (5.10.6) that represents the spherical point *entity* (3.2.9)

Note 1 to entry: A **Spherical_point** is a type of Cartesian_point which uses a three dimensional spherical polar coordinate system, centred at the origin of the corresponding Cartesian coordinate system, to define its location.

5.470.24
Polar_point
<application module: Basic_geometry_arm> *application object* (3.1.78) that is a type of *Cartesian_point* (5.10.6) that represents the polar point *entity* (3.2.9)

Note 1 to entry: A **Polar_point** is a type of Cartesian_point which uses a two dimensional polar coordinate system, centred at the origin of the corresponding Cartesian coordinate system, to define its location.

5.471 Cable_arm

5.471.1
Cable_terminal
<application module: Cable_arm> *application object* (3.1.78) that is a type of *Part_terminal* (5.500.8) that represents the cable terminal *entity* (3.2.9)

5.471.2
Cable_usage_view
<application module: Cable_arm> *application object* (3.1.78) that is a type of *Part_usage_view* (5.595.8) that represents the cable usage view *entity* (3.2.9)

5.472 Cable_mim

5.472.1
cable_terminal
<application module: Cable_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the cable terminal *entity* (3.2.9)

Note 1 to entry: A **cable_terminal** is a type of shape_aspect that implements the ARM concept of *Cable_terminal* (5.471.1).

5.472.2

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cable_usage_view
<application module: Cable_mim> *entity data type* (3.2.10) that is a type of *physical_unit* (5.596.4) that represents the cable usage view *entity* (3.2.9)

Note 1 to entry: A **cable_usage_view** is a type of physical_unit that implements the ARM concept of *Cable_usage_view* (5.471.2).

5.473 Characteristic_arm

5.473.1
Characteristic_data_table_header_usage
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Property_definition_representation* (5.40.5) that represents the characteristic data table header usage *entity* (3.2.9)

Note 1 to entry: A **Characteristic_data_table_header_usage** is a type of Property_definition_representation that links a *Characteristic_data_table_representation* (5.473.3) to the *Characteristic_data_table_header* (5.473.6) to which it belongs.

5.473.2
Characteristic_data_table
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the characteristic data table *entity* (3.2.9)

Note 1 to entry: A **Characteristic_data_table** is a type of Representation_item that is described by one or more *Characteristic_data_table_row* (5.473.4).

5.473.3
Characteristic_data_table_representation
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Property_value_representation* (5.118.4) that represents the characteristic data table representation *entity* (3.2.9)

5.473.4
Characteristic_data_table_row
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the characteristic data table row *entity* (3.2.9)

5.473.5
Characteristic_data_column_header
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Independent_property* (5.44.1) that represents the characteristic data column header *entity* (3.2.9)

5.473.6
Characteristic_data_table_header
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Independent_property* (5.44.1) that represents the characteristic data table header *entity* (3.2.9)

Note 1 to entry: A **Characteristic_data_table_header** is a type of Independent_property for specifying the header of a table for measurements.

5.473.7
Characteristic_data_column_header_link
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Independent_property_relationship* (5.44.2) that represents the characteristic data column header link *entity* (3.2.9)

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Note 1 to entry: A **Characteristic_data_column_header_link** is a type of Independent_property_relationship that define the structure of the columns of a data table.

5.473.8
Characteristic_data_table_header_decomposition
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Independent_property_relationship* (5.44.2) that represents the characteristic data table header decomposition *entity* (3.2.9)

5.473.9
Correlated_property
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Assigned_property* (5.40.2) that represents the correlated property *entity* (3.2.9)

Note 1 to entry: A **Correlated_property** is a type of Assigned_property that identifies a set of other correlated Assigned_property instances.

5.473.10
Externally_defined_type_qualifier
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Type_qualifier* (5.666.12) that represents the externally defined type qualifier *entity* (3.2.9)

Note 1 to entry: A **Externally_defined_type_qualifier** is a type of Type_qualifier whose meaning is defined in an external library.

5.473.11
Length_tolerance_characteristic
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Tolerance_characteristic* (5.473.22) that represents the length tolerance characteristic *entity* (3.2.9)

5.473.12
Maximum_tolerance_characteristic
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Tolerance_characteristic* (5.473.22) that represents the maximum tolerance characteristic *entity* (3.2.9)

5.473.13
Minimum_tolerance_characteristic
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Tolerance_characteristic* (5.473.22) that represents the minimum tolerance characteristic *entity* (3.2.9)

5.473.14
Nominal_tolerance_characteristic
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Tolerance_characteristic* (5.473.22) that represents the nominal tolerance characteristic *entity* (3.2.9)

5.473.15
Null_representation_item
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the null representation item *entity* (3.2.9)

5.473.16

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Plus_minus_tolerance_characteristic
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Tolerance_characteristic* (5.473.22) that represents the plus minus tolerance characteristic *entity* (3.2.9)

5.473.17
Qualified_tolerance_characteristic
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Tolerance_characteristic* (5.473.22) that represents the qualified tolerance characteristic *entity* (3.2.9)

5.473.18
Range_characteristic
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Property_value_representation* (5.118.4) that represents the range characteristic *entity* (3.2.9)

Note 1 to entry: A **Range_characteristic** is a type of Property_value_representation that specifies a range of values.

5.473.19
Statistical_tolerance_characteristic
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Tolerance_characteristic* (5.473.22) that represents the statistical tolerance characteristic *entity* (3.2.9)

5.473.20
Symmetrical_tolerance_characteristic
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Tolerance_characteristic* (5.473.22) that represents the symmetrical tolerance characteristic *entity* (3.2.9)

Note 1 to entry: A **Symmetrical_tolerance_characteristic** is a type of Tolerance_characteristic that has symmetrical tolerances around the nominal value.

5.473.21
Text_representation_item
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *String_representation_item* (5.12.9) that represents the text representation item *entity* (3.2.9)

5.473.22
Tolerance_characteristic
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Property_value_representation* (5.118.4) that represents the tolerance characteristic *entity* (3.2.9)

5.473.23
Typical_tolerance_characteristic
<application module: Characteristic_arm> *application object* (3.1.78) that is a type of *Tolerance_characteristic* (5.473.22) that represents the typical tolerance characteristic *entity* (3.2.9)

5.474 Characteristic_mim

5.474.1
characteristic_data_table_header
<application module: Characteristic_mim> *entity data type* (3.2.10) that is a type of *general_property* (4.19.5) that represents the characteristic data table header *entity* (3.2.9)

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5.474.2
characteristic_data_column_header
<application module: Characteristic_mim> *entity data type* (3.2.10) that is a type of *general_property* (4.19.5) that represents the characteristic data column header *entity* (3.2.9)

Note 1 to entry: A **characteristic_data_column_header** is a type of general_property that implements the ARM concept of *Characteristic_data_column_header* (5.473.5).

5.474.3
characteristic_data_column_header_link
<application module: Characteristic_mim> *entity data type* (3.2.10) that is a type of *general_property_relationship* (4.19.7) that represents the characteristic data column header link *entity* (3.2.9)

Note 1 to entry: A **characteristic_data_column_header_link** is a type of general_property_relationship that implements the ARM concept of *Characteristic_data_column_header_link* (5.473.7).

5.474.4
characteristic_data_table_header_decomposition
<application module: Characteristic_mim> *entity data type* (3.2.10) that is a type of *general_property_relationship* (4.19.7) that represents the characteristic data table header decomposition *entity* (3.2.9)

Note 1 to entry: A **characteristic_data_table_header_decomposition** is a type of general_property_relationship that implements the ARM concept of *Characteristic_data_table_header_decomposition* (5.473.8).

5.474.5
characteristic_type
<application module: Characteristic_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the characteristic type *entity* (3.2.9)

Note 1 to entry: A **characteristic_type** is a type of group that specifies a boolean property, a numeric property, a compound characteristic, a logical property, a string property, or an externally defined property for a characteristic.

5.474.6
null_representation_item
<application module: Characteristic_mim> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the null representation item *entity* (3.2.9)

Note 1 to entry: A **null_representation_item** is a type of representation_item that implements the ARM concept of *Null_representation_item* (5.473.15).

5.474.7
range_characteristic
<application module: Characteristic_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) and *descriptive_representation_item* (4.34.1) that represents the range characteristic *entity* (3.2.9)

Note 1 to entry: A **range_characteristic** is a type of representation and of descriptive_representation_item that implements the ARM concept of *Range_characteristic* (5.473.18).

5.474.8

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row_representation_item
<application module: Characteristic_mim> *entity data type* (3.2.10) that is a type of *compound_representation_item* (4.41.3) that represents the row representation item *entity* (3.2.9)

5.474.9
table_representation_item
<application module: Characteristic_mim> *entity data type* (3.2.10) that is a type of *compound_representation_item* (4.41.3) that represents the table representation item *entity* (3.2.9)

5.475 Chemical_substance_arm

5.475.1
Chemical_compound
<application module: Chemical_substance_arm> *application object* (3.1.78) that is a type of *Substance* (5.475.5) that represents the chemical compound *entity* (3.2.9)

Note 1 to entry: A **Chemical_compound** is a type of Substance that represents a *chemical compound* (3.1.20)

5.475.2
Chemical_element
<application module: Chemical_substance_arm> *application object* (3.1.78) that is a type of *Substance* (5.475.5) that represents the chemical element *entity* (3.2.9)

Note 1 to entry: A **Chemical_element** is a type of Substance that represents a *chemical element* (3.1.21)

5.475.3
Physical_particle
<application module: Chemical_substance_arm> *application object* (3.1.78) that is a type of *Substance* (5.475.5) that represents the physical particle *entity* (3.2.9)

Note 1 to entry: A **Physical_particle** is a type of Substance that represents a *physical particle* (3.1.22)

5.475.4
Raw_material_definition_relationship
<application module: Chemical_substance_arm> *application object* (3.1.78) that is a type of *View_definition_usage* (5.48.2) that represents the raw material definition relationship *entity* (3.2.9)

5.475.5
Substance
<application module: Chemical_substance_arm> *application object* (3.1.78) that is a type of *Product* (5.28.1) that represents the substance *entity* (3.2.9)

Note 1 to entry: A **Substance** is a type of Product that collects the definitional information of the versions of a *substance* (3.1.23).

5.475.6
Substance_composition_relationship
<application module: Chemical_substance_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the substance composition relationship *entity* (3.2.9)

Note 1 to entry: An **Substance_composition_relationship** is a type of View_definition_relationship that relates two *Substance_view_definition* (5.475.8) for the purpose of specifying that one is a constituent of the other.

5.475.7

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Substance_version
<application module: Chemical_substance_arm> *application object* (3.1.78) that is a type of *Product_version* (5.29.1) that represents the substance version *entity* (3.2.9)

Note 1 to entry: A **Substance_version** is a type of Product_version that identifies a version of a substance.

5.475.8
Substance_view_definition
<application module: Chemical_substance_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the substance view definition *entity* (3.2.9)

Note 1 to entry: A **Substance_view_definition** is a type of Product_view_definition that defines a characterization view of a version of a *Substance* (5.475.5).

5.476 Component_grouping_arm

5.476.1
Array_placement_group
<application module: Component_grouping_arm> *application object* (3.1.78) that is a type of *Assembly_group_component* (5.476.3) that represents the array placement group *entity* (3.2.9)

Note 1 to entry: An **Array_placement_group** is a type of Assembly_group_component that is a group of *Assembly_component* (5.684.1) placed in a linear or rectangular regular pattern in the assembly.

5.476.2
Assembly_component_placement_link
<application module: Component_grouping_arm> *application object* (3.1.78) that represents the assembly component placement link *entity* (3.2.9)

Note 1 to entry: An **Assembly_component_placement_link** is a means to specify a directed relationship between two components in the assembly to support regular placement.

5.476.3
Assembly_group_component
<application module: Component_grouping_arm> *application object* (3.1.78) that is a type of *Assembly_component* (5.684.1) and *Single_instance* (5.79.6) that represents the assembly group component *entity* (3.2.9)

Note 1 to entry: An **Assembly_group_component** is a type of Assembly_component and a type of Single_instance.

5.476.4
Linear_array_placement_group_component
<application module: Component_grouping_arm> *application object* (3.1.78) that is a type of *Array_placement_group* (5.476.1) that represents the linear array placement group component *entity* (3.2.9)

Note 1 to entry: A **Linear_array_placement_group_component** is a type of an Array_placement_group.

5.476.5
Linear_array_placement_group_component_link
<application module: Component_grouping_arm> *application object* (3.1.78) that represents the linear array placement group component link *entity* (3.2.9)

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Note 1 to entry: A **Linear_array_placement_group_component_link** is a directed relationship between two *Linear_array_placement_group_component* (5.476.4) included to support establishing an array of placed components.

5.476.6
Rectangular_array_placement_group_component
<application module: Component_grouping_arm> *application object* (3.1.78) that is a type of *Array_placement_group* (5.476.1) that represents the rectangular array placement group component *entity* (3.2.9)

5.477 Component_grouping_mim

5.477.1
array_placement_group
<application module: Component_grouping_mim> *entity data type* (3.2.10) that is a type of *assembly_group_component* (5.477.2) that represents the array placement group *entity* (3.2.9)

Note 1 to entry: An **array_placement_group** is a type of assembly_group_component that implements the ARM concept of *Array_placement_group* (5.476.1).

5.477.2
assembly_group_component
<application module: Component_grouping_mim> *entity data type* (3.2.10) that is a type of *assembly_component* (5.685.1) that represents the assembly group component *entity* (3.2.9)

Note 1 to entry: An **assembly_group_component** is a type of assembly_component that implements the ARM concept of *Assembly_group_component* (5.476.3).

5.477.3
assembly_group_component_definition_placement_link
<application module: Component_grouping_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) and *product_definition_relationship* (4.18.15) that represents the assembly group component definition placement link *entity* (3.2.9)

Note 1 to entry: An **assembly_group_component_definition_placement_link** is a type of product_definition and a product_definition_relationship that implements the ARM concept of *Assembly_component_placement_link* (5.476.2).

5.477.4
interfaced_group_component
<application module: Component_grouping_mim> *entity data type* (3.2.10) that is a type of *assembly_group_component* (5.477.2) that represents the interfaced group component *entity* (3.2.9)

5.477.5
linear_array_component_definition_link
<application module: Component_grouping_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) and *product_definition_relationship* (4.18.15) that represents the linear array component definition link *entity* (3.2.9)

Note 1 to entry: A **linear_array_component_definition_link** is a type of product_definition and a product_definition_relationship that implements the ARM concept of *Linear_array_placement_group_component_link* (5.476.5).

5.477.6

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linear_array_placement_group_component
<application module: Component_grouping_mim> *entity data type* (3.2.10) that is a type of *array_placement_group* (5.477.1) that represents the linear array placement group component *entity* (3.2.9)

Note 1 to entry: A **linear_array_placement_group_component** is a type of array_placement_group that implements the ARM concept of *Linear_array_placement_group_component* (5.476.4).

5.477.7
rectangular_array_placement_group_component
<application module: Component_grouping_mim> *entity data type* (3.2.10) that is a type of *array_placement_group* (5.477.1) that represents the rectangular array placement group component *entity* (3.2.9)

Note 1 to entry: A **rectangular_array_placement_group_component** is a type of array_placement_group that implements the ARM concept of *Rectangular_array_placement_group_component* (5.476.6).

5.478 Component_feature_arm

5.478.1
Component_feature
<application module: Component_feature_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the component feature *entity* (3.2.9)

5.478.2
Component_feature_joint
<application module: Component_feature_arm> *application object* (3.1.78) that is a type of *Component_feature_relationship* (5.478.4) and *Shape_element* (5.41.6) that represents the component feature joint *entity* (3.2.9)

Note 1 to entry: A **Component_feature_joint** is a type of Component_feature_relationship and of Shape_element for the representation of a joint between two *Component_feature* (5.478.1) instances.

5.478.3
Component_feature_make_from_relationship
<application module: Component_feature_arm> *application object* (3.1.78) that is a type of *Component_feature_relationship* (5.478.4) that represents the component feature make from relationship *entity* (3.2.9)

5.478.4
Component_feature_relationship
<application module: Component_feature_arm> *application object* (3.1.78) that is a type of *Shape_element_relationship* (5.41.7) that represents the component feature relationship *entity* (3.2.9)

5.478.5
Component_terminal
<application module: Component_feature_arm> *application object* (3.1.78) that is a type of *Component_feature* (5.478.1) that represents the component terminal *entity* (3.2.9)

5.479 Component_feature_mim

5.479.1
component_feature
<application module: Component_feature_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the component feature *entity* (3.2.9)

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Note 1 to entry: A **component_feature** is a type of shape_aspect that implements the ARM concept of *Component_feature* (5.478.1).

5.479.2
component_feature_joint
<application module: Component_feature_mim> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) and *shape_aspect* (4.19.10) that represents the component feature joint *entity* (3.2.9)

Note 1 to entry: A **component_feature_joint** is a type of shape_aspect and a shape_aspect_relationship that implements the ARM concept of *Component_feature_joint* (5.478.2).

5.479.3
component_feature_relationship
<application module: Component_feature_mim> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) that represents the component feature relationship *entity* (3.2.9)

Note 1 to entry: A **component_feature_relationship** is a type of shape_aspect_relationship that implements the ARM concept of *Component_feature_relationship* (5.478.4)

5.479.4
component_terminal
<application module: Component_feature_mim> *entity data type* (3.2.10) that is a type of *component_feature* (5.479.1) that represents the component terminal *entity* (3.2.9)

Note 1 to entry: A **component_terminal** is a type of component_feature that implements the ARM concepts of:

- *Assembly_module_component_terminal* (5.449.2);
- *Assembly_module_macro_component_join_terminal* (5.447.2);
- *Bare_die_component_terminal* (5.453.3);
- *Component_terminal* (5.478.5);
- *Component_termination_passage_join_terminal* (5.536.6);
- *Conductive_interconnect_element_terminal* (5.536.9);
- *Interconnect_component_join_terminal* (5.453.7);
- *Interconnect_module_component_terminal* (5.453.10);
- *Interconnect_module_macro_component_join_terminal* (5.519.2);
- *Land_join_terminal* (5.529.8);
- *Minimally_defined_component_terminal* (5.441.6);
- *Packaged_component_join_terminal* (5.720.2);
- *Printed_component_join_terminal* (5.538.6);
- *Via_terminal* (5.536.110).

5.479.5

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make_from_feature_relationship
<application module: Component_feature_mim> *entity data type* (3.2.10) that is a type of *component_feature_relationship* (5.479.3) that represents the make from feature relationship *entity* (3.2.9)

Note 1 to entry: A **make_from_feature_relationship** is a type of component_feature_relationship that implements the ARM concept of *Component_feature_make_from_relationship* (5.478.3).

5.480 Connectivity_allocation_to_physical_network_arm

5.480.1
Connectivity_allocation_to_physical_network
<application module: Connectivity_allocation_to_physical_network_arm> *application object* (3.1.78) that represents the connectivity allocation to physical network *entity* (3.2.9)

Note 1 to entry: A **Connectivity_allocation_to_physical_network** is a means to provide information about the **implementation** of a connectivity requirement to a network.

5.481 Curve_swept_solid_arm

5.481.1
Curve_swept_solid
<application module: Curve_swept_solid_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the curve swept solid *entity* (3.2.9)

5.482 Datum_difference_based_model_arm

5.482.1
Datum_difference
<application module: Datum_difference_based_model_arm> *application object* (3.1.78) that represents the datum difference *entity* (3.2.9)

Note 1 to entry: A **Datum_difference** is the basis for mapping from a geometric context model into a lexical context model for definitional purposes.

5.482.2
Datum_difference_based_characteristic
<application module: Datum_difference_based_model_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the datum difference based characteristic *entity* (3.2.9)

5.482.3
Datum_difference_based_model_parameter
<application module: Datum_difference_based_model_arm> *application object* (3.1.78) that is a type of *Model_parameter* (5.543.3) that represents the datum difference based model parameter *entity* (3.2.9)

5.482.4
Datum_difference_functional_unit_usage_view_terminal_assignment
<application module: Datum_difference_based_model_arm> *application object* (3.1.78) that represents the datum difference functional unit usage view terminal assignment *entity* (3.2.9)

Note 1 to entry: A **Datum_difference_functional_unit_usage_view_terminal_assignment** is a means to provide the ability to map from a geometric context into the functional context of a *Functional_unit_definition* (5.547.6).

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5.483 Datum_difference_based_model_mim

5.483.1
datum_difference_based_model_parameter
<application module: Datum_difference_based_model_mim> *entity data type* (3.2.10) that is a type of *model_parameter* (5.544.3) that represents the datum difference based model parameter *entity* (3.2.9)

Note 1 to entry: A **datum_difference_based_model_parameter** is a type of model_parameter that implements the ARM concept of *Datum_difference_based_model_parameter* (5.482.3).

5.483.2
datum_difference_functional_unit_usage_view_terminal_assignment
<application module: Datum_difference_based_model_mim> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) that represents the datum difference functional unit usage view terminal assignment *entity* (3.2.9)

Note 1 to entry: A **datum_difference_functional_unit_usage_view_terminal_assignment** is a type of shape_aspect_relationship that implements the ARM concept of *Datum_difference_functional_unit_usage_view_terminal_assignment* (5.482.4).

5.483.3
datum_difference
<application module: Datum_difference_based_model_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the datum difference *entity* (3.2.9)

Note 1 to entry: A **datum_difference** is a type of shape_aspect and a shape_aspect_relationship that implements the ARM concept of *Datum_difference* (5.482.1).

5.483.4
datum_difference_based_characteristic
<application module: Datum_difference_based_model_mim> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the datum difference based characteristic *entity* (3.2.9)

Note 1 to entry: A **datum_difference_based_characteristic** is a type of representation_item that implements the ARM concept of *Datum_difference_based_characteristic* (5.482.2).

5.484 Design_specific_assignment_to_assembly_usage_view_arm

5.484.1
Component_terminal_to_assembly_module_interface_terminal_assignment
<application module: Design_specific_assignment_to_assembly_usage_view_arm> *application object* (3.1.78) that is a type of *Component_feature_to_physical_usage_view_assignment* (5.588.5) that represents the component terminal to assembly module interface terminal assignment *entity* (3.2.9)

5.484.2
Component_terminal_to_layered_assembly_module_terminal_assignment
<application module: Design_specific_assignment_to_assembly_usage_view_arm> *application object* (3.1.78) that is a type of *Component_feature_to_physical_usage_view_assignment* (5.588.5) that represents the component terminal to layered assembly module terminal assignment *entity* (3.2.9)

5.485 Design_specific_assignment_to_interconnect_usage_view_arm

5.485.1

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Component_terminal_to_interconnect_module_interface_terminal_assignment
<application module: Design_specific_assignment_to_interconnect_usage_view_arm> *application object* (3.1.78) that is a type of *Component_feature_to_physical_usage_view_assignment* (5.588.5) that represents the component terminal to interconnect module interface terminal assignment *entity* (3.2.9)

5.485.2
Component_terminal_to_interconnect_module_macro_terminal_assignment
<application module: Design_specific_assignment_to_interconnect_usage_view_arm> *application object* (3.1.78) that is a type of *Component_feature_to_physical_usage_view_assignment* (5.588.5) that represents the component terminal to interconnect module macro terminal assignment *entity* (3.2.9)

5.485.3
Stratum_concept_to_physical_usage_view_assignment
<application module: Design_specific_assignment_to_interconnect_usage_view_arm> *application object* (3.1.78) that represents the stratum concept to physical usage view assignment *entity* (3.2.9)

5.486 Device_marking_arm

5.486.1
Configuration_controlled_message
<application module: Device_marking_arm> *application object* (3.1.78) that represents the configuration controlled message *entity* (3.2.9)

Note 1 to entry: A **Configuration_controlled_message** is a message that has its content under version control, and that is source data for application of marking materials to a product.

5.486.2
Marking
<application module: Device_marking_arm> *application object* (3.1.78) that represents the marking *entity* (3.2.9)

Note 1 to entry: A **Marking** is the specification of what, where, and how information that is placed on a *Part_view_definition* (5.35.1) for identification purposes is applied.

5.487 Electrical_network_definition_arm

5.487.1
Electrical_network_definition
<application module: Electrical_network_definition_arm> *application object* (3.1.78) that is a type of *Functional_unit_network_definition* (5.545.4) that represents the electrical network definition *entity* (3.2.9)

Note 1 to entry: An **Electrical_network_definition** is a type of Functional_unit_network_definition that identifes that the nodes in the network definition default to voltage as the nodal property.

5.488 Electrical_network_definition_mim

5.488.1
electrical_network
<application module: Electrical_network_definition_mim> *entity data type* (3.2.10) that is a type of *functional_unit* (5.548.2) that represents the electrical network *entity* (3.2.9)

Note 1 to entry: An **electrical_network** is a type of functional_unit that implements the ARM concept of *Electrical_network_definition* (5.487.1).

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5.489 Extended_basic_geometry_arm

5.489.1
Detailed_geometric_model_element_relationship
<application module: Extended_basic_geometry_arm> *application object* (3.1.78) that represents the detailed geometric model element relationship *entity* (3.2.9)

Note 1 to entry: A **Detailed_geometric_model_element_relationship** is the association between a *Detailed_geometric_model_element* (5.10.9) and another Detailed_geometric_model_element for predefined purposes.

5.489.2
Geometric_model_element_relationship
<application module: Extended_basic_geometry_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element_relationship* (5.489.1) and *Detailed_geometric_model_element* (5.10.9) that represents the geometric model element relationship *entity* (3.2.9)

Note 1 to entry: A **Geometric_model_element_relationship** is a type of Detailed_geometric_model_element_relationship and a type of Detailed_geometric_model_element.

5.489.3
Vector
<application module: Extended_basic_geometry_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the vector *entity* (3.2.9)

5.490 Extended_basic_geometry_mim

5.490.1
geometric_model_element_relationship
<application module: Extended_basic_geometry_mim> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) and *representation_item_relationship* (4.41.17) that represents the geometric model element relationship *entity* (3.2.9)

Note 1 to entry: A **geometric_model_element_relationship** is a type of geometric_representation_item and a type of representation_item_relationship that implements the ARM concept of *Geometric_model_element_relationship* (5.489.2).

5.491 Fabrication_joint_arm

5.491.1
Connection_zone_based_fabrication_joint
<application module: Fabrication_joint_arm> *application object* (3.1.78) that is a type of *Fabrication_joint* (5.491.2) that represents the connection zone based fabrication joint *entity* (3.2.9)

5.491.2
Fabrication_joint
<application module: Fabrication_joint_arm> *application object* (3.1.78) that is a type of *Component_feature_joint* (5.478.2) that represents the fabrication joint *entity* (3.2.9)

5.491.3
Passage_terminal_based_fabrication_joint_link
<application module: Fabrication_joint_arm> *application object* (3.1.78) that represents the passage terminal based fabrication joint link *entity* (3.2.9)

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Note 1 to entry: A **Passage_terminal_based_fabrication_joint_link** is a directed link between two *Fabrication_joint* (5.491.2) that are associated with a common conductive passage in the interconnect substrate.

5.492 Fabrication_joint_mim

5.492.1
connection_zone_based_fabrication_joint
<application module: Fabrication_joint_mim> *entity data type* (3.2.10) that is a type of *fabrication_joint* (5.492.2) that represents the connection zone based fabrication joint *entity* (3.2.9)

Note 1 to entry: A **connection_zone_based_fabrication_joint** is a type of fabrication_joint that implements the ARM concept of *Connection_zone_based_fabrication_joint* (5.491.1).

5.492.2
fabrication_joint
<application module: Fabrication_joint_mim> *entity data type* (3.2.10) that is a type of *component_feature_joint* (5.479.2) that represents the fabrication joint *entity* (3.2.9)

Note 1 to entry: A **fabrication_joint** is a type of component_feature_joint that implements the ARM concept of *Fabrication_joint* (5.491.2).

5.492.3
passage_terminal_based_fabrication_joint_link
<application module: Fabrication_joint_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the passage terminal based fabrication joint link *entity* (3.2.9)

Note 1 to entry: A **passage_terminal_based_fabrication_joint_link** is a type of shape_aspect and of shape_aspect_relationship that implements the ARM concept of *Passage_terminal_based_fabrication_joint_link* (5.491.3).

5.493 Fabrication_requirement_arm

5.493.1
Fabrication_thickness_requirement
<application module: Fabrication_requirement_arm> *application object* (3.1.78) that is a type of *Predefined_requirement_view_definition* (5.607.6) that represents the fabrication thickness requirement *entity* (3.2.9)

Note 1 to entry: A **Fabrication_thickness_requirement** is a type of Predefined_requirement_view_definition that characterizes the interconnect thickness range over metallic material or dielectric material and assigns a **tolerance** to that range for fabrication purposes.

5.493.2
Layout_land_width_tolerance_requirement
<application module: Fabrication_requirement_arm> *application object* (3.1.78) that is a type of *Predefined_requirement_view_definition* (5.607.6) that represents the layout land width tolerance requirement *entity* (3.2.9)

Note 1 to entry: A **Layout_land_width_tolerance_requirement** is a type of Predefined_requirement_view_definition that characterizes the land width range that is required to be produced for a particular terminal pitch class of mating components.

5.493.3

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Layout_line_width_tolerance_requirement
<application module: Fabrication_requirement_arm> *application object* (3.1.78) that is a type of *Predefined_requirement_view_definition* (5.607.6) that represents the layout line width tolerance requirement *entity* (3.2.9)

Note 1 to entry: A **Layout_line_width_tolerance_requirement** is a type of Predefined_requirement_view_definition that characterizes the line width range that is expected by the design organization to be manufactured for a particular *Stratum_technology* (5.494.25).

5.493.4
Line_width_class
<application module: Fabrication_requirement_arm> *application object* (3.1.78) that represents the line width class *entity* (3.2.9)

Note 1 to entry: A **Line_width_class** is a category which assigns a name to a length range for classification purposes.

5.493.5
Pitch_class
<application module: Fabrication_requirement_arm> *application object* (3.1.78) that represents the pitch class *entity* (3.2.9)

Note 1 to entry: A **Pitch_class** is a category in which a particular group of *Part_feature* (5.595.4) may fall, depending on the value of their paired spacing.

5.494 Fabrication_technology_arm

5.494.1
Allocated_passage_minimum_annular_ring
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Characterizable_object* (5.643.1) that represents the allocated passage minimum annular ring *entity* (3.2.9)

Note 1 to entry: An **Allocated_passage_minimum_annular_ring** is a type of Characterizable_object included to support specification of annular ring properties for the combined technology that results from applying a *Passage_technology* (5.494.20) to a stackup model.

5.494.2
Copy_stratum_technology_occurrence_relationship
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Derived_stratum_technology_occurrence_relationship* (5.494.7) that represents the copy stratum technology occurrence relationship *entity* (3.2.9)

Note 1 to entry: A **Copy_stratum_technology_occurrence_relationship** is a type of Derived_stratum_technology_occurrence_relationship, stating that the geometry of the primary *Stratum* (5.536.90) is copied to the geometry of the secondary Stratum.

5.494.3
Default_component_termination_passage_definition
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Passage_technology* (5.494.20) that represents the default component termination passage definition *entity* (3.2.9)

Note 1 to entry: A **Default_component_termination_passage_definition** is a type of Passage_technology that defines a default passage based on characteristics of the associated *Part_terminal* (5.500.8).

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5.494.4
Default_tapered_blind_via_definition
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Default_via_definition* (5.494.6) that represents the default tapered blind via definition *entity* (3.2.9)

Note 1 to entry: A **Default_tapered_blind_via_definition** is a type of Default_via_definition that supports the definition of vias that have a different diameter on one end than on the other.

5.494.5
Default_unsupported_passage_definition
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Passage_technology* (5.494.20) that represents the default unsupported passage definition *entity* (3.2.9)

Note 1 to entry: A **Default_unsupported_passage_definition** is a type of Passage_technology where the passage is unsupported by metallization.

5.494.6
Default_via_definition
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Passage_technology* (5.494.20) that represents the default via definition *entity* (3.2.9)

Note 1 to entry: A **Default_via_definition** is a type of Passage_technology that defines the default shape of the *Via* (5.536.109).

5.494.7
Derived_stratum_technology_occurrence_relationship
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Stratum_technology_occurrence_relationship* (5.494.28) that represents the derived stratum technology occurrence relationship *entity* (3.2.9)

Note 1 to entry: A **Derived_stratum_technology_occurrence_relationship** is a type of Stratum_technology_occurrence_relationship for the purpose of stating that the geometry of one *Stratum* (5.536.90) is derived from the geometry of another Stratum.

5.494.8
Design_layer_technology
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Stratum_technology* (5.494.25) that represents the design layer technology *entity* (3.2.9)

5.494.9
Design_stack_model
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Stratum_stack_model* (5.494.22) that represents the design stack model *entity* (3.2.9)

Note 1 to entry: A **Design_stack_model** is a type of Stratum_stack_model that is included in a design to specify the set of laminate stackups used in the design of an interconnect.

5.494.10
Documentation_layer_technology
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Stratum_technology* (5.494.25) that represents the documentation layer technology *entity* (3.2.9)

Note 1 to entry: A **Documentation_layer_technology** is a type of Stratum_technology that may have patterns applied and whose purpose is not for directly implementing point to point connectivity as in the *Design_layer_technology* (5.494.8).

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5.494.11
Equivalent_stackup_model_definition
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) and *View_definition_relationship* (5.48.1) that represents the equivalent stackup model definition *entity* (3.2.9)

Note 1 to entry: An **Equivalent_stackup_model_definition** is a type of Product_view_definition and a type of View_definition_relationship that provides support for explicitly stating that a more detailed stackup model is the topological equivalent of a more generic stackup model.

5.494.12
Equivalent_sub_stack_definition
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the equivalent sub stack definition *entity* (3.2.9)

Note 1 to entry: An **Equivalent_sub_stack_definition** is a type of Product_view_definition that specifies the equivalence of a subset of a more generic stackup to a subset of a more detailed stackup.

5.494.13
Footprint_library_stratum_technology
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Stratum_technology* (5.494.25) that represents the footprint library stratum technology *entity* (3.2.9)

5.494.14
Impedance_measurement_setup_requirement
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Predefined_requirement_view_definition* (5.607.6) that represents the impedance measurement setup requirement *entity* (3.2.9)

Note 1 to entry: An **Impedance_measurement_setup_requirement** is a type of Predefined_requirement_view_definition that specifies the structural relationships necessary to support a functional definition of an impedance measurement.

5.494.15
Impedance_requirement
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Predefined_requirement_view_definition* (5.607.6) that represents the impedance requirement *entity* (3.2.9)

Note 1 to entry: An **Impedance_requirement** is a type of Predefined_requirement_view_definition provided to support functional performance specification of interconnect implementations in support of high speed design.

5.494.16
Inverse_copy_stratum_technology_occurrence_relationship
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Derived_stratum_technology_occurrence_relationship* (5.494.7) that represents the inverse copy stratum technology occurrence relationship *entity* (3.2.9)

Note 1 to entry: An **Inverse_copy_stratum_technology_occurrence_relationship** is a type of Derived_stratum_technology_occurrence_relationship, stating that the geometry of one *Stratum* (5.536.90) is an inverse copy of the geometry of another Stratum.

5.494.17
Local_linear_stack
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Stratum_sub_stack* (5.494.23) that represents the local linear stack *entity* (3.2.9)

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Note 1 to entry: A **Local_linear_stack** is a type of Stratum_sub_stack that is a locally complete vertical extent of the referenced *Stratum_stack_model* (5.494.22).

5.494.18
Passage_deposition_material_identification
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Material_identification* (5.511.3) that represents the passage deposition material identification *entity* (3.2.9)

Note 1 to entry: A **Passage_deposition_material_identification** is a type of Material_identification used to identify material deposited on the walls or lower or upper terminus of a passage.

5.494.19
Passage_filling_material_identification
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Material_identification* (5.511.3) that represents the passage filling material identification *entity* (3.2.9)

Note 1 to entry: A **Passage_filling_material_identification** is a type of Material_identification used to identify material that fills a passage.

5.494.20
Passage_technology
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Characterizable_object* (5.643.1) that represents the passage technology *entity* (3.2.9)

5.494.21
Passage_technology_allocation_to_stack_model
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Stratum_sub_stack* (5.494.23) that represents the passage technology allocation to stack model *entity* (3.2.9)

5.494.22
Stratum_stack_model
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Template_definition* (5.578.2) that represents the stratum stack model *entity* (3.2.9)

Note 1 to entry: A **Stratum_stack_model** is a type of Template_definition that is included to define the sequence of materials in an interconnect.

5.494.23
Stratum_sub_stack
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Template_definition* (5.578.2) that represents the stratum sub stack *entity* (3.2.9)

5.494.24
Stratum_surface_technology
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the stratum surface technology *entity* (3.2.9)

Note 1 to entry: A **Stratum_surface_technology** is a type of Shape_element that specifies the surface characteristics for a *Stratum_technology* (5.494.25).

5.494.25

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Stratum_technology
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Characterizable_object* (5.643.1) that represents the stratum technology *entity* (3.2.9)

5.494.26
Stratum_technology_occurrence
<application module: Fabrication_technology_arm> *application object* (3.1.78) that represents the stratum technology occurrence *entity* (3.2.9)

Note 1 to entry: A **Stratum_technology_occurrence** is a reference or instance of a *Stratum_technology* (5.494.25) provided for the purpose of constructing an abstract stackup model of an interconnect based solely on the technology parameters and not on any specific set of geometric properties.

5.494.27
Stratum_technology_occurrence_link
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Stratum_technology_occurrence_relationship* (5.494.28) that represents the stratum technology occurrence link *entity* (3.2.9)

Note 1 to entry: A **Stratum_technology_occurrence_link** is a type of Stratum_technology_occurrence_relationship A **Stratum_technology_occurrence_link** is a relationship that specifies a directed link between two members of *Stratum_technology_occurrence* (5.494.26).

5.494.28
Stratum_technology_occurrence_relationship
<application module: Fabrication_technology_arm> *application object* (3.1.78) that represents the stratum technology occurrence relationship *entity* (3.2.9)

Note 1 to entry: A **Stratum_technology_occurrence_relationship** is a relationship that relates two *Stratum_technology_occurrence* (5.494.26).

5.494.29
Stratum_technology_occurrence_swap_relationship
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Stratum_technology_occurrence_relationship* (5.494.28) that represents the stratum technology occurrence swap relationship *entity* (3.2.9)

5.494.30
Stratum_technology_occurrence_feature_constraint
<application module: Fabrication_technology_arm> *application object* (3.1.78) that is a type of *Stratum_technology_occurrence_relationship* (5.494.28) that represents the stratum technology occurrence feature constraint *entity* (3.2.9)

5.494.31
Stratum_technology_mapping_relationship
<application module: Fabrication_technology_arm> *application object* (3.1.78) that represents the stratum technology mapping relationship *entity* (3.2.9)

Note 1 to entry: A **Stratum_technology_mapping_relationship** is a relationship between a *Footprint_library_stratum_technology* (5.494.13) and a *Stratum_technology* (5.494.25) included to specify a formal relationship between a more general model and a more specific model where the more specific model includes thickness.

5.494.32

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Stratum_technology_swap_relationship
<application module: Fabrication_technology_arm> *application object* (3.1.78) that represents the stratum technology swap relationship *entity* (3.2.9)

Note 1 to entry: A **Stratum_technology_swap_relationship** is a relationship that relates two *Stratum_technology* (5.494.25) provided to indicate that one Stratum_technology shall replace the other Stratum_technology.

5.495 Fabrication_technology_mim

5.495.1
allocated_passage_minimum_annular_ring
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) that represents the allocated passage minimum annular ring *entity* (3.2.9)

Note 1 to entry: An **allocated_passage_minimum_annular_ring** is a type of characterized_object that implements the ARM concept of *Allocated_passage_minimum_annular_ring* (5.494.1).

5.495.2
copy_stratum_technology_occurrence_relationship
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *derived_stratum_technology_occurrence_relationship* (5.495.3) that represents the copy stratum technology occurrence relationship *entity* (3.2.9)

Note 1 to entry: A **copy_stratum_technology_occurrence_relationship** is a type of derived_stratum_technology_occurrence_relationship that implements the ARM concept of *Copy_stratum_technology_occurrence_relationship* (5.494.2).

5.495.3
derived_stratum_technology_occurrence_relationship
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *stratum_technology_occurrence_relationship* (5.495.22) that represents the derived stratum technology occurrence relationship *entity* (3.2.9)

Note 1 to entry: A **derived_stratum_technology_occurrence_relationship** is a type of stratum_technology_occurrence_relationship that implements the ARM concept of *Derived_stratum_technology_occurrence_relationship* (5.494.7).

5.495.4
design_stack_model
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *stratum_stack_model* (5.495.17) that represents the design stack model *entity* (3.2.9)

Note 1 to entry: A **design_stack_model** is a type of stratum_stack_model that implements the ARM concept of *Design_stack_model* (5.494.9).

5.495.5
equivalent_stackup_model_definition
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) and *product_definition_relationship* (4.18.15) that represents the equivalent stackup model definition *entity* (3.2.9)

Note 1 to entry: An **equivalent_stackup_model_definition** is a type of product_definition and a type of product_definition_relationship that implements the ARM concept of *Equivalent_stackup_model_definition* (5.494.11).

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5.495.6
equivalent_sub_stack_definition
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the equivalent sub stack definition *entity* (3.2.9)

Note 1 to entry: An **equivalent_sub_stack_definition** is a type of product_definition that implements the ARM concept of *Equivalent_sub_stack_definition* (5.494.12).

5.495.7
footprint_library_stratum_technology
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *stratum_technology* (5.495.19) that represents the footprint library stratum technology *entity* (3.2.9)

Note 1 to entry: A **footprint_library_stratum_technology** is a type of stratum_technology that implements the ARM concept of *Footprint_library_stratum_technology* (5.494.13).

5.495.8
impedance_measurement_setup_requirement
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *predefined_requirement_view_definition* (5.608.3) that represents the impedance measurement setup requirement *entity* (3.2.9)

Note 1 to entry: An **impedance_measurement_setup_requirement** is a type of predefined_requirement_view_definition that implements the ARM concept of *Impedance_measurement_setup_requirement* (5.494.14).

5.495.9
impedance_requirement
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *predefined_requirement_view_definition* (5.608.3) that represents the impedance requirement *entity* (3.2.9)

Note 1 to entry: An **impedance_requirement** is a type of predefined_requirement_view_definition that implements the ARM concept of *Impedance_requirement* (5.494.15).

5.495.10
inverse_copy_stratum_technology_occurrence_relationship
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *derived_stratum_technology_occurrence_relationship* (5.495.3) that represents the inverse copy stratum technology occurrence relationship *entity* (3.2.9)

Note 1 to entry: A **inverse_copy_stratum_technology_occurrence_relationship** is a type of derived_stratum_technology_occurrence_relationship that implements the ARM concept of *Inverse_copy_stratum_technology_occurrence_relationship* (5.494.16).

5.495.11
local_linear_stack
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *stratum_sub_stack* (5.495.16) that represents the local linear stack *entity* (3.2.9)

Note 1 to entry: A **local_linear_stack** is a type of stratum_sub_stack that implements the ARM concept of *Local_linear_stack* (5.494.17).

5.495.12

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passage_deposition_material_identification
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *material_designation* (4.32.2) that represents the passage deposition material identification *entity* (3.2.9)

Note 1 to entry: A **passage_deposition_material_identification** is a type of material_designation that implements the ARM concept of *Passage_deposition_material_identification* (5.494.18).

5.495.13
passage_filling_material_identification
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *material_designation* (4.32.2) that represents the passage filling material identification *entity* (3.2.9)

Note 1 to entry: A **passage_filling_material_identification** is a type of material_designation that implements the ARM concept of *Passage_filling_material_identification* (5.494.19).

5.495.14
passage_technology
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_definition_shape* (4.19.8) that represents the passage technology *entity* (3.2.9)

Note 1 to entry: A **passage_technology** is a type of characterized_object and a type of product_definition_shape that implements the ARM concept of *Passage_technology* (5.494.20).

5.495.15
passage_technology_allocation_to_stack_model
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *stratum_sub_stack* (5.495.16) that represents the passage technology allocation to stack model *entity* (3.2.9)

Note 1 to entry: A **passage_technology_allocation_to_stack_model** is a type of stratum_sub_stack that implements the ARM concept of *Passage_technology_allocation_to_stack_model* (5.494.21).

5.495.16
stratum_sub_stack
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *part_template_definition* (5.579.1) that represents the stratum sub stack *entity* (3.2.9)

Note 1 to entry: A **stratum_sub_stack** is a type of part_template_definition that implements the ARM concept of *Stratum_sub_stack* (5.494.23).

5.495.17
stratum_stack_model
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *part_template_definition* (5.579.1) that represents the stratum stack model *entity* (3.2.9)

Note 1 to entry: A **stratum_stack_model** is a type of part_template_definition that implements the ARM concept of *Stratum_stack_model* (5.494.22).

5.495.18
stratum_surface_technology
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the stratum surface technology *entity* (3.2.9)

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Note 1 to entry: A **stratum_surface_technology** is a type of shape_aspect that implements the ARM concept of *Stratum_surface_technology* (5.494.24).

5.495.19
stratum_technology

<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_definition_shape* (4.19.8) that represents the stratum technology *entity* (3.2.9)

Note 1 to entry: A **stratum_technology** is a type of characterized_object and a type of product_definition_shape that implements the ARM concepts of:

— *Design_layer_technology* (5.494.8);

— *Documentation_layer_technology* (5.494.10);

— *Stratum_technology* (5.494.25).

5.495.20
stratum_technology_occurrence

<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) that represents the stratum technology occurrence *entity* (3.2.9)

Note 1 to entry: A **stratum_technology_occurrence** is a type of property_definition that implements the ARM concept of *Stratum_technology_occurrence* (5.494.26).

5.495.21
stratum_technology_occurrence_link

<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *stratum_technology_occurrence_relationship* (5.495.22) that represents the stratum technology occurrence link *entity* (3.2.9)

Note 1 to entry: A **stratum_technology_occurrence_link** is a type of stratum_technology_occurrence_relationship that implements the ARM concept of *Stratum_technology_occurrence_link* (5.494.27).

5.495.22
stratum_technology_occurrence_relationship

<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) and *property_definition_relationship* (4.32.6) that represents the stratum technology occurrence relationship *entity* (3.2.9)

Note 1 to entry: A **stratum_technology_occurrence_relationship** is a type of property_definition and a type of property_definition_relationship that implements the ARM concept of *Stratum_technology_occurrence_relationship* (5.494.28).

5.495.23
stratum_technology_occurrence_feature_constraint

<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *stratum_technology_occurrence_relationship* (5.495.22) that represents the stratum technology occurrence feature constraint *entity* (3.2.9)

Note 1 to entry: A **stratum_technology_occurrence_feature_constraint** is a type of stratum_technology_occurrence_relationship that implements the ARM concept of *Stratum_technology_occurrence_feature_constraint* (5.494.30).

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5.495.24
stratum_technology_occurrence_swap_relationship
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *stratum_technology_occurrence_relationship* (5.495.22) that represents the stratum technology occurrence swap relationship *entity* (3.2.9)

Note 1 to entry: A **stratum_technology_occurrence_swap_relationship** is a type of stratum_technology_occurrence_relationship that implements the ARM concept of *Stratum_technology_occurrence_swap_relationship* (5.494.29).

5.495.25
stratum_technology_swap_relationship
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *property_definition_relationship* (4.32.6) that represents the stratum technology swap relationship *entity* (3.2.9)

Note 1 to entry: A **stratum_technology_swap_relationship** is a type of property_definition_relationship that implements the ARM concept of *Stratum_technology_swap_relationship* (5.494.32).

5.495.26
stratum_technology_mapping_relationship
<application module: Fabrication_technology_mim> *entity data type* (3.2.10) that is a type of *property_definition_relationship* (4.32.6) that represents the stratum technology mapping relationship *entity* (3.2.9)

Note 1 to entry: A **stratum_technology_mapping_relationship** is a type of property_definition_relationship that implements the ARM concept of *Stratum_technology_mapping_relationship* (5.494.31).

5.496 Feature_and_connection_zone_arm

5.496.1
Connection_zone
<application module: Feature_and_connection_zone_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the connection zone *entity* (3.2.9)

5.496.2
Feature_definition_with_connection_area
<application module: Feature_and_connection_zone_arm> *application object* (3.1.78) that is a type of *Shape_feature_definition* (5.641.4) that represents the feature definition with connection area *entity* (3.2.9)

Note 1 to entry: A **Feature_definition_with_connection_area** is a type of Shape_feature_definition that specifies one or more areas on the feature that may be attachment areas when used in a realization.

5.497 Feature_and_connection_zone_mim

5.497.1
connection_zone_interface_plane_relationship
<application module: Feature_and_connection_zone_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the connection zone interface plane relationship *entity* (3.2.9)

Note 1 to entry: A **connection_zone_interface_plane_relationship** is a type of shape_aspect and of shape_aspect_relationship that implements the ARM concept of *Connection_zone_bare_die_interface_plane_relationship* (5.467.10).

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5.497.2
feature_definition_with_connection_area
<application module: Feature_and_connection_zone_mim> *entity data type* (3.2.10) that is a type of *shape_feature_definition* (5.642.1) that represents the feature definition with connection area *entity* (3.2.9)

Note 1 to entry: A **feature_definition_with_connection_area** is a type of shape_feature_definition that implements the ARM concept of *Feature_definition_with_connection_area* (5.496.2).

5.498 Fill_area_style_arm

5.498.1
Solid_fill_area_style
<application module: Fill_area_style_arm> *application object* (3.1.78) that represents the solid fill area style *entity* (3.2.9)

Note 1 to entry: A **Solid_fill_area_style** is a style for filling visible curve segments, *Annotation_fill_area* (5.283.1), or surfaces with tiles or hatching.

5.498.2
Externally_defined_hatch_style
<application module: Fill_area_style_arm> *application object* (3.1.78) that is a type of *Hatch_style* (5.498.4) that represents the externally defined hatch style *entity* (3.2.9)

Note 1 to entry: An **Externally_defined_hatch_style** is a type of Hatch_style that is defined in an external computer interpretable system.

5.498.3
Externally_defined_tile_style
<application module: Fill_area_style_arm> *application object* (3.1.78) that is a type of *Tile_style* (5.498.5) that represents the externally defined tile style *entity* (3.2.9)

Note 1 to entry: An **Externally_defined_tile_style** is a type of Tile_style that is defined in an external computer interpretable system.

5.498.4
Hatch_style
<application module: Fill_area_style_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the hatch style *entity* (3.2.9)

5.498.5
Tile_style
<application module: Fill_area_style_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the tile style *entity* (3.2.9)

5.498.6
User_defined_hatch_style
<application module: Fill_area_style_arm> *application object* (3.1.78) that is a type of *Hatch_style* (5.498.4) that represents the user defined hatch style *entity* (3.2.9)

5.498.7
User_defined_tile_style
<application module: Fill_area_style_arm> *application object* (3.1.78) that is a type of *Tile_style* (5.498.5) that represents the user defined tile style *entity* (3.2.9)

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5.499 Edge_shape_feature_arm

5.499.1
Bevel_edge_feature_shape_model
<application module: Edge_shape_feature_arm> *application object* (3.1.78) that is a type of *Edge_shape_model* (5.499.2) that represents the bevel edge feature shape model *entity* (3.2.9)

Note 1 to entry: A **Bevel_edge_feature_shape_model** is a type of Edge_shape_model that describes a bevelled edge of a feature with a two-dimensional shape.

5.499.2
Edge_shape_model
<application module: Edge_shape_feature_arm> *application object* (3.1.78) that is a type of *Planar_shape_model* (5.531.2) that represents the edge shape model *entity* (3.2.9)

5.499.3
Radius_edge_feature_shape_model
<application module: Edge_shape_feature_arm> *application object* (3.1.78) that is a type of *Edge_shape_model* (5.499.2) that represents the radius edge feature shape model *entity* (3.2.9)

Note 1 to entry: A **Radius_edge_feature_shape_model** is a type of Edge_shape_model that describes a circular cross sectioned edge.

5.499.4
Step_edge_feature_shape_model
<application module: Edge_shape_feature_arm> *application object* (3.1.78) that is a type of *Edge_shape_model* (5.499.2) that represents the step edge feature shape model *entity* (3.2.9)

Note 1 to entry: A **Step_edge_feature_shape_model** is a type of Edge_shape_model that is the two-dimensional definition of the construction of a step edge.

5.500 Functional_assignment_to_part_arm

5.500.1
Functional_usage_view_to_part_terminal_assignment
<application module: Functional_assignment_to_part_arm> *application object* (3.1.78) that represents the functional usage view to part terminal assignment *entity* (3.2.9)

Note 1 to entry: A **Functional_usage_view_to_part_terminal_assignment** is the association between a *Scalar_terminal_definition* (5.547.12) and a *Part_terminal* (5.500.8).

5.500.2
Part_connected_terminals_definition
<application module: Functional_assignment_to_part_arm> *application object* (3.1.78) that represents the part connected terminals definition *entity* (3.2.9)

Note 1 to entry: A **Part_connected_terminals_definition** is the association between two or more *Part_terminal* (5.500.8) that are connected internally to the part.

5.500.3
Part_connected_terminals_definition_domain
<application module: Functional_assignment_to_part_arm> *application object* (3.1.78) that represents the part connected terminals definition domain *entity* (3.2.9)

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Note 1 to entry: A **Part_connected_terminals_definition_domain** is is the application of a domain name to a *Part_connected_terminals_definition* (5.500.2) to support cases where domains other than pure electrical are required.

5.500.4
Part_connected_terminals_element
<application module: Functional_assignment_to_part_arm> *application object* (3.1.78) that represents the part connected terminals element *entity* (3.2.9)

Note 1 to entry: A **Part_connected_terminals_element** is a the object that describes a link between two nodes for the graph representation.

5.500.5
Part_connected_terminals_layout_topology_requirement_assignment
<application module: Functional_assignment_to_part_arm> *application object* (3.1.78) that is a type of *Requirement_assignment* (5.208.1) that represents the part connected terminals layout topology requirement assignment *entity* (3.2.9)

5.500.6
Part_connected_terminals_structure_definition
<application module: Functional_assignment_to_part_arm> *application object* (3.1.78) that is a type of *Part_connected_terminals_definition* (5.500.2) that represents the part connected terminals structure definition *entity* (3.2.9)

Note 1 to entry: A **Part_connected_terminals_structure_definition** is a type of Part_connected_terminals_definition that has a structure.

5.500.7
Part_connected_terminals_topological_junction
<application module: Functional_assignment_to_part_arm> *application object* (3.1.78) that represents the part connected terminals topological junction *entity* (3.2.9)

Note 1 to entry: A **Part_connected_terminals_topological_junction** is used when at least three *Part_terminal* (5.500.8) are connected and the explicit topology must be stated.

5.500.8
Part_terminal
<application module: Functional_assignment_to_part_arm> *application object* (3.1.78) that is a type of *Part_feature* (5.595.4) that represents the part terminal *entity* (3.2.9)

Note 1 to entry: A **Part_terminal** is a type of Part_feature provided to support a specific, identified, feature on a product that may be used to access electrical or other domain functional aspects.

5.501 Functional_assignment_to_part_mim

5.501.1
part_connected_terminals_definition
<application module: Functional_assignment_to_part_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the part connected terminals definition *entity* (3.2.9)

Note 1 to entry: A **part_connected_terminals_definition** is a type of shape_aspect that implements the ARM concept of *Part_connected_terminals_definition* (5.500.2).

5.501.2

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part_connected_terminals_definition_domain
<application module: Functional_assignment_to_part_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the part connected terminals definition domain *entity* (3.2.9)

5.501.3
part_connected_terminals_element
<application module: Functional_assignment_to_part_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the part connected terminals element *entity* (3.2.9)

Note 1 to entry: A **part_connected_terminals_element** is a type of shape_aspect and a type of shape_aspect_relationship that implements the ARM concept of *Part_connected_terminals_element* (5.500.4).

5.501.4
part_connected_terminals_structure_definition
<application module: Functional_assignment_to_part_mim> *entity data type* (3.2.10) that is a type of *part_connected_terminals_definition* (5.501.1) that represents the part connected terminals structure definition *entity* (3.2.9)

Note 1 to entry: A **part_connected_terminals_structure_definition** is a type of part_connected_terminals_definition that implements the ARM concept of *Part_connected_terminals_structure_definition* (5.500.6).

5.501.5
part_connected_terminals_layout_topology_requirement_assignment
<application module: Functional_assignment_to_part_mim> *entity data type* (3.2.10) that is a type of *requirement_assignment* (5.209.3) that represents the part connected terminals layout topology requirement assignment *entity* (3.2.9)

Note 1 to entry: A **part_connected_terminals_layout_topology_requirement_assignment** is a type of requirement_assignment that implements the ARM concept of *Part_connected_terminals_layout_topology_requirement_assignment* (5.500.5).

5.502 Functional_decomposition_to_assembly_design_arm

5.502.1
Design_functional_unit_allocation_to_assembly_joint
<application module: Functional_decomposition_to_assembly_design_arm> *application object* (3.1.78) that represents the design functional unit allocation to assembly joint *entity* (3.2.9)

Note 1 to entry: A **Design_functional_unit_allocation_to_assembly_joint** is an assignment of a *Functional_unit* (5.545.3) in a *Design_composition_path* (5.503.2) to its **implementation** in an *Assembly_joint* (5.465.4).

5.503 Functional_decomposition_to_design_arm

5.503.1
Component_swap_specification
<application module: Functional_decomposition_to_design_arm> *application object* (3.1.78) that is a type of *Modify_single_element* (5.712.6) that represents the component swap specification *entity* (3.2.9)

5.503.2
Design_composition_path
<application module: Functional_decomposition_to_design_arm> *application object* (3.1.78) that represents the design composition path *entity* (3.2.9)

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Note 1 to entry: A **Design_composition_path** is a collection of *Functional_unit* (5.545.3) that together compose one path through the complete functional definition that has the **design_functional_unit** as a reference to the *Functional_unit_definition* (5.547.6) that is the leaf node.

5.503.3
Design_functional_unit_allocation_to_assembly_component

<application module: Functional_decomposition_to_design_arm> *application object* (3.1.78) that represents the design functional unit allocation to assembly component *entity* (3.2.9)

Note 1 to entry: A **Design_functional_unit_allocation_to_assembly_component** is the relationship between the *Design_composition_path* (5.503.2) and the *Assembly_component* (5.684.1) that performs the required function.

5.503.4
Design_functional_unit_allocation_to_reference_functional_unit

<application module: Functional_decomposition_to_design_arm> *application object* (3.1.78) that represents the design functional unit allocation to reference functional unit *entity* (3.2.9)

Note 1 to entry: A **Design_functional_unit_allocation_to_reference_functional_unit** is an assignment of a *Functional_unit* (5.545.3) in a *Design_composition_path* (5.503.2) to a Functional_unit in a *Reference_composition_path* (5.503.6) for the functional definition of a product.

5.503.5
Gate_path_swap_specification

<application module: Functional_decomposition_to_design_arm> *application object* (3.1.78) that is a type of *Modify_single_element* (5.712.6) that represents the gate path swap specification *entity* (3.2.9)

5.503.6
Reference_composition_path

<application module: Functional_decomposition_to_design_arm> *application object* (3.1.78) that represents the reference composition path *entity* (3.2.9)

Note 1 to entry: A **Reference_composition_path** is one path through the function reference network graph.

5.503.7
Reference_functional_unit_assignment_to_template

<application module: Functional_decomposition_to_design_arm> *application object* (3.1.78) that represents the reference functional unit assignment to template *entity* (3.2.9)

Note 1 to entry: A **Functional_decomposition_to_design_arm.Reference_functional_unit_assignment_to_template** is a means to assign one specific path in the function reference network graph to an **implementation**.

5.503.8
Reference_functional_unit_assignment_to_part

<application module: Functional_decomposition_to_design_arm> *application object* (3.1.78) that represents the reference functional unit assignment to part *entity* (3.2.9)

Note 1 to entry: A **Reference_functional_unit_assignment_to_part** is a means to assign one specific path in the function reference network graph to an **implementation**.

5.503.9
Terminal_swap_specification

<application module: Functional_decomposition_to_design_arm> *application object* (3.1.78) that is a type of *Modify_single_element* (5.712.6) that represents the terminal swap specification *entity* (3.2.9)

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5.504 Functional_decomposition_to_design_mim

5.504.1
design_composition_path
<application module: Functional_decomposition_to_design_mim> *entity data type* (3.2.10) that is a type of *applied_group_assignment* (5.114.1) and *product_definition* (4.18.7) that represents the design composition path *entity* (3.2.9)

Note 1 to entry: A **design_composition_path** is a type of applied_group_assignment and of product_definition that implements the ARM concept of *Design_composition_path* (5.503.2).

5.504.2
reference_composition_path
<application module: Functional_decomposition_to_design_mim> *entity data type* (3.2.10) that is a type of *applied_group_assignment* (5.114.1) and *product_definition* (4.18.7) that represents the reference composition path *entity* (3.2.9)

Note 1 to entry: A **reference_composition_path** is a type of applied_group_assignment and of product_definition that implements the ARM concept of *Reference_composition_path* (5.503.6).

5.505 Functional_decomposition_to_interconnect_design_arm

5.505.1
Design_functional_unit_allocation_to_fabrication_joint
<application module: Functional_decomposition_to_interconnect_design_arm> *application object* (3.1.78) that represents the design functional unit allocation to fabrication joint *entity* (3.2.9)

Note 1 to entry: A **Design_functional_unit_allocation_to_fabrication_joint** is an assignment of a *Functional_unit* (5.545.3) in a *Design_composition_path* (5.503.2) to its **implementation** in a *Fabrication_joint* (5.491.2).

5.505.2
Transmission_line_functional_unit_terminal_allocation
<application module: Functional_decomposition_to_interconnect_design_arm> *application object* (3.1.78) that represents the transmission line functional unit terminal allocation *entity* (3.2.9)

Note 1 to entry: A **Transmission_line_functional_unit_terminal_allocation** is the relationship between the occurrence of a *Functional_unit_terminal* (5.545.8) of a transmission line and the physical **implementation** of that occurrence as a *Printed_component_join_terminal* (5.538.6).

5.505.3
Transmission_line_functional_unit_to_routed_transmission_line_allocation
<application module: Functional_decomposition_to_interconnect_design_arm> *application object* (3.1.78) that is a type of *Design_functional_unit_allocation_to_assembly_component* (5.503.3) that represents the transmission line functional unit to routed transmission line allocation *entity* (3.2.9)

5.506 Functional_decomposition_with_nodal_representation_to_packaged_mapping_arm

5.506.1
Aggregate_connectivity_requirement
<application module: Functional_decomposition_with_nodal_representation_to_packaged_mapping_arm> *application object* (3.1.78) that represents the aggregate connectivity requirement *entity* (3.2.9)

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Note 1 to entry: An **Aggregate_connectivity_requirement** is the set of one or more *Functional_unit_network_node_definition* (5.545.5) that are determined by a mapping application to be linked with a transitive closure based on a property of each member of the set.

5.506.2
Connectivity_allocation
<application module: Functional_decomposition_with_nodal_representation_to_packaged_mapping_arm> *application object* (3.1.78) that represents the connectivity allocation *entity* (3.2.9)

Note 1 to entry: A **Connectivity_allocation** is the relationship between a functional connectivity requirement and its **implementation**.

5.507 Functional_decomposition_with_nodal_representation_to_packaged_mapping_mim

5.507.1
aggregate_connectivity_requirement
<application module: Functional_decomposition_with_nodal_representation_to_packaged_mapping_mim> *entity data type* (3.2.10) that is a type of *applied_group_assignment* (5.114.1) and *product_definition* (4.18.7) that represents the aggregate connectivity requirement *entity* (3.2.9)

Note 1 to entry: An **aggregate_connectivity_requirement** is a type of applied_group_assignment and product_definition that implements the ARM concept of *Aggregate_connectivity_requirement* (5.506.1).

5.508 Functional_specification_arm

5.508.1
Functional_specification
<application module: Functional_specification_arm> *application object* (3.1.78) that represents the functional specification *entity* (3.2.9)

Note 1 to entry: A **Functional_specification** is the information that characterizes the behaviour of a *Functional_unit* (5.545.3) under controlled circumstances using stimulus-response test methods.

5.508.2
Functional_specification_definition
<application module: Functional_specification_arm> *application object* (3.1.78) that is a type of *Functional_unit_network_definition* (5.545.4) that represents the functional specification definition *entity* (3.2.9)

5.508.3
Signal_specification
<application module: Functional_specification_arm> *application object* (3.1.78) that represents the signal specification *entity* (3.2.9)

Note 1 to entry: A **Signal_specification** is a bounded behavioural characteristic as measured in a controlled environment.

5.509 Functional_specification_mim

5.509.1

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functional_specification
<application module: Functional_specification_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the functional specification *entity* (3.2.9)

Note 1 to entry: An **functional_specification** is a type of representation that implements the ARM concept of *Functional_specification* (5.508.1).

5.509.2
functional_specification_definition
<application module: Functional_specification_mim> *entity data type* (3.2.10) that is a type of *functional_unit* (5.548.2) that represents the functional specification definition *entity* (3.2.9)

Note 1 to entry: A **functional_specification_definition** is a type of functional_unit that implements the ARM concept of *Functional_specification_definition* (5.508.2).

5.510 Functional_unit_requirement_allocation_arm

5.510.1
Functional_unit_requirement_allocation
<application module: Functional_unit_requirement_allocation_arm> *application object* (3.1.78) that is a type of *Requirement_assignment* (5.208.1) that represents the functional unit requirement allocation *entity* (3.2.9)

5.511 Generic_material_aspects_arm

5.511.1
Applied_independent_material_property
<application module: Generic_material_aspects_arm> *application object* (3.1.78) that is a type of *Material_property* (5.511.4) and *Applied_independent_property* (5.40.1) that represents the applied independent material property *entity* (3.2.9)

Note 1 to entry: An **Applied_independent_material_property** is a type of Material_property and a type of Applied_independent_property.

5.511.2
Data_environment
<application module: Generic_material_aspects_arm> *application object* (3.1.78) that represents the data environment *entity* (3.2.9)

Note 1 to entry: A **Data_environment** is the specification of the conditions under which a *Material_property_value_representation* (5.511.6) is valid.

5.511.3
Material_identification
<application module: Generic_material_aspects_arm> *application object* (3.1.78) that represents the material identification *entity* (3.2.9)

Note 1 to entry: A **Material_identification** is the identification of the substance out of which one or more items are or can be made.

5.511.4
Material_property
<application module: Generic_material_aspects_arm> *application object* (3.1.78) that is a type of *Assigned_property* (5.40.2) that represents the material property *entity* (3.2.9)

5.511.5

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Material_property_association
<application module: Generic_material_aspects_arm> *application object* (3.1.78) that represents the material property association *entity* (3.2.9)

Note 1 to entry: A **Material_property_association** is an instance that associates a *Material_identification* (5.511.3) instance with a *Material_property_value_representation* (5.511.6) instance.

5.511.6
Material_property_value_representation
<application module: Generic_material_aspects_arm> *application object* (3.1.78) that is a type of *Property_definition_representation* (5.40.5) that represents the material property value representation *entity* (3.2.9)

5.511.7
General_material_property
<application module: Generic_material_aspects_arm> *application object* (3.1.78) that is a type of *Independent_property* (5.44.1) that represents the general material property *entity* (3.2.9)

5.512 Generic_material_aspects_mim

5.512.1
general_material_property
<application module: Generic_material_aspects_mim> *entity data type* (3.2.10) that is a type of *general_property* (4.19.5) that represents the general material property *entity* (3.2.9)

Note 1 to entry: A **general_material_property** is a type of general_property that depends on material aspects.

5.513 Interconnect_2d_shape_arm

5.513.1
Component_2d_embedded_location
<application module: Interconnect_2d_shape_arm> *application object* (3.1.78) that is a type of *Component_2d_location* (5.582.2) that represents the component 2d embedded location *entity* (3.2.9)

5.514 Interconnect_module_connection_routing_arm

5.514.1
Dielectric_crossover_area
<application module: Interconnect_module_connection_routing_arm> *application object* (3.1.78) that represents the dielectric crossover area *entity* (3.2.9)

Note 1 to entry: A **Dielectric_crossover_area** is a relationship that relates one *Stratum_feature* (5.536.93) with another that results in the creation of a dielectric crossover feature in a dielectric *Stratum* (5.536.90).

5.514.2
Direct_stratum_component_join_implementation
<application module: Interconnect_module_connection_routing_arm> *application object* (3.1.78) that represents the direct stratum component join implementation *entity* (3.2.9)

Note 1 to entry: A **Direct_stratum_component_join_implementation** is a means to implement a connection between a feature on a stratum and an *Embedded_physical_component_terminal* (5.536.23), where the *Stratum* (5.536.90) and the Embedded_physical_component_terminal are in intimate physical contact.

5.514.3

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Indirect_stratum_component_join_implementation
<application module: Interconnect_module_connection_routing_arm> *application object* (3.1.78) that is a type of *Plated_inter_stratum_feature* (5.536.79) that represents the indirect stratum component join implementation *entity* (3.2.9)

5.514.4
Junction_vertex_allocation
<application module: Interconnect_module_connection_routing_arm> *application object* (3.1.78) that represents the junction vertex allocation *entity* (3.2.9)

Note 1 to entry: A **Junction_vertex_allocation** is the relationship that specifies one or more *Layer_connection_point* (5.536.56) to which a *Topological_junction* (5.632.9) is mapped during the layout routing process.

5.514.5
Physical_connectivity_abstraction_map
<application module: Interconnect_module_connection_routing_arm> *application object* (3.1.78) that represents the physical connectivity abstraction map *entity* (3.2.9)

Note 1 to entry: A **Physical_connectivity_abstraction_map** is a mapping between an element of a tree structure in a name space based context and an equivalent element in a geometric context.

5.515 Interconnect_module_connection_routing_mim

5.515.1
dielectric_crossover_area
<application module: Interconnect_module_connection_routing_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the dielectric crossover area *entity* (3.2.9)

Note 1 to entry: A **dielectric_crossover_area** is a type of shape_aspect and of shape_aspect_relationship that implements the ARM concept of *Dielectric_crossover_area* (5.514.1).

5.515.2
direct_stratum_component_join_implementation
<application module: Interconnect_module_connection_routing_mim> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) that represents the direct stratum component join implementation *entity* (3.2.9)

Note 1 to entry: A **direct_stratum_component_join_implementation** is a type of shape_aspect_relationship that implements the ARM concept of *Direct_stratum_component_join_implementation* (5.514.2).

5.515.3
indirect_stratum_component_join_implementation
<application module: Interconnect_module_connection_routing_mim> *entity data type* (3.2.10) that is a type of *plated_inter_stratum_feature* (5.537.67) that represents the indirect stratum component join implementation *entity* (3.2.9)

Note 1 to entry: An **indirect_stratum_component_join_implementation** is a type of plated_inter_stratum_feature that implements the ARM concept *Indirect_stratum_component_join_implementation* (5.514.3).

5.516 Interconnect_module_to_assembly_module_relationship_arm

5.516.1

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Assembly_requirement_for_interconnect_relationship
<application module: Interconnect_module_to_assembly_module_relationship_arm> *application object* (3.1.78) that is a type of *Part_definition_relationship* (5.314.5) that represents the assembly requirement for interconnect relationship *entity* (3.2.9)

5.516.2
Component_based_annotation_symbol_placement_relationship
<application module: Interconnect_module_to_assembly_module_relationship_arm> *application object* (3.1.78) that is a type of *Component_feature_to_layout_feature_relationship* (5.516.4) that represents the component based annotation symbol placement relationship *entity* (3.2.9)

5.516.3
Component_based_annotation_text_relationship
<application module: Interconnect_module_to_assembly_module_relationship_arm> *application object* (3.1.78) that is a type of *Component_feature_to_layout_feature_relationship* (5.516.4) that represents the component based annotation text relationship *entity* (3.2.9)

5.516.4
Component_feature_to_layout_feature_relationship
<application module: Interconnect_module_to_assembly_module_relationship_arm> *application object* (3.1.78) that represents the component feature to layout feature relationship *entity* (3.2.9)

Note 1 to entry: A **Component_feature_to_layout_feature_relationship** is the association between a component or feature of a component and a layout feature, based upon a requirement.

5.517 Interconnect_module_usage_view_arm

5.517.1
Interconnect_module_cavity_surface
<application module: Interconnect_module_usage_view_arm> *application object* (3.1.78) that is a type of *Interconnect_module_surface_feature* (5.517.9) that represents the interconnect module cavity surface *entity* (3.2.9)

5.517.2
Interconnect_module_cutout_segment_surface
<application module: Interconnect_module_usage_view_arm> *application object* (3.1.78) that is a type of *Interconnect_module_surface_feature* (5.517.9) that represents the interconnect module cutout segment surface *entity* (3.2.9)

5.517.3
Interconnect_module_cutout_surface
<application module: Interconnect_module_usage_view_arm> *application object* (3.1.78) that is a type of *Interconnect_module_surface_feature* (5.517.9) that represents the interconnect module cutout surface *entity* (3.2.9)

Note 1 to entry: An **Interconnect_module_cutout_surface** is a type of a Interconnect_module_surface_feature that is completely through the material of the *Layered_interconnect_module_design_view* (5.536.35) in the *Interconnect_module_usage_view* (5.517.12).

5.517.4
Interconnect_module_edge_segment_surface
<application module: Interconnect_module_usage_view_arm> *application object* (3.1.78) that is a type of *Interconnect_module_surface_feature* (5.517.9) that represents the interconnect module edge segment surface *entity* (3.2.9)

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5.517.5
Interconnect_module_edge_surface
<application module: Interconnect_module_usage_view_arm> *application object* (3.1.78) that is a type of *Interconnect_module_surface_feature* (5.517.9) that represents the interconnect module edge surface *entity* (3.2.9)

5.517.6
Interconnect_module_interface_terminal
<application module: Interconnect_module_usage_view_arm> *application object* (3.1.78) that is a type of *Interconnect_module_terminal* (5.517.10) that represents the interconnect module interface terminal *entity* (3.2.9)

5.517.7
Interconnect_module_primary_surface
<application module: Interconnect_module_usage_view_arm> *application object* (3.1.78) that is a type of *Interconnect_module_surface_feature* (5.517.9) that represents the interconnect module primary surface *entity* (3.2.9)

5.517.8
Interconnect_module_secondary_surface
<application module: Interconnect_module_usage_view_arm> *application object* (3.1.78) that is a type of *Interconnect_module_surface_feature* (5.517.9) that represents the interconnect module secondary surface *entity* (3.2.9)

5.517.9
Interconnect_module_surface_feature
<application module: Interconnect_module_usage_view_arm> *application object* (3.1.78) that is a type of *Part_feature* (5.595.4) that represents the interconnect module surface feature *entity* (3.2.9)

5.517.10
Interconnect_module_terminal
<application module: Interconnect_module_usage_view_arm> *application object* (3.1.78) that is a type of *Part_terminal* (5.500.8) that represents the interconnect module terminal *entity* (3.2.9)

5.517.11
Interconnect_module_terminal_surface_constituent_relationship
<application module: Interconnect_module_usage_view_arm> *application object* (3.1.78) that is a type of *Shape_element_relationship* (5.41.7) that represents the interconnect module terminal surface constituent relationship *entity* (3.2.9)

5.517.12
Interconnect_module_usage_view
<application module: Interconnect_module_usage_view_arm> *application object* (3.1.78) that is a type of *Part_usage_view* (5.595.8) that represents the interconnect module usage view *entity* (3.2.9)

Note 1 to entry: An **Interconnect_module_usage_view** is a type of Part_usage_view to support the application of an interconnect in an assembly.

5.517.13
Layered_interconnect_module_usage_view
<application module: Interconnect_module_usage_view_arm> *application object* (3.1.78) that is a type of *Interconnect_module_usage_view* (5.517.12) that represents the layered interconnect module usage view *entity* (3.2.9)

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Note 1 to entry: A **Layered_interconnect_module_usage_view** is a type of Interconnect_module_usage_view that provides the information necessary to include the *Layered_interconnect_module_design_view* (5.536.35) in its next higher level assembly for design and some simulation purposes, but may not include sufficient information to reproduce the printed circuit board (PCB).

5.517.14
Located_interconnect_module_thickness_requirement

<application module: Interconnect_module_usage_view_arm> *application object* (3.1.78) that represents the located interconnect module thickness requirement *entity* (3.2.9)

Note 1 to entry: A **Located_interconnect_module_thickness_requirement** is a definition that relates a specific location with a thickness requirement for an interconnect substrate.

5.518 Interconnect_module_usage_view_mim

5.518.1
interconnect_module_cutout_segment_surface

<application module: Interconnect_module_usage_view_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the interconnect module cutout segment surface *entity* (3.2.9)

Note 1 to entry: A **interconnect_module_cutout_segment_surface** is a type of shape_aspect and of shape_aspect_relationship that implements the ARM concept of *Interconnect_module_cutout_segment_surface* (5.517.2).

5.518.2
interconnect_module_edge_segment_surface

<application module: Interconnect_module_usage_view_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the interconnect module edge segment surface *entity* (3.2.9)

Note 1 to entry: A **interconnect_module_edge_segment_surface** is a type of shape_aspect and of shape_aspect_relationship that implements the ARM concept of *Interconnect_module_edge_segment_surface* (5.517.4).

5.518.3
interconnect_module_interface_terminal

<application module: Interconnect_module_usage_view_mim> *entity data type* (3.2.10) that is a type of *interconnect_module_terminal* (5.518.4) that represents the interconnect module interface terminal *entity* (3.2.9)

Note 1 to entry: An **interconnect_module_interface_terminal** is a type of interconnect_module_terminal that implements the ARM concept of *Interconnect_module_interface_terminal* (5.517.6).

5.518.4
interconnect_module_terminal

<application module: Interconnect_module_usage_view_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the interconnect module terminal *entity* (3.2.9)

Note 1 to entry: An **interconnect_module_terminal** is a type of shape_aspect that implements the ARM concepts of:

— *Interconnect_module_terminal* (5.517.10);

— *Part_terminal* (5.500.8).

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5.518.5
interconnect_module_usage_view
<application module: Interconnect_module_usage_view_mim> *entity data type* (3.2.10) that is a type of *physical_unit* (5.596.4) that represents the interconnect module usage view *entity* (3.2.9)

Note 1 to entry: An **interconnect_module_usage_view** is a type of physical_unit that implements the ARM concept of *Interconnect_module_usage_view* (5.517.12).

5.518.6
layered_interconnect_module_usage_view
<application module: Interconnect_module_usage_view_mim> *entity data type* (3.2.10) that is a type of *interconnect_module_usage_view* (5.518.5) that represents the layered interconnect module usage view *entity* (3.2.9)

Note 1 to entry: An **layered_interconnect_module_usage_view** is a type of interconnect_module_usage_view that implements the ARM concept of *Layered_interconnect_module_usage_view* (5.517.13).

5.519 Interconnect_module_with_macros_arm

5.519.1
Interconnect_module_macro_component
<application module: Interconnect_module_with_macros_arm> *application object* (3.1.78) that is a type of *Physical_component* (5.684.3) and *Single_instance* (5.79.6) that represents the interconnect module macro component *entity* (3.2.9)

Note 1 to entry: An **Interconnect_module_macro_component** is a type of Physical_component and a type of Single_instance.

5.519.2
Interconnect_module_macro_component_join_terminal
<application module: Interconnect_module_with_macros_arm> *application object* (3.1.78) that is a type of *Physical_component_terminal* (5.576.2) that represents the interconnect module macro component join terminal *entity* (3.2.9)

5.520 Interconnect_module_with_macros_mim

5.520.1
interconnect_module_macro_component
<application module: Interconnect_module_with_macros_mim> *entity data type* (3.2.10) that is a type of *physical_component* (5.685.3) that represents the interconnect module macro component *entity* (3.2.9)

Note 1 to entry: An **interconnect_module_macro_component** is a type of physical_component that implements the ARM concept of *Interconnect_module_macro_component* (5.519.1).

5.520.2
interconnect_module_macro_component_join_terminal
<application module: Interconnect_module_with_macros_mim> *entity data type* (3.2.10) that is a type of *physical_component_terminal* (5.577.2) that represents the interconnect module macro component join terminal *entity* (3.2.9)

Note 1 to entry: An **interconnect_module_macro_component_join_terminal** is a type of physical_component_terminal that implements the ARM concept of *Interconnect_module_macro_component_join_terminal* (5.519.2).

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5.521 Interconnect_non_planar_shape_arm

5.521.1
Component_part_2d_non_planar_geometric_representation_relationship
<application module: Interconnect_non_planar_shape_arm> *application object* (3.1.78) that is a type of *Geometric_model_relationship* (5.366.2) that represents the component part 2d non planar geometric representation relationship *entity* (3.2.9)

5.522 Interconnect_non_planar_shape_mim

5.522.1
manifold_constraining_context_dependent_shape_representation
<application module: Interconnect_non_planar_shape_mim> *entity data type* (3.2.10) that is a type of *context_dependent_shape_representation* (4.20.4) and *representation_relationship* (4.41.20) that represents the manifold constraining context dependent shape representation *entity* (3.2.9)

Note 1 to entry: A **manifold_constraining_context_dependent_shape_representation** is a type of context_dependent_shape_representation and of representation_relationship.

5.522.2
component_part_2d_non_planar_geometric_representation_relationship
<application module: Interconnect_non_planar_shape_mim> *entity data type* (3.2.10) that is a type of *shape_representation_relationship* (4.20.10) and *representation_relationship_with_transformation* (4.41.21) that represents the component part 2d non planar geometric representation relationship *entity* (3.2.9)

Note 1 to entry: A **component_part_2d_non_planar_geometric_representation_relationship** is a type of shape_representation_relationship and of representation_relationship_with_transformation that implements the ARM concept of *Component_part_2d_non_planar_geometric_representation_relationship* (5.521.1).

5.523 Interconnect_physical_requirement_allocation_arm

5.523.1
Electrical_isolation_requirement
<application module: Interconnect_physical_requirement_allocation_arm> *application object* (3.1.78) that is a type of *Requirement_view_definition* (5.138.1) that represents the electrical isolation requirement *entity* (3.2.9)

Note 1 to entry: A **Electrical_isolation_requirement** is a type of Requirement_view_definition included to specify source or derived requirements for electric potential isolation between design elements.

5.523.2
Interconnect_shield_allocation
<application module: Interconnect_physical_requirement_allocation_arm> *application object* (3.1.78) that is a type of *Requirement_assignment* (5.208.1) that represents the interconnect shield allocation *entity* (3.2.9)

Note 1 to entry: An **Interconnect_shield_allocation** is a type of the Requirement_assignment that relates an item (usually metallic) in the design that provides a shielding role, and specifies the requirement for shielding.

5.523.3
Thermal_isolation_requirement
<application module: Interconnect_physical_requirement_allocation_arm> *application object* (3.1.78) that is a type of *Requirement_view_definition* (5.138.1) that represents the thermal isolation requirement *entity* (3.2.9)

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Note 1 to entry: A **Thermal_isolation_requirement** is a type of Requirement_view_definition included to specify source or derived requirements for thermal potential isolation between design elements.

5.524 Interconnect_physical_requirement_allocation_mim

5.524.1
interconnect_shield_allocation

<application module: Interconnect_physical_requirement_allocation_mim> *entity data type* (3.2.10) that is a type of *requirement_assignment* (5.209.3) that represents the interconnect shield allocation *entity* (3.2.9)

Note 1 to entry: A **interconnect_shield_allocation** is a type of requirement_assignment that implements the ARM concept of *Interconnect_shield_allocation* (5.523.2).

5.525 Interconnect_placement_requirements_arm

5.525.1
Interconnect_module_constraint_region

<application module: Interconnect_placement_requirements_arm> *application object* (3.1.78) that is a type of *Non_feature_shape_element* (5.549.4) that represents the interconnect module constraint region *entity* (3.2.9)

5.525.2
Layer_qualified_layout_spacing_requirement

<application module: Interconnect_placement_requirements_arm> *application object* (3.1.78) that is a type of *Layout_spacing_requirement* (5.525.5) that represents the layer qualified layout spacing requirement *entity* (3.2.9)

Note 1 to entry: A **Layer_qualified_layout_spacing_requirement** is a type of Layout_spacing_requirement that describes the physical spacing between one of an *interconnect_module_design_object_category* (5.526.3), an interconnect_module_design_object_category, an interconnect_module_design_object_category, an interconnect_module_design_object_category, or an interconnect_module_design_object_category, and another of these categories of design objects.

5.525.3
Area_qualified_layout_spacing_requirement

<application module: Interconnect_placement_requirements_arm> *application object* (3.1.78) that is a type of *Layout_spacing_requirement* (5.525.5) that represents the area qualified layout spacing requirement *entity* (3.2.9)

Note 1 to entry: A **Area_qualified_layout_spacing_requirement** is a type of Layout_spacing_requirement that describes the physical spacing between one of an *interconnect_module_design_object_category* (5.526.3), an interconnect_module_design_object_category, an interconnect_module_design_object_category, an interconnect_module_design_object_category, or an interconnect_module_design_object_category, and another of these categories of design objects.

5.525.4
Layout_spacing_contextual_area

<application module: Interconnect_placement_requirements_arm> *application object* (3.1.78) that is a type of *Non_feature_shape_element* (5.549.4) that represents the layout spacing contextual area *entity* (3.2.9)

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5.525.5
Layout_spacing_requirement
<application module: Interconnect_placement_requirements_arm> *application object* (3.1.78) that is a type of *Predefined_requirement_view_definition* (5.607.6) that represents the layout spacing requirement *entity* (3.2.9)

5.525.6
Layout_spacing_requirement_non_conforming_design_object
<application module: Interconnect_placement_requirements_arm> *application object* (3.1.78) that represents the layout spacing requirement non conforming design object *entity* (3.2.9)

Note 1 to entry: A **Layout_spacing_requirement_non_conforming_design_object** is a means to specify one or more design object that does not meet object to object spacing requirements for the printed circuit board layout.

5.525.7
Stratum_constraint_region
<application module: Interconnect_placement_requirements_arm> *application object* (3.1.78) that is a type of *Non_feature_shape_element* (5.549.4) that represents the stratum constraint region *entity* (3.2.9)

Note 1 to entry: A **Stratum_constraint_region** is a type of Non_feature_shape_element included to constrain one or more *Stratum* (5.536.90) to specific regions in the interconnect design.

5.526 Interconnect_placement_requirements_mim

5.526.1
area_qualified_layout_spacing_requirement
<application module: Interconnect_placement_requirements_mim> *entity data type* (3.2.10) that is a type of *layout_spacing_requirement* (5.526.5) that represents the area qualified layout spacing requirement *entity* (3.2.9)

Note 1 to entry: An **area_qualified_layout_spacing_requirement** is a type of layout_spacing_requirement that implements the ARM concept of *Area_qualified_layout_spacing_requirement* (5.525.3).

5.526.2
layout_spacing_contextual_area
<application module: Interconnect_placement_requirements_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the layout spacing contextual area *entity* (3.2.9)

Note 1 to entry: A **layout_spacing_contextual_area** is a type of shape_aspect that implements the ARM concept of *Layout_spacing_contextual_area* (5.525.4).

5.526.3
interconnect_module_design_object_category
<application module: Interconnect_placement_requirements_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) that represents the interconnect module design object category *entity* (3.2.9)

Note 1 to entry: An **interconnect_module_design_object_category** is a type of characterized_object that specifies a design object category for the implementation of the ARM concept of *Interconnect_module_constraint_region* (5.525.1).

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5.526.4
layer_qualified_layout_spacing_requirement
<application module: Interconnect_placement_requirements_mim> *entity data type* (3.2.10) that is a type of *layout_spacing_requirement* (5.526.5) that represents the layer qualified layout spacing requirement *entity* (3.2.9)

Note 1 to entry: An **layer_qualified_layout_spacing_requirement** is a type of layout_spacing_requirement that implements the ARM concept of *Layer_qualified_layout_spacing_requirement* (5.525.2).

5.526.5
layout_spacing_requirement
<application module: Interconnect_placement_requirements_mim> *entity data type* (3.2.10) that is a type of *predefined_requirement_view_definition* (5.608.3) that represents the layout spacing requirement *entity* (3.2.9)

Note 1 to entry: An **layout_spacing_requirement** is a type of predefined_requirement_view_definition that implements the ARM concept of *Layout_spacing_requirement* (5.525.5).

5.527 Interface_component_arm

5.527.1
Physical_component_interface_terminal
<application module: Interface_component_arm> *application object* (3.1.78) that is a type of *Physical_component_feature* (5.576.1) that represents the physical component interface terminal *entity* (3.2.9)

5.527.2
Interface_component
<application module: Interface_component_arm> *application object* (3.1.78) that is a type of *Physical_component* (5.684.3) and *Single_instance* (5.79.6) that represents the interface component *entity* (3.2.9)

Note 1 to entry: An **Interface_component** is a type of Physical_component and a type of Single_instance used to provide an identified interface in the assembly.

5.528 Interface_component_mim

5.528.1
physical_component_interface_terminal
<application module: Interface_component_mim> *entity data type* (3.2.10) that is a type of *physical_component_feature* (5.577.1) that represents the physical component interface terminal *entity* (3.2.9)

Note 1 to entry: A **physical_component_interface_terminal** is a type of physical_component_feature that implements the ARM concepts of:

— *Physical_component_interface_terminal* (5.527.1);

— *Interconnect_component_interface_terminal* (5.453.6);

— *Packaged_connector_component_interface_terminal* (5.457.3).

5.528.2
interface_component
<application module: Interface_component_mim> *entity data type* (3.2.10) that is a type of *physical_component* (5.685.3) that represents the interface component *entity* (3.2.9)

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Note 1 to entry: An **interface_component** is a type of physical_component that implements the ARM concept of *Interface_component* (5.527.2).

5.529 Land_arm

5.529.1
Contact_size_dependent_land
<application module: Land_arm> *application object* (3.1.78) that is a type of *Land* (5.529.6) that represents the contact size dependent land *entity* (3.2.9)

Note 1 to entry: A **Contact_size_dependent_land** is a type of Land whose shape is dependent on the size of the contact area of the *Component_terminal* (5.478.5) that will be joined to the **Contact_size_dependent_land** in the assembly.

5.529.2
Dependent_thermal_isolation_removal_component
<application module: Land_arm> *application object* (3.1.78) that is a type of *Thermal_isolation_removal_component* (5.529.3) that represents the dependent thermal isolation removal component *entity* (3.2.9)

5.529.3
Thermal_isolation_removal_component
<application module: Land_arm> *application object* (3.1.78) that is a type of *Material_removal_structured_component* (5.536.60) that represents the thermal isolation removal component *entity* (3.2.9)

5.529.4
Dependent_electrical_isolation_removal_component
<application module: Land_arm> *application object* (3.1.78) that is a type of *Electrical_isolation_laminate_component* (5.536.22) that represents the dependent electrical isolation removal component *entity* (3.2.9)

5.529.5
Inter_stratum_feature_dependent_land
<application module: Land_arm> *application object* (3.1.78) that is a type of *Land* (5.529.6) that represents the inter stratum feature dependent land *entity* (3.2.9)

Note 1 to entry: An **Inter_stratum_feature_dependent_land** is a type of Land included in the design to provide mechanical support to an *Inter_stratum_feature* (5.536.32) or included in the design to provide a connection to an Inter_stratum_feature.

5.529.6
Land
<application module: Land_arm> *application object* (3.1.78) that is a type of *Stratum_feature_template_component* (5.536.97) that represents the land *entity* (3.2.9)

Note 1 to entry: A **Land** is a type of Stratum_feature_template_component that is provided to support explicit geometric based interfaces to the wiring pattern on a layer in an interconnect or to provide mechanical support to a vertical structure.

5.529.7
Land_interface_terminal
<application module: Land_arm> *application object* (3.1.78) that is a type of *Laminate_component_interface_terminal* (5.536.50) that represents the land interface terminal *entity* (3.2.9)

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Note 1 to entry: A **Land_interface_terminal** is a type of Laminate_component_interface_terminal included to identify the interface available to be fastened to in the next level of assembly.

5.529.8
Land_join_terminal
<application module: Land_arm> *application object* (3.1.78) that is a type of *Laminate_component_join_terminal* (5.536.51) that represents the land join terminal *entity* (3.2.9)

Note 1 to entry: A **Land_join_terminal** is a type of Laminate_component_join_terminal included in the design to mate directly with a terminal of another fabricated feature by use of a *Fabrication_joint* (5.491.2) internally in a layout.

5.529.9
Land_with_join_terminal
<application module: Land_arm> *application object* (3.1.78) that is a type of *Land* (5.529.6) and *Land_join_terminal* (5.529.8) that represents the land with join terminal *entity* (3.2.9)

Note 1 to entry: A **Land_with_join_terminal** is a type of Land and a type of Land_join_terminal.

5.529.10
Plated_passage_dependent_land
<application module: Land_arm> *application object* (3.1.78) that is a type of *Inter_stratum_feature_dependent_land* (5.529.5) that represents the plated passage dependent land *entity* (3.2.9)

Note 1 to entry: A **Plated_passage_dependent_land** is a type of Inter_stratum_feature_dependent_land whose shape is dependent only on a *Plated_passage* (5.536.82).

5.529.11
Unsupported_passage_dependent_land
<application module: Land_arm> *application object* (3.1.78) that is a type of *Inter_stratum_feature_dependent_land* (5.529.5) that represents the unsupported passage dependent land *entity* (3.2.9)

Note 1 to entry: An **Unsupported_passage_dependent_land** is a type of Inter_stratum_feature_dependent_land whose shape is dependent upon the shape of an *Unsupported_passage* (5.536.108).

5.530 Land_mim

5.530.1
contact_size_dependent_land
<application module: Land_mim> *entity data type* (3.2.10) that is a type of *land* (5.530.5) that represents the contact size dependent land *entity* (3.2.9)

Note 1 to entry: A **contact_size_dependent_land** is a type of land that implements the ARM concept of *Contact_size_dependent_land* (5.529.1).

5.530.2
dependent_electrical_isolation_removal_component
<application module: Land_mim> *entity data type* (3.2.10) that is a type of *electrical_isolation_laminate_component* (5.537.15) that represents the dependent electrical isolation removal component *entity* (3.2.9)

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Note 1 to entry: A **dependent_electrical_isolation_removal_component** is a type of electrical_isolation_laminate_component that implements the ARM concept of *Dependent_electrical_isolation_removal_component* (5.529.4).

5.530.3
dependent_thermal_isolation_removal_component

<application module: Land_mim> *entity data type* (3.2.10) that is a type of *thermal_isolation_removal_component* (5.530.8) that represents the dependent thermal isolation removal component *entity* (3.2.9)

Note 1 to entry: A **dependent_thermal_isolation_removal_component** is a type of *material_removal_structured_component* (5.537.44) that implements the ARM concept of *Dependent_thermal_isolation_removal_component* (5.529.2).

5.530.4
inter_stratum_feature_dependent_land

<application module: Land_mim> *entity data type* (3.2.10) that is a type of *land* (5.530.5) that represents the inter stratum feature dependent land *entity* (3.2.9)

Note 1 to entry: An **inter_stratum_feature_dependent_land** is a type of land that implements the ARM concept of *Inter_stratum_feature_dependent_land* (5.529.5).

5.530.5
land

<application module: Land_mim> *entity data type* (3.2.10) that is a type of *stratum_feature_template_component* (5.537.77) that represents the land *entity* (3.2.9)

Note 1 to entry: A **land** is a type of stratum_feature_template_component that implements the ARM concepts of:

— *Contact_size_dependent_land* (5.529.1);

— *Land* (5.529.6).

5.530.6
land_with_join_terminal

<application module: Land_mim> *entity data type* (3.2.10) that is a type of *land* (5.530.5) and *laminate_component_join_terminal* (5.537.34) that represents the land with join terminal *entity* (3.2.9)

Note 1 to entry: A **land_with_join_terminal** is a type of land and a type of laminate_component_join_terminal that implements the ARM concept of *Land_with_join_terminal* (5.529.9).

5.530.7
plated_passage_dependent_land

<application module: Land_mim> *entity data type* (3.2.10) that is a type of *inter_stratum_feature_dependent_land* (5.530.4) that represents the plated passage dependent land *entity* (3.2.9)

Note 1 to entry: A **plated_passage_dependent_land** is a type of inter_stratum_feature_dependent_land that implements the ARM concept of *Plated_passage_dependent_land* (5.529.10).

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5.530.8
thermal_isolation_removal_component
<application module: Land_mim> *entity data type* (3.2.10) that is a type of *material_removal_structured_component* (5.537.44) that represents the thermal isolation removal component *entity* (3.2.9)

Note 1 to entry: A **thermal_isolation_removal_component** is a type of material_removal_structured_component that implements the ARM concept of *Thermal_isolation_removal_component* (5.529.3).

5.530.9
unsupported_passage_dependent_land
<application module: Land_mim> *entity data type* (3.2.10) that is a type of *inter_stratum_feature_dependent_land* (5.530.4) that represents the unsupported passage dependent land *entity* (3.2.9)

Note 1 to entry: A **unsupported_passage_dependent_land** is a type of inter_stratum_feature_dependent_land that implements the ARM concept of *Unsupported_passage_dependent_land* (5.529.11).

5.531 Layered_2d_shape_arm

5.531.1
Planar_projected_shape_model
<application module: Layered_2d_shape_arm> *application object* (3.1.78) that is a type of *Planar_shape_model* (5.531.2) that represents the planar projected shape model *entity* (3.2.9)

5.531.2
Planar_shape_model
<application module: Layered_2d_shape_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the planar shape model *entity* (3.2.9)

Note 1 to entry: A **Planar_shape_model** is a type of Geometric_model that lies on a two-dimensional plane.

5.532 Layered_3d_shape_arm

5.532.1
Shape_definition_3d_intersection
<application module: Layered_3d_shape_arm> *application object* (3.1.78) that is a type of *Geometric_model_relationship* (5.366.2) that represents the shape definition 3d intersection *entity* (3.2.9)

5.532.2
Shape_definition_3d_plane_projection
<application module: Layered_3d_shape_arm> *application object* (3.1.78) that is a type of *Geometric_model_relationship* (5.366.2) that represents the shape definition 3d plane projection *entity* (3.2.9)

5.533 Layered_3d_shape_mim

5.533.1
shape_definition_3d_intersection
<application module: Layered_3d_shape_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) and *shape_representation_relationship* (4.20.10) and *representation_relationship_with_transformation* (4.41.21) that represents the shape definition 3d intersection *entity* (3.2.9)

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Note 1 to entry: A **shape_definition_3d_intersection** is a type of representation, of shape_representation_relationship, and of representation_relationship_with_transformation that implements the ARM concept of *Shape_definition_3d_intersection* (5.532.1).

5.534 Layered_interconnect_module_2d_design_arm

5.534.1
Located_2d_inter_stratum_extent

<application module: Layered_interconnect_module_2d_design_arm> *application object* (3.1.78) that is a type of *Inter_stratum_extent* (5.536.31) that represents the located 2d inter stratum extent *entity* (3.2.9)

Note 1 to entry: A **Located_2d_inter_stratum_extent** is a type of Inter_stratum_extent that provides the **location** where the Inter_stratum_extent was determined.

5.534.2
Stratum_interconnect_module_planar_position

<application module: Layered_interconnect_module_2d_design_arm> *application object* (3.1.78) that represents the stratum interconnect module planar position *entity* (3.2.9)

Note 1 to entry: A **Stratum_interconnect_module_planar_position** is the position of the *Stratum* (5.536.90) model in the *Interconnect_module_design_view* (5.536.37) model in two dimensions.

5.534.3
Stratum_planar_shape_model

<application module: Layered_interconnect_module_2d_design_arm> *application object* (3.1.78) that is a type of *Csg_2d_model* (5.593.3) that represents the stratum planar shape model *entity* (3.2.9)

Note 1 to entry: A **Stratum_planar_shape_model** is a type of the Csg_2d_model.

5.535 Layered_interconnect_module_3d_design_arm

5.535.1
Located_3d_inter_stratum_extent

<application module: Layered_interconnect_module_3d_design_arm> *application object* (3.1.78) that is a type of *Inter_stratum_extent* (5.536.31) that represents the located 3d inter stratum extent *entity* (3.2.9)

Note 1 to entry: A **Located_3d_inter_stratum_extent** is a type of Inter_stratum_extent that provides the line in three dimensional space along which the Inter_stratum_extent was determined.

5.535.2
Stratum_3d_shape_model

<application module: Layered_interconnect_module_3d_design_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the stratum 3d shape model *entity* (3.2.9)

5.535.3
Stratum_interconnect_module_3d_position

<application module: Layered_interconnect_module_3d_design_arm> *application object* (3.1.78) that represents the stratum interconnect module 3d position *entity* (3.2.9)

Note 1 to entry: A **Stratum_interconnect_module_3d_position** is the position of the *Stratum* (5.536.90) model in the *Interconnect_module_design_view* (5.536.37) model in three dimensions.

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5.536 Layered_interconnect_module_design_arm

5.536.1
Adjacent_stratum_surface_embedded_physical_component_surface_definition
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that represents the adjacent stratum surface embedded physical component surface definition *entity* (3.2.9)

Note 1 to entry: An **Adjacent_stratum_surface_embedded_physical_component_surface_definition** is an oriented link in a sequence of stratum and embedded physical components that result in the completed design.

5.536.2
Area_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Stratum_feature_template_component* (5.536.97) that represents the area component *entity* (3.2.9)

5.536.3
Breakout_occurrence
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Footprint_occurrence* (5.536.27) that represents the breakout occurrence *entity* (3.2.9)

5.536.4
Component_termination_passage
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Plated_passage* (5.536.82) that represents the component termination passage *entity* (3.2.9)

Note 1 to entry: A **Component_termination_passage** is a type of Plated_passage through which a *Component_terminal* (5.478.5) may pass.

5.536.5
Component_termination_passage_interface_terminal
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Laminate_component_interface_terminal* (5.536.50) that represents the component termination passage interface terminal *entity* (3.2.9)

5.536.6
Component_termination_passage_join_terminal
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Laminate_component_join_terminal* (5.536.51) that represents the component termination passage join terminal *entity* (3.2.9)

5.536.7
Conductive_filled_area
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Stratum_feature* (5.536.93) that represents the conductive filled area *entity* (3.2.9)

Note 1 to entry: A **Conductive_filled_area** is a type of Stratum_feature in which the material is conductive.

5.536.8
Conductive_interconnect_element
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Stratum_feature_template_component* (5.536.97) that represents the conductive interconnect element *entity* (3.2.9)

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5.536.9
Conductive_interconnect_element_terminal
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Laminate_component_feature* (5.536.49) that represents the conductive interconnect element terminal *entity* (3.2.9)

5.536.10
Conductive_interconnect_element_terminal_link
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that represents the conductive interconnect element terminal link *entity* (3.2.9)

Note 1 to entry: A **Conductive_interconnect_element_terminal_link** is a directed link between two *Conductive_interconnect_element_terminal* (5.536.9) in order to support the sequence of Conductive_interconnect_element_terminal required in *Conductive_interconnect_element_with_pre_defined_transitions* (5.536.11).

5.536.11
Conductive_interconnect_element_with_pre_defined_transitions
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Conductive_interconnect_element* (5.536.8) that represents the conductive interconnect element with pre defined transitions *entity* (3.2.9)

5.536.12
Conductor
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Stratum_feature* (5.536.93) that represents the conductor *entity* (3.2.9)

Note 1 to entry: A **Conductor** is a type of Stratum_feature realized in a *Design_layer_stratum* (5.536.19) that participates in the implementation of a *Generic_physical_network* (5.536.29).

5.536.13
Connected_area_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Area_component* (5.536.2) that represents the connected area component *entity* (3.2.9)

5.536.14
Connected_filled_area
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Conductive_filled_area* (5.536.7) that represents the connected filled area *entity* (3.2.9)

Note 1 to entry: A **Connected_filled_area** is a type of Conductive_filled_area with which a set of layer connection points are associated (as specified in the **implementation_requirement** attribute).

5.536.15
Cutout
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Inter_stratum_feature* (5.536.32) that represents the cutout *entity* (3.2.9)

5.536.16
Cutout_edge_segment
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Inter_stratum_feature* (5.536.32) that represents the cutout edge segment *entity* (3.2.9)

Note 1 to entry: A **Cutout_edge_segment** is a type of Inter_stratum_feature that defines an edge segment of a *Cutout* (5.536.15).

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5.536.17
Dependently_located_layer_connection_point
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Layer_connection_point* (5.536.56) that represents the dependently located layer connection point *entity* (3.2.9)

Note 1 to entry: A **Dependently_located_layer_connection_point** is a type of Layer_connection_point that is position dependent on the location of an *Interconnect_module_terminal* (5.517.10) or an *Inter_stratum_feature* (5.536.32).

5.536.18
Derived_stratum
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Stratum* (5.536.90) that represents the derived stratum *entity* (3.2.9)

Note 1 to entry: A **Derived_stratum** is a type of Stratum that supports the case where a complete design or documentation stratum geometric pattern is copied onto another layer.

5.536.19
Design_layer_stratum
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Stratum* (5.536.90) that represents the design layer stratum *entity* (3.2.9)

Note 1 to entry: A **Design_layer_stratum** is a type of Stratum incorporated into an *Layered_interconnect_module_design_view* (5.536.35) for the purpose of realizing a physical network in one material.

5.536.20
Dielectric_material_passage
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Inter_stratum_feature* (5.536.32) that represents the dielectric material passage *entity* (3.2.9)

Note 1 to entry: A **Dielectric_material_passage** is a type of Inter_stratum_feature that contains dielectric material.

5.536.21
Documentation_layer_stratum
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Stratum* (5.536.90) that represents the documentation layer stratum *entity* (3.2.9)

Note 1 to entry: A **Documentation_layer_stratum** is a type of Stratum that includes patterns and other artwork information needed to manufacture a physical layer in a printed circuit board where that layer is not implementing any *Generic_physical_network* (5.536.29) in the printed circuit board.

5.536.22
Electrical_isolation_laminate_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Material_removal_laminate_component* (5.536.59) that represents the electrical isolation laminate component *entity* (3.2.9)

5.536.23
Embedded_physical_component_terminal
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Laminate_component_join_terminal* (5.536.51) that represents the embedded physical component terminal *entity* (3.2.9)

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Note 1 to entry: An **Embedded_physical_component_terminal** is a type of Laminate_component_join_terminal included in the design to mate directly with a terminal of a fabricated feature by use of a *Fabrication_joint* (5.491.2) internally in a layout.

5.536.24
Explicitly_located_layer_connection_point
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Layer_connection_point* (5.536.56) that represents the explicitly located layer connection point *entity* (3.2.9)

Note 1 to entry: An **Explicitly_located_layer_connection_point** is a type of Layer_connection_point that is not a *Dependently_located_layer_connection_point* (5.536.17).

5.536.25
Fiducial
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Laminate_component* (5.536.48) that represents the fiducial *entity* (3.2.9)

Note 1 to entry: A **Fiducial** is a type of Laminate_component that is a basis of measurement with respect to other *Assembly_component* (5.684.1).

5.536.26
Fiducial_stratum_feature
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Stratum_feature* (5.536.93) that represents the fiducial stratum feature *entity* (3.2.9)

Note 1 to entry: A **Fiducial_stratum_feature** is a type of Stratum_feature that is a basis of measurement with respect to other Stratum_feature.

5.536.27
Footprint_occurrence
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Structured_layout_component* (5.536.100) that represents the footprint occurrence *entity* (3.2.9)

5.536.28
Footprint_occurrence_sub_assembly_relationship
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Structured_layout_component_sub_assembly_relationship* (5.536.101) that represents the footprint occurrence sub assembly relationship *entity* (3.2.9)

5.536.29
Generic_physical_network
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that represents the generic physical network *entity* (3.2.9)

Note 1 to entry: A **Generic_physical_network** is either an *Unrouted_physical_network* (5.536.107) or a *Routed_physical_network* (5.536.88).

5.536.30
Interface_access_material_removal_laminate_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Material_removal_laminate_component* (5.536.59) that represents the interface access material removal laminate component *entity* (3.2.9)

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Note 1 to entry: An **Interface_access_material_removal_laminate_component** is a type of Material_removal_laminate_component that indicates that material is to be removed in the realization of access to the *Laminate_component_interface_terminal* (5.536.50).

5.536.31
Inter_stratum_extent
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Part_definition_relationship* (5.314.5) that represents the inter stratum extent *entity* (3.2.9)

5.536.32
Inter_stratum_feature
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Laminate_component* (5.536.48) that represents the inter stratum feature *entity* (3.2.9)

5.536.33
Inter_stratum_join_relationship
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Routed_join_relationship* (5.536.87) that represents the inter stratum join relationship *entity* (3.2.9)

Note 1 to entry: An **Inter_stratum_join_relationship** is a type of Routed_join_relationship, in which the elements to be joined, *Layer_connection_point* (5.536.56), shall be on different *Design_layer_stratum* (5.536.19).

5.536.34
Interconnect_connection_zone_position_relationship
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that represents the interconnect connection zone position relationship *entity* (3.2.9)

Note 1 to entry: An **Interconnect_connection_zone_position_relationship** is the association between a geometric model of an *Layered_interconnect_module_design_view* (5.536.35) as a target and a geometric model of a *Connection_zone_in_design_view* (5.588.6) as the source.

5.536.35
Layered_interconnect_module_design_view
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Interconnect_module_design_view* (5.536.37) that represents the layered interconnect module design view *entity* (3.2.9)

5.536.36
Layered_interconnect_panel_design_view
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Layered_interconnect_module_design_view* (5.536.35) that represents the layered interconnect panel design view *entity* (3.2.9)

5.536.37
Interconnect_module_design_view
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Assembly_definition* (5.314.2) and *Part_design_view* (5.588.8) that represents the interconnect module design view *entity* (3.2.9)

Note 1 to entry: An **Interconnect_module_design_view** is a type of Assembly_definition and of Part_design_view.

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5.536.38
Interconnect_module_edge
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Inter_stratum_feature* (5.536.32) that represents the interconnect module edge *entity* (3.2.9)

5.536.39
Interconnect_module_edge_segment
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Inter_stratum_feature* (5.536.32) that represents the interconnect module edge segment *entity* (3.2.9)

5.536.40
Interconnect_module_macro_terminal
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Interconnect_module_terminal* (5.517.10) that represents the interconnect module macro terminal *entity* (3.2.9)

Note 1 to entry: An **Interconnect_module_macro_terminal** is a type of Interconnect_module_terminal included to support interconnect macro definition and reuse.

5.536.41
Interconnect_module_stratum_assembly_relationship
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that represents the interconnect module stratum assembly relationship *entity* (3.2.9)

Note 1 to entry: An **Interconnect_module_stratum_assembly_relationship** is the composition association between an *Layered_interconnect_module_design_view* (5.536.35) and a *Stratum* (5.536.90) helping to compose it.

5.536.42
Interface_access_stratum_feature_template_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Stratum_feature_template_component* (5.536.97) that represents the interface access stratum feature template component *entity* (3.2.9)

Note 1 to entry: An **Interface_access_stratum_feature_template_component** is a type of Stratum_feature_template_component provided to provide access to a *Laminate_component_interface_terminal* (5.536.50) where auxiliary processes would prohibit direct access to the terminal and where it is necessary to record the explicit relationship.

5.536.43
Internal_probe_access_area
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Probe_access_area* (5.536.85) that represents the internal probe access area *entity* (3.2.9)

Note 1 to entry: An **Internal_probe_access_area** is a type of Probe_access_area included in the design for access to an internal conductor for probing purposes.

5.536.44
Internal_stratum_access
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that represents the internal stratum access *entity* (3.2.9)

Note 1 to entry: An **Internal_stratum_access** is a relationship between an *Internal_probe_access_area* (5.536.43) and a *Via* (5.536.109) that provides access to a *Stratum_feature* (5.536.93) on an internal *Design_layer_stratum* (5.536.19).

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5.536.45
Inter_stratum_join_implementation
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that represents the inter stratum join implementation *entity* (3.2.9)

Note 1 to entry: An **Inter_stratum_join_implementation** is one of a *Physical_network_supporting_inter_stratum_feature* (5.536.73) or a *Physical_network_supporting_stratum_feature_conductive_join* (5.536.74).

5.536.46
Intra_stratum_join_relationship
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Routed_join_relationship* (5.536.87) that represents the intra stratum join relationship *entity* (3.2.9)

Note 1 to entry: An **Intra_stratum_join_relationship** is a type of Routed_join_relationship in which all joins occur on one *Design_layer_stratum* (5.536.19).

5.536.47
Join_relationship
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that represents the join relationship *entity* (3.2.9)

Note 1 to entry: A **Join_relationship** is a *Routed_join_relationship* (5.536.87), or an *Unrouted_join_relationship* (5.536.106).

5.536.48
Laminate_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Assembly_component* (5.684.1) and *Single_instance* (5.79.6) that represents the laminate component *entity* (3.2.9)

Note 1 to entry: A **Laminate_component** is a type of Assembly_component and a type of Single_instance.

5.536.49
Laminate_component_feature
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Component_feature* (5.478.1) that represents the laminate component feature *entity* (3.2.9)

Note 1 to entry: A **Laminate_component_feature** is a type of Component_feature whose scope is that of an interconnect definition.

5.536.50
Laminate_component_interface_terminal
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Laminate_component_feature* (5.536.49) that represents the laminate component interface terminal *entity* (3.2.9)

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5.536.51
Laminate_component_join_terminal
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Laminate_component_feature* (5.536.49) and *Component_terminal* (5.478.5) that represents the laminate component join terminal *entity* (3.2.9)

Note 1 to entry: A **Laminate_component_join_terminal** is a type of Component_terminal and a type of Laminate_component_feature.

5.536.52
Laminate_group_component_make_from_relationship
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Component_make_from_relationship* (5.684.2) that represents the laminate group component make from relationship *entity* (3.2.9)

5.536.53
Layer_stack_region
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Instanced_feature* (5.641.2) that represents the layer stack region *entity* (3.2.9)

Note 1 to entry: A **Layer_stack_region** is a type of Instanced_feature that specifies a boundary for a set of one or more *Local_linear_stack* (5.494.17).

5.536.54
Generic_laminate_text_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Laminate_component* (5.536.48) that represents the generic laminate text component *entity* (3.2.9)

Note 1 to entry: A **Generic_laminate_text_component** is a type of Laminate_component that is designed to be interpreted as a single character portion of a text message by a human or by an artificial vision system.

5.536.55
Laminate_text_string_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Array_placement_group* (5.476.1) and *Laminate_component* (5.536.48) that represents the laminate text string component *entity* (3.2.9)

5.536.56
Layer_connection_point
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the layer connection point *entity* (3.2.9)

Note 1 to entry: A **Layer_connection_point** is a type of Shape_element that resides on the surface of a *Design_layer_stratum* (5.536.19) in the *Layered_interconnect_module_design_view* (5.536.35) and is defined in the coordinate system of the Layered_interconnect_module_design_view.

5.536.57
Layout_junction
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that represents the layout junction *entity* (3.2.9)

Note 1 to entry: A **Layout_junction** is a means to help define partial routing of a layout.

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5.536.58
Library_reference_view_definition_relationship
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the library reference view definition relationship *entity* (3.2.9)

Note 1 to entry: A **Library_reference_view_definition_relationship** is a type of View_definition_relationship that is provided to relate a definition in a design context to a definition in a library context, when the design context definition is not identical to the library context definition but is a derivation.

5.536.59
Material_removal_laminate_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Laminate_component* (5.536.48) that represents the material removal laminate component *entity* (3.2.9)

Note 1 to entry: A **Material_removal_laminate_component** is a type of Laminate_component that indicates that material is to be removed in the realization of the item that is in the role of **design_intent**.

5.536.60
Material_removal_structured_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Structured_layout_component* (5.536.100) that represents the material removal structured component *entity* (3.2.9)

5.536.61
Multi_layer_material_removal_laminate_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Material_removal_laminate_component* (5.536.59) that represents the multi layer material removal laminate component *entity* (3.2.9)

Note 1 to entry: A **Multi_layer_material_removal_laminate_component** is a type of Material_removal_laminate_component that modifies geometry on a collection of layers in a design based on one reference layer.

5.536.62
Multi_stratum_special_symbol_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Structured_layout_component* (5.536.100) that represents the multi stratum special symbol component *entity* (3.2.9)

Note 1 to entry: A **Multi_stratum_special_symbol_component** is a type of Structured_layout_component provided to support a geometric-based query by a manufacturing or test process for an enterprise or industry specific graphic element.

5.536.63
Multi_layer_stratum_feature_template_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Stratum_feature_template_component* (5.536.97) that represents the multi layer stratum feature template component *entity* (3.2.9)

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5.536.64
Material_removal_laminate_text_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Generic_laminate_text_component* (5.536.54) that represents the material removal laminate text component *entity* (3.2.9)

Note 1 to entry: A **Material_removal_laminate_text_component** is a type of Generic_laminate_text_component included to support the case of material removals in the form of text that is to be interpreted by a human or machine vision system.

5.536.65
Padstack_occurrence
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Structured_layout_component* (5.536.100) that represents the padstack occurrence *entity* (3.2.9)

5.536.66
Partially_plated_cutout
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Cutout* (5.536.15) that represents the partially plated cutout *entity* (3.2.9)

Note 1 to entry: A **Partially_plated_cutout** is a type of Cutout that is not a completely plated cutout for reason of manufacturing capabilities or design purposes.

5.536.67
Partially_plated_interconnect_module_edge
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Interconnect_module_edge* (5.536.38) that represents the partially plated interconnect module edge *entity* (3.2.9)

Note 1 to entry: A **Partially_plated_interconnect_module_edge** is a type of Interconnect_module_edge that is not a completely plated edge for reason of manufacturing capabilities or design purposes.

5.536.68
Physical_connectivity_interrupting_cutout
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Cutout* (5.536.15) that represents the physical connectivity interrupting cutout *entity* (3.2.9)

Note 1 to entry: A **Physical_connectivity_interrupting_cutout** is a type of Cutout that is included in the design of an *Layered_interconnect_module_design_view* (5.536.35) for the purpose of interrupting one or more connectivity elements in an Layered_interconnect_module_design_view.

5.536.69
Physical_network_group
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Group* (5.113.1) that represents the physical network group *entity* (3.2.9)

5.536.70
Pre_defined_physical_network_group
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Physical_network_group* (5.536.69) that represents the pre defined physical network group *entity* (3.2.9)

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5.536.71
Externally_defined_physical_network_group
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Physical_network_group* (5.536.69) that represents the externally defined physical network group *entity* (3.2.9)

5.536.72
Physical_network_group_element_relationship
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Group_relationship* (5.113.2) that represents the physical network group element relationship *entity* (3.2.9)

5.536.73
Physical_network_supporting_inter_stratum_feature
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Plated_inter_stratum_feature* (5.536.79) and *Inter_stratum_join_implementation* (5.536.45) that represents the physical network supporting inter stratum feature *entity* (3.2.9)

Note 1 to entry: A **Physical_network_supporting_inter_stratum_feature** is a type of Inter_stratum_join_implementation and a type of Plated_inter_stratum_feature, that is included in the design for the purpose of implementing connectivity.

5.536.74
Physical_network_supporting_stratum_feature_conductive_join
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Stratum_feature_conductive_join* (5.536.96) and *Inter_stratum_join_implementation* (5.536.45) that represents the physical network supporting stratum feature conductive join *entity* (3.2.9)

Note 1 to entry: A **Physical_network_supporting_stratum_feature_conductive_join** is a type of Inter_stratum_join_implementation and a type of Stratum_feature_conductive_join, that is included in the design for the purpose of implementing a *Generic_physical_network* (5.536.29).

5.536.75
Pre_defined_physical_network_group_element_relationship
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Physical_network_group_element_relationship* (5.536.72) that represents the pre defined physical network group element relationship *entity* (3.2.9)

5.536.76
Externally_defined_physical_network_group_element_relationship
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Physical_network_group_element_relationship* (5.536.72) that represents the externally defined physical network group element relationship *entity* (3.2.9)

5.536.77
Plated_cutout
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Cutout* (5.536.15) and *Plated_inter_stratum_feature* (5.536.79) that represents the plated cutout *entity* (3.2.9)

Note 1 to entry: A **Plated_cutout** is a type of Cutout and a type of Plated_inter_stratum_feature.

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5.536.78
Plated_cutout_edge_segment
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Cutout_edge_segment* (5.536.16) and *Plated_inter_stratum_feature* (5.536.79) that represents the plated cutout edge segment *entity* (3.2.9)

Note 1 to entry: A **Plated_cutout_edge_segment** is a type of Cutout_edge_segment and a type of Plated_inter_stratum_feature that helps compose a *Partially_plated_cutout* (5.536.66).

5.536.79
Plated_inter_stratum_feature
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Inter_stratum_feature* (5.536.32) that represents the plated inter stratum feature *entity* (3.2.9)

Note 1 to entry: A **Plated_inter_stratum_feature** is a type of Inter_stratum_feature with deposited metal on its walls that makes an electrical connection between conductive patterns on internal *Design_layer_stratum* (5.536.19), external Design_layer_stratum, or both, of a printed circuit board.

5.536.80
Plated_interconnect_module_edge
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Interconnect_module_edge* (5.536.38) and *Plated_inter_stratum_feature* (5.536.79) that represents the plated interconnect module edge *entity* (3.2.9)

Note 1 to entry: A **Plated_interconnect_module_edge** is a type of Interconnect_module_edge and a type of Plated_inter_stratum_feature that forms one of the edges of an interconnect substrate.

5.536.81
Plated_interconnect_module_edge_segment
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Plated_inter_stratum_feature* (5.536.79) and *Interconnect_module_edge_segment* (5.536.39) that represents the plated interconnect module edge segment *entity* (3.2.9)

Note 1 to entry: A **Plated_interconnect_module_edge_segment** is a type of Interconnect_module_edge_segment and a type of Plated_inter_stratum_feature that forms a section of the edge of an interconnect substrate.

5.536.82
Plated_passage
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Plated_inter_stratum_feature* (5.536.79) that represents the plated passage *entity* (3.2.9)

5.536.83
Additive_laminate_text_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Generic_laminate_text_component* (5.536.54) that represents the additive laminate text component *entity* (3.2.9)

5.536.84
Primary_stratum_indicator_symbol
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Single_stratum_special_symbol_component* (5.536.89) that represents the primary stratum indicator symbol *entity* (3.2.9)

Note 1 to entry: A **Primary_stratum_indicator_symbol** is a type of Single_stratum_special_symbol_component that is used to identify the arbitrarily named primary side of a printed circuit board.

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5.536.85
Probe_access_area
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Laminate_component* (5.536.48) and *Shape_element* (5.41.6) that represents the probe access area *entity* (3.2.9)

Note 1 to entry: A **Probe_access_area** is a type of Shape_element and a type of Laminate_component.

5.536.86
Region_based_derived_pattern
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that represents the region based derived pattern *entity* (3.2.9)

Note 1 to entry: A **Region_based_derived_pattern** is an extent of contiguous strata in a printed circuit board (PCB).

5.536.87
Routed_join_relationship
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Join_relationship* (5.536.47) that represents the routed join relationship *entity* (3.2.9)

Note 1 to entry: A **Routed_join_relationship** is a type of Join_relationship whose implementations are provided.

5.536.88
Routed_physical_network
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Generic_physical_network* (5.536.29) that represents the routed physical network *entity* (3.2.9)

5.536.89
Single_stratum_special_symbol_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Structured_layout_component* (5.536.100) that represents the single stratum special symbol component *entity* (3.2.9)

Note 1 to entry: A **Single_stratum_special_symbol_component** is a type of Structured_layout_component such as an enterprise logo, trademark, or other enterprise specific symbol.

5.536.90
Stratum
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Part_view_definition* (5.35.1) that represents the stratum *entity* (3.2.9)

5.536.91
Stratum_average_surface
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Stratum_surface* (5.536.99) that represents the stratum average surface *entity* (3.2.9)

Note 1 to entry: A **Stratum_average_surface** is a type of Stratum_surface used to specify the constructed geometry that is the average of the primary and secondary surface for a *Stratum* (5.536.90).

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5.536.92
Stratum_embedded_physical_component_join_relationship
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Routed_join_relationship* (5.536.87) that represents the stratum embedded physical component join relationship *entity* (3.2.9)

Note 1 to entry: A **Stratum_embedded_physical_component_join_relationship** is a type of Routed_join_relationship, in which the elements to be joined, *Layer_connection_point* (5.536.56), and Layer_connection_point, shall be on different materials in the interconnect, either *Design_layer_stratum* (5.536.19) or embedded physical component.

5.536.93
Stratum_feature
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the stratum feature *entity* (3.2.9)

5.536.94
Stratum_feature_usage
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Item_identified_representation_usage* (5.41.2) that represents the stratum feature usage *entity* (3.2.9)

5.536.95
Stratum_feature_based_derived_pattern
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that represents the stratum feature based derived pattern *entity* (3.2.9)

Note 1 to entry: A **Stratum_feature_based_derived_pattern** is a geometry for one particular item is copied from a design or documentation layer onto a set of other contiguous layers.

5.536.96
Stratum_feature_conductive_join
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that represents the stratum feature conductive join *entity* (3.2.9)

Note 1 to entry: A **Stratum_feature_conductive_join** is a connection between two conductive *Stratum_feature* (5.536.93) on disjoint *Stratum* (5.536.90) that is not a passage.

5.536.97
Stratum_feature_template_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Laminate_component* (5.536.48) that represents the stratum feature template component *entity* (3.2.9)

5.536.98
Stratum_feature_template_component_with_stratum_feature
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Stratum_feature_template_component* (5.536.97) and *Stratum_feature* (5.536.93) that represents the stratum feature template component with stratum feature *entity* (3.2.9)

Note 1 to entry: A **Stratum_feature_template_component_with_stratum_feature** is a type of Stratum_feature and a type of Stratum_feature_template_component.

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5.536.99
Stratum_surface
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that represents the stratum surface *entity* (3.2.9)

5.536.100
Structured_layout_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Assembly_group_component* (5.476.3) that represents the structured layout component *entity* (3.2.9)

Note 1 to entry: A **Structured_layout_component** is a type of Assembly_group_component specialized for interconnect layout purposes.

5.536.101
Structured_layout_component_sub_assembly_relationship
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Next_assembly_usage_occurrence_relationship* (5.588.7) that represents the structured layout component sub assembly relationship *entity* (3.2.9)

5.536.102
Structured_layout_component_sub_assembly_relationship_with_component
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Structured_layout_component_sub_assembly_relationship* (5.536.101) and *Assembly_component* (5.684.1) that represents the structured layout component sub assembly relationship with component *entity* (3.2.9)

Note 1 to entry: A **Structured_layout_component_sub_assembly_relationship_with_component** is a type of Assembly_component and a type of Structured_layout_component_sub_assembly_relationship.

5.536.103
Unplated_cutout_edge_segment
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Cutout_edge_segment* (5.536.16) that represents the unplated cutout edge segment *entity* (3.2.9)

5.536.104
Unplated_interconnect_module_edge_segment
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Interconnect_module_edge_segment* (5.536.39) that represents the unplated interconnect module edge segment *entity* (3.2.9)

5.536.105
Unrouted_conductive_interconnect_element
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Conductive_interconnect_element* (5.536.8) that represents the unrouted conductive interconnect element *entity* (3.2.9)

5.536.106
Unrouted_join_relationship
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Join_relationship* (5.536.47) that represents the unrouted join relationship *entity* (3.2.9)

Note 1 to entry: An **Unrouted_join_relationship** is a type of Join_relationship for which the implementation of the requirements specified by a *Routed_physical_network* (5.536.88) is incomplete.

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5.536.107
Unrouted_physical_network
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Generic_physical_network* (5.536.29) that represents the unrouted physical network *entity* (3.2.9)

Note 1 to entry: An **Unrouted_physical_network** is a type of Generic_physical_network for which there are no subsets of the implementation completed.

5.536.108
Unsupported_passage
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Inter_stratum_feature* (5.536.32) that represents the unsupported passage *entity* (3.2.9)

Note 1 to entry: An **Unsupported_passage** is a type of Inter_stratum_feature that has no metallization in the realization of its walls.

5.536.109
Via
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Plated_passage* (5.536.82) that represents the via *entity* (3.2.9)

5.536.110
Via_terminal
<application module: Layered_interconnect_module_design_arm> *application object* (3.1.78) that is a type of *Laminate_component_feature* (5.536.49) that represents the via terminal *entity* (3.2.9)

5.537 Layered_interconnect_module_design_mim

5.537.1
additive_laminate_text_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *generic_laminate_text_component* (5.537.36) that represents the additive laminate text component *entity* (3.2.9)

Note 1 to entry: A **additive_laminate_text_component** is a type of generic_laminate_text_component that implements the ARM concepts of *Additive_laminate_text_component* (5.536.83).

5.537.2
area_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *stratum_feature_template_component* (5.537.77) that represents the area component *entity* (3.2.9)

Note 1 to entry: An **area_component** is a type of stratum_feature_template_component that implements the ARM concept of *Area_component* (5.536.2).

5.537.3
breakout_occurrence
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *footprint_occurrence* (5.537.19) that represents the breakout occurrence *entity* (3.2.9)

Note 1 to entry: A **breakout_occurrence** is a type of footprint_occurrence that implements the ARM concept of *Breakout_occurrence* (5.536.3).

5.537.4

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component_termination_passage
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *plated_passage* (5.537.68) that represents the component termination passage *entity* (3.2.9)

Note 1 to entry: A **component_termination_passage** is a type of plated_passage that implements the ARM concept of *Component_termination_passage* (5.536.4).

5.537.5
conductive_interconnect_element
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *stratum_feature_template_component* (5.537.77) that represents the conductive interconnect element *entity* (3.2.9)

Note 1 to entry: A **conductive_interconnect_element** is a type of stratum_feature_template_component that implements the ARM concept of *Conductive_interconnect_element* (5.536.8).

5.537.6
conductive_interconnect_element_terminal_link
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the conductive interconnect element terminal link *entity* (3.2.9)

Note 1 to entry: A **conductive_interconnect_element_terminal_link** is a type of shape_aspect and a shape_aspect_relationship that implements the ARM concept of *Conductive_interconnect_element_terminal_link* (5.536.10).

5.537.7
conductive_interconnect_element_with_pre_defined_transitions
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *conductive_interconnect_element* (5.537.5) and *item_identified_representation_usage* (4.20.5) that represents the conductive interconnect element with pre defined transitions *entity* (3.2.9)

Note 1 to entry: A **conductive_interconnect_element_with_pre_defined_transitions** is a type of conductive_interconnect_element and a type of item_identified_representation_usage that implements the ARM concept of *Conductive_interconnect_element_with_pre_defined_transitions* (5.536.11).

5.537.8
connected_area_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *area_component* (5.537.2) that represents the connected area component *entity* (3.2.9)

Note 1 to entry: A **connected_area_component** is a type of area_component that implements the ARM concept of *Connected_area_component* (5.536.13)

5.537.9
cutout
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *inter_stratum_feature* (5.537.21) that represents the cutout *entity* (3.2.9)

Note 1 to entry: A **cutout** is a type of inter_stratum_feature that implements the ARM concept of *Cutout* (5.536.15).

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5.537.10
cutout_edge_segment
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *inter_stratum_feature* (5.537.21) and *shape_aspect_relationship* (4.19.12) that represents the cutout edge segment *entity* (3.2.9)

Note 1 to entry: A **cutout_edge_segment** is a type of inter_stratum_feature and a shape_aspect_relationship that implements the ARM concept of *Cutout_edge_segment* (5.536.16).

5.537.11
derived_stratum
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *stratum* (5.537.73) that represents the derived stratum *entity* (3.2.9)

Note 1 to entry: A **derived_stratum** is a type of stratum that implements the ARM concept of *Derived_stratum* (5.536.18).

5.537.12
design_layer_stratum
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *stratum* (5.537.73) that represents the design layer stratum *entity* (3.2.9)

Note 1 to entry: A **design_layer_stratum** is a type of stratum that implements the ARM concept of *Design_layer_stratum* (5.536.19).

5.537.13
dielectric_material_passage
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *inter_stratum_feature* (5.537.21) that represents the dielectric material passage *entity* (3.2.9)

Note 1 to entry: A **dielectric_material_passage** is a type of inter_stratum_feature that implements the ARM concept of *Dielectric_material_passage* (5.536.20).

5.537.14
documentation_layer_stratum
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *stratum* (5.537.73) that represents the documentation layer stratum *entity* (3.2.9)

Note 1 to entry: A **documentation_layer_stratum** is a type of stratum that implements the ARM concept of *Documentation_layer_stratum* (5.536.21).

5.537.15
electrical_isolation_laminate_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *material_removal_laminate_component* (5.537.43) that represents the electrical isolation laminate component *entity* (3.2.9)

Note 1 to entry: A **electrical_isolation_laminate_component** is a type of material_removal_laminate_component that implements the ARM concept of *Electrical_isolation_laminate_component* (5.536.22).

5.537.16
fiducial
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *laminate_component* (5.537.31) that represents the fiducial *entity* (3.2.9)

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Note 1 to entry: A **fiducial** is a type of laminate_component that implements the ARM concept of *Fiducial* (5.536.25).

5.537.17
fiducial_stratum_feature
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *stratum_feature* (5.537.74) that represents the fiducial stratum feature *entity* (3.2.9)

Note 1 to entry: A **fiducial_stratum_feature** is a type of stratum_feature that implements the ARM concept of *Fiducial_stratum_feature* (5.536.26).

5.537.18
filled_via
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *via* (5.537.87) that represents the filled via *entity* (3.2.9)

5.537.19
footprint_occurrence
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *structured_layout_component* (5.537.80) that represents the footprint occurrence *entity* (3.2.9)

Note 1 to entry: A **footprint_occurrence** is a type of structured_layout_component that implements the ARM concept of *Footprint_occurrence* (5.536.27).

5.537.20
footprint_occurrence_product_definition_relationship
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *structured_layout_component_sub_assembly_relationship* (5.537.81) that represents the footprint occurrence product definition relationship *entity* (3.2.9)

5.537.21
inter_stratum_feature
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *laminate_component* (5.537.31) that represents the inter stratum feature *entity* (3.2.9)

Note 1 to entry: An **inter_stratum_feature** is a type of laminate_component that implements the ARM concepts of:

— *Cutout* (5.536.15);

— *Cutout_edge_segment* (5.536.16);

— *Dielectric_material_passage* (5.536.20);

— *Inter_stratum_feature* (5.536.32);

— *Interconnect_module_edge* (5.536.38);

— *Interconnect_module_edge_segment* (5.536.39);

— *Partially_plated_cutout* (5.536.66);

— *Partially_plated_interconnect_module_edge* (5.536.67);

— *Physical_connectivity_interrupting_cutout* (5.536.68);

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— *Unsupported_passage* (5.536.108).

5.537.22
interconnect_module_design_view
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *physical_unit* (5.596.4) that represents the interconnect module design view *entity* (3.2.9)

Note 1 to entry: An **interconnect_module_design_view** is a type of physical_unit that implement the ARM concept of *Interconnect_module_design_view* (5.536.37).

5.537.23
interconnect_module_edge
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *inter_stratum_feature* (5.537.21) that represents the interconnect module edge *entity* (3.2.9)

Note 1 to entry: An **interconnect_module_edge** is a type of inter_stratum_feature that implements the ARM concept of *Interconnect_module_edge* (5.536.38).

5.537.24
interconnect_module_edge_segment
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *inter_stratum_feature* (5.537.21) and *shape_aspect_relationship* (4.19.12) that represents the interconnect module edge segment *entity* (3.2.9)

Note 1 to entry: An **interconnect_module_edge_segment** is a type of inter_stratum_feature and shape_aspect_relationship that implements the ARM concept of *Interconnect_module_edge_segment* (5.536.39).

5.537.25
interconnect_module_macro_terminal
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *interconnect_module_terminal* (5.518.4) that represents the interconnect module macro terminal *entity* (3.2.9)

5.537.26
interface_access_component_definition
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *laminate_component* (5.537.31) that represents the interface access component definition *entity* (3.2.9)

Note 1 to entry: An **interface_access_component_definition** is a type of laminate_component that implements the ARM concept of *Interface_access_stratum_feature_template_component* (5.536.42).

5.537.27
interface_access_material_removal_laminate_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *material_removal_laminate_component* (5.537.43) that represents the interface access material removal laminate component *entity* (3.2.9)

5.537.28
interface_access_stratum_feature_template_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *stratum_feature_template_component* (5.537.77) that represents the interface access stratum feature template component *entity* (3.2.9)

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5.537.29
internal_probe_access_area
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *probe_access_area* (5.537.70) that represents the internal probe access area *entity* (3.2.9)

5.537.30
join_shape_aspect
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the join shape aspect *entity* (3.2.9)

Note 1 to entry: A **join_shape_aspect** is a type of shape_aspect that implements the ARM concepts of:

— *Inter_stratum_join_relationship* (5.536.33);

— *Intra_stratum_join_relationship* (5.536.46);

— *Join_relationship* (5.536.47);

— *Unrouted_join_relationship* (5.536.106).

5.537.31
laminate_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *assembly_component* (5.685.1) that represents the laminate component *entity* (3.2.9)

Note 1 to entry: A **laminate_component** is a type of assembly_component that implements the ARM concept of *Laminate_component* (5.536.48).

5.537.32
laminate_component_feature
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *component_feature* (5.479.1) that represents the laminate component feature *entity* (3.2.9)

Note 1 to entry: A **laminate_component_feature** is a type of component_feature that implements the ARM concept of *Laminate_component_feature* (5.536.49).

5.537.33
laminate_component_interface_terminal
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *laminate_component_feature* (5.537.32) that represents the laminate component interface terminal *entity* (3.2.9)

5.537.34
laminate_component_join_terminal
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *laminate_component_feature* (5.537.32) and *component_terminal* (5.479.4) that represents the laminate component join terminal *entity* (3.2.9)

Note 1 to entry: A **laminate_component_join_terminal** is a type of component_terminal and a type of laminate_component_feature that implements the ARM concept of:

— *Component_termination_passage_join_terminal* (5.536.6);

— *Embedded_physical_component_terminal* (5.536.23);

— *Laminate_component_join_terminal* (5.536.51).

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5.537.35
laminate_group_component_make_from_relationship
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *make_from_usage_option* (4.25.5) that represents the laminate group component make from relationship *entity* (3.2.9)

Note 1 to entry: A **laminate_group_component_make_from_relationship** is a type of make_from_usage_option that implements the ARM concept of *Laminate_group_component_make_from_relationship* (5.536.52).

5.537.36
generic_laminate_text_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *laminate_component* (5.537.31) that represents the generic laminate text component *entity* (3.2.9)

Note 1 to entry: A **generic_laminate_text_component** is a type of laminate_component that implements the ARM concept of *Generic_laminate_text_component* (5.536.54).

5.537.37
laminate_text_string_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *array_placement_group* (5.477.1) and *laminate_component* (5.537.31) that represents the laminate text string component *entity* (3.2.9)

Note 1 to entry: A **laminate_text_string_component** is a type of array_placement_group and a type of laminate_component that implements the ARM concept of *Laminate_text_string_component* (5.536.55).

5.537.38
layer_connection_point
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the layer connection point *entity* (3.2.9)

Note 1 to entry: A **layer_connection_point** is a type of shape_aspect that implements the ARM concepts of:

— *Dependently_located_layer_connection_point* (5.536.17);

— *Explicitly_located_layer_connection_point* (5.536.24);

— *Layer_connection_point* (5.536.56).

5.537.39
layout_junction
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the layout junction *entity* (3.2.9)

Note 1 to entry: A **layout_junction** is a type of shape_aspect that implements the ARM concept of *Layout_junction* (5.536.57).

5.537.40
layer_stack_region
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *instanced_feature* (4.42.27) that represents the layer stack region *entity* (3.2.9)

Note 1 to entry: A **layer_stack_region** is a type of instanced_feature that implements the ARM concept of *Layer_stack_region* (5.536.53).

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5.537.41
layered_interconnect_module_design_view
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *interconnect_module_design_view* (5.537.22) that represents the layered interconnect module design view *entity* (3.2.9)

Note 1 to entry: A **layered_interconnect_module_design_view** is a type of interconnect_module_design_view that implements the ARM concept of *Layered_interconnect_module_design_view* (5.536.35).

5.537.42
layered_interconnect_panel_design_view
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *layered_interconnect_module_design_view* (5.537.41) that represents the layered interconnect panel design view *entity* (3.2.9)

Note 1 to entry: A **layered_interconnect_panel_design_view** is a type of layered_interconnect_module_design_view that implements the ARM concept of *Layered_interconnect_panel_design_view* (5.536.36).

5.537.43
material_removal_laminate_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *laminate_component* (5.537.31) that represents the material removal laminate component *entity* (3.2.9)

Note 1 to entry: A **material_removal_laminate_component** is a type of laminate_component that implements the ARM concept of *Material_removal_laminate_component* (5.536.59).

5.537.44
material_removal_structured_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *structured_layout_component* (5.537.80) that represents the material removal structured component *entity* (3.2.9)

Note 1 to entry: A **material_removal_structured_component** is a type of structured_layout_component that implements the ARM concept of *Material_removal_structured_component* (5.536.60).

5.537.45
multi_layer_component_definition
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *laminate_component* (5.537.31) that represents the multi layer component definition *entity* (3.2.9)

Note 1 to entry: A **multi_layer_component_definition** is a type of laminate_component that implements the ARM concept of *Multi_layer_stratum_feature_template_component* (5.536.63).

5.537.46
multi_layer_material_removal_laminate_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *material_removal_laminate_component* (5.537.43) that represents the multi layer material removal laminate component *entity* (3.2.9)

Note 1 to entry: A **multi_layer_material_removal_laminate_component** is a type of material_removal_laminate_component that implements the ARM concept of *Multi_layer_material_removal_laminate_component* (5.536.61).

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5.537.47
multi_layer_stratum_feature_template_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *stratum_feature_template_component* (5.537.77) that represents the multi layer stratum feature template component *entity* (3.2.9)

Note 1 to entry: A **multi_layer_stratum_feature_template_component** is a type of stratum_feature_template_component that implements the ARM concept of *Multi_layer_stratum_feature_template_component* (5.536.63).

5.537.48
multi_stratum_special_symbol_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *structured_layout_component* (5.537.80) that represents the multi stratum special symbol component *entity* (3.2.9)

Note 1 to entry: A **multi_stratum_special_symbol_component** is a type of structured_layout_component that implements the ARM concept of *Multi_stratum_special_symbol_component* (5.536.62).

5.537.49
material_removal_laminate_text_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *generic_laminate_text_component* (5.537.36) that represents the material removal laminate text component *entity* (3.2.9)

Note 1 to entry: A **material_removal_laminate_text_component** is a type of generic_laminate_text_component that implements the ARM concept of *Material_removal_laminate_text_component* (5.536.64).

5.537.50
padstack_occurrence
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *structured_layout_component* (5.537.80) that represents the padstack occurrence *entity* (3.2.9)

Note 1 to entry: A **padstack_occurrence** is a type of structured_layout_component that implements the ARM concept of *Padstack_occurrence* (5.536.65).

5.537.51
padstack_occurrence_product_definition_relationship
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) and *next_assembly_usage_occurrence_relationship* (5.589.4) that represents the padstack occurrence product definition relationship *entity* (3.2.9)

Note 1 to entry: A **padstack_occurrence_product_definition_relationship** is a type of next_assembly_usage_occurrence_relationship and property_definition.

5.537.52
partially_plated_cutout
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *cutout* (5.537.9) that represents the partially plated cutout *entity* (3.2.9)

Note 1 to entry: A **partially_plated_cutout** is a type of cutout that implements the ARM concept of *Partially_plated_cutout* (5.536.66).

5.537.53

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partially_plated_interconnect_module_edge
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *interconnect_module_edge* (5.537.23) that represents the partially plated interconnect module edge *entity* (3.2.9)

Note 1 to entry: A **partially_plated_interconnect_module_edge** is a type of interconnect_module_edge that implements the ARM concept of *Partially_plated_interconnect_module_edge* (5.536.67).

5.537.54
physical_connectivity_interrupting_cutout
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *cutout* (5.537.9) that represents the physical connectivity interrupting cutout *entity* (3.2.9)

Note 1 to entry: A **physical_connectivity_interrupting_cutout** is a type of cutout that implements the ARM concept of *Physical_connectivity_interrupting_cutout* (5.536.68).

5.537.55
physical_network
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the physical network *entity* (3.2.9)

Note 1 to entry: A **physical_network** is a type of shape_aspect that implements the ARM concept of *Generic_physical_network* (5.536.29).

5.537.56
physical_network_group
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the physical network group *entity* (3.2.9)

Note 1 to entry: A **physical_network_group** is a type of group that implements the ARM concept of *Physical_network_group* (5.536.69).

5.537.57
pre_defined_physical_network_group
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *physical_network_group* (5.537.56) that represents the pre defined physical network group *entity* (3.2.9)

Note 1 to entry: A **pre_defined_physical_network_group** is a type of physical_network_group that implements the ARM concepts of *Pre_defined_physical_network_group* (5.536.70).

5.537.58
externally_defined_physical_network_group
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *physical_network_group* (5.537.56) that represents the externally defined physical network group *entity* (3.2.9)

Note 1 to entry: A **externally_defined_physical_network_group** is a type of physical_network_group that implements the ARM concept of *Externally_defined_physical_network_group* (5.536.71).

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5.537.59
physical_network_group_element_relationship
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *group_relationship* (4.12.2) that represents the physical network group element relationship *entity* (3.2.9)

Note 1 to entry: A **physical_network_group_element_relationship** is a type of group_relationship that implements the ARM concept of *Physical_network_group_element_relationship* (5.536.72).

5.537.60
pre_defined_physical_network_group_element_relationship
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *physical_network_group_element_relationship* (5.537.59) that represents the pre defined physical network group element relationship *entity* (3.2.9)

Note 1 to entry: A **pre_defined_physical_network_group_element_relationship** is a type of physical_network_group_element_relationship that implements the ARM concepts of *Pre_defined_physical_network_group_element_relationship* (5.536.75).

5.537.61
externally_defined_physical_network_group_element_relationship
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *physical_network_group_element_relationship* (5.537.59) that represents the externally defined physical network group element relationship *entity* (3.2.9)

Note 1 to entry: A **externally_defined_physical_network_group_element_relationship** is a type of physical_network_group_element_relationship that implements the ARM concept of *Externally_defined_physical_network_group_element_relationship* (5.536.76).

5.537.62
physical_network_supporting_inter_stratum_feature
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *plated_inter_stratum_feature* (5.537.67) that represents the physical network supporting inter stratum feature *entity* (3.2.9)

Note 1 to entry: A **physical_network_supporting_inter_stratum_feature** is a type of plated_inter_stratum_feature that implements the ARM concept of *Physical_network_supporting_inter_stratum_feature* (5.536.73).

5.537.63
plated_cutout
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *cutout* (5.537.9) and *plated_inter_stratum_feature* (5.537.67) that represents the plated cutout *entity* (3.2.9)

Note 1 to entry: A **plated_cutout** is a type of cutout and a type of plated_inter_stratum_feature that implements the ARM concept of *Plated_cutout* (5.536.77).

5.537.64
plated_cutout_edge_segment
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *cutout_edge_segment* (5.537.10) and *plated_inter_stratum_feature* (5.537.67) that represents the plated cutout edge segment *entity* (3.2.9)

Note 1 to entry: A **plated_cutout_edge_segment** is a type of cutout_edge_segment and plated_inter_stratum_feature that implements the ARM concept of *Plated_cutout_edge_segment* (5.536.78).

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5.537.65
plated_interconnect_module_edge
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *interconnect_module_edge* (5.537.23) and *plated_inter_stratum_feature* (5.537.67) that represents the plated interconnect module edge *entity* (3.2.9)

Note 1 to entry: A **plated_interconnect_module_edge** is a type of interconnect_module_edge and a type of plated_inter_stratum_feature that implements the ARM concept of *Plated_interconnect_module_edge* (5.536.80).

5.537.66
plated_interconnect_module_edge_segment
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *interconnect_module_edge_segment* (5.537.24) and *plated_inter_stratum_feature* (5.537.67) that represents the plated interconnect module edge segment *entity* (3.2.9)

Note 1 to entry: A **plated_interconnect_module_edge_segment** is a type of interconnect_module_edge_segment and a type of plated_inter_stratum_feature that implements the ARM concept of *Plated_interconnect_module_edge_segment* (5.536.81).

5.537.67
plated_inter_stratum_feature
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *inter_stratum_feature* (5.537.21) that represents the plated inter stratum feature *entity* (3.2.9)

Note 1 to entry: A **plated_inter_stratum_feature** is a type of inter_stratum_feature that implements the ARM concepts of:

— *Inter_stratum_join_implementation* (5.536.45);

— *Physical_network_supporting_inter_stratum_feature* (5.536.73);

— *Plated_cutout* (5.536.77);

— *Plated_inter_stratum_feature* (5.536.79);

— *Plated_interconnect_module_edge* (5.536.80).

5.537.68
plated_passage
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *plated_inter_stratum_feature* (5.537.67) that represents the plated passage *entity* (3.2.9)

Note 1 to entry: A **plated_passage** is a type of plated_inter_stratum_feature that implements the ARM concepts of:

— *Blind_via* (5.630.1);

— *Buried_via* (5.630.2);

— *Component_termination_passage* (5.536.4);

— *Interfacial_connection* (5.630.3);

— *Non_conductive_base_blind_via* (5.630.4);

— *Plated_conductive_base_blind_via* (5.630.5);

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— *Plated_passage* (5.536.82);

— *Via* (5.536.109).

5.537.69
primary_stratum_indicator_symbol
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *single_stratum_special_symbol_component* (5.537.72) that represents the primary stratum indicator symbol *entity* (3.2.9)

Note 1 to entry: A **primary_stratum_indicator_symbol** is a type of single_stratum_special_symbol_component that implements the ARM concepts of *Primary_stratum_indicator_symbol* (5.536.84).

5.537.70
probe_access_area
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *laminate_component* (5.537.31) and *shape_aspect* (4.19.10) that represents the probe access area *entity* (3.2.9)

Note 1 to entry: A **probe_access_area** is a type of laminate_component and a type of shape_aspect that implements the ARM concepts of *Internal_probe_access_area* (5.536.43) and *Probe_access_area* (5.536.85).

5.537.71
region_based_derived_pattern
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the region based derived pattern *entity* (3.2.9)

Note 1 to entry: A **region_based_derived_pattern** is a type of shape_aspect that implements the ARM concepts of *Region_based_derived_pattern* (5.536.86).

5.537.72
single_stratum_special_symbol_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *structured_layout_component* (5.537.80) that represents the single stratum special symbol component *entity* (3.2.9)

Note 1 to entry: A **single_stratum_special_symbol_component** is a type of structured_layout_component that implements the ARM concepts of *Single_stratum_special_symbol_component* (5.536.89).

5.537.73
stratum
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) and *product_definition_shape* (4.19.8) that represents the stratum *entity* (3.2.9)

Note 1 to entry: A **stratum** is a type of product_definition and a type of product_definition_shape that implements the ARM concepts of:

— *Design_layer_stratum* (5.536.19);

— *Documentation_layer_stratum* (5.536.21);

— *Stratum* (5.536.90).

5.537.74

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stratum_feature
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the stratum feature *entity* (3.2.9)

Note 1 to entry: A **stratum_feature** is a type of shape_aspect that implements the ARM concepts of:

— *Conductive_filled_area* (5.536.7);

— *Conductor* (5.536.12);

— *Connected_filled_area* (5.536.14);

— *Stratum_feature* (5.536.93).

5.537.75
stratum_feature_based_derived_pattern
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *property_definition_relationship* (4.32.6) that represents the stratum feature based derived pattern *entity* (3.2.9)

Note 1 to entry: A **stratum_feature_based_derived_pattern** is a type of characterized_object and a type of property_definition_relationship that implements the ARM concept of *Stratum_feature_based_derived_pattern* (5.536.95).

5.537.76
stratum_feature_conductive_join
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the stratum feature conductive join *entity* (3.2.9)

Note 1 to entry: A **stratum_feature_conductive_join** is a type of product_definition_relationship that implements the ARM concept of *Stratum_feature_conductive_join* (5.536.96).

5.537.77
stratum_feature_template_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *laminate_component* (5.537.31) that represents the stratum feature template component *entity* (3.2.9)

Note 1 to entry: A **stratum_feature_template_component** is a type of laminate_component that implements the ARM concept of *Stratum_feature_template_component* (5.536.97).

5.537.78
stratum_feature_template_component_with_stratum_feature
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *stratum_feature_template_component* (5.537.77) and *stratum_feature* (5.537.74) and *shape_aspect_relationship* (4.19.12) that represents the stratum feature template component with stratum feature *entity* (3.2.9)

Note 1 to entry: A **stratum_feature_template_component_with_stratum_feature** is a type of shape_aspect_relationship, a type of stratum_feature, and a type of stratum_feature_template_component that implements the ARM concept of *Stratum_feature_template_component_with_stratum_feature* (5.536.98).

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5.537.79
stratum_surface
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the stratum surface *entity* (3.2.9)

Note 1 to entry: A **stratum_surface** is a type of shape_aspect that implements the ARM concepts of *Stratum_surface* (5.536.99) and *Stratum_average_surface* (5.536.91).

5.537.80
structured_layout_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *assembly_group_component* (5.477.2) that represents the structured layout component *entity* (3.2.9)

Note 1 to entry: A **structured_layout_component** is a type of assembly_group_component that implements the ARM concept of *Structured_layout_component* (5.536.100).

5.537.81
structured_layout_component_sub_assembly_relationship
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *next_assembly_usage_occurrence_relationship* (5.589.4) that represents the structured layout component sub assembly relationship *entity* (3.2.9)

Note 1 to entry: A **structured_layout_component_sub_assembly_relationship** is a type of next_assembly_usage_occurrence_relationship that implements the ARM concept of *Structured_layout_component_sub_assembly_relationship* (5.536.101).

5.537.82
structured_layout_component_sub_assembly_relationship_with_component
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *structured_layout_component_sub_assembly_relationship* (5.537.81) and *assembly_component* (5.685.1) that represents the structured layout component sub assembly relationship with component *entity* (3.2.9)

Note 1 to entry: A **structured_layout_component_sub_assembly_relationship_with_component** is a type of assembly_component and a type of structured_layout_component_sub_assembly_relationship that implements the ARM concept of *Structured_layout_component_sub_assembly_relationship_with_component* (5.536.102).

5.537.83
unplated_cutout_edge_segment
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *cutout_edge_segment* (5.537.10) that represents the unplated cutout edge segment *entity* (3.2.9)

Note 1 to entry: A **unplated_cutout_edge_segment** is a type of cutout_edge_segment that implements the ARM concept of *Unplated_cutout_edge_segment* (5.536.103).

5.537.84
unplated_interconnect_module_edge_segment
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *interconnect_module_edge_segment* (5.537.24) that represents the unplated interconnect module edge segment *entity* (3.2.9)

Note 1 to entry: A **unplated_interconnect_module_edge_segment** is a type of interconnect_module_edge_segment that implements the ARM concept of *Unplated_interconnect_module_edge_segment* (5.536.104).

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5.537.85
unrouted_conductive_interconnect_element
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *conductive_interconnect_element* (5.537.5) that represents the unrouted conductive interconnect element *entity* (3.2.9)

Note 1 to entry: A **unrouted_conductive_interconnect_element** is a type of conductive_interconnect_element that implements the ARM concept of *Unrouted_conductive_interconnect_element* (5.536.105).

5.537.86
unsupported_passage
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *inter_stratum_feature* (5.537.21) that represents the unsupported passage *entity* (3.2.9)

Note 1 to entry: A **unsupported_passage** is a type of inter_stratum_feature that implements the ARM concept of *Unsupported_passage* (5.536.108).

5.537.87
via
<application module: Layered_interconnect_module_design_mim> *entity data type* (3.2.10) that is a type of *plated_passage* (5.537.68) that represents the via *entity* (3.2.9)

Note 1 to entry: A **via** is a type of plated_passage that implements the ARM concept of *Via* (5.536.109).

5.538 Layered_interconnect_module_with_printed_component_design_arm

5.538.1
Basic_multi_stratum_printed_component
<application module: Layered_interconnect_module_with_printed_component_design_arm> *application object* (3.1.78) that is a type of *Printed_component* (5.538.5) that represents the basic multi stratum printed component *entity* (3.2.9)

5.538.2
Tiebar_printed_component
<application module: Layered_interconnect_module_with_printed_component_design_arm> *application object* (3.1.78) that is a type of *Printed_component* (5.538.5) and *Structured_layout_component* (5.536.100) that represents the tiebar printed component *entity* (3.2.9)

Note 1 to entry: A **Tiebar_printed_component** is a type of Printed_component and a type of Structured_layout_component.

5.538.3
Multi_stratum_printed_component
<application module: Layered_interconnect_module_with_printed_component_design_arm> *application object* (3.1.78) that is a type of *Printed_component* (5.538.5) and *Structured_layout_component* (5.536.100) that represents the multi stratum printed component *entity* (3.2.9)

Note 1 to entry: A **Multi_stratum_printed_component** is a type of Printed_component and a type of Structured_layout_component.

5.538.4
Single_stratum_printed_component
<application module: Layered_interconnect_module_with_printed_component_design_arm> *application object* (3.1.78) that is a type of *Printed_component* (5.538.5) and

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Structured_layout_component (5.536.100) that represents the single stratum printed component *entity* (3.2.9)

Note 1 to entry: A **Single_stratum_printed_component** is a type of Printed_component and a type of Structured_layout_component.

5.538.5
Printed_component
<application module: Layered_interconnect_module_with_printed_component_design_arm> *application object* (3.1.78) that is a type of *Assembly_component* (5.684.1) and *Single_instance* (5.79.6) that represents the printed component *entity* (3.2.9)

Note 1 to entry: A **Printed_component** is a type of Assembly_component and a type of Single_instance.

5.538.6
Printed_component_join_terminal
<application module: Layered_interconnect_module_with_printed_component_design_arm> *application object* (3.1.78) that is a type of *Laminate_component_join_terminal* (5.536.51) that represents the printed component join terminal *entity* (3.2.9)

5.538.7
Printed_connector_component
<application module: Layered_interconnect_module_with_printed_component_design_arm> *application object* (3.1.78) that is a type of *Printed_component* (5.538.5) that represents the printed connector component *entity* (3.2.9)

5.538.8
Printed_connector_component_interface_terminal
<application module: Layered_interconnect_module_with_printed_component_design_arm> *application object* (3.1.78) that is a type of *Laminate_component_interface_terminal* (5.536.50) that represents the printed connector component interface terminal *entity* (3.2.9)

5.538.9
Routed_transmission_line
<application module: Layered_interconnect_module_with_printed_component_design_arm> *application object* (3.1.78) that is a type of *Assembly_component* (5.684.1) and *Single_instance* (5.79.6) that represents the routed transmission line *entity* (3.2.9)

Note 1 to entry: A **Routed_transmission_line** is a type of Assembly_component and a type of Single_instance included where the explicit layout pattern is a design property and where the requirements are consistent along a path.

5.539 Layered_interconnect_module_with_printed_component_design_mim

5.539.1
basic_multi_stratum_printed_component
<application module: Layered_interconnect_module_with_printed_component_design_mim> *entity data type* (3.2.10) that is a type of *printed_component* (5.539.4) that represents the basic multi stratum printed component *entity* (3.2.9)

Note 1 to entry: A **basic_multi_stratum_printed_component** is a type of printed_component that implements the ARM concept of *Basic_multi_stratum_printed_component* (5.538.1).

5.539.2

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multi_stratum_printed_component
<application module: Layered_interconnect_module_with_printed_component_design_mim> *entity data type* (3.2.10) that is a type of *printed_component* (5.539.4) and *structured_layout_component* (5.537.80) that represents the multi stratum printed component *entity* (3.2.9)

Note 1 to entry: A **multi_stratum_printed_component** is a type of printed_component and a type of structured_layout_component that implements the ARM concept of *Multi_stratum_printed_component* (5.538.3).

5.539.3
printed_connector_component
<application module: Layered_interconnect_module_with_printed_component_design_mim> *entity data type* (3.2.10) that is a type of *printed_component* (5.539.4) that represents the printed connector component *entity* (3.2.9)

Note 1 to entry: A **printed_connector_component** is a type of printed_component that implements the ARM concept of *Printed_connector_component* (5.538.7).

5.539.4
printed_component
<application module: Layered_interconnect_module_with_printed_component_design_mim> *entity data type* (3.2.10) that is a type of *assembly_component* (5.685.1) that represents the printed component *entity* (3.2.9)

Note 1 to entry: A **printed_component** is a type of assembly_component that implements the ARM concepts of:

— *Layout_macro_component* (5.540.1);

— *Printed_component* (5.538.5);

— *Printed_connector_component* (5.538.7).

5.539.5
routed_transmission_line
<application module: Layered_interconnect_module_with_printed_component_design_mim> *entity data type* (3.2.10) that is a type of *assembly_component* (5.685.1) that represents the routed transmission line *entity* (3.2.9)

Note 1 to entry: A **routed_transmission_line** is a type of assembly_component that implements the ARM concept of *Routed_transmission_line* (5.538.9).

5.539.6
single_stratum_printed_component
<application module: Layered_interconnect_module_with_printed_component_design_mim> *entity data type* (3.2.10) that is a type of *printed_component* (5.539.4) and *structured_layout_component* (5.537.80) that represents the single stratum printed component *entity* (3.2.9)

Note 1 to entry: A **single_stratum_printed_component** is a type of printed_component and a type of structured_layout_component that implements the ARM concept of *Single_stratum_printed_component* (5.538.4).

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5.539.7
tiebar_printed_component
<application module: Layered_interconnect_module_with_printed_component_design_mim> *entity data type* (3.2.10) that is a type of *printed_component* (5.539.4) and *structured_layout_component* (5.537.80) that represents the tiebar printed component *entity* (3.2.9)

Note 1 to entry: A **tiebar_printed_component** is a type of printed_component and a type of structured_layout_component that implements the ARM concept of *Tiebar_printed_component* (5.538.2).

5.540 Layout_macro_definition_arm

5.540.1
Layout_macro_component
<application module: Layout_macro_definition_arm> *application object* (3.1.78) that is a type of *Printed_component* (5.538.5) that represents the layout macro component *entity* (3.2.9)

5.540.2
Layout_macro_definition
<application module: Layout_macro_definition_arm> *application object* (3.1.78) that is a type of *Layered_interconnect_module_design_view* (5.536.35) that represents the layout macro definition *entity* (3.2.9)

5.540.3
Layout_macro_definition_terminal_to_usage_terminal_assignment
<application module: Layout_macro_definition_arm> *application object* (3.1.78) that represents the layout macro definition terminal to usage terminal assignment *entity* (3.2.9)

Note 1 to entry: A **Layout_macro_definition_terminal_to_usage_terminal_assignment** is the association between the *Printed_part_template_terminal* (5.603.15) and one of several fabricated features.

5.540.4
Layout_macro_floor_plan_template
<application module: Layout_macro_definition_arm> *application object* (3.1.78) that is a type of *Printed_part_template* (5.603.9) that represents the layout macro floor plan template *entity* (3.2.9)

5.541 Layout_macro_definition_mim

5.541.1
layout_macro_component
<application module: Layout_macro_definition_mim> *entity data type* (3.2.10) that is a type of *printed_component* (5.539.4) that represents the layout macro component *entity* (3.2.9)

Note 1 to entry: A **layout_macro_component** is a type of printed_component that implements the ARM concept of *Layout_macro_component* (5.540.1).

5.541.2
layout_macro_definition
<application module: Layout_macro_definition_mim> *entity data type* (3.2.10) that is a type of *layered_interconnect_module_design_view* (5.537.41) that represents the layout macro definition *entity* (3.2.9)

Note 1 to entry: An **layout_macro_definition** is a type of layered_interconnect_module_design_view that implements the ARM concept of *Layout_macro_definition* (5.540.2).

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5.541.3
layout_macro_definition_terminal_to_usage_terminal_assignment
<application module: Layout_macro_definition_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the layout macro definition terminal to usage terminal assignment *entity* (3.2.9)

Note 1 to entry: A **layout_macro_definition_terminal_to_usage_terminal_assignment** is a type of shape_aspect and of shape_aspect_relationship that implements the ARM concept of *Layout_macro_definition_terminal_to_usage_terminal_assignment* (5.540.3).

5.541.4
layout_macro_floor_plan_template
<application module: Layout_macro_definition_mim> *entity data type* (3.2.10) that is a type of *printed_part_template* (5.604.8) that represents the layout macro floor plan template *entity* (3.2.9)

Note 1 to entry: A **layout_macro_floor_plan_template** is a type of printed_part_template that implements the ARM concepts of *Layout_macro_floor_plan_template* (5.540.4).

5.542 Manifold_subsurface_arm

5.542.1
Manifold_subsurface_model
<application module: Manifold_subsurface_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the manifold subsurface model *entity* (3.2.9)

5.543 Model_parameter_arm

5.543.1
Category_model_parameter
<application module: Model_parameter_arm> *application object* (3.1.78) that is a type of *Model_parameter* (5.543.3) that represents the category model parameter *entity* (3.2.9)

5.543.2
Independent_property_with_unit
<application module: Model_parameter_arm> *application object* (3.1.78) that is a type of *Independent_property* (5.44.1) that represents the independent property with unit *entity* (3.2.9)

5.543.3
Model_parameter
<application module: Model_parameter_arm> *application object* (3.1.78) that is a type of *Independent_property* (5.44.1) that represents the model parameter *entity* (3.2.9)

5.543.4
Model_parameter_with_unit
<application module: Model_parameter_arm> *application object* (3.1.78) that is a type of *Independent_property_with_unit* (5.543.2) and *Model_parameter* (5.543.3) that represents the model parameter with unit *entity* (3.2.9)

Note 1 to entry: A **Model_parameter_with_unit** is a type of Independent_property_with_unit and a type of Model_parameter that includes a specification of the allowed units to use for the parameter.

5.543.5
Parameter_assignment
<application module: Model_parameter_arm> *application object* (3.1.78) that is a type of *Property_definition_representation* (5.40.5) that represents the parameter assignment *entity* (3.2.9)

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5.543.6
Parameter_assignment_override
<application module: Model_parameter_arm> *application object* (3.1.78) that represents the parameter assignment override *entity* (3.2.9)

Note 1 to entry: A **Parameter_assignment_override** is the association between a *Parameter_assignment* (5.543.5) and another Parameter_assignment which replaces or overrides the first Parameter_assignment.

5.543.7
Schema_based_model_parameter
<application module: Model_parameter_arm> *application object* (3.1.78) that is a type of *Model_parameter* (5.543.3) that represents the schema based model parameter *entity* (3.2.9)

5.543.8
Product_specific_parameter_value_assignment
<application module: Model_parameter_arm> *application object* (3.1.78) that represents the product specific parameter value assignment *entity* (3.2.9)

Note 1 to entry: A **Product_specific_parameter_value_assignment** is the assignment of a value to a parameter in the context of a specific *Product* (5.28.1).

5.543.9
Test_method_based_parameter_assignment
<application module: Model_parameter_arm> *application object* (3.1.78) that is a type of *Parameter_assignment* (5.543.5) that represents the test method based parameter assignment *entity* (3.2.9)

5.544 Model_parameter_mim

5.544.1
category_model_parameter
<application module: Model_parameter_mim> *entity data type* (3.2.10) that is a type of *model_parameter* (5.544.3) that represents the category model parameter *entity* (3.2.9)

Note 1 to entry: A **category_model_parameter** is a type of model_parameter that implements the ARM concept of *Category_model_parameter* (5.543.1).

5.544.2
default_value_property_definition_representation
<application module: Model_parameter_mim> *entity data type* (3.2.10) that is a type of *property_definition_representation* (4.20.6) that represents the default value property definition representation *entity* (3.2.9)

5.544.3
model_parameter
<application module: Model_parameter_mim> *entity data type* (3.2.10) that is a type of *general_property* (4.19.5) that represents the model parameter *entity* (3.2.9)

Note 1 to entry: A **model_parameter** is a type of *descriptive_representation_item* (4.34.1), of *group_assignment* (4.15.32) and of general_property that implements the ARM concept of *Model_parameter* (5.543.3).

5.544.4
model_parameter_with_unit
<application module: Model_parameter_mim> *entity data type* (3.2.10) that is a type of *model_parameter* (5.544.3) that represents the model parameter with unit *entity* (3.2.9)

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Note 1 to entry: A **model_parameter_with_unit** is a type of model_parameter that implements the ARM concept of *Model_parameter_with_unit* (5.543.4).

5.544.5
parameter_assignment_override
<application module: Model_parameter_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) and *representation_relationship* (4.41.20) that represents the parameter assignment override *entity* (3.2.9)

Note 1 to entry: A **parameter_assignment_override** is a type of representation and of representation_relationship that implements the ARM concept of *Parameter_assignment_override* (5.543.6).

5.544.6
parameter_assignment
<application module: Model_parameter_mim> *entity data type* (3.2.10) that is a type of *property_definition_representation* (4.20.6) and *representation* (4.41.13) that represents the parameter assignment *entity* (3.2.9)

Note 1 to entry: A **parameter_assignment** is a type of property_definition_representation and of representation.

5.544.7
product_specific_parameter_value_assignment
<application module: Model_parameter_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *product_related_product_category* (4.18.21) that represents the product specific parameter value assignment *entity* (3.2.9)

Note 1 to entry: A **product_specific_parameter_value_assignment** is a type of characterized_object and of product_related_product_category that implements the ARM concept of *Product_specific_parameter_value_assignment* (5.543.8).

5.544.8
schema_based_model_parameter
<application module: Model_parameter_mim> *entity data type* (3.2.10) that is a type of *model_parameter* (5.544.3) that represents the schema based model parameter *entity* (3.2.9)

Note 1 to entry: A **schema_based_model_parameter** is a type of model_parameter that implements the ARM concept of *Schema_based_model_parameter* (5.543.7).

5.544.9
valid_range_property_definition_representation
<application module: Model_parameter_mim> *entity data type* (3.2.10) that is a type of *property_definition_representation* (4.20.6) that represents the valid range property definition representation *entity* (3.2.9)

5.544.10
test_method_based_parameter_assignment
<application module: Model_parameter_mim> *entity data type* (3.2.10) that is a type of *parameter_assignment* (5.544.6) that represents the test method based parameter assignment *entity* (3.2.9)

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5.545 Network_functional_design_view_arm

5.545.1
Bus_element_link
<application module: Network_functional_design_view_arm> *application object* (3.1.78) that represents the bus element link *entity* (3.2.9)

Note 1 to entry: A **Bus_element_link** is a directed definitional and structural relationship between two nodes of a bus.

5.545.2
Bus_structural_definition
<application module: Network_functional_design_view_arm> *application object* (3.1.78) that represents the bus structural definition *entity* (3.2.9)

Note 1 to entry: A **Bus_structural_definition** is the description of the structure of the bus.

5.545.3
Functional_unit
<application module: Network_functional_design_view_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the functional unit *entity* (3.2.9)

5.545.4
Functional_unit_network_definition
<application module: Network_functional_design_view_arm> *application object* (3.1.78) that is a type of *Functional_unit_definition* (5.547.6) that represents the functional unit network definition *entity* (3.2.9)

Note 1 to entry: A **Functional_unit_network_definition** is a type of Functional_unit_definition that is composed of one or more *Functional_unit* (5.545.3), several members of *Functional_unit_network_node_definition* (5.545.5) and relevant assignments.

5.545.5
Functional_unit_network_node_definition
<application module: Network_functional_design_view_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the functional unit network node definition *entity* (3.2.9)

5.545.6
Functional_unit_network_terminal_definition_bus_assignment
<application module: Network_functional_design_view_arm> *application object* (3.1.78) that represents the functional unit network terminal definition bus assignment *entity* (3.2.9)

Note 1 to entry: A **Functional_unit_network_terminal_definition_bus_assignment** is the relationship between the structural definition of a bus and the terminal definition of a network to which the bus is assigned.

5.545.7
Functional_unit_network_terminal_definition_node_assignment
<application module: Network_functional_design_view_arm> *application object* (3.1.78) that represents the functional unit network terminal definition node assignment *entity* (3.2.9)

Note 1 to entry: A **Functional_unit_network_terminal_definition_node_assignment** is the assignment relationship between a node definition of the functional unit network definition and a terminal definition of that network definition.

5.545.8

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Functional_unit_terminal
<application module: Network_functional_design_view_arm> *application object* (3.1.78) that represents the functional unit terminal *entity* (3.2.9)

Note 1 to entry: A **Functional_unit_terminal** is an access mechanism for a *Functional_unit* (5.545.3).

5.545.9
Functional_unit_terminal_bus_assignment
<application module: Network_functional_design_view_arm> *application object* (3.1.78) that represents the functional unit terminal bus assignment *entity* (3.2.9)

Note 1 to entry: A **Functional_unit_terminal_bus_assignment** is the relationship between the structural definition of a bus and a terminal that is assigned to the bus.

5.545.10
Functional_unit_terminal_node_assignment
<application module: Network_functional_design_view_arm> *application object* (3.1.78) that represents the functional unit terminal node assignment *entity* (3.2.9)

Note 1 to entry: A **Functional_unit_terminal_node_assignment** is the assignment relationship between a *Functional_unit_network_node_definition* (5.545.5) and a *Functional_unit_terminal* (5.545.8).

5.546 Network_functional_design_view_mim

5.546.1
bus_element_link
<application module: Network_functional_design_view_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) and *product_definition_relationship* (4.18.15) that represents the bus element link *entity* (3.2.9)

Note 1 to entry: A **bus_element_link** is a type of product_definition and of product_definition_relationship that implements the ARM concept of *Bus_element_link* (5.545.1)

5.546.2
bus_structural_definition
<application module: Network_functional_design_view_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the bus structural definition *entity* (3.2.9)

Note 1 to entry: A **bus_structural_definition** is a type of product_definition that implements the ARM concept of *Bus_structural_definition* (5.545.2).

5.546.3
component_functional_terminal
<application module: Network_functional_design_view_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the component functional terminal *entity* (3.2.9)

Note 1 to entry: A **component_functional_terminal** is a type of shape_aspect that implements the ARM concept of *Functional_unit_terminal* (5.545.8).

5.546.4
component_functional_unit
<application module: Network_functional_design_view_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the component functional unit *entity* (3.2.9)

Note 1 to entry: A **component_functional_unit** is a type of product_definition that implements the ARM concept of *Functional_unit* (5.545.3).

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5.546.5
network_node_definition
<application module: Network_functional_design_view_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the network node definition *entity* (3.2.9)

Note 1 to entry: A **network_node_definition** is a type of product_definition that implements the ARM concept of *Functional_unit_network_node_definition* (5.545.5).

5.547 Functional_usage_view_arm

5.547.1
Equivalent_functional_terminals_assignment
<application module: Functional_usage_view_arm> *application object* (3.1.78) that represents the equivalent functional terminals assignment *entity* (3.2.9)

Note 1 to entry: An **Equivalent_functional_terminals_assignment** is the assignment that a set of terminals are equivalent in a *Functional_unit_usage_view* (5.547.8).

5.547.2
Equivalent_functional_unit_definition_assignment
<application module: Functional_usage_view_arm> *application object* (3.1.78) that represents the equivalent functional unit definition assignment *entity* (3.2.9)

Note 1 to entry: An **Equivalent_functional_unit_definition_assignment** is the association between at least two *Functional_unit_definition* (5.547.6) that are equivalent.

5.547.3
Functional_product
<application module: Functional_usage_view_arm> *application object* (3.1.78) that is a type of *Information_product* (5.638.1) that represents the functional product *entity* (3.2.9)

5.547.4
Functional_terminal_group
<application module: Functional_usage_view_arm> *application object* (3.1.78) that represents the functional terminal group *entity* (3.2.9)

Note 1 to entry: A **Functional_terminal_group** is a group of terminals that have common characteristics and can be acted upon as a group.

5.547.5
Functional_terminal_group_assignment
<application module: Functional_usage_view_arm> *application object* (3.1.78) that represents the functional terminal group assignment *entity* (3.2.9)

Note 1 to entry: A **Functional_terminal_group_assignment** is a means to allocate a *Scalar_terminal_definition* (5.547.12) to the *Functional_terminal_group* (5.547.4).

5.547.6
Functional_unit_definition
<application module: Functional_usage_view_arm> *application object* (3.1.78) that is a type of *Information_definition* (5.638.3) that represents the functional unit definition *entity* (3.2.9)

5.547.7

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Functional_unit_make_from_relationship
<application module: Functional_usage_view_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the functional unit make from relationship *entity* (3.2.9)

5.547.8
Functional_unit_usage_view
<application module: Functional_usage_view_arm> *application object* (3.1.78) that is a type of *Functional_unit_definition* (5.547.6) that represents the functional unit usage view *entity* (3.2.9)

Note 1 to entry: A **Functional_unit_usage_view** is a type of Functional_unit_definition that describes the usage of the *Functional_unit* (5.545.3) in a Functional_unit_definition.

5.547.9
Functional_unit_usage_view_terminal_definition
<application module: Functional_usage_view_arm> *application object* (3.1.78) that represents the functional unit usage view terminal definition *entity* (3.2.9)

Note 1 to entry: A **Functional_unit_usage_view_terminal_definition** is the defined access mechanism for dynamic properties or signals of a *Functional_unit_usage_view* (5.547.8).

5.547.10
Functional_unit_usage_view_terminal_definition_make_from_relationship
<application module: Functional_usage_view_arm> *application object* (3.1.78) that represents the functional unit usage view terminal definition make from relationship *entity* (3.2.9)

Note 1 to entry: A **Functional_unit_usage_view_terminal_definition_make_from_relationship** is the description of the directed relationship between a terminal that is one result of creating a new *Functional_unit_definition* (5.547.6) by copying and modifying an existing Functional_unit_definition and the source terminal.

5.547.11
Functional_version
<application module: Functional_usage_view_arm> *application object* (3.1.78) that is a type of *Information_version* (5.638.2) that represents the functional version *entity* (3.2.9)

5.547.12
Scalar_terminal_definition
<application module: Functional_usage_view_arm> *application object* (3.1.78) that is a type of *Functional_unit_usage_view_terminal_definition* (5.547.9) that represents the scalar terminal definition *entity* (3.2.9)

Note 1 to entry: A **Scalar_terminal_definition** is a type of Functional_unit_usage_view_terminal_definition for which the size shall be unity.

5.547.13
Scalar_terminal_definition_link
<application module: Functional_usage_view_arm> *application object* (3.1.78) that represents the scalar terminal definition link *entity* (3.2.9)

Note 1 to entry: A **Scalar_terminal_definition_link** is a directed relationship established between two *Scalar_terminal_definition* (5.547.12) for a design purpose.

5.548 Functional_usage_view_mim

5.548.1

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functional_terminal_group
<application module: Functional_usage_view_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the functional terminal group *entity* (3.2.9)

Note 1 to entry: A **functional_terminal_group** is a type of group group that implements the ARM concept of *Functional_terminal_group* (5.547.4).

5.548.2
functional_unit
<application module: Functional_usage_view_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) and *product_definition_shape* (4.19.8) that represents the functional unit *entity* (3.2.9)

Note 1 to entry: A **functional_unit** is a type of product_definition and a type of product_definition_shape.

5.548.3
functional_unit_terminal_definition
<application module: Functional_usage_view_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the functional unit terminal definition *entity* (3.2.9)

Note 1 to entry: A **functional_unit_terminal_definition** is a type of shape_aspect that implements the ARM concepts of *Functional_unit_usage_view_terminal_definition* (5.547.9) and *Scalar_terminal_definition* (5.547.12).

5.548.4
make_from_functional_unit_terminal_definition_relationship
<application module: Functional_usage_view_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the make from functional unit terminal definition relationship *entity* (3.2.9)

Note 1 to entry: A **make_from_functional_unit_terminal_definition_relationship** is a type of shape_aspect and of shape_aspect_relationship that implements the ARM concept of *Functional_unit_usage_view_terminal_definition_make_from_relationship* (5.547.10).

5.548.5
scalar_terminal_definition_link
<application module: Functional_usage_view_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the scalar terminal definition link *entity* (3.2.9)

Note 1 to entry: A **scalar_terminal_definition_link** is a type of shape_aspect and of shape_aspect_relationship that implements the ARM concept of *Scalar_terminal_definition_link* (5.547.13).

5.549 Non_feature_shape_element_arm

5.549.1
Edge_segment_vertex
<application module: Non_feature_shape_element_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the edge segment vertex *entity* (3.2.9)

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5.549.2
Interface_plane
<application module: Non_feature_shape_element_arm> *application object* (3.1.78) that is a type of *Non_feature_shape_element* (5.549.4) that represents the interface plane *entity* (3.2.9)

Note 1 to entry: An **Interface_plane** is a type of Non_feature_shape_element included specifically for the purpose of providing a description of an interface plane.

5.549.3
Non_feature_shape_model
<application module: Non_feature_shape_element_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the non feature shape model *entity* (3.2.9)

5.549.4
Non_feature_shape_element
<application module: Non_feature_shape_element_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the non feature shape element *entity* (3.2.9)

5.549.5
Non_feature_shape_element_relationship
<application module: Non_feature_shape_element_arm> *application object* (3.1.78) that is a type of *Shape_element_relationship* (5.41.7) that represents the non feature shape element relationship *entity* (3.2.9)

Note 1 to entry: A **Non_feature_shape_element_relationship** is a type of Shape_element_relationship that associates a *Non_feature_shape_element* (5.549.4) with another Non_feature_shape_element.

5.549.6
Reference_graphic_registration_mark
<application module: Non_feature_shape_element_arm> *application object* (3.1.78) that is a type of *Non_feature_shape_element* (5.549.4) that represents the reference graphic registration mark *entity* (3.2.9)

Note 1 to entry: A **Reference_graphic_registration_mark** is a type of Non_feature_shape_element that is annotation graphic included in the design model for a printed circuit board (PCB).

5.549.7
Seating_plane
<application module: Non_feature_shape_element_arm> *application object* (3.1.78) that is a type of *Non_feature_shape_element* (5.549.4) that represents the seating plane *entity* (3.2.9)

Note 1 to entry: A **Seating_plane** is a type of Non_feature_shape_element included specifically for the purpose of providing a description of a plane simulating a mounting surface.

5.549.8
Usage_view_level_non_feature_shape_model
<application module: Non_feature_shape_element_arm> *application object* (3.1.78) that is a type of *Non_feature_shape_model* (5.549.3) that represents the usage view level non feature shape model *entity* (3.2.9)

5.549.9
View_level_non_feature_shape_element
<application module: Non_feature_shape_element_arm> *application object* (3.1.78) that is a type of *Non_feature_shape_element* (5.549.4) that represents the view level non feature shape element *entity* (3.2.9)

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5.550 Non_feature_shape_element_mim

5.550.1
group_shape_aspect
<application module: Non_feature_shape_element_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the group shape aspect *entity* (3.2.9)

Note 1 to entry: A **group_shape_aspect** is a type of shape_aspect that implements the ARM concepts of:

— *Interconnect_module_constraint_region* (5.525.1);

— *Placement_group_requirement_definition* (5.437.8);

— *Termination_constraint* (5.461.7).

5.550.2
interface_plane
<application module: Non_feature_shape_element_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the interface plane *entity* (3.2.9)

Note 1 to entry: An **interface_plane** is a type of shape_aspect that implements the ARM concept of *Interface_plane* (5.549.2).

5.550.3
edge_segment_vertex
<application module: Non_feature_shape_element_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the edge segment vertex *entity* (3.2.9)

Note 1 to entry: An **edge_segment_vertex** is a type of shape_aspect that implements the ARM concept of *Edge_segment_vertex* (5.549.1).

5.550.4
reference_graphic_registration_mark
<application module: Non_feature_shape_element_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the reference graphic registration mark *entity* (3.2.9)

Note 1 to entry: A **reference_graphic_registration_mark** is a type of shape_aspect that implements the ARM concept of *Reference_graphic_registration_mark* (5.549.6).

5.550.5
seating_plane
<application module: Non_feature_shape_element_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the seating plane *entity* (3.2.9)

Note 1 to entry: The **seating_plane** is a type of shape_aspect that implements the ARM concept of *Seating_plane* (5.549.7).

5.551 Package_arm

5.551.1
Connection_zone_in_part_feature_template_definition
<application module: Package_arm> *application object* (3.1.78) that is a type of *Connection_zone* (5.496.1) that represents the connection zone in part feature template definition *entity* (3.2.9)

Note 1 to entry: A **Connection_zone_in_part_feature_template_definition** is a type of Connection_zone in which the context is a *Part_feature_template_definition* (5.595.6).

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5.551.2
Connection_zone_package_interface_plane_relationship
<application module: Package_arm> *application object* (3.1.78) that represents the connection zone package interface plane relationship *entity* (3.2.9)

Note 1 to entry: A **Connection_zone_package_interface_plane_relationship** is a mechanism to establish a derived relationship declaration between two connection areas using a common plane as the interface declaration.

5.551.3
Visual_orientation_feature
<application module: Package_arm> *application object* (3.1.78) that is a type of *Part_feature* (5.595.4) that represents the visual orientation feature *entity* (3.2.9)

5.551.4
Guided_wave_terminal
<application module: Package_arm> *application object* (3.1.78) that is a type of *Package_terminal* (5.551.13) that represents the guided wave terminal *entity* (3.2.9)

Note 1 to entry: A **Guided_wave_terminal** is a type of Package_terminal that is explicitly included for the purpose of providing access to the functionality of a *Packaged_part* (5.557.1) using guided waves.

5.551.5
Package
<application module: Package_arm> *application object* (3.1.78) that is a type of *Part_usage_view* (5.595.8) that represents the package *entity* (3.2.9)

Note 1 to entry: A **Package** is a type of a Part_usage_view.

5.551.6
Package_body
<application module: Package_arm> *application object* (3.1.78) that is a type of *Part_feature* (5.595.4) that represents the package body *entity* (3.2.9)

Note 1 to entry: A **Package_body** is a type of Part_feature that is the encasement used in the realization of a *Package* (5.551.5).

5.551.7
Package_body_bottom_surface
<application module: Package_arm> *application object* (3.1.78) that is a type of *Package_body_surface* (5.551.10) that represents the package body bottom surface *entity* (3.2.9)

Note 1 to entry: A **Package_body_bottom_surface** is a type of Package_body_surface that is not visible from an observer located so as to place the component on a substrate.

5.551.8
Package_body_edge_segment_surface
<application module: Package_arm> *application object* (3.1.78) that is a type of *Package_body_surface* (5.551.10) that represents the package body edge segment surface *entity* (3.2.9)

5.551.9
Package_body_edge_surface
<application module: Package_arm> *application object* (3.1.78) that is a type of *Package_body_surface* (5.551.10) that represents the package body edge surface *entity* (3.2.9)

5.551.10

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Package_body_surface
<application module: Package_arm> *application object* (3.1.78) that is a type of *Part_feature* (5.595.4) that represents the package body surface *entity* (3.2.9)

5.551.11
Package_body_top_surface
<application module: Package_arm> *application object* (3.1.78) that is a type of *Package_body_surface* (5.551.10) that represents the package body top surface *entity* (3.2.9)

Note 1 to entry: A **Package_body_top_surface** is a type of Package_body_surface that is visible from any observer located so as to place the component on a substrate.

5.551.12
Package_orientation_feature
<application module: Package_arm> *application object* (3.1.78) that is a type of *Part_feature* (5.595.4) that represents the package orientation feature *entity* (3.2.9)

5.551.13
Package_terminal
<application module: Package_arm> *application object* (3.1.78) that is a type of *Part_feature* (5.595.4) and *Placed_feature* (5.641.3) that represents the package terminal *entity* (3.2.9)

Note 1 to entry: A **Package_terminal** is a type of Part_feature and a type of Placed_feature.

5.551.14
Package_terminal_template_definition
<application module: Package_arm> *application object* (3.1.78) that is a type of *Part_feature_template_definition* (5.595.6) that represents the package terminal template definition *entity* (3.2.9)

5.551.15
Package_terminal_surface_constituent_relationship
<application module: Package_arm> *application object* (3.1.78) that is a type of *Shape_element_relationship* (5.41.7) that represents the package terminal surface constituent relationship *entity* (3.2.9)

5.551.16
Polarity_indication_feature
<application module: Package_arm> *application object* (3.1.78) that is a type of *Part_feature* (5.595.4) that represents the polarity indication feature *entity* (3.2.9)

5.551.17
Primary_orientation_feature
<application module: Package_arm> *application object* (3.1.78) that is a type of *Package_orientation_feature* (5.551.12) that represents the primary orientation feature *entity* (3.2.9)

5.551.18
Primary_reference_terminal
<application module: Package_arm> *application object* (3.1.78) that is a type of *Package_terminal* (5.551.13) that represents the primary reference terminal *entity* (3.2.9)

5.551.19

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Secondary_orientation_feature
<application module: Package_arm> *application object* (3.1.78) that is a type of *Package_orientation_feature* (5.551.12) that represents the secondary orientation feature *entity* (3.2.9)

5.551.20
Tertiary_orientation_feature
<application module: Package_arm> *application object* (3.1.78) that is a type of *Package_orientation_feature* (5.551.12) that represents the tertiary orientation feature *entity* (3.2.9)

5.551.21
Wire_terminal
<application module: Package_arm> *application object* (3.1.78) that is a type of *Package_terminal* (5.551.13) that represents the wire terminal *entity* (3.2.9)

Note 1 to entry: A **Wire_terminal** is a type of Package_terminal where the explicit shape of the terminal is not predefined in a library.

5.551.22
Wire_terminal_template_definition
<application module: Package_arm> *application object* (3.1.78) that is a type of *Package_terminal_template_definition* (5.551.14) that represents the wire terminal template definition *entity* (3.2.9)

5.552 Package_mim

5.552.1
visual_orientation_feature
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the visual orientation feature *entity* (3.2.9)

Note 1 to entry: A **visual_orientation_feature** is a type of shape_aspect that implements the ARM concept of *Visual_orientation_feature* (5.551.3).

5.552.2
guided_wave_terminal
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *package_terminal* (5.552.11) that represents the guided wave terminal *entity* (3.2.9)

Note 1 to entry: A **guided_wave_terminal** is a type of package_terminal that implements the ARM concept of *Guided_wave_terminal* (5.551.4).

5.552.3
package
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *physical_unit* (5.596.4) that represents the package *entity* (3.2.9)

Note 1 to entry: A **package** is a type of physical_unit that implements the ARM concepts of:

— *Altered_package* (5.426.1);

— *Package* (5.551.5).

5.552.4

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package_body
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the package body *entity* (3.2.9)

Note 1 to entry: A **package_body** is a type of shape_aspect that implements the ARM concept of *Package_body* (5.551.6).

5.552.5
package_body_bottom_surface
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *package_body_surface* (5.552.8) that represents the package body bottom surface *entity* (3.2.9)

Note 1 to entry: A **package_body_bottom_surface** is a type of package_body_surface that implements the ARM concept of *Package_body_bottom_surface* (5.551.7).

5.552.6
package_body_edge_segment_surface
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the package body edge segment surface *entity* (3.2.9)

Note 1 to entry: A **package_body_edge_segment_surface** is a type of shape_aspect and of shape_aspect_relationship that implements the ARM concept of *Package_body_edge_segment_surface* (5.551.8).

5.552.7
package_body_edge_surface
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *package_body_surface* (5.552.8) that represents the package body edge surface *entity* (3.2.9)

Note 1 to entry: A **package_body_edge_surface** is a type of package_body_surface that implements the ARM concept of *Package_body_edge_surface* (5.551.9).

5.552.8
package_body_surface
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the package body surface *entity* (3.2.9)

Note 1 to entry: A **package_body_surface** is a type of shape_aspect that implements the ARM concept of *Package_body_surface* (5.551.10).

5.552.9
package_body_top_surface
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *package_body_surface* (5.552.8) that represents the package body top surface *entity* (3.2.9)

Note 1 to entry: A **package_body_top_surface** is a type of package_body_surface that implements the ARM concept of *Package_body_top_surface* (5.551.11).

5.552.10
package_terminal_template_definition
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *part_feature_template_definition* (5.596.3) that represents the package terminal template definition *entity* (3.2.9)

Note 1 to entry: A **package_terminal_template_definition** is a type of part_feature_template_definition that implements the ARM concept of *Package_terminal_template_definition* (5.551.14).

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5.552.11
package_terminal
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *placed_feature* (5.642.2) that represents the package terminal *entity* (3.2.9)

Note 1 to entry: A **package_terminal** is a type of placed_feature that implements the ARM concepts of:

— *Altered_package_terminal* (5.426.2);

— *Guided_wave_terminal* (5.551.4);

— *Length_trimmed_terminal* (5.426.3);

— *Package_terminal* (5.551.13);

— *Shape_formed_terminal* (5.426.4);

— *Surface_prepped_terminal* (5.426.5);

— *Wire_terminal_template_definition* (5.551.22).

5.552.12
primary_orientation_feature
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the primary orientation feature *entity* (3.2.9)

Note 1 to entry: A **primary_orientation_feature** is a type of shape_aspect that implements the ARM concept of *Primary_orientation_feature* (5.551.17).

5.552.13
primary_reference_terminal
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *package_terminal* (5.552.11) that represents the primary reference terminal *entity* (3.2.9)

Note 1 to entry: A **primary_reference_terminal** is a type of package_terminal that implements the ARM concept of *Primary_reference_terminal* (5.551.18).

5.552.14
secondary_orientation_feature
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the secondary orientation feature *entity* (3.2.9)

Note 1 to entry: A **secondary_orientation_feature** is a type of shape_aspect that implements the ARM concept of *Secondary_orientation_feature* (5.551.19).

5.552.15
tertiary_orientation_feature
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the tertiary orientation feature *entity* (3.2.9)

Note 1 to entry: A **tertiary_orientation_feature** is a type of shape_aspect that implements the ARM concept of *Tertiary_orientation_feature* (5.551.20).

5.552.16

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wire_terminal
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *package_terminal* (5.552.11) that represents the wire terminal *entity* (3.2.9)

Note 1 to entry: A **wire_terminal** is a type of package_terminal that implements the ARM concept of *Wire_terminal* (5.551.21).

5.552.17
wire_terminal_template_definition
<application module: Package_mim> *entity data type* (3.2.10) that is a type of *package_terminal_template_definition* (5.552.10) that represents the wire terminal template definition *entity* (3.2.9)

Note 1 to entry: A **wire_terminal_template_definition** is a type of package_terminal_template_definition that implements the ARM concept of *Wire_terminal_template_definition* (5.551.22).

5.553 Packaged_connector_model_arm

5.553.1
Mating_connector_relationship
<application module: Packaged_connector_model_arm> *application object* (3.1.78) that is a type of *Part_definition_relationship* (5.314.5) that represents the mating connector relationship *entity* (3.2.9)

Note 1 to entry: A **Mating_connector_relationship** is a type of Part_definition_relationship that relates two instances of *Packaged_connector* (5.553.2) which are possible to join.

5.553.2
Packaged_connector
<application module: Packaged_connector_model_arm> *application object* (3.1.78) that is a type of *Packaged_part* (5.557.1) that represents the packaged connector *entity* (3.2.9)

Note 1 to entry: A **Packaged_connector** is a type of Packaged_part whose functionality between certain terminals is defined to be a short by this document.

5.553.3
Packaged_connector_terminal_relationship
<application module: Packaged_connector_model_arm> *application object* (3.1.78) that represents the packaged connector terminal relationship *entity* (3.2.9)

Note 1 to entry: A **Packaged_connector_terminal_relationship** is the association between one interface terminal and a corresponding join terminal of the *Packaged_connector* (5.553.2) that specifies that the two terminals are shorted internally to the Packaged_connector as part of its required functionality.

5.553.4
Packaged_part_interface_terminal
<application module: Packaged_connector_model_arm> *application object* (3.1.78) that is a type of *Packaged_part_terminal* (5.557.3) that represents the packaged part interface terminal *entity* (3.2.9)

Note 1 to entry: A **Packaged_part_interface_terminal** is a type of Packaged_part_terminal that is a terminal of a *Packaged_connector* (5.553.2).

5.554 Packaged_connector_model_mim

5.554.1

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packaged_connector
<application module: Packaged_connector_model_mim> *entity data type* (3.2.10) that is a type of *packaged_part* (5.558.1) that represents the packaged connector *entity* (3.2.9)

Note 1 to entry: A **packaged_connector** is a type of packaged_part that implements the ARM concept of *Packaged_connector* (5.553.2).

5.554.2
packaged_connector_terminal_relationship
<application module: Packaged_connector_model_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the packaged connector terminal relationship *entity* (3.2.9)

Note 1 to entry: A **packaged_connector_terminal_relationship** is a type of shape_aspect and of shape_aspect_relationship that implements the ARM concept of *Packaged_connector_terminal_relationship* (5.553.3).

5.555 Packaged_part_white_box_model_arm

5.555.1
Device_2d_position
<application module: Packaged_part_white_box_model_arm> *application object* (3.1.78) that represents the device 2d position *entity* (3.2.9)

Note 1 to entry: A **Device_2d_position** is the location in two dimensions of a *Part_device* (5.555.5) within a *Packaged_part* (5.557.1).

5.555.2
Device_3d_position
<application module: Packaged_part_white_box_model_arm> *application object* (3.1.78) that represents the device 3d position *entity* (3.2.9)

Note 1 to entry: A **Device_3d_position** is the location in three dimensions of a *Part_device* (5.555.5) within a *Packaged_part* (5.557.1).

5.555.3
Device_terminal_map
<application module: Packaged_part_white_box_model_arm> *application object* (3.1.78) that represents the device terminal map *entity* (3.2.9)

Note 1 to entry: A **Device_terminal_map** is the association between a *Part_device_terminal* (5.555.6) and a *Packaged_part_terminal* (5.557.3).

5.555.4
Device_terminal_map_relationship
<application module: Packaged_part_white_box_model_arm> *application object* (3.1.78) that represents the device terminal map relationship *entity* (3.2.9)

Note 1 to entry: A **Device_terminal_map_relationship** is the association of one *Device_terminal_map* (5.555.3) to another.

5.555.5
Part_device
<application module: Packaged_part_white_box_model_arm> *application object* (3.1.78) that represents the part device *entity* (3.2.9)

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Note 1 to entry: A **Part_device** is a specific occurrence of a *Bare_die* (5.467.1) in a *Packaged_part* (5.557.1).

5.555.6
Part_device_terminal
<application module: Packaged_part_white_box_model_arm> *application object* (3.1.78) that represents the part device terminal *entity* (3.2.9)

Note 1 to entry: A **Part_device_terminal** is the surface area on an occurrence of a *Bare_die* (5.467.1) in a *Packaged_part* (5.557.1) that shall allow access to the function of an occurrence of the Bare_die.

5.556 Packaged_part_white_box_model_mim

5.556.1
device_terminal_map
<application module: Packaged_part_white_box_model_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the device terminal map *entity* (3.2.9)

Note 1 to entry: A **device_terminal_map** is a type of shape_aspect and of shape_aspect_relationship that implements the ARM concept of *Device_terminal_map* (5.555.3).

5.557 Packaged_part_black_box_model_arm

5.557.1
Packaged_part
<application module: Packaged_part_black_box_model_arm> *application object* (3.1.78) that is a type of *Part_usage_view* (5.595.8) that represents the packaged part *entity* (3.2.9)

5.557.2
Packaged_part_join_terminal
<application module: Packaged_part_black_box_model_arm> *application object* (3.1.78) that is a type of *Packaged_part_terminal* (5.557.3) that represents the packaged part join terminal *entity* (3.2.9)

Note 1 to entry: A **Packaged_part_join_terminal** is a type of Packaged_part_terminal such that an occurrence of the Packaged_part_terminal shall not be in the role of an external interface when the occurrence of the associated *Packaged_connector* (5.553.2) is a component in an assembly.

5.557.3
Packaged_part_terminal
<application module: Packaged_part_black_box_model_arm> *application object* (3.1.78) that is a type of *Part_terminal* (5.500.8) that represents the packaged part terminal *entity* (3.2.9)

Note 1 to entry: A **Packaged_part_terminal** is a type of Part_terminal that describes a terminal of a *Packaged_part* (5.557.1).

5.558 Packaged_part_black_box_model_mim

5.558.1
packaged_part
<application module: Packaged_part_black_box_model_mim> *entity data type* (3.2.10) that is a type of *physical_unit* (5.596.4) that represents the packaged part *entity* (3.2.9)

Note 1 to entry: A **packaged_part** is a type of physical_unit that implements the ARM concepts of:

— *Altered_packaged_part* (5.428.1);

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— *Packaged_part* (5.557.1).

5.558.2
packaged_part_terminal
<application module: Packaged_part_black_box_model_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the packaged part terminal *entity* (3.2.9)

Note 1 to entry: A **packaged_part_terminal** is a type of shape_aspect that implements the ARM concepts of:

— *Packaged_part_interface_terminal* (5.553.4);

— *Packaged_part_join_terminal* (5.557.2);

— *Packaged_part_terminal* (5.557.3).

5.559 Part_external_reference_arm

5.559.1
Package_external_reference
<application module: Part_external_reference_arm> *application object* (3.1.78) that represents the package external reference *entity* (3.2.9)

Note 1 to entry: A **Package_external_reference** is an unambiguous reference to the definition of a *Package* (5.551.5) in an external system.

5.559.2
Package_terminal_external_reference
<application module: Part_external_reference_arm> *application object* (3.1.78) that represents the package terminal external reference *entity* (3.2.9)

Note 1 to entry: A **Package_terminal_external_reference** is an unambiguous reference to a *Package_terminal* (5.551.13) in an external system.

5.559.3
Part_terminal_external_reference
<application module: Part_external_reference_arm> *application object* (3.1.78) that is a type of *General_part_feature* (5.694.3) that represents the part terminal external reference *entity* (3.2.9)

5.560 Part_external_reference_mim

5.560.1
part_terminal_external_reference
<application module: Part_external_reference_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the part terminal external reference *entity* (3.2.9)

Note 1 to entry: A **part_terminal_external_reference** is a type of shape_aspect that implements the ARM concept of *Part_terminal_external_reference* (5.559.3)

5.561 Part_feature_function_arm

5.561.1
Fiducial_part_feature
<application module: Part_feature_function_arm> *application object* (3.1.78) that is a type of *Part_tooling_feature* (5.561.5) that represents the fiducial part feature *entity* (3.2.9)

5.561.2

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Part_interface_access_feature
<application module: Part_feature_function_arm> *application object* (3.1.78) that is a type of *Part_feature* (5.595.4) that represents the part interface access feature *entity* (3.2.9)

Note 1 to entry: A **Part_interface_access_feature** is a type of Part_feature that is identified to facilitate tolerance specification when an occurrence of the associated part is used in an assembly.

5.561.3
Part_mating_feature
<application module: Part_feature_function_arm> *application object* (3.1.78) that is a type of *Part_feature* (5.595.4) that represents the part mating feature *entity* (3.2.9)

Note 1 to entry: A **Part_mating_feature** is a type of Part_feature that is identified to facilitate tolerance specification when an occurrence of the associated part is mated to a complementary part.

5.561.4
Part_mounting_feature
<application module: Part_feature_function_arm> *application object* (3.1.78) that is a type of *Part_feature* (5.595.4) that represents the part mounting feature *entity* (3.2.9)

Note 1 to entry: A **Part_mounting_feature** is a type of Part_feature that is identified to facilitate tolerance specification when an occurrence of the associated part is used in an assembly.

5.561.5
Part_tooling_feature
<application module: Part_feature_function_arm> *application object* (3.1.78) that is a type of *Part_feature* (5.595.4) that represents the part tooling feature *entity* (3.2.9)

5.561.6
Test_point_part_feature
<application module: Part_feature_function_arm> *application object* (3.1.78) that is a type of *Part_tooling_feature* (5.561.5) that represents the test point part feature *entity* (3.2.9)

5.561.7
Thermal_feature
<application module: Part_feature_function_arm> *application object* (3.1.78) that is a type of *Part_feature* (5.595.4) that represents the thermal feature *entity* (3.2.9)

Note 1 to entry: A **Thermal_feature** is a type of Part_feature that is specified as having a role in the exchange of heat with the application environment of the *Part_view_definition* (5.35.1).

5.561.8
Tool_registration_mark
<application module: Part_feature_function_arm> *application object* (3.1.78) that is a type of *Part_tooling_feature* (5.561.5) that represents the tool registration mark *entity* (3.2.9)

Note 1 to entry: A **Tool_registration_mark** is a type of Part_tooling_feature that is used to visually indicate a reference alignment for tooling purposes.

5.562 Part_feature_function_mim

5.562.1
fiducial_part_feature
<application module: Part_feature_function_mim> *entity data type* (3.2.10) that is a type of *part_tooling_feature* (5.562.5) that represents the fiducial part feature *entity* (3.2.9)

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Note 1 to entry: A **fiducial_part_feature** is a type of part_tooling_feature that implements the ARM concept of *Fiducial_part_feature* (5.561.1).

5.562.2
part_interface_access_feature

<application module: Part_feature_function_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the part interface access feature *entity* (3.2.9)

Note 1 to entry: A **part_interface_access_feature** is a type of shape_aspect that implements the ARM concept of *Part_interface_access_feature* (5.561.2).

5.562.3
part_mating_feature

<application module: Part_feature_function_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the part mating feature *entity* (3.2.9)

Note 1 to entry: A **part_mating_feature** is a type of shape_aspect that implements the ARM concept of *Part_mating_feature* (5.561.3).

5.562.4
part_mounting_feature

<application module: Part_feature_function_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the part mounting feature *entity* (3.2.9)

Note 1 to entry: A **part_mounting_feature** is a type of shape_aspect that implements the ARM concept of *Part_mounting_feature* (5.561.4).

5.562.5
part_tooling_feature

<application module: Part_feature_function_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the part tooling feature *entity* (3.2.9)

Note 1 to entry: A **part_tooling_feature** is a type of shape_aspect that implements the ARM concept of *Part_tooling_feature* (5.561.5).

5.562.6
test_point_part_feature

<application module: Part_feature_function_mim> *entity data type* (3.2.10) that is a type of *part_tooling_feature* (5.562.5) that represents the test point part feature *entity* (3.2.9)

Note 1 to entry: A **test_point_part_feature** is a type of part_tooling_feature that implements the ARM concept of *Fiducial_part_feature* (5.561.1).

5.562.7
thermal_feature

<application module: Part_feature_function_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the thermal feature *entity* (3.2.9)

Note 1 to entry: A **thermal_feature** is a type of shape_aspect that implements the ARM concept of *Thermal_feature* (5.561.7).

5.562.8
tool_registration_mark

<application module: Part_feature_function_mim> *entity data type* (3.2.10) that is a type of *part_tooling_feature* (5.562.5) that represents the tool registration mark *entity* (3.2.9)

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Note 1 to entry: A **tool_registration_mark** is a type of part_tooling_feature that implements the ARM concept of *Tool_registration_mark* (5.561.8).

5.563 Part_feature_grouping_arm

5.563.1
Part_array_feature
<application module: Part_feature_grouping_arm> *application object* (3.1.78) that is a type of *Part_group_feature* (5.563.3) that represents the part array feature *entity* (3.2.9)

Note 1 to entry: A **Part_array_feature** is a type of Part_group_feature that is an array of *Part_feature* (5.595.4) whose positions are specified as members of an array, and whose tolerances are applied based upon the array nature of **Part_array_feature**.

5.563.2
Part_feature_placement_link
<application module: Part_feature_grouping_arm> *application object* (3.1.78) that represents the part feature placement link *entity* (3.2.9)

Note 1 to entry: A **Part_feature_placement_link** is a means to specify the order of *Part_feature* (5.595.4) in a linear array.

5.563.3
Part_group_feature
<application module: Part_feature_grouping_arm> *application object* (3.1.78) that is a type of *Part_feature* (5.595.4) and *Composite_shape_element* (5.611.2) that represents the part group feature *entity* (3.2.9)

Note 1 to entry: A **Part_group_feature** is a type of Part_feature and a type of Composite_shape_element that is an aggregation of Part_feature.

5.563.4
Part_linear_array_feature
<application module: Part_feature_grouping_arm> *application object* (3.1.78) that is a type of *Part_array_feature* (5.563.1) that represents the part linear array feature *entity* (3.2.9)

5.563.5
Part_linear_array_feature_link
<application module: Part_feature_grouping_arm> *application object* (3.1.78) that represents the part linear array feature link *entity* (3.2.9)

Note 1 to entry: A **Part_linear_array_feature_link** is a means to associate two *Part_linear_array_feature* (5.563.4) instances.

5.563.6
Part_rectangular_array_feature
<application module: Part_feature_grouping_arm> *application object* (3.1.78) that is a type of *Part_array_feature* (5.563.1) that represents the part rectangular array feature *entity* (3.2.9)

5.564 Part_feature_grouping_mim

5.564.1
composite_array_shape_aspect
<application module: Part_feature_grouping_mim> *entity data type* (3.2.10) that is a type of *composite_shape_aspect* (4.42.7) that represents the composite array shape aspect *entity* (3.2.9)

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Note 1 to entry: A **composite_array_shape_aspect** is a type of composite_shape_aspect that implements the ARM concept of *Part_array_feature* (5.563.1).

5.564.2
composite_array_shape_aspect_link

<application module: Part_feature_grouping_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the composite array shape aspect link *entity* (3.2.9)

Note 1 to entry: An **composite_array_shape_aspect_link** is a type of shape_aspect and of shape_aspect_relationship that implements the ARM concept of *Part_feature_placement_link* (5.563.2).

5.564.3
linear_composite_array_shape_aspect

<application module: Part_feature_grouping_mim> *entity data type* (3.2.10) that is a type of *composite_array_shape_aspect* (5.564.1) that represents the linear composite array shape aspect *entity* (3.2.9)

Note 1 to entry: A **linear_composite_array_shape_aspect** is a type of composite_array_shape_aspect that implements the ARM concept of *Part_linear_array_feature* (5.563.4).

5.564.4
linear_composite_array_shape_aspect_link

<application module: Part_feature_grouping_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the linear composite array shape aspect link *entity* (3.2.9)

Note 1 to entry: A **linear_composite_array_shape_aspect_link** is a type of shape_aspect and of shape_aspect_relationship that implements the ARM concept of *Part_linear_array_feature_link* (5.563.5).

5.564.5
rectangular_composite_array_shape_aspect

<application module: Part_feature_grouping_mim> *entity data type* (3.2.10) that is a type of *composite_array_shape_aspect* (5.564.1) that represents the rectangular composite array shape aspect *entity* (3.2.9)

Note 1 to entry: A **rectangular_composite_array_shape_aspect** is a type of composite_array_shape_aspect that implements the ARM concept of *Part_rectangular_array_feature* (5.563.6).

5.565 Part_feature_location_arm

5.565.1
Usage_concept_usage_relationship

<application module: Part_feature_location_arm> *application object* (3.1.78) that is a type of *Geometric_placement_operation* (5.10.14) that represents the usage concept usage relationship *entity* (3.2.9)

5.566 Part_feature_location_mim

5.566.1
usage_concept_usage_relationship

<application module: Part_feature_location_mim> *entity data type* (3.2.10) that is a type of *mapped_item* (4.41.11) and *item_identified_representation_usage* (4.20.5) that represents the usage concept usage relationship *entity* (3.2.9)

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Note 1 to entry: A **usage_concept_usage_relationship** is a type of mapped_item and a type of item_identified_representation_usage that implements the ARM concept of *Usage_concept_usage_relationship* (5.565.1).

5.567 Layered_interconnect_complex_template_arm

5.567.1
Complex_passage_padstack_definition
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Stratum_stack_dependent_template* (5.567.23) and *Passage_padstack_definition* (5.567.16) that represents the complex passage padstack definition *entity* (3.2.9)

Note 1 to entry: A **Complex_passage_padstack_definition** is a type of Stratum_stack_dependent_template and a type of Passage_padstack_definition for cases where the horizontal extent is changing through the vertical extent.

5.567.2
Dependent_electrical_isolation_removal_template
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Electrical_isolation_removal_template* (5.571.16) that represents the dependent electrical isolation removal template *entity* (3.2.9)

5.567.3
Dependent_template_location_in_padstack_definition
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Stratum_specific_template_location* (5.567.22) that represents the dependent template location in padstack definition *entity* (3.2.9)

5.567.4
Dependent_thermal_isolation_removal_template
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Thermal_isolation_removal_template* (5.567.29) that represents the dependent thermal isolation removal template *entity* (3.2.9)

5.567.5
Design_specific_stratum_technology_mapping_relationship
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Stratum_technology_mapping_relationship* (5.494.31) that represents the design specific stratum technology mapping relationship *entity* (3.2.9)

5.567.6
Inter_stratum_feature_template_location
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Template_location_in_structured_template* (5.567.27) that represents the inter stratum feature template location *entity* (3.2.9)

5.567.7
Library_stack_model
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Stratum_stack_model* (5.494.22) that represents the library stack model *entity* (3.2.9)

5.567.8

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Library_to_design_stack_model_mapping
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the library to design stack model mapping *entity* (3.2.9)

5.567.9
Material_removal_structured_template
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Single_stratum_structured_template* (5.567.20) that represents the material removal structured template *entity* (3.2.9)

5.567.10
Multi_stratum_special_symbol_template
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Multi_stratum_structured_template* (5.567.11) and *Special_symbol_template* (5.567.21) that represents the multi stratum special symbol template *entity* (3.2.9)

Note 1 to entry: A **Multi_stratum_special_symbol_template** is a type of Multi_stratum_structured_template and a type of Special_symbol_template.

5.567.11
Multi_stratum_structured_template
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Structured_template* (5.567.25) that represents the multi stratum structured template *entity* (3.2.9)

5.567.12
Padstack_definition
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Multi_stratum_structured_template* (5.567.11) that represents the padstack definition *entity* (3.2.9)

5.567.13
Part_template_keepout_shape_allocation_to_stratum_stack
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that represents the part template keepout shape allocation to stratum stack *entity* (3.2.9)

Note 1 to entry: A **Part_template_keepout_shape_allocation_to_stratum_stack** is an allocation of a specific *Part_template_keepout_shape_model* (5.574.2) to a subset of a stackup model.

5.567.14
Part_template_planar_keepout_shape_model
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Planar_shape_model* (5.531.2) and *Non_feature_shape_model* (5.549.3) and *Part_template_keepout_shape_model* (5.574.2) that represents the part template planar keepout shape model *entity* (3.2.9)

Note 1 to entry: A **Part_template_planar_keepout_shape_model** is a type of Planar_shape_model, Non_feature_shape_model and Part_template_keepout_shape_model.

5.567.15
Part_template_planar_shape_model
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Planar_projected_shape_model* (5.531.1) and *Part_template_shape_model* (5.574.3) that represents the part template planar shape model *entity* (3.2.9)

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Note 1 to entry: A **Part_template_planar_shape_model** is a type of Planar_projected_shape_model and a type of Part_template_shape_model.

5.567.16
Passage_padstack_definition
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Padstack_definition* (5.567.12) that represents the passage padstack definition *entity* (3.2.9)

Note 1 to entry: A **Passage_padstack_definition** is a type of Padstack_definition that references a specific *Passage_technology* (5.494.20).

5.567.17
Physical_unit_keepout_shape_allocation_to_stratum_stack
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that represents the physical unit keepout shape allocation to stratum stack *entity* (3.2.9)

Note 1 to entry: A **Physical_unit_keepout_shape_allocation_to_stratum_stack** is an allocation of a specific *Physical_unit_keepout_shape_model* (5.592.1) to a subset of a stackup model.

5.567.18
Physical_unit_keepout_shape_allocation_to_stratum_technology
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that represents the physical unit keepout shape allocation to stratum technology *entity* (3.2.9)

Note 1 to entry: A **Physical_unit_keepout_shape_allocation_to_stratum_technology** is is an allocation of a specific *Physical_unit_keepout_shape_model* (5.592.1) to a subset of keep out technologies.

5.567.19
Single_stratum_special_symbol_template
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Single_stratum_structured_template* (5.567.20) and *Special_symbol_template* (5.567.21) that represents the single stratum special symbol template *entity* (3.2.9)

Note 1 to entry: A **Single_stratum_special_symbol_template** is a type of Single_stratum_structured_template and a type of Special_symbol_template.

5.567.20
Single_stratum_structured_template
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Structured_template* (5.567.25) and *Single_stratum_template* (5.571.35) that represents the single stratum structured template *entity* (3.2.9)

Note 1 to entry: A **Single_stratum_structured_template** is a type of Structured_template and a type of Single_stratum_template.

5.567.21
Special_symbol_template
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Template_definition* (5.578.2) that represents the special symbol template *entity* (3.2.9)

5.567.22
Stratum_specific_template_location
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Template_location_in_structured_template* (5.567.27) that represents the stratum specific template location *entity* (3.2.9)

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Note 1 to entry: A **Stratum_specific_template_location** is a type of Template_location_in_structured_template that binds the location in the template shape to a specific technology or technology occurrence in a stackup model.

5.567.23
Stratum_stack_dependent_template
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Multi_stratum_structured_template* (5.567.11) that represents the stratum stack dependent template *entity* (3.2.9)

5.567.24
Structured_inter_stratum_feature_template
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Inter_stratum_feature_template* (5.571.22) and *Stratum_stack_dependent_template* (5.567.23) that represents the structured inter stratum feature template *entity* (3.2.9)

Note 1 to entry: A **Structured_inter_stratum_feature_template** is a type of Inter_stratum_feature_template and a type of Stratum_stack_dependent_template.

5.567.25
Structured_template
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Geometric_template* (5.574.1) that represents the structured template *entity* (3.2.9)

5.567.26
Structured_template_planar_shape_model
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Part_template_planar_shape_model* (5.567.15) that represents the structured template planar shape model *entity* (3.2.9)

5.567.27
Template_location_in_structured_template
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that represents the template location in structured template *entity* (3.2.9)

Note 1 to entry: A **Template_location_in_structured_template** is the relationship that identifies the location of a *Template_definition* (5.578.2) in a *Structured_template* (5.567.25).

5.567.28
Template_location_in_structured_template_transform
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Geometric_placement* (5.10.13) that represents the template location in structured template transform *entity* (3.2.9)

5.567.29
Thermal_isolation_removal_template
<application module: Layered_interconnect_complex_template_arm> *application object* (3.1.78) that is a type of *Material_removal_structured_template* (5.567.9) that represents the thermal isolation removal template *entity* (3.2.9)

Note 1 to entry: A **Thermal_isolation_removal_template** is a type of Material_removal_structured_template that describes the shape of material to be removed from a feature to satisfy a thermal isolation requirement.

5.568 Layered_interconnect_complex_template_mim

5.568.1

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complex_passage_padstack_definition
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *stratum_stack_dependent_template* (5.568.19) and *passage_padstack_definition* (5.568.12) that represents the complex passage padstack definition *entity* (3.2.9)

Note 1 to entry: A **complex_passage_padstack_definition** is a type of stratum_stack_dependent_template and a type of passage_padstack_definition that implements the ARM concept of *Complex_passage_padstack_definition* (5.567.1).

5.568.2
dependent_electrical_isolation_removal_template
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *electrical_isolation_removal_template* (5.572.11) that represents the dependent electrical isolation removal template *entity* (3.2.9)

Note 1 to entry: A **dependent_electrical_isolation_removal_template** is a type of electrical_isolation_removal_template that implements the ARM concept of *Dependent_electrical_isolation_removal_template* (5.567.2).

5.568.3
dependent_thermal_isolation_removal_template
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *thermal_isolation_removal_template* (5.568.22) that represents the dependent thermal isolation removal template *entity* (3.2.9)

Note 1 to entry: A **dependent_thermal_isolation_removal_template** is a type of thermal_isolation_removal_template that implements the ARM concept of *Dependent_thermal_isolation_removal_template* (5.567.4).

5.568.4
design_specific_stratum_technology_mapping_relationship
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *stratum_technology_mapping_relationship* (5.495.26) and *property_definition* (4.19.9) that represents the design specific stratum technology mapping relationship *entity* (3.2.9)

Note 1 to entry: A **design_specific_stratum_technology_mapping_relationship** is a type of stratum_technology_mapping_relationship and a type of property_definition that implements the ARM concept of *Design_specific_stratum_technology_mapping_relationship* (5.567.5).

5.568.5
library_stack_model
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *stratum_stack_model* (5.495.17) that represents the library stack model *entity* (3.2.9)

Note 1 to entry: A **library_stack_model** is a type of stratum_stack_model that implements the ARM concept of *Library_stack_model* (5.567.7).

5.568.6
library_to_design_stack_model_mapping
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *product_definition_relationship* (4.18.15) that represents the library to design stack model mapping *entity* (3.2.9)

Note 1 to entry: A **library_to_design_stack_model_mapping** is a type of product_definition_relationship that implements the ARM concept of *Library_to_design_stack_model_mapping* (5.567.8).

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5.568.7
material_removal_structured_template
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *single_stratum_structured_template* (5.568.16) that represents the material removal structured template *entity* (3.2.9)

Note 1 to entry: A **material_removal_structured_template** is a type of single_stratum_structured_template that implements the ARM concept of *Material_removal_structured_template* (5.567.9).

5.568.8
multi_stratum_special_symbol_template
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *multi_stratum_structured_template* (5.568.9) and *special_symbol_template* (5.568.17) that represents the multi stratum special symbol template *entity* (3.2.9)

Note 1 to entry: A **multi_stratum_special_symbol_template** is a type of multi_stratum_structured_template and a type of special_symbol_template that implements the ARM concept of *Multi_stratum_special_symbol_template* (5.567.10).

5.568.9
multi_stratum_structured_template
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *structured_template* (5.568.21) that represents the multi stratum structured template *entity* (3.2.9)

Note 1 to entry: A **multi_stratum_structured_template** is a type of structured_template that implements the ARM concept of *Multi_stratum_structured_template* (5.567.11).

5.568.10
padstack_definition
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *multi_stratum_structured_template* (5.568.9) that represents the padstack definition *entity* (3.2.9)

Note 1 to entry: A **padstack_definition** is a type of multi_stratum_structured_template that implements the ARM concept of *Padstack_definition* (5.567.12) and its subtypes.

5.568.11
part_template_keepout_shape_allocation_to_stratum_stack
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) and *property_definition* (4.19.9) that represents the part template keepout shape allocation to stratum stack *entity* (3.2.9)

Note 1 to entry: A **part_template_keepout_shape_allocation_to_stratum_stack** is a type of characterized_object and a type of property_definition that implements the ARM concept of *Part_template_keepout_shape_allocation_to_stratum_stack* (5.567.13).

5.568.12
passage_padstack_definition
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *padstack_definition* (5.568.10) that represents the passage padstack definition *entity* (3.2.9)

Note 1 to entry: A **passage_padstack_definition** is a type of padstack_definition that implements the ARM concept of *Passage_padstack_definition* (5.567.16).

5.568.13

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physical_unit_keepout_shape_allocation_to_stratum_stack
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) and *representation_relationship* (4.41.20) that represents the physical unit keepout shape allocation to stratum stack *entity* (3.2.9)

Note 1 to entry: A **physical_unit_keepout_shape_allocation_to_stratum_stack** is a type of representation and a type of representation_relationship that implements the ARM concept of *Physical_unit_keepout_shape_allocation_to_stratum_stack* (5.567.17).

5.568.14
physical_unit_keepout_shape_allocation_to_stratum_technology
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the physical unit keepout shape allocation to stratum technology *entity* (3.2.9)

Note 1 to entry: A **physical_unit_keepout_shape_allocation_to_stratum_technology** is a type of representation that implements the ARM concept of *Physical_unit_keepout_shape_allocation_to_stratum_technology* (5.567.18).

5.568.15
single_stratum_special_symbol_template
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *single_stratum_structured_template* (5.568.16) and *special_symbol_template* (5.568.17) that represents the single stratum special symbol template *entity* (3.2.9)

Note 1 to entry: A **single_stratum_special_symbol_template** is a type of single_stratum_structured_template and a type of special_symbol_template that implements the ARM concept of *Single_stratum_special_symbol_template* (5.567.19).

5.568.16
single_stratum_structured_template
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *structured_template* (5.568.21) and *single_stratum_template* (5.572.27) that represents the single stratum structured template *entity* (3.2.9)

Note 1 to entry: A **single_stratum_structured_template** is a type of structured_template and a type of single_stratum_template that implements the ARM concepts of *Single_stratum_structured_template* (5.567.20).

5.568.17
special_symbol_template
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *part_template_definition* (5.579.1) that represents the special symbol template *entity* (3.2.9)

Note 1 to entry: A **special_symbol_template** is a type of part_template_definition that implements the ARM concept of *Special_symbol_template* (5.567.21).

5.568.18
stratum_specific_template_location
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *assembly_component_usage* (4.25.2) and *property_definition* (4.19.9) that represents the stratum specific template location *entity* (3.2.9)

Note 1 to entry: A **stratum_specific_template_location** is a type of assembly_component_usage and a type of property_definition that implements the ARM concept of *Stratum_specific_template_location* (5.567.22).

5.568.19

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stratum_stack_dependent_template
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *multi_stratum_structured_template* (5.568.9) that represents the stratum stack dependent template *entity* (3.2.9)

Note 1 to entry: A **stratum_stack_dependent_template** is a type of multi_stratum_structured_template that implements the ARM concept of *Stratum_stack_dependent_template* (5.567.23).

5.568.20
structured_inter_stratum_feature_template
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *inter_stratum_feature_template* (5.572.14) and *stratum_stack_dependent_template* (5.568.19) that represents the structured inter stratum feature template *entity* (3.2.9)

Note 1 to entry: A **structured_inter_stratum_feature_template** is a type of inter_stratum_feature_template and a type of stratum_stack_dependent_template that implements the ARM concept of *Structured_inter_stratum_feature_template* (5.567.24).

5.568.21
structured_template
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *geometric_template* (5.575.1) that represents the structured template *entity* (3.2.9)

Note 1 to entry: A **structured_template** is a type of geometric_template that implements the ARM concept of *Structured_template* (5.567.25).

5.568.22
thermal_isolation_removal_template
<application module: Layered_interconnect_complex_template_mim> *entity data type* (3.2.10) that is a type of *material_removal_structured_template* (5.568.7) that represents the thermal isolation removal template *entity* (3.2.9)

Note 1 to entry: A **thermal_isolation_removal_template** is a type of material_removal_structured_template that implements the ARM concept of *Thermal_isolation_removal_template* (5.567.29).

5.569 Part_template_3d_shape_arm

5.569.1
Edge_segment_cross_section
<application module: Part_template_3d_shape_arm> *application object* (3.1.78) that is a type of *Shape_definition_3d_intersection* (5.532.1) that represents the edge segment cross section *entity* (3.2.9)

5.569.2
Inter_stratum_feature_edge_segment_template_with_cross_section
<application module: Part_template_3d_shape_arm> *application object* (3.1.78) that is a type of *Inter_stratum_feature_edge_segment_template* (5.571.20) that represents the inter stratum feature edge segment template with cross section *entity* (3.2.9)

5.569.3
Part_template_3d_keepout_shape_model
<application module: Part_template_3d_shape_arm> *application object* (3.1.78) that is a type of *Non_feature_shape_model* (5.549.3) and *Part_template_keepout_shape_model* (5.574.2) that represents the part template 3d keepout shape model *entity* (3.2.9)

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Note 1 to entry: A **Part_template_3d_keepout_shape_model** is a type of Non_feature_shape_model and a type of Part_template_keepout_shape_model.

5.569.4
Part_template_3d_shape_model
<application module: Part_template_3d_shape_arm> *application object* (3.1.78) that is a type of *Part_template_shape_model* (5.574.3) that represents the part template 3d shape model *entity* (3.2.9)

5.570 Part_template_3d_shape_mim

5.570.1
edge_segment_cross_section
<application module: Part_template_3d_shape_mim> *entity data type* (3.2.10) that is a type of *shape_definition_3d_intersection* (5.533.1) that represents the edge segment cross section *entity* (3.2.9)

Note 1 to entry: A **edge_segment_cross_section** is a type of shape_definition_3d_intersection that implements the ARM concept of *Edge_segment_cross_section* (5.569.1).

5.570.2
inter_stratum_feature_edge_segment_template_with_cross_section
<application module: Part_template_3d_shape_mim> *entity data type* (3.2.10) that is a type of *inter_stratum_feature_edge_segment_template* (5.572.12) that represents the inter stratum feature edge segment template with cross section *entity* (3.2.9)

Note 1 to entry: A **inter_stratum_feature_edge_segment_template_with_cross_section** is a type of inter_stratum_feature_edge_segment_template that implements the ARM concept of *Inter_stratum_feature_edge_segment_template_with_cross_section* (5.569.2).

5.571 Layered_interconnect_simple_template_arm

5.571.1
Blind_passage_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Unsupported_passage_template* (5.571.44) that represents the blind passage template *entity* (3.2.9)

5.571.2
Closed_path_area_with_parameters
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Path_area_with_parameters* (5.593.7) that represents the closed path area with parameters *entity* (3.2.9)

5.571.3
Connection_zone_in_layout_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Connection_zone* (5.496.1) and *Instanced_feature* (5.641.2) that represents the connection zone in layout template *entity* (3.2.9)

Note 1 to entry: A **Connection_zone_in_layout_template** is a type of Connection_zone and a type of Instanced_feature.

5.571.4
Continuous_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Geometric_template* (5.574.1) that represents the continuous template *entity* (3.2.9)

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5.571.5
Counterbore_passage_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Unsupported_passage_template* (5.571.44) that represents the counterbore passage template *entity* (3.2.9)

5.571.6
Countersunk_passage_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Unsupported_passage_template* (5.571.44) that represents the countersunk passage template *entity* (3.2.9)

5.571.7
Component_termination_passage_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Continuous_template* (5.571.4) and *Inter_stratum_feature_template* (5.571.22) that represents the component termination passage template *entity* (3.2.9)

Note 1 to entry: A **Component_termination_passage_template** is a type of Continuous_template and a type of Inter_stratum_feature_template.

5.571.8
Component_termination_passage_template_interface_terminal
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Component_termination_passage_template_terminal* (5.571.10) that represents the component termination passage template interface terminal *entity* (3.2.9)

Note 1 to entry: A **Component_termination_passage_template_interface_terminal** is a type of Component_termination_passage_template_terminal, an occurrence of which provides an interface capability to the next level of assembly.

5.571.9
Component_termination_passage_template_join_terminal
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Component_termination_passage_template_terminal* (5.571.10) that represents the component termination passage template join terminal *entity* (3.2.9)

Note 1 to entry: A **Component_termination_passage_template_join_terminal** is a type of Component_termination_passage_template_terminal, an occurrence of which provides a fabrication join capability, within an optionally constrained set of *Stratum* (5.536.90).

5.571.10
Component_termination_passage_template_terminal
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *General_part_feature* (5.694.3) that represents the component termination passage template terminal *entity* (3.2.9)

5.571.11
Default_attachment_size_based_land_physical_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Land_physical_template* (5.571.23) and *Shape_element* (5.41.6) that represents the default attachment size based land physical template *entity* (3.2.9)

Note 1 to entry: A **Default_attachment_size_based_land_physical_template** is a type of Shape_element and a type of Land_physical_template.

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5.571.12
Default_passage_based_land_physical_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Land_physical_template* (5.571.23) that represents the default passage based land physical template *entity* (3.2.9)

5.571.13
Default_plated_passage_based_land_physical_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Default_passage_based_land_physical_template* (5.571.12) that represents the default plated passage based land physical template *entity* (3.2.9)

Note 1 to entry: A **Default_plated_passage_based_land_physical_template** is a type of Default_passage_based_land_physical_template where the passage type is plated.

5.571.14
Default_unsupported_passage_based_land_physical_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Default_passage_based_land_physical_template* (5.571.12) that represents the default unsupported passage based land physical template *entity* (3.2.9)

Note 1 to entry: A **Default_unsupported_passage_based_land_physical_template** is a type of Default_passage_based_land_physical_template where the passage type is a passage that has no metallized support.

5.571.15
Default_trace_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Trace_template* (5.571.43) that represents the default trace template *entity* (3.2.9)

5.571.16
Electrical_isolation_removal_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Material_removal_feature_template* (5.571.27) that represents the electrical isolation removal template *entity* (3.2.9)

Note 1 to entry: An **Electrical_isolation_removal_template** is a type of Material_removal_feature_template that describes the shape of material to be removed from a feature in a design when that template is instantiated in the design to achieve electrical isolation.

5.571.17
Fill_area_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Parametric_template* (5.571.28) that represents the fill area template *entity* (3.2.9)

Note 1 to entry: A **Fill_area_template** is a type of Parametric_template that may be solid filled, tiled, or hatch filled.

5.571.18
Hatch_area_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Fill_area_template* (5.571.17) that represents the hatch area template *entity* (3.2.9)

5.571.19

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Hatch_line_element
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the hatch line element *entity* (3.2.9)

5.571.20
Inter_stratum_feature_edge_segment_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Inter_stratum_feature_template* (5.571.22) that represents the inter stratum feature edge segment template *entity* (3.2.9)

Note 1 to entry: An **Inter_stratum_feature_edge_segment_template** is a type of Inter_stratum_feature_template included to support segmentation of edges in an interconnect design.

5.571.21
Inter_stratum_feature_edge_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Inter_stratum_feature_template* (5.571.22) that represents the inter stratum feature edge template *entity* (3.2.9)

Note 1 to entry: An **Inter_stratum_feature_edge_template** is a type of Inter_stratum_feature_template included to support description of properties of the edges of features that traverse one or multiple layers of an interconnect.

5.571.22
Inter_stratum_feature_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Geometric_template* (5.574.1) that represents the inter stratum feature template *entity* (3.2.9)

5.571.23
Land_physical_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Stratum_feature_template* (5.571.38) that represents the land physical template *entity* (3.2.9)

5.571.24
Land_template_interface_terminal
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Land_template_terminal* (5.571.26) that represents the land template interface terminal *entity* (3.2.9)

Note 1 to entry: A **Land_template_interface_terminal** is a type of Land_template_terminal that has an external access functionality.

5.571.25
Land_template_join_terminal
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Land_template_terminal* (5.571.26) that represents the land template join terminal *entity* (3.2.9)

Note 1 to entry: A **Land_template_join_terminal** is a type of Land_template_terminal that has an internal access functionality.

5.571.26

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Land_template_terminal
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *General_part_feature* (5.694.3) that represents the land template terminal *entity* (3.2.9)

5.571.27
Material_removal_feature_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Single_stratum_continuous_template* (5.571.34) that represents the material removal feature template *entity* (3.2.9)

Note 1 to entry: A **Material_removal_feature_template** is a type of Single_stratum_continuous_template that describes the shape of material to be removed from a feature.

5.571.28
Parametric_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Template_definition* (5.578.2) that represents the parametric template *entity* (3.2.9)

5.571.29
Part_string_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Template_definition* (5.578.2) that represents the part string template *entity* (3.2.9)

Note 1 to entry: A **Part_string_template** is a type of Template_definition that supports the definitin of a multi-character representation in a design.

5.571.30
Part_text_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Template_definition* (5.578.2) that represents the part text template *entity* (3.2.9)

Note 1 to entry: A **Part_text_template** is a type of Template_definition that is the information required to support the creation of text messages in the stratum material on the *Layered_interconnect_module_design_view* (5.536.35) or in a marking application.

5.571.31
Planar_path_shape_model_with_parameters
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Single_area_csg_2d_model* (5.593.9) that represents the planar path shape model with parameters *entity* (3.2.9)

5.571.32
Planar_closed_path_shape_model_with_parameters
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Planar_path_shape_model_with_parameters* (5.571.31) that represents the planar closed path shape model with parameters *entity* (3.2.9)

5.571.33
Plated_passage_template_shape_model
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Part_template_shape_model* (5.574.3) that represents the plated passage template shape model *entity* (3.2.9)

5.571.34

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Single_stratum_continuous_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Continuous_template* (5.571.4) and *Single_stratum_template* (5.571.35) that represents the single stratum continuous template *entity* (3.2.9)

Note 1 to entry: A **Single_stratum_continuous_template** is a type of Continuous_template and a type of Single_stratum_template.

5.571.35
Single_stratum_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Template_definition* (5.578.2) that represents the single stratum template *entity* (3.2.9)

Note 1 to entry: A **Single_stratum_template** is a type of Template_definition included that has a constraint that the geometric extent of the template is limited to a single layer.

5.571.36
Solid_character_glyph_2d_symbol
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Character_glyph_symbol* (5.624.3) and *Csg_2d_model* (5.593.3) that represents the solid character glyph 2d symbol *entity* (3.2.9)

Note 1 to entry: A **Solid_character_glyph_2d_symbol** is a type of Character_glyph_symbol and a type of Csg_2d_model included to be an explicit geometric model of a character in a design that may be realized in material delivered to a customer.

5.571.37
Snowball_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Teardrop_template* (5.571.41) that represents the snowball template *entity* (3.2.9)

Note 1 to entry: A **Snowball_template** is a type of Teardrop_template that describes the shape of material to be added to a trace termination that is parameterized by the radius of the material addition geometry.

5.571.38
Stratum_feature_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Single_stratum_continuous_template* (5.571.34) that represents the stratum feature template *entity* (3.2.9)

Note 1 to entry: A **Stratum_feature_template** is a type of Single_stratum_continuous_template that is a definition or partial definition of a *Stratum_feature* (5.536.93).

5.571.39
Teardrop_by_angle_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Teardrop_template* (5.571.41) that represents the teardrop by angle template *entity* (3.2.9)

Note 1 to entry: A **Teardrop_by_angle_template** is a type of Teardrop_template that describes the shape of material to be added to a trace termination that is parameterized by the angle of the material addition geometry.

5.571.40
Teardrop_by_length_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Teardrop_template* (5.571.41) that represents the teardrop by length template *entity* (3.2.9)

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Note 1 to entry: A **Teardrop_by_length_template** is a type of Teardrop_template that describes the shape of material to be added to a design feature.

5.571.41
Teardrop_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Parametric_template* (5.571.28) and *Single_stratum_template* (5.571.35) that represents the teardrop template *entity* (3.2.9)

Note 1 to entry: A **Teardrop_template** is a type of Parametric_template and a type of Single_stratum_template that supports the transition area between a trace and a land.

5.571.42
Tile_area_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Fill_area_template* (5.571.17) that represents the tile area template *entity* (3.2.9)

5.571.43
Trace_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Parametric_template* (5.571.28) that represents the trace template *entity* (3.2.9)

Note 1 to entry: A **Trace_template** is a type of Parametric_template whose purpose is to define the width of a *Conductive_interconnect_element* (5.536.8) and the style of the ends and corners of that Conductive_interconnect_element.

5.571.44
Unsupported_passage_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Continuous_template* (5.571.4) and *Inter_stratum_feature_template* (5.571.22) that represents the unsupported passage template *entity* (3.2.9)

Note 1 to entry: An **Unsupported_passage_template** is a type of Continuous_template and a type of Inter_stratum_feature_template.

5.571.45
Via_template
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *Continuous_template* (5.571.4) and *Inter_stratum_feature_template* (5.571.22) that represents the via template *entity* (3.2.9)

Note 1 to entry: A **Via_template** is a type of Continuous_template and a type of Inter_stratum_feature_template.

5.571.46
Via_template_terminal
<application module: Layered_interconnect_simple_template_arm> *application object* (3.1.78) that is a type of *General_part_feature* (5.694.3) that represents the via template terminal *entity* (3.2.9)

5.572 Layered_interconnect_simple_template_mim

5.572.1
blind_passage_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *unsupported_passage_template* (5.572.36) that represents the blind passage template *entity* (3.2.9)

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Note 1 to entry: A **blind_passage_template** is a type of unsupported_passage_template that implements the ARM concept of *Blind_passage_template* (5.571.1).

5.572.2
component_termination_passage_template

<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *continuous_template* (5.572.3) and *inter_stratum_feature_template* (5.572.14) that represents the component termination passage template *entity* (3.2.9)

Note 1 to entry: A **component_termination_passage_template** is a type of continuous_template and a type of inter_stratum_feature_template that implements the ARM concept of *Component_termination_passage_template* (5.571.7).

5.572.3
continuous_template

<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *geometric_template* (5.575.1) that represents the continuous template *entity* (3.2.9)

Note 1 to entry: A **continuous_template** is a type of geometric_template that implements the ARM concept of *Continuous_template* (5.571.4).

5.572.4
counterbore_passage_template

<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *unsupported_passage_template* (5.572.36) that represents the counterbore passage template *entity* (3.2.9)

Note 1 to entry: A **counterbore_passage_template** is a type of unsupported_passage_template that implements the ARM concept of *Counterbore_passage_template* (5.571.5).

5.572.5
countersunk_passage_template

<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *unsupported_passage_template* (5.572.36) that represents the countersunk passage template *entity* (3.2.9)

Note 1 to entry: A **countersunk_passage_template** is a type of unsupported_passage_template that implements the ARM concept of *Countersunk_passage_template* (5.571.6).

5.572.6
default_attachment_size_based_land_physical_template

<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *land_physical_template* (5.572.18) and *shape_aspect* (4.19.10) that represents the default attachment size based land physical template *entity* (3.2.9)

Note 1 to entry: A **default_attachment_size_based_land_physical_template** is a type of land_physical_template and a type of shape_aspect that implements the ARM concept of *Default_attachment_size_based_land_physical_template* (5.571.11).

5.572.7
default_passage_based_land_physical_template

<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *land_physical_template* (5.572.18) that represents the default passage based land physical template *entity* (3.2.9)

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Note 1 to entry: A **default_passage_based_land_physical_template** is a type of land_physical_template that implements the ARM concept of *Default_passage_based_land_physical_template* (5.571.12).

5.572.8
default_plated_passage_based_land_physical_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *default_passage_based_land_physical_template* (5.572.7) that represents the default plated passage based land physical template *entity* (3.2.9)

Note 1 to entry: A **default_plated_passage_based_land_physical_template** is a type of default_passage_based_land_physical_template that implements the ARM concept of *Default_plated_passage_based_land_physical_template* (5.571.13).

5.572.9
default_trace_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *trace_template* (5.572.35) that represents the default trace template *entity* (3.2.9)

Note 1 to entry: A **default_trace_template** is a type of trace_template that implements the ARM concept of *Default_trace_template* (5.571.15).

5.572.10
default_unsupported_passage_based_land_physical_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *default_passage_based_land_physical_template* (5.572.7) that represents the default unsupported passage based land physical template *entity* (3.2.9)

Note 1 to entry: A **default_unsupported_passage_based_land_physical_template** is a type of default_passage_based_land_physical_template that implements the ARM concept of *Default_unsupported_passage_based_land_physical_template* (5.571.14).

5.572.11
electrical_isolation_removal_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *material_removal_feature_template* (5.572.20) that represents the electrical isolation removal template *entity* (3.2.9)

Note 1 to entry: A **electrical_isolation_removal_template** is a type of material_removal_feature_template that implements the ARM concept of *Electrical_isolation_removal_template* (5.571.16).

5.572.12
inter_stratum_feature_edge_segment_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *part_template_definition* (5.579.1) and *shape_aspect_relationship* (4.19.12) that represents the inter stratum feature edge segment template *entity* (3.2.9)

Note 1 to entry: An **inter_stratum_feature_edge_segment_template** is a type of part_template_definition and of shape_aspect_relationship that implements the ARM concept of *Interconnect_module_edge_segment* (5.536.39).

5.572.13
inter_stratum_feature_edge_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *part_template_definition* (5.579.1) that represents the inter stratum feature edge template *entity* (3.2.9)

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Note 1 to entry: A **inter_stratum_feature_edge_template** is a type of part_template_definition that implements the ARM concept of *Inter_stratum_feature_edge_template* (5.571.21).

5.572.14
inter_stratum_feature_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *geometric_template* (5.575.1) that represents the inter stratum feature template *entity* (3.2.9)

Note 1 to entry: A **inter_stratum_feature_template** is a type of geometric_template that implements the ARM concept of *Inter_stratum_feature_template* (5.571.22).

5.572.15
fill_area_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *parametric_template* (5.572.21) that represents the fill area template *entity* (3.2.9)

Note 1 to entry: A **fill_area_template** is a type of parametric_template that implements the ARM concept of *Fill_area_template* (5.571.17).

5.572.16
hatch_area_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *fill_area_template* (5.572.15) that represents the hatch area template *entity* (3.2.9)

Note 1 to entry: A **hatch_area_template** is a type of fill_area_template that implements the ARM concept of *Hatch_area_template* (5.571.18).

5.572.17
hatch_line_element
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *geometric_representation_item* (4.28.2) and *representation_item_relationship* (4.41.17) that represents the hatch line element *entity* (3.2.9)

Note 1 to entry: A **hatch_line_element** is a type of geometric_representation_item and a type of representation_item_relationship that implements the ARM concept of *Hatch_line_element* (5.571.19).

5.572.18
land_physical_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *stratum_feature_template* (5.572.30) that represents the land physical template *entity* (3.2.9)

Note 1 to entry: A **land_physical_template** is a type of stratum_feature_template that implements the ARM concepts of:

— *Default_attachment_size_based_land_physical_template* (5.571.11);

— *Land_physical_template* (5.571.23).

5.572.19
land_template_terminal
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the land template terminal *entity* (3.2.9)

Note 1 to entry: A **land_template_terminal** is a type of shape_aspect that implements the ARM concepts of:

— *Land_template_interface_terminal* (5.571.24);

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— *Land_template_join_terminal* (5.571.25);

— *Land_template_terminal* (5.571.26).

5.572.20
material_removal_feature_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *single_stratum_continuous_template* (5.572.26) that represents the material removal feature template *entity* (3.2.9)

Note 1 to entry: A **material_removal_feature_template** is a type of single_stratum_continuous_template that implements the ARM concept of *Material_removal_feature_template* (5.571.27).

5.572.21
parametric_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *part_template_definition* (5.579.1) that represents the parametric template *entity* (3.2.9)

Note 1 to entry: A **parametric_template** is a type of part_template_definition that implements the ARM concept of *Parametric_template* (5.571.28).

5.572.22
part_string_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *part_template_definition* (5.579.1) that represents the part string template *entity* (3.2.9)

Note 1 to entry: A **part_string_template** is a type of part_template_definition that implements the ARM concept of *Part_string_template* (5.571.29).

5.572.23
part_text_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *part_template_definition* (5.579.1) that represents the part text template *entity* (3.2.9)

Note 1 to entry: A **part_text_template** is a type of part_template_definition that implements the ARM concept of *Part_text_template* (5.571.30).

5.572.24
planar_path_shape_representation_with_parameters
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *single_area_csg_2d_shape_representation* (5.594.11) that represents the planar path shape representation with parameters *entity* (3.2.9)

5.572.25
planar_closed_path_shape_representation_with_parameters
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *planar_path_shape_representation_with_parameters* (5.572.24) that represents the planar closed path shape representation with parameters *entity* (3.2.9)

Note 1 to entry: A **planar_closed_path_shape_representation_with_parameters** is a type of planar_path_shape_representation_with_parameters that implements the ARM concept of *Planar_closed_path_shape_model_with_parameters* (5.571.32).

5.572.26

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single_stratum_continuous_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *continuous_template* (5.572.3) and *single_stratum_template* (5.572.27) that represents the single stratum continuous template *entity* (3.2.9)

Note 1 to entry: A **single_stratum_continuous_template** is a type of continuous_template and a type of single_stratum_template that implements the ARM concept of *Single_stratum_continuous_template* (5.571.34).

5.572.27
single_stratum_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *part_template_definition* (5.579.1) that represents the single stratum template *entity* (3.2.9)

Note 1 to entry: A **single_stratum_template** is a type of part_template_definition that implements the ARM concept of *Single_stratum_template* (5.571.35).

5.572.28
solid_character_glyph_2d_symbol
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *generic_character_glyph_symbol* (4.40.13) and *csg_2d_shape_representation* (5.594.6) that represents the solid character glyph 2d symbol *entity* (3.2.9)

Note 1 to entry: A **solid_character_glyph_2d_symbol** is a type of generic_character_glyph_symbol and a type of csg_2d_shape_representation that implements the ARM concept of *Solid_character_glyph_2d_symbol* (5.571.36).

5.572.29
snowball_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *teardrop_template* (5.572.33) that represents the snowball template *entity* (3.2.9)

Note 1 to entry: A **snowball_template** is a type of teardrop_template that implements the ARM concept of *Snowball_template* (5.571.37).

5.572.30
stratum_feature_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *single_stratum_continuous_template* (5.572.26) that represents the stratum feature template *entity* (3.2.9)

Note 1 to entry: A **stratum_feature_template** is a type of single_stratum_continuous_template that implements the ARM concept of *Stratum_feature_template* (5.571.38).

5.572.31
teardrop_by_angle_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *teardrop_template* (5.572.33) that represents the teardrop by angle template *entity* (3.2.9)

Note 1 to entry: A **teardrop_by_angle_template** is a type of teardrop_template that implements the ARM concept of *Teardrop_by_angle_template* (5.571.39).

5.572.32
teardrop_by_length_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *teardrop_template* (5.572.33) that represents the teardrop by length template *entity* (3.2.9)

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Note 1 to entry: A **teardrop_by_length_template** is a type of teardrop_template that implements the ARM concept of *Teardrop_by_length_template* (5.571.40).

5.572.33
teardrop_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *parametric_template* (5.572.21) and *single_stratum_template* (5.572.27) that represents the teardrop template *entity* (3.2.9)

Note 1 to entry: A **teardrop_template** is a type of parametric_template and a type of single_stratum_template that implements the ARM concept of *Teardrop_template* (5.571.41).

5.572.34
tile_area_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *fill_area_template* (5.572.15) that represents the tile area template *entity* (3.2.9)

Note 1 to entry: A **tile_area_template** is a type of fill_area_template that implements the ARM concept of *Tile_area_template* (5.571.42).

5.572.35
trace_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *parametric_template* (5.572.21) that represents the trace template *entity* (3.2.9)

Note 1 to entry: A **trace_template** is a type of parametric_template that implements the ARM concept of *Trace_template* (5.571.43).

5.572.36
unsupported_passage_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *continuous_template* (5.572.3) and *inter_stratum_feature_template* (5.572.14) that represents the unsupported passage template *entity* (3.2.9)

Note 1 to entry: An **unsupported_passage_template** is a type of continuous_template and a type of inter_stratum_feature_template that implements the ARM concept of *Unsupported_passage_template* (5.571.44).

5.572.37
via_template
<application module: Layered_interconnect_simple_template_mim> *entity data type* (3.2.10) that is a type of *continuous_template* (5.572.3) and *inter_stratum_feature_template* (5.572.14) that represents the via template *entity* (3.2.9)

Note 1 to entry: A **via_template** is a type of continuous_template and a type of inter_stratum_feature_template that implements the ARM concept of *Via_template* (5.571.45).

5.573 Part_template_non_planar_shape_arm

5.573.1
Part_template_non_planar_2d_shape_model
<application module: Part_template_non_planar_shape_arm> *application object* (3.1.78) that is a type of *Manifold_surface_shape_representation* (5.413.1) and *Part_template_shape_model* (5.574.3) that represents the part template non planar 2d shape model *entity* (3.2.9)

Note 1 to entry: A **Part_template_non_planar_2d_shape_model** is a type of Manifold_surface_shape_representation and a type of Part_template_shape_model.

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5.574 Part_template_shape_with_parameters_arm

5.574.1
Geometric_template
<application module: Part_template_shape_with_parameters_arm> *application object* (3.1.78) that is a type of *Template_definition* (5.578.2) that represents the geometric template *entity* (3.2.9)

5.574.2
Part_template_keepout_shape_model
<application module: Part_template_shape_with_parameters_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the part template keepout shape model *entity* (3.2.9)

5.574.3
Part_template_shape_model
<application module: Part_template_shape_with_parameters_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the part template shape model *entity* (3.2.9)

5.575 Part_template_shape_with_parameters_mim

5.575.1
geometric_template
<application module: Part_template_shape_with_parameters_mim> *entity data type* (3.2.10) that is a type of *part_template_definition* (5.579.1) that represents the geometric template *entity* (3.2.9)

Note 1 to entry: A **geometric_template** is a type of part_template_definition that implements the ARM concept of *Geometric_template* (5.574.1).

5.576 Physical_component_feature_arm

5.576.1
Physical_component_feature
<application module: Physical_component_feature_arm> *application object* (3.1.78) that is a type of *Component_feature* (5.478.1) that represents the physical component feature *entity* (3.2.9)

5.576.2
Physical_component_terminal
<application module: Physical_component_feature_arm> *application object* (3.1.78) that is a type of *Component_terminal* (5.478.5) and *Physical_component_feature* (5.576.1) that represents the physical component terminal *entity* (3.2.9)

Note 1 to entry: A **Physical_component_terminal** is a type of Component_terminal and a Physical_component_feature.

5.577 Physical_component_feature_mim

5.577.1
physical_component_feature
<application module: Physical_component_feature_mim> *entity data type* (3.2.10) that is a type of *component_feature* (5.479.1) that represents the physical component feature *entity* (3.2.9)

Note 1 to entry: A **physical_component_feature** is a type of component_feature that implements the ARM concept of *Physical_component_feature* (5.576.1).

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5.577.2
physical_component_terminal
<application module: Physical_component_feature_mim> *entity data type* (3.2.10) that is a type of *component_terminal* (5.479.4) and *physical_component_feature* (5.577.1) that represents the physical component terminal *entity* (3.2.9)

Note 1 to entry: A **physical_component_terminal** is a type of component_terminal and of physical_component_feature that implements the ARM concept of *Physical_component_terminal* (5.576.2).

5.578 Part_template_arm

5.578.1
Template
<application module: Part_template_arm> *application object* (3.1.78) that is a type of *Part* (5.34.1) that represents the template *entity* (3.2.9)

5.578.2
Template_definition
<application module: Part_template_arm> *application object* (3.1.78) that is a type of *Part_view_definition* (5.35.1) that represents the template definition *entity* (3.2.9)

Note 1 to entry: A **Template_definition** is a type of Part_view_definition that defines a characterization view of a version of a *Template* (5.578.1).

5.578.3
Template_version
<application module: Part_template_arm> *application object* (3.1.78) that is a type of *Part_version* (5.34.2) that represents the template version *entity* (3.2.9)

Note 1 to entry: A **Template_version** is a type of Part_version that identifies a version of a template.

5.579 Part_template_mim

5.579.1
part_template_definition
<application module: Part_template_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) and *product_definition_shape* (4.19.8) that represents the part template definition *entity* (3.2.9)

Note 1 to entry: A **part_template_definition** is a type of product_definition and of product_definition_shape that implements the ARM concepts of:

- *Blind_passage_template* (5.571.1);
- *Component_termination_passage_template* (5.571.7);
- *Counterbore_passage_template* (5.571.5);
- *Countersunk_passage_template* (5.571.6);
- *Default_trace_template* (5.571.15);
- *Inter_stratum_feature_template* (5.571.22);
- *Material_removal_feature_template* (5.571.27);
- *Non_conductive_cross_section_template* (5.603.4);

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— *Template_definition* (5.578.2);

— *Part_text_template* (5.571.30);

— *Printed_connector_template* (5.603.5);

— *Printed_part_cross_section_template* (5.603.7);

— *Printed_part_template* (5.603.9);

— *Stratum_feature_template* (5.571.38);

— *Trace_template* (5.571.43);

— *Unsupported_passage_template* (5.571.44);

— *Via_template* (5.571.45).

5.580 Physical_node_requirement_to_implementing_component_allocation_arm

5.580.1
Assembly_to_part_connectivity_structure_allocation

<application module: Physical_node_requirement_to_implementing_component_allocation_arm> *application object* (3.1.78) that represents the assembly to part connectivity structure allocation *entity* (3.2.9)

Note 1 to entry: An **Assembly_to_part_connectivity_structure_allocation** is an ..

5.580.2
Physical_node_branch_requirement_to_implementing_component_allocation

<application module: Physical_node_requirement_to_implementing_component_allocation_arm> *application object* (3.1.78) that represents the physical node branch requirement to implementing component allocation *entity* (3.2.9)

Note 1 to entry: A **Physical_node_branch_requirement_to_implementing_component_allocation** is an ..

5.580.3
Physical_node_requirement_to_implementing_component_allocation

<application module: Physical_node_requirement_to_implementing_component_allocation_arm> *application object* (3.1.78) that represents the physical node requirement to implementing component allocation *entity* (3.2.9)

Note 1 to entry: A **Physical_node_requirement_to_implementing_component_allocation** is the association between the connectivity requirements and the component and joints that provide that connectivity.

5.581 Physical_node_requirement_to_implementing_component_allocation_mim

5.581.1
assembly_to_part_connectivity_structure_allocation

<application module: Physical_node_requirement_to_implementing_component_allocation_mim> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) and *shape_aspect* (4.19.10) that represents the assembly to part connectivity structure allocation *entity* (3.2.9)

Note 1 to entry: An **assembly_to_part_connectivity_structure_allocation** is a type of shape_aspect and a type of shape_aspect_relationship that implements the ARM concept of *Assembly_to_part_connectivity_structure_allocation* (5.580.1).

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5.581.2
physical_node_branch_requirement_to_implementing_component_allocation
<application module: Physical_node_requirement_to_implementing_component_allocation_mim> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) and *shape_aspect* (4.19.10) that represents the physical node branch requirement to implementing component allocation *entity* (3.2.9)

Note 1 to entry: An **physical_node_branch_requirement_to_implementing_component_allocation** is a type of shape_aspect and a type of shape_aspect_relationship that implements the ARM concept of *Physical_node_branch_requirement_to_implementing_component_allocation* (5.580.2).

5.581.3
physical_node_requirement_to_implementing_component_allocation
<application module: Physical_node_requirement_to_implementing_component_allocation_mim> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) and *shape_aspect* (4.19.10) that represents the physical node requirement to implementing component allocation *entity* (3.2.9)

Note 1 to entry: A **physical_node_requirement_to_implementing_component_allocation** is a type of shape_aspect and a type of shape_aspect_relationship that is the allocation of a physical node to the component that is partially or wholly responsible for implementing that node in the assembly.

5.582 Physical_unit_2d_design_view_arm

5.582.1
Assembly_component_2d_shape_model
<application module: Physical_unit_2d_design_view_arm> *application object* (3.1.78) that is a type of *Planar_projected_shape_model* (5.531.1) that represents the assembly component 2d shape model *entity* (3.2.9)

5.582.2
Component_2d_location
<application module: Physical_unit_2d_design_view_arm> *application object* (3.1.78) that is a type of *Contextual_shape_representation* (5.39.2) and *Geometric_composition_with_operator_transformation* (5.39.3) that represents the component 2d location *entity* (3.2.9)

Note 1 to entry: A **Component_2d_location** is a type of Contextual_shape_representation and a type of Geometric_composition_with_operator_transformation.

5.583 Physical_unit_2d_design_view_mim

5.583.1
component_2d_location
<application module: Physical_unit_2d_design_view_mim> *entity data type* (3.2.10) that is a type of *context_dependent_shape_representation* (4.20.4) and *shape_representation_relationship* (4.20.10) and *representation_relationship_with_transformation* (4.41.21) and *definitional_representation_relationship* (4.41.5) that represents the component 2d location *entity* (3.2.9)

Note 1 to entry: A **component_2d_location** is a type of context_dependent_shape_representation, shape_representation_relationship, representation_relationship_with_transformation and definitional_representation_relationship.

5.584 Physical_unit_3d_design_view_arm

5.584.1

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Assembly_component_3d_shape_model
<application module: Physical_unit_3d_design_view_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the assembly component 3d shape model *entity* (3.2.9)

5.584.2
Component_3d_location
<application module: Physical_unit_3d_design_view_arm> *application object* (3.1.78) that is a type of *Contextual_shape_representation* (5.39.2) and *Geometric_composition_with_operator_transformation* (5.39.3) that represents the component 3d location *entity* (3.2.9)

Note 1 to entry: A **Component_3d_location** is a type of Contextual_shape_representation and a type of Geometric_composition_with_operator_transformation.

5.585 Physical_unit_3d_design_view_mim

5.585.1
component_3d_location
<application module: Physical_unit_3d_design_view_mim> *entity data type* (3.2.10) that is a type of *context_dependent_shape_representation* (4.20.4) and *shape_representation_relationship* (4.20.10) and *representation_relationship_with_transformation* (4.41.21) and *definitional_representation_relationship* (4.41.5) that represents the component 3d location *entity* (3.2.9)

Note 1 to entry: A **component_3d_location** is a type of context_dependent_shape_representation, definitional_representation_relationship, representation_relationship_with_transformation, shape_representation_relationship.

5.586 Physical_unit_2d_shape_arm

5.586.1
Physical_unit_planar_keepout_shape_model
<application module: Physical_unit_2d_shape_arm> *application object* (3.1.78) that is a type of *Planar_shape_model* (5.531.2) and *Usage_view_level_non_feature_shape_model* (5.549.8) and *Physical_unit_keepout_shape_model* (5.592.1) that represents the physical unit planar keepout shape model *entity* (3.2.9)

Note 1 to entry: A **Physical_unit_planar_keepout_shape_model** is a type of Planar_shape_model, Usage_view_level_non_feature_shape_model and a type of Physical_unit_keepout_shape_model.

5.586.2
Physical_unit_planar_shape_model
<application module: Physical_unit_2d_shape_arm> *application object* (3.1.78) that is a type of *Planar_projected_shape_model* (5.531.1) and *Physical_unit_shape_model* (5.592.2) that represents the physical unit planar shape model *entity* (3.2.9)

Note 1 to entry: A **Physical_unit_planar_shape_model** is a type of Planar_projected_shape_model and a type of Physical_unit_shape_model.

5.587 Physical_unit_3d_shape_arm

5.587.1
Physical_unit_3d_keepout_shape_model
<application module: Physical_unit_3d_shape_arm> *application object* (3.1.78) that is a type of *Usage_view_level_non_feature_shape_model* (5.549.8) and *Physical_unit_keepout_shape_model* (5.592.1) that represents the physical unit 3d keepout shape model *entity* (3.2.9)

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Note 1 to entry: A **Physical_unit_3d_keepout_shape_model** is a type of Physical_unit_keepout_shape_model and a type of Usage_view_level_non_feature_shape_model.

5.587.2
Physical_unit_3d_shape_model
<application module: Physical_unit_3d_shape_arm> *application object* (3.1.78) that is a type of *Physical_unit_shape_model* (5.592.2) that represents the physical unit 3d shape model *entity* (3.2.9)

5.588 Physical_unit_design_view_arm

5.588.1
Assembly_alternate_product
<application module: Physical_unit_design_view_arm> *application object* (3.1.78) that is a type of *Alternate_product_relationship* (5.55.1) that represents the assembly alternate product *entity* (3.2.9)

Note 1 to entry: An **Assembly_alternate_product** is a type of Alternate_product_relationship where the alternate relationship is limited to the scope of a specific design definition.

5.588.2
Assembly_item_number
<application module: Physical_unit_design_view_arm> *application object* (3.1.78) that represents the assembly item number *entity* (3.2.9)

Note 1 to entry: An **Assembly_item_number** is an association of a set of *Assembly_component_relationship* (5.38.1) with an identifier in the context of a physical design.

5.588.3
Component_material_relationship
<application module: Physical_unit_design_view_arm> *application object* (3.1.78) that represents the component material relationship *entity* (3.2.9)

Note 1 to entry: A **Component_material_relationship** is a means to provide the ability to relate at a component level a process specific assembly requirement that bonds two items together using a third item as the bonding agent.

5.588.4
Component_to_physical_usage_view_assignment
<application module: Physical_unit_design_view_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the component to physical usage view assignment *entity* (3.2.9)

5.588.5
Component_feature_to_physical_usage_view_assignment
<application module: Physical_unit_design_view_arm> *application object* (3.1.78) that represents the component feature to physical usage view assignment *entity* (3.2.9)

Note 1 to entry: A **Component_feature_to_physical_usage_view_assignment** is the association between the *Part_feature* (5.595.4) and the *Component_feature* (5.478.1).

5.588.6
Connection_zone_in_design_view
<application module: Physical_unit_design_view_arm> *application object* (3.1.78) that is a type of *Connection_zone* (5.496.1) that represents the connection zone in design view *entity* (3.2.9)

Note 1 to entry: A **Connection_zone_in_design_view** is a type of Connection_zone that is created to support design specific connection areas.

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5.588.7
Next_assembly_usage_occurrence_relationship
<application module: Physical_unit_design_view_arm> *application object* (3.1.78) that is a type of *Next_assembly_usage* (5.38.4) that represents the next assembly usage occurrence relationship *entity* (3.2.9)

Note 1 to entry: A **Next_assembly_usage_occurrence_relationship** is a type of Next_assembly_usage that restricts the **component** to be a *Product_occurrence* (5.79.2).

5.588.8
Part_design_view
<application module: Physical_unit_design_view_arm> *application object* (3.1.78) that is a type of *Part_view_definition* (5.35.1) that represents the part design view *entity* (3.2.9)

5.589 Physical_unit_design_view_mim

5.589.1
assembly_item_number
<application module: Physical_unit_design_view_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) and *applied_group_assignment* (5.114.1) that represents the assembly item number *entity* (3.2.9)

Note 1 to entry: An **assembly_item_number** is a type of applied_group_assignment and a type of group that implements the ARM concept of *Assembly_item_number* (5.588.2).

5.589.2
component_material_relationship
<application module: Physical_unit_design_view_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) and *property_definition* (4.19.9) that represents the component material relationship *entity* (3.2.9)

Note 1 to entry: A **component_material_relationship** is a type of group and a type of property_definition that implements the ARM concept of *Component_material_relationship* (5.588.3).

5.589.3
component_material_relationship_assignment
<application module: Physical_unit_design_view_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) and *role_association* (4.4.9) that represents the component material relationship assignment *entity* (3.2.9)

Note 1 to entry: A **component_material_relationship_assignment** is a type of group_assignment and a type of role_association.

5.589.4
next_assembly_usage_occurrence_relationship
<application module: Physical_unit_design_view_mim> *entity data type* (3.2.10) that is a type of *next_assembly_usage_occurrence* (4.25.8) and *product_definition_occurrence_relationship* (4.25.12) that represents the next assembly usage occurrence relationship *entity* (3.2.9)

Note 1 to entry: A **next_assembly_usage_occurrence_relationship** is a type of next_assembly_usage_occurrence and a type of product_definition_occurrence_relationship that implements the ARM concept of *Next_assembly_usage_occurrence_relationship* (5.588.7).

5.590 Physical_unit_interconnect_definition_arm

5.590.1

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Connector_based_interconnect_definition
<application module: Physical_unit_interconnect_definition_arm> *application object* (3.1.78) that represents the connector based interconnect definition *entity* (3.2.9)

Note 1 to entry: A **Connector_based_interconnect_definition** is the linkage between two physical connectors that specifies the existence of a mated state of that pair of connectors in the context of an assembly that includes the components related to the connectors.

5.590.2
Physical_unit_interconnect_definition
<application module: Physical_unit_interconnect_definition_arm> *application object* (3.1.78) that is a type of *Part_view_definition* (5.35.1) that represents the physical unit interconnect definition *entity* (3.2.9)

Note 1 to entry: A **Physical_unit_interconnect_definition** is a type of Part_view_definition A **Physical_unit_interconnect_definition** is referenced by members of *Connector_based_interconnect_definition* (5.590.1) that correspond to the mated connectors for the sub assemblies included in the design.

5.591 Physical_unit_interconnect_definition_mim

5.591.1
connector_based_interconnect_definition
<application module: Physical_unit_interconnect_definition_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) that represents the connector based interconnect definition *entity* (3.2.9)

Note 1 to entry: A **connector_based_interconnect_definition** is a type of property_definition that implements the ARM concept of *Connector_based_interconnect_definition* (5.590.1).

5.591.2
physical_unit_interconnect_definition
<application module: Physical_unit_interconnect_definition_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the physical unit interconnect definition *entity* (3.2.9)

Note 1 to entry: A **physical_unit_interconnect_definition** is a type of product_definition that implements the ARM concept of *Physical_unit_interconnect_definition* (5.590.2).

5.592 Physical_unit_shape_with_parameters_arm

5.592.1
Physical_unit_keepout_shape_model
<application module: Physical_unit_shape_with_parameters_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the physical unit keepout shape model *entity* (3.2.9)

5.592.2
Physical_unit_shape_model
<application module: Physical_unit_shape_with_parameters_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the physical unit shape model *entity* (3.2.9)

5.593 Constructive_solid_geometry_2d_arm

5.593.1

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Area_with_outer_boundary
<application module: Constructive_solid_geometry_2d_arm> *application object* (3.1.78) that is a type of *Primitive_2d* (5.434.4) that represents the area with outer boundary *entity* (3.2.9)

Note 1 to entry: An **Area_with_outer_boundary** is a type of Primitive_2d that represents the extent of an enclosed two-dimensional surface.

5.593.2
Boolean_result_2d
<application module: Constructive_solid_geometry_2d_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the boolean result 2d *entity* (3.2.9)

Note 1 to entry: A **Boolean_result_2d** is a type of Detailed_geometric_model_element that represents the output of a Boolean operation performed on a two-dimensional element.

5.593.3
Csg_2d_model
<application module: Constructive_solid_geometry_2d_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the csg 2d model *entity* (3.2.9)

Note 1 to entry: A **Csg_2d_model** is a type of Geometric_model defined by a collection of solid models, each of which can be composed of two or more primitive solids combined using regularised Boolean operations.

5.593.4
Curve_style_parameters
<application module: Constructive_solid_geometry_2d_arm> *application object* (3.1.78) that represents the curve style parameters *entity* (3.2.9)

Note 1 to entry: A **Curve_style_parameters** is the definition of a set of properties that are of a geometric nature.

5.593.5
Closed_curve_style_parameters
<application module: Constructive_solid_geometry_2d_arm> *application object* (3.1.78) that is a type of *Curve_style_parameters* (5.593.4) that represents the closed curve style parameters *entity* (3.2.9)

Note 1 to entry: A **Closed_curve_style_parameters** is a type of Curve_style_parameters that is intended to only be applied to a closed path.

5.593.6
Curve_style_parameters_with_ends
<application module: Constructive_solid_geometry_2d_arm> *application object* (3.1.78) that is a type of *Curve_style_parameters* (5.593.4) that represents the curve style parameters with ends *entity* (3.2.9)

Note 1 to entry: A **Curve_style_parameters_with_ends** is a type of Curve_style_parameters that includes end effects.

5.593.7
Path_area_with_parameters
<application module: Constructive_solid_geometry_2d_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the path area with parameters *entity* (3.2.9)

Note 1 to entry: A **Path_area_with_parameters** is a type of Detailed_geometric_model_element that is described by a central curve and the path of a point moving along that curve.

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5.593.8
Primitive_2d_with_inner_boundary
<application module: Constructive_solid_geometry_2d_arm> *application object* (3.1.78) that is a type of *Primitive_2d* (5.434.4) that represents the primitive 2d with inner boundary *entity* (3.2.9)

Note 1 to entry: A **Primitive_2d_with_inner_boundary** is a type of Primitive_2d that describes the surface area of a simple two-dimensional geometric shape with an inner boundary defined.

5.593.9
Single_area_csg_2d_model
<application module: Constructive_solid_geometry_2d_arm> *application object* (3.1.78) that is a type of *Csg_2d_model* (5.593.3) that represents the single area csg 2d model *entity* (3.2.9)

Note 1 to entry: A **Single_area_csg_2d_model** is a type of Csg_2d_model that describes the area of a simple geometric two-dimensional primitive.

5.593.10
Single_boundary_csg_2d_model
<application module: Constructive_solid_geometry_2d_arm> *application object* (3.1.78) that is a type of *Single_area_csg_2d_model* (5.593.9) that represents the single boundary csg 2d model *entity* (3.2.9)

Note 1 to entry: A **Single_boundary_csg_2d_model** is a type of Single_area_csg_2d_model that describes a simple two-dimensional geometric primitive with a boundary.

5.594 Constructive_solid_geometry_2d_mim

5.594.1
boolean_result_2d
<application module: Constructive_solid_geometry_2d_mim> *entity data type* (3.2.10) that is a type of *boolean_result* (4.27.7) that represents the boolean result 2d *entity* (3.2.9)

Note 1 to entry: A **boolean_result_2d** is a type of boolean_result in two dimensions.

5.594.2
closed_curve_style_parameters
<application module: Constructive_solid_geometry_2d_mim> *entity data type* (3.2.10) that is a type of *curve_style_parameters_representation* (5.594.7) that represents the closed curve style parameters *entity* (3.2.9)

Note 1 to entry: A **closed_curve_style_parameters** is a type of curve_style_parameters_representation that implements the ARM concept of *Closed_curve_style_parameters* (5.593.5).

5.594.3
complex_area
<application module: Constructive_solid_geometry_2d_mim> *entity data type* (3.2.10) that is a type of *primitive_2d* (4.27.24) that represents the complex area *entity* (3.2.9)

5.594.4
csg_primitive_solid_2d
<application module: Constructive_solid_geometry_2d_mim> *entity data type* (3.2.10) that is a type of *csg_solid_2d* (5.594.5) that represents the csg primitive solid 2d *entity* (3.2.9)

5.594.5
csg_solid_2d
<application module: Constructive_solid_geometry_2d_mim> *entity data type* (3.2.10) that is a type of *csg_solid* (4.27.6) that represents the csg solid 2d *entity* (3.2.9)

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Note 1 to entry: A **csg_solid_2d** is a type of csg_solid in two dimensions.

5.594.6
csg_2d_shape_representation
<application module: Constructive_solid_geometry_2d_mim> *entity data type* (3.2.10) that is a type of *shape_representation* (4.20.8) that represents the csg 2d shape representation *entity* (3.2.9)

Note 1 to entry: A **csg_2d_shape_representation** is a type of shape_representation that implements the ARM concept of *Csg_2d_model* (5.593.3).

5.594.7
curve_style_parameters_representation
<application module: Constructive_solid_geometry_2d_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) that represents the curve style parameters representation *entity* (3.2.9)

5.594.8
curve_style_parameters_with_ends
<application module: Constructive_solid_geometry_2d_mim> *entity data type* (3.2.10) that is a type of *curve_style_parameters_representation* (5.594.7) that represents the curve style parameters with ends *entity* (3.2.9)

Note 1 to entry: A **curve_style_parameters_with_ends** is a type of curve_style_parameters_representation that implements the ARM concept of *Curve_style_parameters_with_ends* (5.593.6).

5.594.9
path_area_with_parameters
<application module: Constructive_solid_geometry_2d_mim> *entity data type* (3.2.10) that is a type of *complex_area* (5.594.3) and *mapped_item* (4.41.11) that represents the path area with parameters *entity* (3.2.9)

Note 1 to entry: A **path_area_with_parameters** is a type of complex_area and of mapped_item that implements the ARM concepts of:

— *Path_area_with_parameters* (5.593.7);

— *Closed_path_area_with_parameters* (5.571.2).

5.594.10
primitive_2d_with_inner_boundary
<application module: Constructive_solid_geometry_2d_mim> *entity data type* (3.2.10) that is a type of *complex_area* (5.594.3) and *compound_representation_item* (4.41.3) that represents the primitive 2d with inner boundary *entity* (3.2.9)

Note 1 to entry: A **primitive_2d_with_inner_boundary** is a type of *primitive_2d* (4.27.24) and of compound_representation_item.

5.594.11
single_area_csg_2d_shape_representation
<application module: Constructive_solid_geometry_2d_mim> *entity data type* (3.2.10) that is a type of *csg_2d_shape_representation* (5.594.6) that represents the single area csg 2d shape representation *entity* (3.2.9)

Note 1 to entry: A **single_area_csg_2d_shape_representation** is a type of csg_2d_shape_representation that implements the ARM concept of *Single_area_csg_2d_model* (5.593.9).

5.594.12

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single_boundary_csg_2d_shape_representation
<application module: Constructive_solid_geometry_2d_mim> *entity data type* (3.2.10) that is a type of *single_area_csg_2d_shape_representation* (5.594.11) that represents the single boundary csg 2d shape representation *entity* (3.2.9)

Note 1 to entry: A **single_boundary_csg_2d_shape_representation** is a type of single_area_csg_2d_shape_representation that implements the ARM concept of *Single_boundary_csg_2d_model* (5.593.10).

5.595 Physical_unit_usage_view_arm

5.595.1
Derived_part_view_definition_relationship
<application module: Physical_unit_usage_view_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the derived part view definition relationship *entity* (3.2.9)

5.595.2
Connection_zone_in_usage_view
<application module: Physical_unit_usage_view_arm> *application object* (3.1.78) that is a type of *Connection_zone* (5.496.1) that represents the connection zone in usage view *entity* (3.2.9)

Note 1 to entry: A **Connection_zone_in_usage_view** is a type of Connection_zone that is in the context of a *Part_usage_view* (5.595.8).

5.595.3
Connection_zone_map_identification
<application module: Physical_unit_usage_view_arm> *application object* (3.1.78) that represents the connection zone map identification *entity* (3.2.9)

Note 1 to entry: A **Connection_zone_map_identification** is a means to specify the causal geometric relationship between a reference *Connection_zone* (5.496.1) associated with a *Package_terminal* (5.551.13) and a mapped Connection_zone associated with a template interface terminal.

5.595.4
Part_feature
<application module: Physical_unit_usage_view_arm> *application object* (3.1.78) that is a type of *General_part_feature* (5.694.3) that represents the part feature *entity* (3.2.9)

Note 1 to entry: A **Part_feature** is a type of General_part_feature that is in the context of a *Part_usage_view* (5.595.8).

5.595.5
Part_feature_make_from_relationship
<application module: Physical_unit_usage_view_arm> *application object* (3.1.78) that is a type of *Shape_element_relationship* (5.41.7) that represents the part feature make from relationship *entity* (3.2.9)

5.595.6
Part_feature_template_definition
<application module: Physical_unit_usage_view_arm> *application object* (3.1.78) that is a type of *Feature_definition_with_connection_area* (5.496.2) that represents the part feature template definition *entity* (3.2.9)

5.595.7

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Part_feature_template_shape_model
<application module: Physical_unit_usage_view_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the part feature template shape model *entity* (3.2.9)

5.595.8
Part_usage_view
<application module: Physical_unit_usage_view_arm> *application object* (3.1.78) that is a type of *Part_view_definition* (5.35.1) that represents the part usage view *entity* (3.2.9)

5.595.9
Usage_view_connection_zone_terminal_shape_relationship
<application module: Physical_unit_usage_view_arm> *application object* (3.1.78) that represents the usage view connection zone terminal shape relationship *entity* (3.2.9)

Note 1 to entry: A **Usage_view_connection_zone_terminal_shape_relationship** is a means to position and orient the geometric model of a *Connection_zone* (5.496.1) into the model of a feature using a transformation.

5.596 Physical_unit_usage_view_mim

5.596.1
connection_zone_map_identification
<application module: Physical_unit_usage_view_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *representation_relationship* (4.41.20) that represents the connection zone map identification *entity* (3.2.9)

Note 1 to entry: A **connection_zone_map_identification** is a type of representation_relationship and a type of shape_aspect that implements the ARM concept of *Connection_zone_map_identification* (5.595.3).

5.596.2
make_from_part_feature_relationship
<application module: Physical_unit_usage_view_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the make from part feature relationship *entity* (3.2.9)

Note 1 to entry: A **make_from_part_feature_relationship** is a type of shape_aspect and a type of shape_aspect_relationship that implements the ARM concept of *Part_feature_make_from_relationship* (5.595.5).

5.596.3
part_feature_template_definition
<application module: Physical_unit_usage_view_mim> *entity data type* (3.2.10) that is a type of *shape_feature_definition* (5.642.1) and *group* (4.12.1) that represents the part feature template definition *entity* (3.2.9)

Note 1 to entry: A **part_feature_template_definition** is a type of group and a type of shape_feature_definition that implements the ARM concept of *Part_feature_template_definition* (5.595.6).

5.596.4
physical_unit
<application module: Physical_unit_usage_view_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) and *product_definition_shape* (4.19.8) that represents the physical unit *entity* (3.2.9)

Note 1 to entry: A **physical_unit** is a type of product_definition and a type of product_definition_shape that implements the ARM concepts of:

— *Assembly_module_design_view* (5.441.1);

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— *Assembly_module_usage_view* (5.451.3);

— *Generic_product_view_definition_reference* (5.711.1);

— *Product_view_definition* (5.30.1);

— *Interconnect_module_design_view* (5.536.37);

— *Interconnect_module_usage_view* (5.517.12);

— *Part_view_definition* (5.35.1);

— *Part_design_view* (5.588.8);

— *Part_usage_view* (5.595.8).

5.596.5
usage_view_connection_zone_terminal_shape_relationship
<application module: Physical_unit_usage_view_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) and *representation_relationship_with_transformation* (4.41.21) that represents the usage view connection zone terminal shape relationship *entity* (3.2.9)

Note 1 to entry: A **usage_view_connection_zone_terminal_shape_relationship** is a type of representation and a type of representation_relationship_with_transformation that implements the ARM concept of *Usage_view_connection_zone_terminal_shape_relationship* (5.595.9).

5.597 Planned_characteristic_arm

5.597.1
Evaluated_characteristic
<application module: Planned_characteristic_arm> *application object* (3.1.78) that represents the evaluated characteristic *entity* (3.2.9)

Note 1 to entry: An **Evaluated_characteristic** is a set of properties resulting from an evaluation or intended evaluation of product data.

5.597.2
Evaluation_view_definition
<application module: Planned_characteristic_arm> *application object* (3.1.78) that is a type of *Product_view_definition* (5.30.1) that represents the evaluation view definition *entity* (3.2.9)

Note 1 to entry: An **Evaluation_view_definition** is a type of Product_view_definition that is an aggregation of individual evaluations for a specific Product_view_definition.

5.597.3
Planned_characteristic
<application module: Planned_characteristic_arm> *application object* (3.1.78) that represents the planned characteristic *entity* (3.2.9)

Note 1 to entry: A **Planned_characteristic** is a means to associate design intent information based on manufacturing capabilities and component characteristics with an allocated requirement.

5.597.4
Measured_characteristic
<application module: Planned_characteristic_arm> *application object* (3.1.78) that represents the measured characteristic *entity* (3.2.9)

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Note 1 to entry: A **Measured_characteristic** is a means to associate design intent information based on manufacturing capabilities and component characteristics with an allocated requirement.

5.597.5
Rule_based_evaluated_characteristic
<application module: Planned_characteristic_arm> *application object* (3.1.78) that is a type of *Evaluated_characteristic* (5.597.1) that represents the rule based evaluated characteristic *entity* (3.2.9)

5.598 Planned_characteristic_mim

5.598.1
evaluated_characteristic
<application module: Planned_characteristic_mim> *entity data type* (3.2.10) that is a type of *representation* (4.41.13) and *representation_relationship* (4.41.20) that represents the evaluated characteristic *entity* (3.2.9)

Note 1 to entry: An **evaluated_characteristic** is a type of representation and a representation_relationship that implements the ARM concept of *Evaluated_characteristic* (5.597.1).

5.598.2
evaluation_product_definition
<application module: Planned_characteristic_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the evaluation product definition *entity* (3.2.9)

Note 1 to entry: An **evaluation_product_definition** is a type of product_definition that implements the ARM concept of *Evaluation_view_definition* (5.597.2)

5.599 Pre_defined_datum_symbol_arm

5.599.1
Pre_defined_parallel_datum_axis_symbol_3d_2d_relationship
<application module: Pre_defined_datum_symbol_arm> *application object* (3.1.78) that is a type of *Shape_definition_3d_intersection* (5.532.1) that represents the pre defined parallel datum axis symbol 3d 2d relationship *entity* (3.2.9)

5.599.2
Pre_defined_perpendicular_datum_axis_symbol_3d_2d_relationship
<application module: Pre_defined_datum_symbol_arm> *application object* (3.1.78) that is a type of *Shape_definition_3d_intersection* (5.532.1) that represents the pre defined perpendicular datum axis symbol 3d 2d relationship *entity* (3.2.9)

5.599.3
Pre_defined_perpendicular_datum_plane_symbol_3d_2d_relationship
<application module: Pre_defined_datum_symbol_arm> *application object* (3.1.78) that is a type of *Shape_definition_3d_intersection* (5.532.1) that represents the pre defined perpendicular datum plane symbol 3d 2d relationship *entity* (3.2.9)

5.600 Pre_defined_datum_symbol_mim

5.600.1
pre_defined_parallel_datum_axis_symbol_3d_2d_relationship
<application module: Pre_defined_datum_symbol_mim> *entity data type* (3.2.10) that is a type of *shape_definition_3d_intersection* (5.533.1) that represents the pre defined parallel datum axis symbol 3d 2d relationship *entity* (3.2.9)

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Note 1 to entry: A **pre_defined_parallel_datum_axis_symbol_3d_2d_relationship** is a type of shape_definition_3d_intersection that implements the ARM concept of *Pre_defined_parallel_datum_axis_symbol_3d_2d_relationship* (5.599.1).

5.600.2
pre_defined_perpendicular_datum_axis_symbol_3d_2d_relationship
<application module: Pre_defined_datum_symbol_mim> *entity data type* (3.2.10) that is a type of *shape_definition_3d_intersection* (5.533.1) that represents the pre defined perpendicular datum axis symbol 3d 2d relationship *entity* (3.2.9)

Note 1 to entry: A **pre_defined_perpendicular_datum_axis_symbol_3d_2d_relationship** is a type of shape_definition_3d_intersection that implements the ARM concept of *Pre_defined_perpendicular_datum_axis_symbol_3d_2d_relationship* (5.599.2).

5.600.3
pre_defined_perpendicular_datum_plane_symbol_3d_2d_relationship
<application module: Pre_defined_datum_symbol_mim> *entity data type* (3.2.10) that is a type of *shape_definition_3d_intersection* (5.533.1) that represents the pre defined perpendicular datum plane symbol 3d 2d relationship *entity* (3.2.9)

Note 1 to entry: A **pre_defined_perpendicular_datum_plane_symbol_3d_2d_relationship** is a type of shape_definition_3d_intersection that implements the ARM concept of *Pre_defined_perpendicular_datum_plane_symbol_3d_2d_relationship* (5.599.3).

5.601 Pre_defined_datum_2d_symbol_arm

5.601.1
Pre_defined_datum_2d_symbol
<application module: Pre_defined_datum_2d_symbol_arm> *application object* (3.1.78) that is a type of *Planar_shape_model* (5.531.2) that represents the pre defined datum 2d symbol *entity* (3.2.9)

5.601.2
Pre_defined_parallel_datum_axis_2d_symbol
<application module: Pre_defined_datum_2d_symbol_arm> *application object* (3.1.78) that is a type of *Pre_defined_datum_2d_symbol* (5.601.1) that represents the pre defined parallel datum axis 2d symbol *entity* (3.2.9)

5.601.3
Pre_defined_perpendicular_datum_axis_2d_symbol
<application module: Pre_defined_datum_2d_symbol_arm> *application object* (3.1.78) that is a type of *Pre_defined_datum_2d_symbol* (5.601.1) that represents the pre defined perpendicular datum axis 2d symbol *entity* (3.2.9)

5.601.4
Pre_defined_perpendicular_datum_plane_2d_symbol
<application module: Pre_defined_datum_2d_symbol_arm> *application object* (3.1.78) that is a type of *Pre_defined_datum_2d_symbol* (5.601.1) that represents the pre defined perpendicular datum plane 2d symbol *entity* (3.2.9)

5.602 Pre_defined_datum_3d_symbol_arm

5.602.1
Pre_defined_datum_axis_3d_symbol
<application module: Pre_defined_datum_3d_symbol_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the pre defined datum axis 3d symbol *entity* (3.2.9)

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5.602.2
Pre_defined_datum_plane_3d_symbol
<application module: Pre_defined_datum_3d_symbol_arm> *application object* (3.1.78) that is a type of *Geometric_model* (5.10.12) that represents the pre defined datum plane 3d symbol *entity* (3.2.9)

5.603 Printed_physical_layout_template_arm

5.603.1
Basic_multi_stratum_printed_part_template
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that is a type of *Printed_part_template* (5.603.9) that represents the basic multi stratum printed part template *entity* (3.2.9)

Note 1 to entry: A **Basic_multi_stratum_printed_part_template** is a type of Printed_part_template where the shape on all stratum is a simple continuous shape.

5.603.2
Functional_usage_view_to_printed_part_template_terminal_assignment
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that represents the functional usage view to printed part template terminal assignment *entity* (3.2.9)

Note 1 to entry: A **Functional_usage_view_to_printed_part_template_terminal_assignment** is the association between a functional terminal definition and a terminal of a *Printed_part_template* (5.603.9).

5.603.3
Multi_stratum_printed_part_template
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that is a type of *Structured_printed_part_template* (5.603.18) and *Multi_stratum_structured_template* (5.567.11) that represents the multi stratum printed part template *entity* (3.2.9)

Note 1 to entry: A **Multi_stratum_printed_part_template** is a type of Multi_stratum_structured_template and a type of Structured_printed_part_template.

5.603.4
Non_conductive_cross_section_template
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that is a type of *Template_definition* (5.578.2) that represents the non conductive cross section template *entity* (3.2.9)

Note 1 to entry: A **Non_conductive_cross_section_template** is a type of Template_definition where the material in the cross-section is non conductive.

5.603.5
Printed_connector_template
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that is a type of *Printed_part_template* (5.603.9) that represents the printed connector template *entity* (3.2.9)

Note 1 to entry: A **Printed_connector_template** is a type of Printed_part_template that contains contacts, each of whose function is to act as a short from an *Printed_part_template_interface_terminal* (5.603.11) to the related *Printed_part_template_join_terminal* (5.603.12).

5.603.6
Printed_connector_template_terminal_relationship
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that represents the printed connector template terminal relationship *entity* (3.2.9)

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Note 1 to entry: A **Printed_connector_template_terminal_relationship** is the definition of the connection between a *Printed_part_template_interface_terminal* (5.603.11) and a *Printed_part_template_join_terminal* (5.603.12) for one contact of a *Printed_connector_template* (5.603.5).

5.603.7
Printed_part_cross_section_template
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that is a type of *Printed_part_template* (5.603.9) that represents the printed part cross section template *entity* (3.2.9)

Note 1 to entry: A **Printed_part_cross_section_template** is a type of Printed_part_template that describes a cross-sectional view of a transmission line unit element including dielectric, metallic and geometric properties.

5.603.8
Printed_part_cross_section_template_terminal
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that is a type of *Printed_part_template_terminal* (5.603.15) that represents the printed part cross section template terminal *entity* (3.2.9)

Note 1 to entry: A **Printed_part_cross_section_template_terminal** is a type of Printed_part_template_terminal that is the terminal of the *Printed_part_cross_section_template* (5.603.7).

5.603.9
Printed_part_template
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that is a type of *Template_definition* (5.578.2) that represents the printed part template *entity* (3.2.9)

Note 1 to entry: A **Printed_part_template** is a type of Template_definition that has a specified function.

5.603.10
Printed_part_template_connected_terminals_definition
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that represents the printed part template connected terminals definition *entity* (3.2.9)

Note 1 to entry: A **Printed_part_template_connected_terminals_definition** is the association between two or more *Printed_part_template_terminal* (5.603.15) that are connected.

5.603.11
Printed_part_template_interface_terminal
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that is a type of *Printed_part_template_terminal* (5.603.15) that represents the printed part template interface terminal *entity* (3.2.9)

Note 1 to entry: A **Printed_part_template_interface_terminal** is a type of Printed_part_template_terminal, an occurrence of which is an external access to the printed circuit board of which it is a component.

5.603.12
Printed_part_template_join_terminal
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that is a type of *Printed_part_template_terminal* (5.603.15) that represents the printed part template join terminal *entity* (3.2.9)

Note 1 to entry: A **Printed_part_template_join_terminal** is a type of Printed_part_template_terminal an occurrence of which provides access to the functionality of the *Printed_part_template* (5.603.9) from within a printed circuit board.

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5.603.13
Printed_part_template_material
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that represents the printed part template material *entity* (3.2.9)

Note 1 to entry: A **Printed_part_template_material** is an extension to stratum technology that adds a width specification to support the structural definition of a transmission line model provided by *Printed_part_cross_section_template* (5.603.7).

5.603.14
Printed_part_template_material_link
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that represents the printed part template material link *entity* (3.2.9)

Note 1 to entry: A **Printed_part_template_material_link** is a link that establishes an adjacency relationship between two material boundaries in the cross section view of a template.

5.603.15
Printed_part_template_terminal
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that is a type of *General_part_feature* (5.694.3) that represents the printed part template terminal *entity* (3.2.9)

5.603.16
Printed_tiebar_template
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that is a type of *Structured_printed_part_template* (5.603.18) that represents the printed tiebar template *entity* (3.2.9)

Note 1 to entry: A **Printed_tiebar_template** is a type of Structured_printed_part_template included to support an implementation of a connection between otherwise disjoint networks in a layout.

5.603.17
Single_stratum_printed_part_template
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that is a type of *Structured_printed_part_template* (5.603.18) and *Single_stratum_structured_template* (5.567.20) that represents the single stratum printed part template *entity* (3.2.9)

Note 1 to entry: A **Single_stratum_printed_part_template** is a type of Single_stratum_structured_template and a type of Structured_printed_part_template.

5.603.18
Structured_printed_part_template
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that is a type of *Printed_part_template* (5.603.9) and *Structured_template* (5.567.25) that represents the structured printed part template *entity* (3.2.9)

Note 1 to entry: A **Structured_printed_part_template** is a type of Printed_part_template and a type of Structured_template.

5.603.19
Structured_printed_part_template_terminal
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that is a type of *Printed_part_template_terminal* (5.603.15) that represents the structured printed part template terminal *entity* (3.2.9)

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Note 1 to entry: A **Structured_printed_part_template_terminal** is a type of Printed_part_template_terminal specialized to support the structure imposed by the *Structured_printed_part_template* (5.603.18).

5.603.20
Template_material_cross_section_boundary
<application module: Printed_physical_layout_template_arm> *application object* (3.1.78) that is a type of *Non_feature_shape_element* (5.549.4) that represents the template material cross section boundary *entity* (3.2.9)

Note 1 to entry: A **Template_material_cross_section_boundary** is a type of Non_feature_shape_element that provides pre-classified boundary elements for the structural definition of a transmission line model provided by *Printed_part_cross_section_template* (5.603.7)..

5.604 Printed_physical_layout_template_mim

5.604.1
basic_multi_stratum_printed_part_template
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *printed_part_template* (5.604.8) that represents the basic multi stratum printed part template *entity* (3.2.9)

Note 1 to entry: A **basic_multi_stratum_printed_part_template** is a type of printed_part_template that implements the ARM concept of *Basic_multi_stratum_printed_part_template* (5.603.1).

5.604.2
multi_stratum_printed_part_template
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *structured_printed_part_template* (5.604.16) and *multi_stratum_structured_template* (5.568.9) that represents the multi stratum printed part template *entity* (3.2.9)

Note 1 to entry: A **multi_stratum_printed_part_template** is a type of multi_stratum_structured_template and a type of structured_printed_part_template that implements the ARM concept of *Multi_stratum_printed_part_template* (5.603.3).

5.604.3
non_conductive_cross_section_template
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *part_template_definition* (5.579.1) that represents the non conductive cross section template *entity* (3.2.9)

Note 1 to entry: A **non_conductive_cross_section_template** is a type of part_template_definition that implements the ARM concept of *Non_conductive_cross_section_template* (5.603.4).

5.604.4
printed_connector_template
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *printed_part_template* (5.604.8) that represents the printed connector template *entity* (3.2.9)

Note 1 to entry: A **printed_connector_template** is a type of printed_part_template that implements the ARM concept of *Printed_connector_template* (5.603.5).

5.604.5
printed_connector_template_terminal_relationship
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the printed connector template terminal relationship *entity* (3.2.9)

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Note 1 to entry: A **printed_connector_template_terminal_relationship** is a type of shape_aspect and a type of shape_aspect_relationship that implements the ARM concept of *Printed_connector_template_terminal_relationship* (5.603.6).

5.604.6
printed_part_cross_section_template
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *printed_part_template* (5.604.8) that represents the printed part cross section template *entity* (3.2.9)

Note 1 to entry: A **printed_part_cross_section_template** is a type of printed_part_template that implements the ARM concept of *Printed_part_cross_section_template* (5.603.7).

5.604.7
printed_part_cross_section_template_terminal
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *printed_part_template_terminal* (5.604.12) that represents the printed part cross section template terminal *entity* (3.2.9)

Note 1 to entry: A **printed_part_cross_section_template_terminal** is a type of printed_part_template_terminal that implements the ARM concept of *Printed_part_cross_section_template_terminal* (5.603.8).

5.604.8
printed_part_template
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *part_template_definition* (5.579.1) that represents the printed part template *entity* (3.2.9)

Note 1 to entry: A **printed_part_template** is a type of part_template_definition that implements the ARM concept of *Printed_part_template* (5.603.9).

5.604.9
printed_part_template_connected_terminals_definition
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the printed part template connected terminals definition *entity* (3.2.9)

Note 1 to entry: A **printed_part_template_connected_terminals_definition** is a type of shape_aspect that implements the ARM concept of *Printed_part_template_connected_terminals_definition* (5.603.10).

5.604.10
printed_part_template_material
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the printed part template material *entity* (3.2.9)

Note 1 to entry: A **printed_part_template_material** is a type of product_definition that implements the ARM concept of: *Printed_part_template_material* (5.603.13)

5.604.11
printed_part_template_material_link
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) and *shape_aspect_relationship* (4.19.12) that represents the printed part template material link *entity* (3.2.9)

Note 1 to entry: A **printed_part_template_material_link** is a type of shape_aspect and a type of shape_aspect_relationship that implements the ARM concept of *Printed_part_template_material_link* (5.603.14).

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5.604.12
printed_part_template_terminal
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the printed part template terminal *entity* (3.2.9)

Note 1 to entry: A **printed_part_template_terminal** is a type of shape_aspect that implements the ARM concepts of:

— *Printed_part_cross_section_template_terminal* (5.603.8);

— *Printed_part_template_interface_terminal* (5.603.11);

— *Printed_part_template_join_terminal* (5.603.12);

— *Printed_part_template_terminal* (5.603.15).

5.604.13
printed_part_template_terminal_connection_zone_category
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the printed part template terminal connection zone category *entity* (3.2.9)

Note 1 to entry: A **printed_part_template_terminal_connection_zone_category** is a type of group that specifies either an 'area edge segment', a 'curve edge segment', a 'surface area', or a 'surface point' for a *Printed_part_template_terminal* (5.603.15).

5.604.14
printed_tiebar_template
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *structured_printed_part_template* (5.604.16) that represents the printed tiebar template *entity* (3.2.9)

Note 1 to entry: A **printed_tiebar_template** is a type of structured_printed_part_template that implements the ARM concept of *Printed_tiebar_template* (5.603.16).

5.604.15
single_stratum_printed_part_template
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *structured_printed_part_template* (5.604.16) and *single_stratum_structured_template* (5.568.16) that represents the single stratum printed part template *entity* (3.2.9)

Note 1 to entry: A **single_stratum_printed_part_template** is a type of single_stratum_structured_template and a type of structured_printed_part_template that implements the ARM concept of *Single_stratum_printed_part_template* (5.603.17).

5.604.16
structured_printed_part_template
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *printed_part_template* (5.604.8) and *structured_template* (5.568.21) that represents the structured printed part template *entity* (3.2.9)

Note 1 to entry: A **structured_printed_part_template** is a type of printed_part_template and a type of structured_template that implements the ARM concept of *Structured_printed_part_template* (5.603.18).

5.604.17

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structured_printed_part_template_terminal
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *printed_part_template_terminal* (5.604.12) that represents the structured printed part template terminal *entity* (3.2.9)

Note 1 to entry: A **structured_printed_part_template_terminal** is a type of printed_part_template_terminal that implements the ARM concept of *Structured_printed_part_template_terminal* (5.603.19).

5.604.18
template_material_cross_section_boundary
<application module: Printed_physical_layout_template_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the template material cross section boundary *entity* (3.2.9)

Note 1 to entry: A **template_material_cross_section_boundary** is a type of shape_aspect that implements the ARM concepts of: *Template_material_cross_section_boundary* (5.603.20).

5.605 Production_rule_arm

5.605.1
Abstract_variable
<application module: Production_rule_arm> *application object* (3.1.78) that represents the abstract variable *entity* (3.2.9)

Note 1 to entry: An **Abstract_variable** is the specification of a variable with an identifier and scope.

5.605.2
Atomic_formula
<application module: Production_rule_arm> *application object* (3.1.78) that represents the atomic formula *entity* (3.2.9)

Note 1 to entry: An **Atomic_formula** is one of a *Rule_condition* (5.605.23) or a *Ground_fact* (5.605.15).

5.605.3
Attribute_assertion
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Fact_type* (5.605.11) that represents the attribute assertion *entity* (3.2.9)

5.605.4
Back_chaining_rule
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Rule_definition* (5.605.25) that represents the back chaining rule *entity* (3.2.9)

5.605.5
Complex_clause
<application module: Production_rule_arm> *application object* (3.1.78) that represents the complex clause *entity* (3.2.9)

Note 1 to entry: A **Complex_clause** is one of a *Complex_conjunctive_clause* (5.605.6) or a *Complex_disjunctive_clause* (5.605.7).

5.605.6
Complex_conjunctive_clause
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Complex_clause* (5.605.5) that represents the complex conjunctive clause *entity* (3.2.9)

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Note 1 to entry: A **Complex_conjunctive_clause** is a type of Complex_clause where the operator used to compose the clause is an AND operator.

5.605.7
Complex_disjunctive_clause
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Complex_clause* (5.605.5) that represents the complex disjunctive clause *entity* (3.2.9)

Note 1 to entry: A **Complex_disjunctive_clause** is a type of Complex_clause where the operator used to compose the clause is an OR operator.

5.605.8
Entity_assertion
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Fact_type* (5.605.11) that represents the entity assertion *entity* (3.2.9)

5.605.9
Enum_reference_prefix
<application module: Production_rule_arm> *application object* (3.1.78) that represents the enum reference prefix *entity* (3.2.9)

Note 1 to entry: An **Enum_reference_prefix** is the text that can be prepended to an enumeration to provide additional information about the enumeration.

5.605.10
Extent
<application module: Production_rule_arm> *application object* (3.1.78) that represents the extent *entity* (3.2.9)

Note 1 to entry: An **Extent** is a means to provide information about the *Fact_type* (5.605.11) by providing the **query_expression** and optional **syntax** information used to extract the Fact_type.

5.605.11
Fact_type
<application module: Production_rule_arm> *application object* (3.1.78) that represents the fact type *entity* (3.2.9)

Note 1 to entry: A **Fact_type** is one of an *Entity_assertion* (5.605.8) or an *Attribute_assertion* (5.605.3).

5.605.12
Forward_chaining_rule
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Rule_definition* (5.605.25) that represents the forward chaining rule *entity* (3.2.9)

5.605.13
Func
<application module: Production_rule_arm> *application object* (3.1.78) that represents the func *entity* (3.2.9)

Note 1 to entry: A **Func** is an association of a symbol to a list of terms.

5.605.14
Global_assignment
<application module: Production_rule_arm> *application object* (3.1.78) that represents the global assignment *entity* (3.2.9)

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Note 1 to entry: A **Global_assignment** is a statement in the production rules that assigns a value to a variable.

5.605.15
Ground_fact
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Atomic_formula* (5.605.2) that represents the ground fact *entity* (3.2.9)

5.605.16
Literal_conjunction
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Simple_clause* (5.605.40) that represents the literal conjunction *entity* (3.2.9)

5.605.17
Literal_disjunction
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Simple_clause* (5.605.40) that represents the literal disjunction *entity* (3.2.9)

5.605.18
Row_value
<application module: Production_rule_arm> *application object* (3.1.78) that represents the row value *entity* (3.2.9)

Note 1 to entry: A **Row_value** is a data type containing a sequenced arrangement of data values.

5.605.19
Row_variable
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Abstract_variable* (5.605.1) that represents the row variable *entity* (3.2.9)

Note 1 to entry: A **Row_variable** is a type of Abstract_variable with a size that may be more than one.

5.605.20
Rule_action
<application module: Production_rule_arm> *application object* (3.1.78) that represents the rule action *entity* (3.2.9)

Note 1 to entry: A **Rule_action** is one of a *Rule_adoption* (5.605.21), a *Rule_change_request* (5.605.22), a *Rule_creation* (5.605.24), a *Rule_expiration* (5.605.26), a *Rule_modification* (5.605.28), a *Rule_rejection* (5.605.31), a *Rule_request* (5.605.32), a *Rule_submission* (5.605.36), or a *Rule_supersedence* (5.605.37).

5.605.21
Rule_adoption
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Rule_action* (5.605.20) that represents the rule adoption *entity* (3.2.9)

Note 1 to entry: A **Rule_adoption** is a type of Rule_action that states a version of a *Rule_product* (5.605.30) has been adopted.

5.605.22
Rule_change_request
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Rule_action* (5.605.20) that represents the rule change request *entity* (3.2.9)

Note 1 to entry: A **Rule_change_request** is a type of Rule_action that states a request has been made for modification to a version of a *Rule_product* (5.605.30).

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5.605.23
Rule_condition
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Atomic_formula* (5.605.2) that represents the rule condition *entity* (3.2.9)

5.605.24
Rule_creation
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Rule_action* (5.605.20) that represents the rule creation *entity* (3.2.9)

Note 1 to entry: A **Rule_creation** is a type of Rule_action that states that a version of a *Rule_product* (5.605.30) has been created.

5.605.25
Rule_definition
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Rule_software_definition* (5.605.35) that represents the rule definition *entity* (3.2.9)

5.605.26
Rule_expiration
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Rule_action* (5.605.20) that represents the rule expiration *entity* (3.2.9)

Note 1 to entry: A **Rule_expiration** is a type of Rule_action that states that a version of a *Rule_product* (5.605.30) has expired.

5.605.27
Rule_justification
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Rule_action* (5.605.20) that represents the rule justification *entity* (3.2.9)

5.605.28
Rule_modification
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Rule_action* (5.605.20) that represents the rule modification *entity* (3.2.9)

Note 1 to entry: A **Rule_modification** is a type of Rule_action that states a version of a *Rule_product* (5.605.30) is a result of a request to change an existing version of an Rule_product.

5.605.29
Rule_priority
<application module: Production_rule_arm> *application object* (3.1.78) that represents the rule priority *entity* (3.2.9)

Note 1 to entry: A **Rule_priority** is a statement that an *Product* (5.28.1) that is in the rule category has a **priority** value.

5.605.30
Rule_product
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Software* (5.618.1) that represents the rule product *entity* (3.2.9)

5.605.31

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Rule_rejection
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Rule_action* (5.605.20) that represents the rule rejection *entity* (3.2.9)

Note 1 to entry: A **Rule_rejection** is a type of Rule_action that states a version of a *Rule_product* (5.605.30) has been rejected.

5.605.32
Rule_request
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Rule_action* (5.605.20) that represents the rule request *entity* (3.2.9)

Note 1 to entry: A **Rule_request** is a type of Rule_action that states a version of a *Rule_product* (5.605.30) has been requested.

5.605.33
Rule_set
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Rule_software_definition* (5.605.35) that represents the rule set *entity* (3.2.9)

5.605.34
Rule_set_group
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Rule_software_definition* (5.605.35) that represents the rule set group *entity* (3.2.9)

5.605.35
Rule_software_definition
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Software_definition* (5.618.2) that represents the rule software definition *entity* (3.2.9)

Note 1 to entry: A **Rule_software_definition** is a type of Software_definition that encodes instructions for a rule.

5.605.36
Rule_submission
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Rule_action* (5.605.20) that represents the rule submission *entity* (3.2.9)

Note 1 to entry: A **Rule_submission** is a type of Rule_action stating that a version of a *Rule_product* (5.605.30) has been submitted.

5.605.37
Rule_supersedence
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Rule_action* (5.605.20) that represents the rule supersedence *entity* (3.2.9)

Note 1 to entry: A **Rule_supersedence** is a type of Rule_action stating that one *Rule_version* (5.605.38) has been superseded by another Rule_version.

5.605.38
Rule_version
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Software_version* (5.618.3) that represents the rule version *entity* (3.2.9)

5.605.39

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Scalar_variable
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Abstract_variable* (5.605.1) that represents the scalar variable *entity* (3.2.9)

Note 1 to entry: A **Scalar_variable** is a type of Abstract_variable with a size of one.

5.605.40
Simple_clause
<application module: Production_rule_arm> *application object* (3.1.78) that represents the simple clause *entity* (3.2.9)

Note 1 to entry: A **Simple_clause** is one of a *Literal_conjunction* (5.605.16) or a *Literal_disjunction* (5.605.17).

5.605.41
Symbol
<application module: Production_rule_arm> *application object* (3.1.78) that is a type of *Representation_item* (5.12.5) that represents the symbol *entity* (3.2.9)

Note 1 to entry: A **Symbol** is a type of Representation_item used by the rules system to name the things on which assertions are made.

5.606 Production_rule_mim

5.606.1
abstract_variable
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) and *property_definition_representation* (4.20.6) and *representation* (4.41.13) and *representation_item* (4.41.16) that represents the abstract variable *entity* (3.2.9)

Note 1 to entry: An **abstract_variable** is a type of property_definition, property_definition_representation, representation and a type of representation_item that implements the ARM concept of *Abstract_variable* (5.605.1).

5.606.2
atomic_formula
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *compound_representation_item* (4.41.3) that represents the atomic formula *entity* (3.2.9)

Note 1 to entry: An **atomic_formula** is a type of compound_representation_item that implements the ARM concept of *Atomic_formula* (5.605.2).

5.606.3
attribute_assertion
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *fact_type* (5.606.12) and *property_definition_representation* (4.20.6) and *representation* (4.41.13) that represents the attribute assertion *entity* (3.2.9)

Note 1 to entry: An **attribute_assertion** is a type of fact_type, property_definition_representation and a type of representation that implements the ARM concept of *Attribute_assertion* (5.605.3).

5.606.4
back_chaining_rule
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *rule_definition* (5.606.24) that represents the back chaining rule *entity* (3.2.9)

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Note 1 to entry: An **back_chaining_rule** is a type of rule_definition that implements the ARM concept of *Back_chaining_rule* (5.605.4).

5.606.5
back_chaining_rule_body
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) and *property_definition_representation* (4.20.6) and *representation* (4.41.13) that represents the back chaining rule body *entity* (3.2.9)

Note 1 to entry: An **back_chaining_rule_body** is a type of property_definition, property_definition_representation and a type of representation.

5.606.6
complex_clause
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *compound_representation_item* (4.41.3) that represents the complex clause *entity* (3.2.9)

Note 1 to entry: An **complex_clause** is a type of compound_representation_item that implements the ARM concept of *Complex_clause* (5.605.5).

5.606.7
complex_conjunctive_clause
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *complex_clause* (5.606.6) that represents the complex conjunctive clause *entity* (3.2.9)

Note 1 to entry: An **complex_conjunctive_clause** is a type of complex_clause that implements the ARM concept of *Complex_conjunctive_clause* (5.605.6).

5.606.8
complex_disjunctive_clause
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *complex_clause* (5.606.6) that represents the complex disjunctive clause *entity* (3.2.9)

Note 1 to entry: An **complex_disjunctive_clause** is a type of complex_clause that implements the ARM concept of *Complex_disjunctive_clause* (5.605.7).

5.606.9
entity_assertion
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *fact_type* (5.606.12) that represents the entity assertion *entity* (3.2.9)

Note 1 to entry: An **entity_assertion** is a type of fact_type that implements the ARM concept of *Entity_assertion* (5.605.8).

5.606.10
enum_reference_prefix
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *descriptive_representation_item* (4.34.1) that represents the enum reference prefix *entity* (3.2.9)

Note 1 to entry: An **enum_reference_prefix** is a type of descriptive_representation_item that implements the ARM concept of *Enum_reference_prefix* (5.605.9).

5.606.11
extent
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) that represents the extent *entity* (3.2.9)

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Note 1 to entry: An **extent** is a type of characterized_object that implements the ARM concept of *Extent* (5.605.10).

5.606.12
fact_type
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) that represents the fact type *entity* (3.2.9)

Note 1 to entry: An **fact_type** is a type of property_definition that implements the ARM concept of *Fact_type* (5.605.11).

5.606.13
forward_chaining_rule
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *rule_definition* (5.606.24) that represents the forward chaining rule *entity* (3.2.9)

Note 1 to entry: An **forward_chaining_rule** is a type of rule_definition that implements the ARM concept of *Forward_chaining_rule* (5.605.12).

5.606.14
forward_chaining_rule_premise
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) and *property_definition_representation* (4.20.6) and *representation* (4.41.13) that represents the forward chaining rule premise *entity* (3.2.9)

Note 1 to entry: An **forward_chaining_rule_premise** is a type of property_definition, property_definition_representation and a type of representation.

5.606.15
func
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *compound_representation_item* (4.41.3) that represents the func *entity* (3.2.9)

Note 1 to entry: An **func** is a type of compound_representation_item that implements the ARM concept of *Func* (5.605.13).

5.606.16
global_assignment
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *representation_item_relationship* (4.41.17) that represents the global assignment *entity* (3.2.9)

Note 1 to entry: An **global_assignment** is a type of representation_item_relationship that implements the ARM concept of *Global_assignment* (5.605.14).

5.606.17
ground_fact
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *atomic_formula* (5.606.2) that represents the ground fact *entity* (3.2.9)

Note 1 to entry: An **ground_fact** is a type of atomic_formula that implements the ARM concept of *Ground_fact* (5.605.15).

5.606.18
literal_conjunction
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *simple_clause* (5.606.31) that represents the literal conjunction *entity* (3.2.9)

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Note 1 to entry: An **literal_conjunction** is a type of simple_clause that implements the ARM concept of *Literal_conjunction* (5.605.16).

5.606.19
literal_disjunction
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *simple_clause* (5.606.31) that represents the literal disjunction *entity* (3.2.9)

Note 1 to entry: An **literal_disjunction** is a type of simple_clause that implements the ARM concept of *Literal_disjunction* (5.605.17).

5.606.20
row_value
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *compound_representation_item* (4.41.3) that represents the row value *entity* (3.2.9)

Note 1 to entry: An **row_value** is a type of compound_representation_item that implements the ARM concept of *Row_value* (5.605.18).

5.606.21
row_variable
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *abstract_variable* (5.606.1) that represents the row variable *entity* (3.2.9)

Note 1 to entry: An **row_variable** is a type of abstract_variable that implements the ARM concept of *Row_variable* (5.605.19).

5.606.22
rule_action
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *action* (4.1.1) that represents the rule action *entity* (3.2.9)

Note 1 to entry: A **rule_action** is a type of action that implements the ARM concepts of:

- *Rule_action* (5.605.20);
- *Rule_adoption* (5.605.21);
- *Rule_change_request* (5.605.22);
- *Rule_creation* (5.605.24);
- *Rule_expiration* (5.605.26);
- *Rule_justification* (5.605.27);
- *Rule_modification* (5.605.28);
- *Rule_rejection* (5.605.31);
- *Rule_request* (5.605.32);
- *Rule_submission* (5.605.36);
- *Rule_supersedence* (5.605.37).

5.606.23

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rule_condition
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *atomic_formula* (5.606.2) that represents the rule condition *entity* (3.2.9)

Note 1 to entry: An **rule_condition** is a type of atomic_formula that implements the ARM concept of *Rule_condition* (5.605.23).

5.606.24
rule_definition
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *rule_software_definition* (5.606.27) that represents the rule definition *entity* (3.2.9)

Note 1 to entry: A **rule_definition** is a type of rule_software_definition that implements the ARM concept of *Rule_definition* (5.605.25).

5.606.25
rule_superseded_assignment
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *action_assignment* (4.15.1) that represents the rule superseded assignment *entity* (3.2.9)

5.606.26
rule_set
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *rule_software_definition* (5.606.27) that represents the rule set *entity* (3.2.9)

Note 1 to entry: A **rule_set** is a type of rule_software_definition that implements the ARM concept of *Rule_set* (5.605.33).

5.606.27
rule_software_definition
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the rule software definition *entity* (3.2.9)

Note 1 to entry: A **rule_software_definition** is a type of product_definition that implements the ARM concept of *Rule_software_definition* (5.605.35).

5.606.28
rule_set_group
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *rule_software_definition* (5.606.27) that represents the rule set group *entity* (3.2.9)

Note 1 to entry: A **rule_set_group** is a type of rule_software_definition that implements the ARM concept of *Rule_set_group* (5.605.34).

5.606.29
rule_supersedence
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *rule_action* (5.606.22) that represents the rule supersedence *entity* (3.2.9)

Note 1 to entry: A **rule_supersedence** is a type of rule_action that implements the ARM concept of *Rule_supersedence* (5.605.37).

5.606.30
scalar_variable
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *abstract_variable* (5.606.1) that represents the scalar variable *entity* (3.2.9)

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Note 1 to entry: A **scalar_variable** is a type of abstract_variable that implements the ARM concept of *Scalar_variable* (5.605.39).

5.606.31
simple_clause
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *compound_representation_item* (4.41.3) that represents the simple clause *entity* (3.2.9)

Note 1 to entry: A **simple_clause** is a type of compound_representation_item that implements the ARM concept of *Simple_clause* (5.605.40).

5.606.32
symbol
<application module: Production_rule_mim> *entity data type* (3.2.10) that is a type of *representation_item* (4.41.16) that represents the symbol *entity* (3.2.9)

Note 1 to entry: A **symbol** is a type of representation_item that implements the ARM concept of *Symbol* (5.605.41).

5.607 Requirement_decomposition_arm

5.607.1
Constraint_occurrence
<application module: Requirement_decomposition_arm> *application object* (3.1.78) that is a type of *Predefined_requirement_view_definition* (5.607.6) that represents the constraint occurrence *entity* (3.2.9)

Note 1 to entry: A **Constraint_occurrence** is a type of Predefined_requirement_view_definition that limits possible solutions to the requirements specification by identifying boundary conditions for any potential solution.

5.607.2
Design_characteristic_occurrence
<application module: Requirement_decomposition_arm> *application object* (3.1.78) that is a type of *Predefined_requirement_view_definition* (5.607.6) that represents the design characteristic occurrence *entity* (3.2.9)

Note 1 to entry: A **Design_characteristic_occurrence** is a type of Predefined_requirement_view_definition that specifies the technical performance values and tolerances for some aspect of a design.

5.607.3
View_based_constraint_occurrence
<application module: Requirement_decomposition_arm> *application object* (3.1.78) that is a type of *Constraint_occurrence* (5.607.1) that represents the view based constraint occurrence *entity* (3.2.9)

Note 1 to entry: A **View_based_constraint_occurrence** is a type of Constraint_occurrence that has a basis in the characteristics of a *Product_view_definition* (5.30.1).

5.607.4
Material_electrical_conductivity_requirement
<application module: Requirement_decomposition_arm> *application object* (3.1.78) that is a type of *Predefined_requirement_view_definition* (5.607.6) that represents the material electrical conductivity requirement *entity* (3.2.9)

Note 1 to entry: A **Material_electrical_conductivity_requirement** is a type of Predefined_requirement_view_definition that specifies the requirement for conductive material.

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5.607.5
Operational_requirement_relationship
<application module: Requirement_decomposition_arm> *application object* (3.1.78) that is a type of *Assigned_property* (5.40.2) and *View_definition_relationship* (5.48.1) that represents the operational requirement relationship *entity* (3.2.9)

Note 1 to entry: An **Operational_requirement_relationship** is a type of Assigned_property and a type of View_definition_relationship.

5.607.6
Predefined_requirement_view_definition
<application module: Requirement_decomposition_arm> *application object* (3.1.78) that is a type of *Requirement_view_definition* (5.138.1) that represents the predefined requirement view definition *entity* (3.2.9)

5.607.7
Shape_and_view_based_constraint_occurrence
<application module: Requirement_decomposition_arm> *application object* (3.1.78) that is a type of *View_based_constraint_occurrence* (5.607.3) that represents the shape and view based constraint occurrence *entity* (3.2.9)

5.608 Requirement_decomposition_mim

5.608.1
material_electrical_conductivity_category
<application module: Requirement_decomposition_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the material electrical conductivity category *entity* (3.2.9)

5.608.2
operational_requirement_relationship
<application module: Requirement_decomposition_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) and *product_definition_relationship* (4.18.15) that represents the operational requirement relationship *entity* (3.2.9)

Note 1 to entry: A **operational_requirement_relationship** is a type of property_definition and a type of product_definition_relationship that implements the ARM concept of *Operational_requirement_relationship* (5.607.5).

5.608.3
predefined_requirement_view_definition
<application module: Requirement_decomposition_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the predefined requirement view definition *entity* (3.2.9)

Note 1 to entry: A **predefined_requirement_view_definition** is a type of product_definition that implements the ARM concepts of:

— *Constraint_occurrence* (5.607.1);

— *Design_characteristic_occurrence* (5.607.2);

— *Predefined_requirement_view_definition* (5.607.6);

— *Interface_requirement* (5.461.1);

— *Material_electrical_conductivity_requirement* (5.607.4).

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5.609 Sequential_laminate_assembly_design_arm

5.609.1
Adjacent_stratum_surface_embedded_sequential_laminate_surface_definition
<application module: Sequential_laminate_assembly_design_arm> *application object* (3.1.78) that is a type of *Adjacent_stratum_surface_embedded_physical_component_surface_definition* (5.536.1) that represents the adjacent stratum surface embedded sequential laminate surface definition *entity* (3.2.9)

Note 1 to entry: A **Adjacent_stratum_surface_embedded_sequential_laminate_surface_definition** is a type of Adjacent_stratum_surface_embedded_physical_component_surface_definition that forms part of the sequential ordering of laminates in a laminate stackup.

5.609.2
Derived_laminate_assignment
<application module: Sequential_laminate_assembly_design_arm> *application object* (3.1.78) that represents the derived laminate assignment *entity* (3.2.9)

5.609.3
Interconnect_module_component_stratum_based_terminal
<application module: Sequential_laminate_assembly_design_arm> *application object* (3.1.78) that is a type of *Interconnect_module_component_terminal* (5.453.10) that represents the interconnect module component stratum based terminal *entity* (3.2.9)

Note 1 to entry: An **Interconnect_module_component_stratum_based_terminal** is a type of Interconnect_module_component_terminal included to support the case where explicit Interconnect_module_component_terminal are being connected by an *Interconnect_module_product_assembly_view_fabrication_joint* (5.609.4) as part of a sequential laminate assembly view for design or analysis purposes.

5.609.4
Interconnect_module_product_assembly_view_fabrication_joint
<application module: Sequential_laminate_assembly_design_arm> *application object* (3.1.78) that represents the interconnect module product assembly view fabrication joint *entity* (3.2.9)

Note 1 to entry: An **Interconnect_module_product_assembly_view_fabrication_joint** is the specification of the bond among *Interconnect_module_component_stratum_based_terminal* (5.609.3) which is created during an assembly process.

5.609.5
Interconnect_module_stratum_based_terminal
<application module: Sequential_laminate_assembly_design_arm> *application object* (3.1.78) that is a type of *Interconnect_module_terminal* (5.517.10) that represents the interconnect module stratum based terminal *entity* (3.2.9)

5.609.6
Sequential_laminate_assembly_relationship
<application module: Sequential_laminate_assembly_design_arm> *application object* (3.1.78) that is a type of *Assembled_part_association* (5.314.1) that represents the sequential laminate assembly relationship *entity* (3.2.9)

Note 1 to entry: A **Sequential_laminate_assembly_relationship** is a type of Assembled_part_association that relates a component in the fabrication stackup view to the fabrication stackup view.

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5.609.7
Sequential_laminate_stackup_component
<application module: Sequential_laminate_assembly_design_arm> *application object* (3.1.78) that is a type of *Physical_component* (5.684.3) and *Single_instance* (5.79.6) that represents the sequential laminate stackup component *entity* (3.2.9)

Note 1 to entry: A **Sequential_laminate_stackup_component** is a type of Physical_component and a type of Single_instance that is defined in the context of a fabrication stackup view.

5.609.8
Sequential_laminate_stackup_definition
<application module: Sequential_laminate_assembly_design_arm> *application object* (3.1.78) that is a type of *Assembly_definition* (5.314.2) that represents the sequential laminate stackup definition *entity* (3.2.9)

Note 1 to entry: A **Sequential_laminate_stackup_definition** is a type of Assembly_definition that is a representation of the information in a fabrication stackup view.

5.609.9
Stackup_requirement_to_design_relationship
<application module: Sequential_laminate_assembly_design_arm> *application object* (3.1.78) that is a type of *View_definition_relationship* (5.48.1) that represents the stackup requirement to design relationship *entity* (3.2.9)

Note 1 to entry: A **Stackup_requirement_to_design_relationship** is a type of View_definition_relationship that associates an oem design view with a fabrication stackup view for configuration management purposes.

5.610 Sequential_laminate_assembly_design_mim

5.610.1
derived_laminate_assignment
<application module: Sequential_laminate_assembly_design_mim> *entity data type* (3.2.10) that is a type of *property_definition_relationship* (4.32.6) that represents the derived laminate assignment *entity* (3.2.9)

Note 1 to entry: A **derived_laminate_assignment** is a type of property_definition_relationship that implements the ARM concept of *Derived_laminate_assignment* (5.609.2).

5.610.2
interconnect_module_stratum_based_terminal
<application module: Sequential_laminate_assembly_design_mim> *entity data type* (3.2.10) that is a type of *interconnect_module_terminal* (5.518.4) that represents the interconnect module stratum based terminal *entity* (3.2.9)

Note 1 to entry: An **interconnect_module_stratum_based_terminal** is a type of interconnect_module_terminal that implements the ARM concept of *Interconnect_module_stratum_based_terminal* (5.609.5).

5.610.3
sequential_laminate_passage_based_fabrication_joint
<application module: Sequential_laminate_assembly_design_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the sequential laminate passage based fabrication joint *entity* (3.2.9)

Note 1 to entry: A **sequential_laminate_passage_based_fabrication_joint** is a type of shape_aspect that implements the ARM concept of *Interconnect_module_product_assembly_view_fabrication_joint* (5.609.4).

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5.610.4
sequential_laminate_stackup_component
<application module: Sequential_laminate_assembly_design_mim> *entity data type* (3.2.10) that is a type of *physical_component* (5.685.3) that represents the sequential laminate stackup component *entity* (3.2.9)

Note 1 to entry: A **sequential_laminate_stackup_component** is a type of physical_component that implements the ARM concept of *Sequential_laminate_stackup_component* (5.609.7).

5.610.5
sequential_laminate_stackup_definition
<application module: Sequential_laminate_assembly_design_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the sequential laminate stackup definition *entity* (3.2.9)

Note 1 to entry: A **sequential_laminate_stackup_definition** is a type of product_definition that implements the ARM concept of *Sequential_laminate_stackup_definition* (5.609.8).

5.611 Shape_composition_arm

5.611.1
Composite_group_shape_element
<application module: Shape_composition_arm> *application object* (3.1.78) that is a type of *Composite_shape_element* (5.611.2) that represents the composite group shape element *entity* (3.2.9)

Note 1 to entry: A **Composite_group_shape_element** is a type of Composite_shape_element in which the composite may be thought of as a group of individual *Shape_element* (5.41.6) in which any property that is applied to the **Composite_group_shape_element** is applied to each of the constituent Shape_element instances on an individual basis.

5.611.2
Composite_shape_element
<application module: Shape_composition_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the composite shape element *entity* (3.2.9)

Note 1 to entry: A **Composite_shape_element** is a type of Shape_element that is composed of two or more constituent Shape_element.

5.611.3
Composite_unit_shape_element
<application module: Shape_composition_arm> *application object* (3.1.78) that is a type of *Composite_shape_element* (5.611.2) that represents the composite unit shape element *entity* (3.2.9)

Note 1 to entry: A **Composite_unit_shape_element** is a type of Composite_shape_element that is treated as a unit, as opposed to as a group of individual *Shape_element* (5.41.6).

5.612 Shape_composition_mim

5.612.1
composite_unit_shape_aspect
<application module: Shape_composition_mim> *entity data type* (3.2.10) that is a type of *composite_shape_aspect* (4.42.7) that represents the composite unit shape aspect *entity* (3.2.9)

Note 1 to entry: A **composite_unit_shape_aspect** is a type of composite_shape_aspect that implements the ARM concept of *Composite_unit_shape_element* (5.611.3).

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5.613 Shape_parameters_mim

5.613.1
keepout_design_object_category

<application module: Shape_parameters_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) that represents the keepout design object category *entity* (3.2.9)

Note 1 to entry: A **keepout_design_object_category** is a type of characterized_object that specifies a design object category for the implementation of the ARM concepts of:

— *Part_template_3d_keepout_shape_model* (5.569.3);

— *Part_template_planar_keepout_shape_model* (5.567.14);

— *Physical_unit_3d_keepout_shape_model* (5.587.1);

— *Physical_unit_planar_keepout_shape_model* (5.586.1).

5.614 Discrete_shield_arm

5.614.1
Physical_shield

<application module: Discrete_shield_arm> *application object* (3.1.78) that is a type of *Physical_component* (5.684.3) that represents the physical shield *entity* (3.2.9)

5.614.2
Routed_physical_shield

<application module: Discrete_shield_arm> *application object* (3.1.78) that is a type of *Routed_physical_component* (5.453.17) and *Physical_shield* (5.614.1) that represents the routed physical shield *entity* (3.2.9)

Note 1 to entry: A **Routed_physical_shield** is a type of Physical_shield and a type of Routed_physical_component.

5.615 Discrete_shield_mim

5.615.1
physical_shield

<application module: Discrete_shield_mim> *entity data type* (3.2.10) that is a type of *physical_component* (5.685.3) that represents the physical shield *entity* (3.2.9)

Note 1 to entry: A **physical_shield** is a type of physical_component that implements the ARM concept of *Physical_shield* (5.614.1), when the shield is comprised of a component or components that are manufactured separately from the interconnect component.

5.615.2
routed_physical_shield

<application module: Discrete_shield_mim> *entity data type* (3.2.10) that is a type of *physical_shield* (5.615.1) and *routed_physical_component* (5.454.8) that represents the routed physical shield *entity* (3.2.9)

Note 1 to entry: A **routed_physical_shield** is a type of physical_shield and a type of routed_physical_component that implements the ARM concept of *Routed_physical_shield* (5.614.2).

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5.616 Signal_arm

5.616.1
Composite_signal_property
<application module: Signal_arm> *application object* (3.1.78) that is a type of *Signal_property* (5.616.4) that represents the composite signal property *entity* (3.2.9)

Note 1 to entry: A **Composite_signal_property** is a type of Signal_property that combines more than one signal property into its structure.

5.616.2
Composite_signal_property_relationship
<application module: Signal_arm> *application object* (3.1.78) that represents the composite signal property relationship *entity* (3.2.9)

Note 1 to entry: A **Composite_signal_property_relationship** is the aggregation of the *Signal_property* (5.616.4) that compose the *Composite_signal_property* (5.616.1).

5.616.3
Signal
<application module: Signal_arm> *application object* (3.1.78) that represents the signal *entity* (3.2.9)

Note 1 to entry: A **Signal** is an abstraction of signal as categorized according to an ISO or IEC standard in this document.

5.616.4
Signal_property
<application module: Signal_arm> *application object* (3.1.78) that represents the signal property *entity* (3.2.9)

Note 1 to entry: A **Signal_property** is a data set that characterizes a *Signal* (5.616.3) and each element of which has units that are traceable to an ISO or IEC standard.

5.617 Signal_mim

5.617.1
composite_signal_property_relationship
<application module: Signal_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) and *property_definition_relationship* (4.32.6) that represents the composite signal property relationship *entity* (3.2.9)

Note 1 to entry: A **composite_signal_property_relationship** is a type of property_definition and of property_definition_relationship that implements the ARM concept of *Composite_signal_property_relationship* (5.616.2)

5.617.2
signal
<application module: Signal_mim> *entity data type* (3.2.10) that is a type of *characterized_object* (4.19.1) that represents the signal *entity* (3.2.9)

Note 1 to entry: A **signal** is a type of characterized_object that implements the ARM concept of *Signal* (5.616.3).

5.617.3
signal_category
<application module: Signal_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the signal category *entity* (3.2.9)

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Note 1 to entry: A **signal_category** is a type of group that specifies the *External_item_identification* (5.127.1) for a *Signal_property* (5.616.4).

5.618 Software_arm

5.618.1
Software
<application module: Software_arm> *application object* (3.1.78) that is a type of *Information_product* (5.638.1) that represents the software *entity* (3.2.9)

5.618.2
Software_definition
<application module: Software_arm> *application object* (3.1.78) that is a type of *Information_definition* (5.638.3) that represents the software definition *entity* (3.2.9)

5.618.3
Software_version
<application module: Software_arm> *application object* (3.1.78) that is a type of *Information_version* (5.638.2) that represents the software version *entity* (3.2.9)

5.619 Specification_document_arm

5.619.1
Design_specification
<application module: Specification_document_arm> *application object* (3.1.78) that is a type of *Specification_definition* (5.619.9) that represents the design specification *entity* (3.2.9)

Note 1 to entry: A **Design_specification** is a type of Specification_definition that establishes the design specifications of products.

5.619.2
Fabrication_technology_specification
<application module: Specification_document_arm> *application object* (3.1.78) that is a type of *Process_specification* (5.619.7) that represents the fabrication technology specification *entity* (3.2.9)

Note 1 to entry: A **Fabrication_technology_specification** is a type of Process_specification that describes limits on the results achieved by a realization process used for specific parts, part families, and materials.

5.619.3
Interface_specification_document_definition
<application module: Specification_document_arm> *application object* (3.1.78) that is a type of *Design_specification* (5.619.1) that represents the interface specification document definition *entity* (3.2.9)

Note 1 to entry: An **Interface_specification_document_definition** is a type of Design_specification that describes supported interfaces and associated details for a product or process.

5.619.4
Language_reference_manual
<application module: Specification_document_arm> *application object* (3.1.78) that is a type of *Specification_definition* (5.619.9) that represents the language reference manual *entity* (3.2.9)

Note 1 to entry: A **Language_reference_manual** is a type of Specification_definition that defines the syntax and semantics of a computer interpretable language.

5.619.5

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Material_specification
<application module: Specification_document_arm> *application object* (3.1.78) that is a type of *Specification_definition* (5.619.9) that represents the material specification *entity* (3.2.9)

Note 1 to entry: A **Material_specification** is a type of Specification_definition that specifies properties applicable to raw material, mixtures, or semi-fabricated material that are used in the fabrication of a product.

5.619.6
Partial_document_with_structured_text_representation_assignment
<application module: Specification_document_arm> *application object* (3.1.78) that is a type of *Partial_document_assignment* (5.120.2) that represents the partial document with structured text representation assignment *entity* (3.2.9)

Note 1 to entry: A **Partial_document_with_structured_text_representation_assignment** is a type of Partial_document_assignment that provides an explicit reference to a node in the structure of a document.

5.619.7
Process_specification
<application module: Specification_document_arm> *application object* (3.1.78) that is a type of *Specification_definition* (5.619.9) that represents the process specification *entity* (3.2.9)

Note 1 to entry: A **Process_specification** is a type of Specification_definition that identifies and describes an activity and limits on the results of the activity to be performed on an *Product* (5.28.1) or material during a product realization process.

5.619.8
Specification_allocation
<application module: Specification_document_arm> *application object* (3.1.78) that is a type of *Document_assignment* (5.120.1) that represents the specification allocation *entity* (3.2.9)

5.619.9
Specification_definition
<application module: Specification_document_arm> *application object* (3.1.78) that is a type of *Document_definition* (5.122.2) that represents the specification definition *entity* (3.2.9)

5.619.10
Surface_finish_specification
<application module: Specification_document_arm> *application object* (3.1.78) that is a type of *Material_specification* (5.619.5) that represents the surface finish specification *entity* (3.2.9)

Note 1 to entry: A **Surface_finish_specification** is a type of Material_specification that is a collection of the properties applicable to surface textures or coatings either for a product in-process or a completed product.

5.619.11
Test_specification
<application module: Specification_document_arm> *application object* (3.1.78) that is a type of *Specification_definition* (5.619.9) that represents the test specification *entity* (3.2.9)

Note 1 to entry: A **Test_specification** is a type of Specification_definition that provides information about the physical or functional testing of an *Product* (5.28.1).

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5.620 Specification_document_mim

5.620.1
document_identifier

<application module: Specification_document_mim> *entity data type* (3.2.10) that is a type of *group* (4.12.1) that represents the document identifier *entity* (3.2.9)

Note 1 to entry: A **document_identifier** is a type of group that specifies an identifier qualified by a name for a document.

5.620.2
document_identifier_assignment

<application module: Specification_document_mim> *entity data type* (3.2.10) that is a type of *group_assignment* (4.15.32) that represents the document identifier assignment *entity* (3.2.9)

5.620.3
partial_document_with_structured_text_representation_assignment

<application module: Specification_document_mim> *entity data type* (3.2.10) that is a type of *applied_document_usage_constraint_assignment* (5.121.2) and *characterized_object* (4.19.1) that represents the partial document with structured text representation assignment *entity* (3.2.9)

Note 1 to entry: A **partial_document_with_structured_text_representation_assignment** is a type of applied_document_usage_constraint_assignment and of characterized_object that implements the ARM concepts of *Partial_document_with_structured_text_representation_assignment* (5.619.6).

5.620.4
specification_definition

<application module: Specification_document_mim> *entity data type* (3.2.10) that is a type of *product_definition* (4.18.7) that represents the specification definition *entity* (3.2.9)

Note 1 to entry: An **specification_definition** is a type of product_definition which implements the ARM concepts of:

- *Design_specification* (5.619.1);
- *Specification_definition* (5.619.9);
- *Fabrication_technology_specification* (5.619.2);
- *Interface_specification_document_definition* (5.619.3);
- *Language_reference_manual* (5.619.4);
- *Material_specification* (5.619.5);
- *Process_specification* (5.619.7);
- *Surface_finish_specification* (5.619.10);
- *Test_specification* (5.619.11).

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5.621 Stratum_non_planar_shape_arm

5.621.1
Stratum_average_surface_shape_model
<application module: Stratum_non_planar_shape_arm> *application object* (3.1.78) that is a type of *Topologically_constrained_manifold_surface_shape_representation* (5.621.3) that represents the stratum average surface shape model *entity* (3.2.9)

5.621.2
Stratum_surface_shape_model
<application module: Stratum_non_planar_shape_arm> *application object* (3.1.78) that is a type of *Topologically_constrained_manifold_surface_shape_representation* (5.621.3) that represents the stratum surface shape model *entity* (3.2.9)

5.621.3
Topologically_constrained_manifold_surface_shape_representation
<application module: Stratum_non_planar_shape_arm> *application object* (3.1.78) that is a type of *Manifold_surface_shape_representation* (5.413.1) that represents the topologically constrained manifold surface shape representation *entity* (3.2.9)

Note 1 to entry: A **Topologically_constrained_manifold_surface_shape_representation** is a type of Manifold_surface_shape_representation that shall neither self-intersect nor self-overlap.

5.622 Styled_curve_arm

5.622.1
Curve_font
<application module: Styled_curve_arm> *application object* (3.1.78) that represents the curve font *entity* (3.2.9)

Note 1 to entry: A **Curve_font** is a shape replicated at a fixed pattern used to render a curve.

5.622.2
Curve_font_pattern
<application module: Styled_curve_arm> *application object* (3.1.78) that represents the curve font pattern *entity* (3.2.9)

Note 1 to entry: A **Curve_font_pattern** is a semaphore pattern (on-off) in the appearance of a curve.

5.622.3
Externally_defined_curve_font
<application module: Styled_curve_arm> *application object* (3.1.78) that is a type of *Curve_font* (5.622.1) that represents the externally defined curve font *entity* (3.2.9)

Note 1 to entry: An **Externally_defined_curve_font** is a type of Curve_font whose definition is outside the scope of this application module.

5.622.4
Predefined_curve_font
<application module: Styled_curve_arm> *application object* (3.1.78) that is a type of *Curve_font* (5.622.1) that represents the predefined curve font *entity* (3.2.9)

Note 1 to entry: A **Predefined_curve_font** is a type of Curve_font which is defined in this document.

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5.622.5
Solid_curve_font
<application module: Styled_curve_arm> *application object* (3.1.78) that is a type of *Predefined_curve_font* (5.622.4) that represents the solid curve font *entity* (3.2.9)

5.622.6
User_defined_curve_font
<application module: Styled_curve_arm> *application object* (3.1.78) that is a type of *Curve_font* (5.622.1) that represents the user defined curve font *entity* (3.2.9)

Note 1 to entry: A **User_defined_curve_font** is a type of Curve_font which is defined withour referencing any standard or convention.

5.623 Styled_curve_mim

5.623.1
solid_curve_font
<application module: Styled_curve_mim> *entity data type* (3.2.10) that is a type of *pre_defined_curve_font* (4.37.38) that represents the solid curve font *entity* (3.2.9)

Note 1 to entry: A **solid_curve_font** is a type of pre_defined_curve_font that implements the ARM concept of *Solid_curve_font* (5.622.5).

5.623.2
user_defined_curve_font
<application module: Styled_curve_mim> *entity data type* (3.2.10) that is a type of *curve_style_font* (4.37.12) and *mapped_item* (4.41.11) that represents the user defined curve font *entity* (3.2.9)

Note 1 to entry: A **user_defined_curve_font** is a type of curve_style_font and of mapped_item that implements the ARM concept of *User_defined_curve_font* (5.622.6).

5.624 Text_representation_arm

5.624.1
Annotation_text_character
<application module: Text_representation_arm> *application object* (3.1.78) that is a type of *Detailed_geometric_model_element* (5.10.9) that represents the annotation text character *entity* (3.2.9)

5.624.2
Character_glyph_font_usage
<application module: Text_representation_arm> *application object* (3.1.78) that represents the character glyph font usage *entity* (3.2.9)

Note 1 to entry: A **Character_glyph_font_usage** is a means to specify the participation of a *Character_glyph_symbol* (5.624.3) in a *Text_font* (5.624.4).

5.624.3
Character_glyph_symbol
<application module: Text_representation_arm> *application object* (3.1.78) that is a type of *Representation* (5.12.2) that represents the character glyph symbol *entity* (3.2.9)

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5.624.4
Text_font
<application module: Text_representation_arm> *application object* (3.1.78) that represents the text font *entity* (3.2.9)

Note 1 to entry: A **Text_font** is the identification of a specific character font.

5.624.5
Text_font_family
<application module: Text_representation_arm> *application object* (3.1.78) that represents the text font family *entity* (3.2.9)

Note 1 to entry: A **Text_font_family** is the identification of a related collection of *Text_font* (5.624.4).

5.624.6
Text_font_in_family
<application module: Text_representation_arm> *application object* (3.1.78) that represents the text font in family *entity* (3.2.9)

Note 1 to entry: A **Text_font_in_family** is a means to specify the participation of a *Text_font* (5.624.4) in a *Text_font_family* (5.624.5).

5.625 Test_requirement_allocation_arm

5.625.1
Test_requirement_allocation
<application module: Test_requirement_allocation_arm> *application object* (3.1.78) that is a type of *Requirement_assignment* (5.208.1) that represents the test requirement allocation *entity* (3.2.9)

Note 1 to entry: A **Test_requirement_allocation** is a type of Requirement_assignment for which the *Predefined_requirement_view_definition* (5.607.6) has test characteristics.

5.626 Thermal_network_definition_arm

5.626.1
Thermal_network_definition
<application module: Thermal_network_definition_arm> *application object* (3.1.78) that is a type of *Functional_unit_network_definition* (5.545.4) that represents the thermal network definition *entity* (3.2.9)

Note 1 to entry: A **Thermal_network_definition** is a type of Functional_unit_network_definition for which the network nodal formulation is a representation of heat flow rather than current flow.

5.626.2
Thermal_functional_unit_network_node_definition
<application module: Thermal_network_definition_arm> *application object* (3.1.78) that is a type of *Functional_unit_network_node_definition* (5.545.5) that represents the thermal functional unit network node definition *entity* (3.2.9)

5.627 Thermal_network_definition_mim

5.627.1
thermal_network
<application module: Thermal_network_definition_mim> *entity data type* (3.2.10) that is a type of *functional_unit* (5.548.2) that represents the thermal network *entity* (3.2.9)

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Note 1 to entry: A **thermal_network** is a type of functional_unit that implements the ARM concept of *Thermal_network_definition* (5.626.1).

5.627.2
thermal_network_node_definition
<application module: Thermal_network_definition_mim> *entity data type* (3.2.10) that is a type of *network_node_definition* (5.546.5) that represents the thermal network node definition *entity* (3.2.9)

Note 1 to entry: A **thermal_network_node_definition** is a type of network_node_definition that implements the ARM concept of *Thermal_functional_unit_network_node_definition* (5.626.2).

5.628 Value_with_unit_extension_arm

5.628.1
Absorbed_dose_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the absorbed dose data element *entity* (3.2.9)

5.628.2
Radioactivity_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the radioactivity data element *entity* (3.2.9)

5.628.3
Acceleration_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the acceleration data element *entity* (3.2.9)

Note 1 to entry: An **Acceleration_data_element** is a type of Value_with_unit where the measurement is of acceleration.

5.628.4
Amount_of_substance_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the amount of substance data element *entity* (3.2.9)

Note 1 to entry: An **Amount_of_substance_data_element** is a type of Value_with_unit for amount of substance.

5.628.5
Angle_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the angle data element *entity* (3.2.9)

Note 1 to entry: An **Angle_data_element** is a type of Value_with_unit where the requisite unit type is that of angular displacement.

5.628.6
Positive_angle_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Angle_data_element* (5.628.5) that represents the positive angle data element *entity* (3.2.9)

Note 1 to entry: A **Positive_angle_data_element** is a type of Angle_data_element where the requisite unit type is that of positive angular displacement.

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5.628.7
Area_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the area data element *entity* (3.2.9)

Note 1 to entry: An **Area_data_element** is a type of Value_with_unit that represents a two dimensional area.

5.628.8
Capacitance_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the capacitance data element *entity* (3.2.9)

Note 1 to entry: A **Capacitance_data_element** is a type of Value_with_unit where the measurement is of capacitance.

5.628.9
Celsius_temperature_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the celsius temperature data element *entity* (3.2.9)

Note 1 to entry: A **Celsius_temperature_data_element** is a type of Value_with_unit where the measurement is of temperature where the unit is Celsius.

5.628.10
Conductance_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the conductance data element *entity* (3.2.9)

Note 1 to entry: A **Conductance_data_element** is a type of Value_with_unit where the measurement is of conductance.

5.628.11
Dielectric_constant_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the dielectric constant data element *entity* (3.2.9)

Note 1 to entry: A **Dielectric_constant_data_element** is a type of Value_with_unit where the measurement is of dielectric constant.

5.628.12
Dose_equivalent_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the dose equivalent data element *entity* (3.2.9)

Note 1 to entry: A **Dose_equivalent_data_element** is a type of Value_with_unit that specifies quantitative measures of Dose equivalence.

5.628.13
Electric_charge_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the electric charge data element *entity* (3.2.9)

Note 1 to entry: An **Electric_charge_data_element** is a type of Value_with_unit where the measurement is of electrical charge.

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5.628.14
Electric_current_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the electric current data element *entity* (3.2.9)

Note 1 to entry: An **Electric_current_data_element** is a type of Value_with_unit where the measurement is of electrical current.

5.628.15
Electric_potential_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the electric potential data element *entity* (3.2.9)

Note 1 to entry: An **Electric_potential_data_element** is a type of Value_with_unit where the measurement is of electric potential.

5.628.16
Energy_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the energy data element *entity* (3.2.9)

Note 1 to entry: An **Energy_data_element** is a type of Value_with_unit where the measurement is of energy.

5.628.17
Force_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the force data element *entity* (3.2.9)

Note 1 to entry: A **Force_data_element** is a type of Value_with_unit where the measurement is of force.

5.628.18
Frequency_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the frequency data element *entity* (3.2.9)

Note 1 to entry: A **Frequency_data_element** is a type of Value_with_unit where the measurement is of frequency.

5.628.19
Illuminance_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the illuminance data element *entity* (3.2.9)

Note 1 to entry: An **Illuminance_data_element** is a type of Value_with_unit where the measurement is of illuminance.

5.628.20
Inductance_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the inductance data element *entity* (3.2.9)

Note 1 to entry: An **Inductance_data_element** is a type of Value_with_unit where the measurement is of inductance.

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5.628.21
Length_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the length data element *entity* (3.2.9)

Note 1 to entry: A **Length_data_element** is a type of Value_with_unit where the measurement is of distance.

5.628.22
Positive_length_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Length_data_element* (5.628.21) that represents the positive length data element *entity* (3.2.9)

Note 1 to entry: A **Positive_length_data_element** is a type of Length_data_element where the measurement is of positive distance.

5.628.23
Loss_tangent_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the loss tangent data element *entity* (3.2.9)

Note 1 to entry: A **Loss_tangent_data_element** is a type of Value_with_unit where the measurement is of loss tangent.

5.628.24
Luminous_flux_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the luminous flux data element *entity* (3.2.9)

Note 1 to entry: A **Luminous_flux_data_element** is a type of Value_with_unit where the measurement is of luminous flux.

5.628.25
Luminous_intensity_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the luminous intensity data element *entity* (3.2.9)

Note 1 to entry: A **Luminous_intensity_data_element** is a type of Value_with_unit where the measurement is of luminous intensity.

5.628.26
Magnetic_flux_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the magnetic flux data element *entity* (3.2.9)

Note 1 to entry: A **Magnetic_flux_data_element** is a type of Value_with_unit where the measurement is of magnetic flux.

5.628.27
Magnetic_flux_density_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the magnetic flux density data element *entity* (3.2.9)

Note 1 to entry: A **Magnetic_flux_density_data_element** is a type of Value_with_unit where the measurement is of magnetic flux density.

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5.628.28
Mass_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the mass data element *entity* (3.2.9)

Note 1 to entry: A **Mass_data_element** is a type of Value_with_unit where the measurement is of mass.

5.628.29
Power_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the power data element *entity* (3.2.9)

Note 1 to entry: A **Power_data_element** is a type of Value_with_unit where the measurement is of power.

5.628.30
Pressure_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the pressure data element *entity* (3.2.9)

Note 1 to entry: A **Pressure_data_element** is a type of Value_with_unit where the measurement is of pressure.

5.628.31
Ratio_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the ratio data element *entity* (3.2.9)

Note 1 to entry: A **Ratio_data_element** is a type of Value_with_unit where the measurement is a ratio.

5.628.32
Resistance_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the resistance data element *entity* (3.2.9)

Note 1 to entry: A **Resistance_data_element** is a type of Value_with_unit where the measurement is of resistance.

5.628.33
Solid_angle_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the solid angle data element *entity* (3.2.9)

Note 1 to entry: A **Solid_angle_data_element** is a type of Value_with_unit where the measurement is of solid angle.

5.628.34
Thermal_resistance_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the thermal resistance data element *entity* (3.2.9)

Note 1 to entry: A **Thermal_resistance_data_element** is a type of Value_with_unit where the measurement is of thermal resistance.

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5.628.35
Thermodynamic_temperature_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the thermodynamic temperature data element *entity* (3.2.9)

Note 1 to entry: A **Thermodynamic_temperature_data_element** is a type of Value_with_unit where the measurement is of temperature.

5.628.36
Velocity_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the velocity data element *entity* (3.2.9)

Note 1 to entry: A **Velocity_data_element** is a type of Value_with_unit where the measurement is of velocity.

5.628.37
Volume_data_element
<application module: Value_with_unit_extension_arm> *application object* (3.1.78) that is a type of *Value_with_unit* (5.65.20) that represents the volume data element *entity* (3.2.9)

Note 1 to entry: A **Volume_data_element** is a type of Value_with_unit where the measurement is of volume.

5.629 Value_with_unit_extension_mim

5.629.1
expression_conversion_based_unit
<application module: Value_with_unit_extension_mim> *entity data type* (3.2.10) that is a type of *context_dependent_unit* (4.16.14) and *variable_semantics* (4.95.5) that represents the expression conversion based unit *entity* (3.2.9)

Note 1 to entry: An **expression_conversion_based_unit** is a type of context_dependent_unit and of variable_semantics that represents the unit in an explicitly defined mathematical function.

5.629.2
dielectric_constant_measure_with_unit
<application module: Value_with_unit_extension_mim> *entity data type* (3.2.10) that is a type of *ratio_measure_with_unit* (4.16.78) that represents the dielectric constant measure with unit *entity* (3.2.9)

Note 1 to entry: A **dielectric_constant_measure_with_unit** is a type of ratio_measure_with_unit that implements the ARM concept of *Dielectric_constant_data_element* (5.628.11).

5.629.3
loss_tangent_measure_with_unit
<application module: Value_with_unit_extension_mim> *entity data type* (3.2.10) that is a type of *ratio_measure_with_unit* (4.16.78) that represents the loss tangent measure with unit *entity* (3.2.9)

Note 1 to entry: A **loss_tangent_measure_with_unit** is a type of ratio_measure_with_unit that implements the ARM concept of *Loss_tangent_data_element* (5.628.23).

5.629.4
thermal_resistance_measure_with_unit
<application module: Value_with_unit_extension_mim> *entity data type* (3.2.10) that is a type of *measure_with_unit* (4.16.67) that represents the thermal resistance measure with unit *entity* (3.2.9)

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Note 1 to entry: A **thermal_resistance_measure_with_unit** is a type of measure_with_unit that implements the ARM concept of *Thermal_resistance_data_element* (5.628.34).

5.629.5
thermal_resistance_unit
<application module: Value_with_unit_extension_mim> *entity data type* (3.2.10) that is a type of *derived_unit* (4.16.16) that represents the thermal resistance unit *entity* (3.2.9)

5.630 Via_component_arm

5.630.1
Blind_via
<application module: Via_component_arm> *application object* (3.1.78) that is a type of *Via* (5.536.109) that represents the blind via *entity* (3.2.9)

5.630.2
Buried_via
<application module: Via_component_arm> *application object* (3.1.78) that is a type of *Via* (5.536.109) that represents the buried via *entity* (3.2.9)

5.630.3
Interfacial_connection
<application module: Via_component_arm> *application object* (3.1.78) that is a type of *Via* (5.536.109) that represents the interfacial connection *entity* (3.2.9)

Note 1 to entry: An **Interfacial_connection** is a type of Via that has both ends visible in the printed circuit board.

5.630.4
Non_conductive_base_blind_via
<application module: Via_component_arm> *application object* (3.1.78) that is a type of *Blind_via* (5.630.1) that represents the non conductive base blind via *entity* (3.2.9)

Note 1 to entry: A **Non_conductive_base_blind_via** is a type of Blind_via with a floor whose material is non-conductive.

5.630.5
Plated_conductive_base_blind_via
<application module: Via_component_arm> *application object* (3.1.78) that is a type of *Blind_via* (5.630.1) that represents the plated conductive base blind via *entity* (3.2.9)

Note 1 to entry: A **Plated_conductive_base_blind_via** is a type of Blind_via in which the material that composes the floor of the Blind_via is conductive, and in which the floor material of the Blind_via is contiguous with the material on the wall of the Blind_via.

5.631 Via_component_mim

5.631.1
blind_via
<application module: Via_component_mim> *entity data type* (3.2.10) that is a type of *via* (5.537.87) that represents the blind via *entity* (3.2.9)

Note 1 to entry: A **blind_via** is a type of via that implements the ARM concepts of *Blind_via* (5.630.1).

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5.631.2
buried_via
<application module: Via_component_mim> *entity data type* (3.2.10) that is a type of *via* (5.537.87) that represents the buried via *entity* (3.2.9)

Note 1 to entry: A **buried_via** is a type of via that implements the ARM concepts of *Buried_via* (5.630.2).

5.631.3
interfacial_connection
<application module: Via_component_mim> *entity data type* (3.2.10) that is a type of *via* (5.537.87) that represents the interfacial connection *entity* (3.2.9)

Note 1 to entry: A **interfacial_connection** is a type of via that implements the ARM concepts of *Interfacial_connection* (5.630.3).

5.631.4
non_conductive_base_blind_via
<application module: Via_component_mim> *entity data type* (3.2.10) that is a type of *blind_via* (5.631.1) that represents the non conductive base blind via *entity* (3.2.9)

Note 1 to entry: A **non_conductive_base_blind_via** is a type of blind_via that implements the ARM concepts of *Non_conductive_base_blind_via* (5.630.4).

5.631.5
plated_conductive_base_blind_via
<application module: Via_component_mim> *entity data type* (3.2.10) that is a type of *blind_via* (5.631.1) that represents the plated conductive base blind via *entity* (3.2.9)

Note 1 to entry: A **plated_conductive_base_blind_via** is a type of blind_via that implements the ARM concepts of *Plated_conductive_base_blind_via* (5.630.5).

5.632 Physical_connectivity_definition_arm

5.632.1
Physical_connectivity_definition
<application module: Physical_connectivity_definition_arm> *application object* (3.1.78) that is a type of *Shape_element* (5.41.6) that represents the physical connectivity definition *entity* (3.2.9)

5.632.2
Physical_connectivity_definition_domain
<application module: Physical_connectivity_definition_arm> *application object* (3.1.78) that represents the physical connectivity definition domain *entity* (3.2.9)

Note 1 to entry: A **Physical_connectivity_definition_domain** is the application of a domain name to a *Physical_connectivity_definition* (5.632.1) to support cases where domains other than pure electrical are required.

5.632.3
Physical_connectivity_definition_relationship
<application module: Physical_connectivity_definition_arm> *application object* (3.1.78) that represents the physical connectivity definition relationship *entity* (3.2.9)

Note 1 to entry: A **Physical_connectivity_definition_relationship** is the association between *Physical_connectivity_definition* (5.632.1) that exists because of a *Predefined_requirement_view_definition* (5.607.6).

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5.632.4
Physical_connectivity_element
<application module: Physical_connectivity_definition_arm> *application object* (3.1.78) that represents the physical connectivity element *entity* (3.2.9)

Note 1 to entry: A **Physical_connectivity_element** is the object that describes a link between two nodes for the graph representation.

5.632.5
Physical_connectivity_layout_topology_requirement_assignment
<application module: Physical_connectivity_definition_arm> *application object* (3.1.78) that is a type of *Requirement_assignment* (5.208.1) that represents the physical connectivity layout topology requirement assignment *entity* (3.2.9)

5.632.6
Physical_connectivity_make_from_relationship
<application module: Physical_connectivity_definition_arm> *application object* (3.1.78) that represents the physical connectivity make from relationship *entity* (3.2.9)

Note 1 to entry: A **Physical_connectivity_make_from_relationship** is an association between one *Physical_connectivity_definition* (5.632.1) that is used as a basis for modification into another Physical_connectivity_definition and the modified Physical_connectivity_definition that results from the modification.

5.632.7
Physical_connectivity_structure_definition
<application module: Physical_connectivity_definition_arm> *application object* (3.1.78) that is a type of *Physical_connectivity_definition* (5.632.1) that represents the physical connectivity structure definition *entity* (3.2.9)

Note 1 to entry: A **Physical_connectivity_structure_definition** is a type of Physical_connectivity_definition that has a structure.

5.632.8
Physical_unit_network_definition
<application module: Physical_connectivity_definition_arm> *application object* (3.1.78) that is a type of *Part_design_view* (5.588.8) that represents the physical unit network definition *entity* (3.2.9)

5.632.9
Topological_junction
<application module: Physical_connectivity_definition_arm> *application object* (3.1.78) that represents the topological junction *entity* (3.2.9)

Note 1 to entry: A **Topological_junction** is used when at least three *Component_terminal* (5.478.5) are connected and the explicit topology must be stated.

5.633 Physical_connectivity_definition_mim

5.633.1
make_from_connectivity_relationship
<application module: Physical_connectivity_definition_mim> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) that represents the make from connectivity relationship *entity* (3.2.9)

Note 1 to entry: A **make_from_connectivity_relationship** is a type of shape_aspect_relationship that implements the ARM concept of *Physical_connectivity_make_from_relationship* (5.632.6).

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5.633.2
physical_connectivity_definition
<application module: Physical_connectivity_definition_mim> *entity data type* (3.2.10) that is a type of *shape_aspect* (4.19.10) that represents the physical connectivity definition *entity* (3.2.9)

Note 1 to entry: A **physical_connectivity_definition** is a type of shape_aspect that implements the ARM concepts of:

— *Physical_connectivity_definition* (5.632.1);

— *Physical_connectivity_structure_definition* (5.632.7).

5.633.3
physical_connectivity_definition_domain
<application module: Physical_connectivity_definition_mim> *entity data type* (3.2.10) that is a type of *property_definition* (4.19.9) that represents the physical connectivity definition domain *entity* (3.2.9)

Note 1 to entry: A **physical_connectivity_definition_domain** is a type of property_definition that implements the ARM concept of *Physical_connectivity_definition_domain* (5.632.2).

5.633.4
physical_connectivity_element
<application module: Physical_connectivity_definition_mim> *entity data type* (3.2.10) that is a type of *shape_aspect_relationship* (4.19.12) and *shape_aspect* (4.19.10) that represents the physical connectivity element *entity* (3.2.9)

Note 1 to entry: A **physical_connectivity_element** is a type of shape_aspect and of shape_aspect_relationship that implement the ARM concept of *Physical_connectivity_element* (5.632.4).

5.633.5
physical_unit_network_definition
<application module: Physical_connectivity_definition_mim> *entity data type* (3.2.10) that is a type of *physical_unit* (5.596.4) that represents the physical unit network definition *entity* (3.2.9)

Note 1 to entry: An **physical_unit_network_definition** is a type of physical_unit that implements the ARM concept of *Physical_unit_network_definition* (5.632.8).

5.633.6
physical_connectivity_layout_topology_requirement_assignment
<application module: Physical_connectivity_definition_mim> *entity data type* (3.2.10) that is a type of *requirement_assignment* (5.209.3) that represents the physical connectivity layout topology requirement assignment *entity* (3.2.9)

Note 1 to entry: A **physical_connectivity_layout_topology_requirement_assignment** is a type of requirement_assignment that implements the ARM concept of *Physical_connectivity_layout_topology_requirement_assignment* (5.632.5).

5.634 Conductivity_material_aspects_arm

5.634.1
Conductivity_material_property_class
<application module: Conductivity_material_aspects_arm> *application object* (3.1.78) that is a type of *Class* (5.83.1) that represents the conductivity material property class *entity* (3.2.9)

Note 1 to entry: A **Conductivity_material_property_class** is a type of a Class.

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5.634.2
Relative_permeability_material_property_class
<application module: Conductivity_material_aspects_arm> *application object* (3.1.78) that is a type of *Class* (5.83.1) that represents the relative permeability material property class *entity* (3.2.9)

Note 1 to entry: A **Relative_permeability_material_property_class** is a type of a Class.

5.634.3
Relative_optical_insertion_loss_material_property_class
<application module: Conductivity_material_aspects_arm> *application object* (3.1.78) that is a type of *Class* (5.83.1) that represents the relative optical insertion loss material property class *entity* (3.2.9)

Note 1 to entry: A **Relative_optical_insertion_loss_material_property_class** is a type of a Class.

5.634.4
Relative_permittivity_material_property_class
<application module: Conductivity_material_aspects_arm> *application object* (3.1.78) that is a type of *Class* (5.83.1) that represents the relative permittivity material property class *entity* (3.2.9)

5.634.5
Material_electrical_conductivity_class
<application module: Conductivity_material_aspects_arm> *application object* (3.1.78) that is a type of *Conductivity_material_property_class* (5.634.1) that represents the material electrical conductivity class *entity* (3.2.9)

Note 1 to entry: A **Material_electrical_conductivity_class** is a type of a Conductivity_material_property_class.

5.634.6
Material_thermal_conductivity_class
<application module: Conductivity_material_aspects_arm> *application object* (3.1.78) that is a type of *Conductivity_material_property_class* (5.634.1) that represents the material thermal conductivity class *entity* (3.2.9)

Note 1 to entry: A **Material_thermal_conductivity_class** is a type of a Conductivity_material_property_class.

5.634.7
Material_identification_with_conductivity_classification
<application module: Conductivity_material_aspects_arm> *application object* (3.1.78) that is a type of *Material_identification* (5.511.3) that represents the material identification with conductivity classification *entity* (3.2.9)

Note 1 to entry: A **Material_identification_with_conductivity_classification** is a type of a Material_identification.

5.635 Conductivity_material_aspects_mim

5.635.1
material_designation_with_conductivity_classification
<application module: Conductivity_material_aspects_mim> *entity data type* (3.2.10) that is a type of *material_designation* (4.32.2) that represents the material designation with conductivity classification *entity* (3.2.9)

5.636 Test_select_product_arm

5.636.1

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Test_select_product
<application module: Test_select_product_arm> *application object* (3.1.78) that is a type of *Alternate_product_relationship* (5.55.1) that represents the test select product *entity* (3.2.9)

5.637 Pre_defined_product_data_management_specializations_arm

5.637.1
Externally_defined_activity_relationship
<application module: Pre_defined_product_data_management_specializations_arm> *application object* (3.1.78) that is a type of *Activity_relationship* (5.56.2) that represents the externally defined activity relationship *entity* (3.2.9)

Note 1 to entry: An **Externally_defined_activity_relationship** is a type of Activity_relationship whose meaning is defined outside of this standard in an external source.

5.637.2
Externally_defined_security_classification
<application module: Pre_defined_product_data_management_specializations_arm> *application object* (3.1.78) that is a type of *Security_classification* (5.25.1) that represents the externally defined security classification *entity* (3.2.9)

Note 1 to entry: A **Externally_defined_security_classification** is a type of Security_classification whose meaning is defined outside of this standard in an external source.

5.637.3
Externally_defined_address_assignment
<application module: Pre_defined_product_data_management_specializations_arm> *application object* (3.1.78) that is a type of *Address_assignment* (5.17.2) that represents the externally defined address assignment *entity* (3.2.9)

Note 1 to entry: A **Externally_defined_address_assignment** is a type of Address_assignment whose meaning is defined outside of this standard in an external source.

5.637.4
Externally_defined_organization_or_person_in_organization_assignment
<application module: Pre_defined_product_data_management_specializations_arm> *application object* (3.1.78) that is a type of *Organization_or_person_in_organization_assignment* (5.21.1) that represents the externally defined organization or person in organization assignment *entity* (3.2.9)

Note 1 to entry: A **Externally_defined_organization_or_person_in_organization_assignment** is a type of Organization_or_person_in_organization_assignment whose meaning is defined outside of this standard in an external source.

5.637.5
Externally_defined_approval_status
<application module: Pre_defined_product_data_management_specializations_arm> *application object* (3.1.78) that is a type of *Approval_status* (5.19.4) that represents the externally defined approval status *entity* (3.2.9)

Note 1 to entry: A **Externally_defined_approval_status** is a type of Approval_status whose meaning is defined outside of this standard in an external source.

5.637.6

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