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Windows and pedestrian doors — Vocabulary

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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).

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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 162, *Doors, windows and curtain walling*.

This first edition cancels and replaces the first edition of ISO 1804:1972, which has been technically revised.

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.

Windows and pedestrian doors — Vocabulary

1 Scope

This document specifies general terminology for windows and pedestrian doors.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

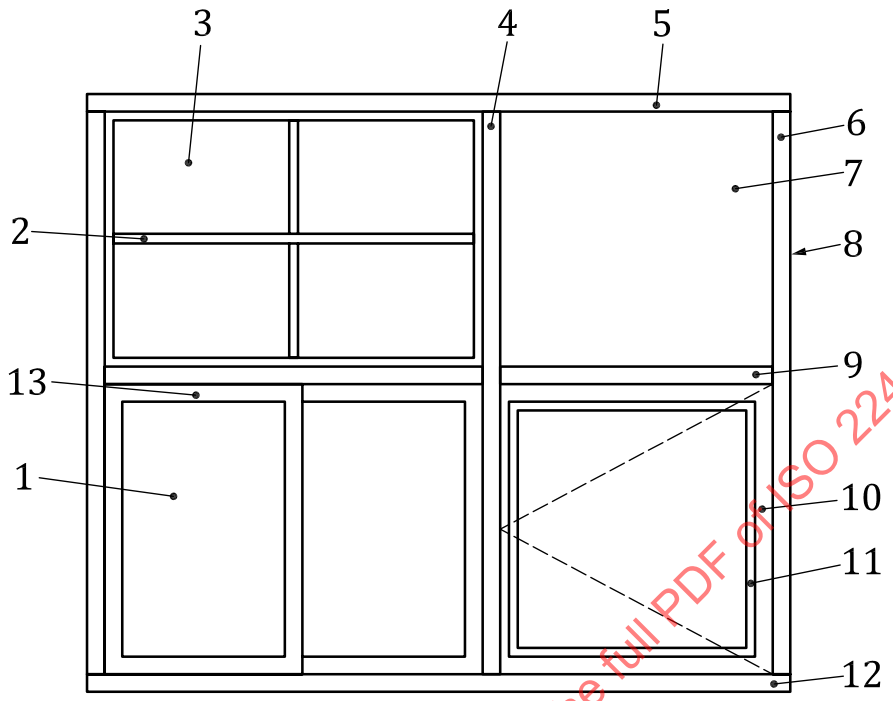
For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological 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 Terms related to windows



Key

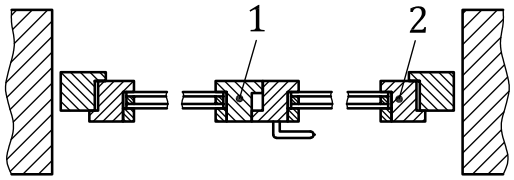
1 sash
2 glazing bar
3 fixed window
4 mullion
5 head
6 frame
7 fixed light
8 jamb
9 transom
10 casement
11 glazing bead
12 sill
13 top rail

Figure 1 — Overview window component

Note 1 to entry: See Annex A for opening functions of windows.

3.1.1
active sash or active casement
sash/casement of a multi-light window, intended to be moved first to provide opening

Note 1 to entry: See Figure 2.



Key

1 passive casement

2 active casement

Figure 2 — Active sash or active casement

3.1.2
bottom rail
horizontal component at the bottom of a sash/casement

3.1.3
bonded glazing
type of window where the glass is primarily retained by a perimeter sealant and maybe with a supplementary mechanical restraint

3.1.4
casement
opening element of a hinged or pivoted window

Note 1 to entry: See also Annex A for opening functions of windows.

Note 2 to entry: See Figure 1 and Figure 9.

3.1.5
casement window
building component for closing an opening in a wall or roof with a hinged or pivoted opening element that may admit light and/or provide ventilation

3.1.6
closed
state where the movable parts rest in or at the fixed part in a way in which they may be fastened (latched and/or locked)

3.1.7
coupled window
window where casements in at least two levels are operated by one action, but can be disconnected for specific purposes such as maintenance or cleaning

Note 1 to entry: See Figure 3.

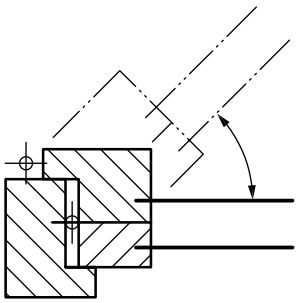


Figure 3 — Coupled window

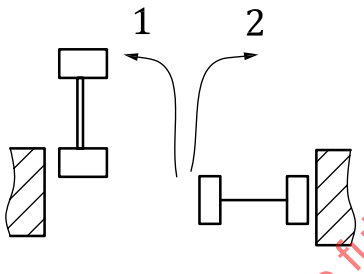
3.1.8
daylight opening width/height
any area in the building envelope that is capable of admitting daylight to an interior

3.1.9
direct glazing
glazing sealed to a casement frame which, when the casement is closed, is linearly mounted on at least two edges

Note 1 to entry: See A.3.

3.1.10
direction of rotation
movement of a hinged or pivoted casement window around its fixing, either clockwise or counter-clockwise

Note 1 to entry: See Figure 4.



Key

1 direction of rotation – counter-clockwise
2 direction of rotation – clockwise

Figure 4 — Direction of rotation

3.1.11
door height window
french window
casement door
window which extends to floor level and allows access or passage for persons

3.1.12
double window
window with casements in at least two layers that operate independently

Note 1 to entry: See Figure 5.

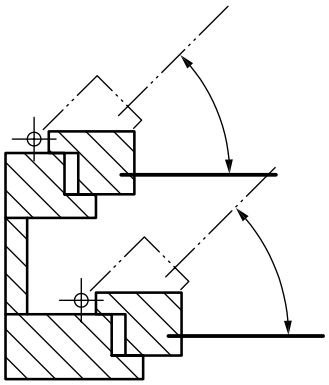
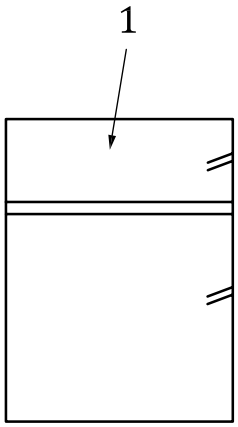


Figure 5 — Double window

3.1.13
fanlight
infill panel of glass or translucent material fitted within a window frame, above the moving sash(es)/casement(s) and with a solid member (transom) between it and the moving part(s)

Note 1 to entry: See Figure 6.



Key
1 fanlight

Figure 6 — Fanlight

3.1.14
fastened
state where the movable part is restrained at one or more points

3.1.15
fixed light
window with infill fitted directly into the frame

Note 1 to entry: In some countries the term fixed light is used for fixed window.

Note 2 to entry: See Figure 1 and Figure A.1 a).

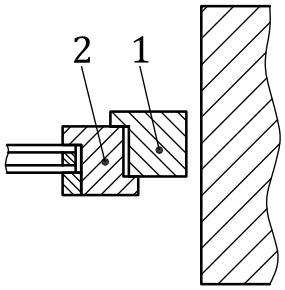
3.1.16
fixed window
window with infill mounted in a sash or casement construction but which differs from an openable window only in that the hardware used does not permit the sash/casement to be opened on a regular basis but holds the sash/casement to the frame

Note 1 to entry: A fixed window contains all the gaskets that an openable window does and these can be replaced by dismantling the sash or casement from the frame.

Note 2 to entry: See Figure 1 and Figure A.1 b).

3.1.17
frame
component forming the perimeter of a window, enabling it to be fixed to the building structure

Note 1 to entry: See Figure 1 and Figure 7 and Figure 9.



Key

1 frame

2 casement or sash

Figure 7 — Frame

3.1.18
glazing
transparent or translucent infill, together with all the components required to hold it within a frame

3.1.19
glazing bar
member subdividing the glazed area into smaller panes, either physically (Georgian bar) or visually (cross- or attached bar)

Note 1 to entry: See A.2 for different types of glazing bar.

Note 2 to entry: See Figure 2.

3.1.20
glazing bead
section retaining infill within its frame

Note 1 to entry: Term "glazing stop" is also used in some countries when the infill is glass.

Note 2 to entry: See Figure 1.

3.1.21
head
top horizontal member of a window frame

Note 1 to entry: See Figure 1.

3.1.22
infill
panel of transparent or opaque material or combination of materials

3.1.23
interlocking stile
stile that is one of a pair of stiles that are designed to engage with each other in the closed position for sliding products

3.1.24
jamb
vertical side member of a window frame

Note 1 to entry: See Figure 1.

3.1.25
latched
movable part is returned to its closed position and restrained by either a) a self-engaging fastener or b) a roller catch or c) a latch

Note 1 to entry: Latched is one of the fastened closing conditions (see 3.1.14).

3.1.26
locked
movable part is further restrained in the closed position by additional operations (of e.g. handle, key, automatic devices or electronic devices) to engage integrated locking devices (e.g. nutbolts or deadbolts) which will affect the product's characteristics

Note 1 to entry: Locked is one of the fastened closing conditions (see 3.1.14).

3.1.27
mullion
vertical or inclined component which subdivides a frame into sashes/casements or connects two frames

Note 1 to entry: See Figure 1.

3.1.28
passive sash
passive casement
sash/casement of a multi-light window, intend to be moved after the active sash/casement

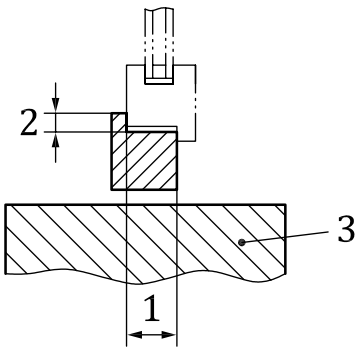
Note 1 to entry: See Figure 2.

3.1.29
pivot window
window that opens by pivoting either horizontally or vertically

Note 1 to entry: See A.1.2 for different types of pivot window.

3.1.30
rebate
recess in a frame, into which a moving element fits

Note 1 to entry: See Figure 8.



Key
1 rebate "*R*"
2 rebate "*r*"
3 wall

Figure 8 — Rebate

Note 2 to entry: A rebate has two measurements, "*r*" the width of the rebate measured in the same plane as the width of the casement and "*R*" the depth of the rebate measured in the same plane as the thickness of the moving element.

Note 3 to entry: See B.2 for examples of different types of rebate.

3.1.31
ribbon window
two or more windows which are attached to each other (either horizontally or vertically) without supporting structure between them

3.1.32
roof window
skylight
window intended for installation in a roof. Roof windows/ Skylights have the same characteristics as windows installed in walls with regard to function, cleaning, maintenance and durability

3.1.33
sash
opening element of a sliding window

Note 1 to entry: See Figure 1 and Figure 7.

3.1.34
screen
assembly of two or more windows and/or doorsets in one plane, with or without separate frames

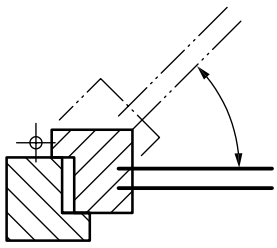
3.1.35
secured
any action(s) which prevent unauthorised release of the fastening device(s) to allow exit or entry (e.g. child safety, burglary)

3.1.36
sill
bottom member of a window frame

Note 1 to entry: See Figure 1.

3.1.37
single window
window with casement or sash in only one layer

Note 1 to entry: See Figure 9.



Key
1 sash/casement
2 frame

Figure 9 — Single window

3.1.38
sliding window
window with one or more sashes where at least one slides either horizontally or vertically

3.1.39
stile
vertical edge member of a sash/casement

3.1.40
top rail
uppermost horizontal member of a sash/casement

Note 1 to entry: See Figure 1.

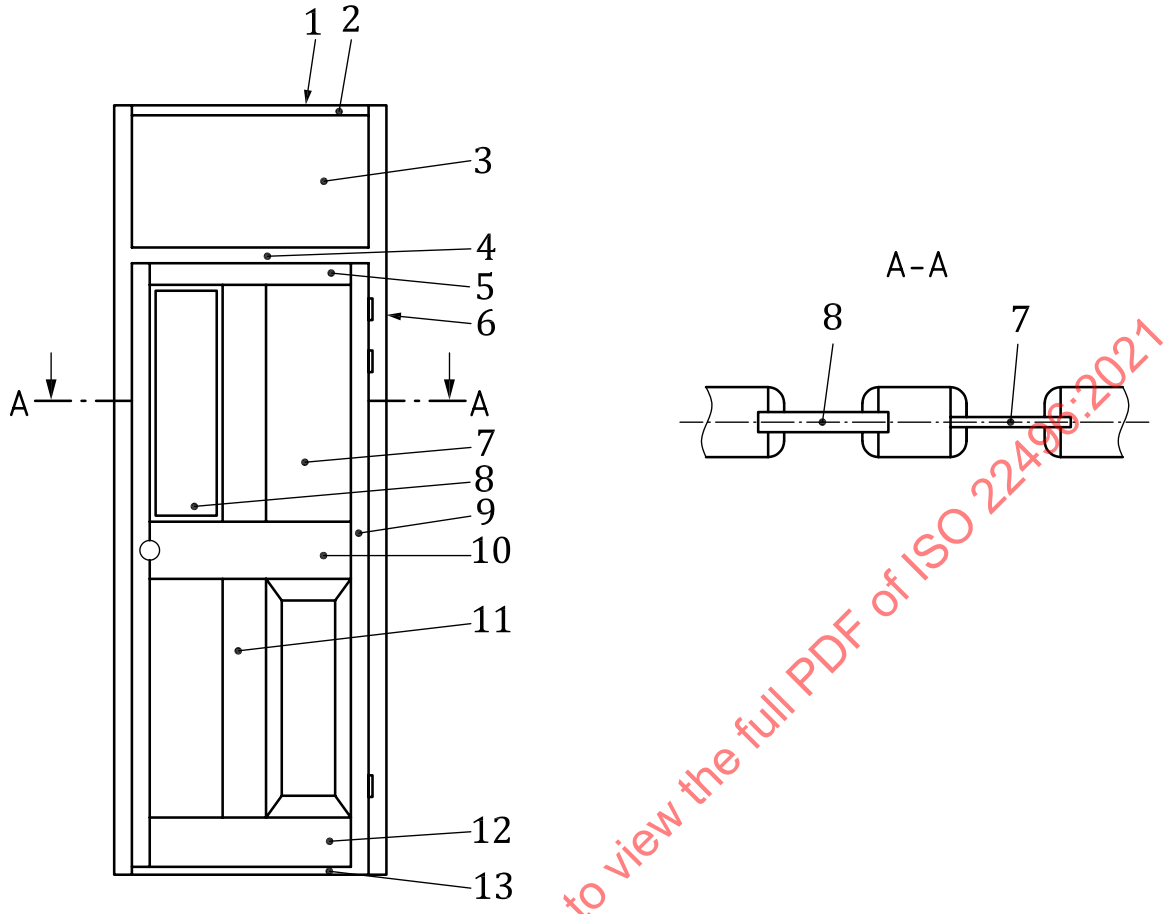
3.1.41
transom
horizontal component which subdivides a frame into sashes/casements or fixed lights

Note 1 to entry: See Figure 1.

3.1.42
window
building component or multiple components for closing an opening in a wall or roof that may admit light and/or provide ventilation

Note 1 to entry: See Figure 1.

3.2 Terminology for pedestrian doors



Key

1 frame
2 head
3 overpanel
4 transom
5 top or head rail
6 jamb
7 glazed panel
8 flat panel
9 stile
10 midrail
11 muntin
12 bottom rail
13 threshold

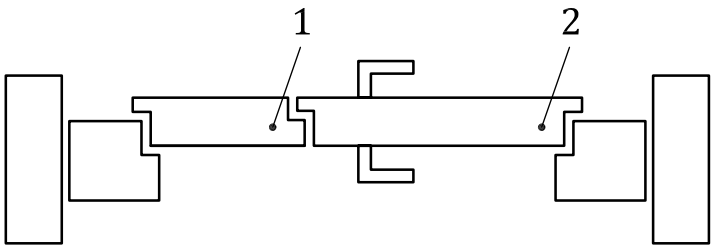
Figure 10 — Overview door component

Note 1 to entry: Terminology for doors also covers terminology used for inspection hatches.

Note 2 to entry: See B.1 for cross-sections and opening functions of doors.

3.2.1
active leaf
leaf of a multi-leaved hinged or pivoted doorset, intended to be moved first to provide opening

Note 1 to entry: See Figure 11.



Key
1 passive leaf
2 active leaf

Figure 11 — Active leaf

3.2.2
astragal
small moulding attached to one opening stile of a pair of doors which, when the doors are closed, cover the clearance gap

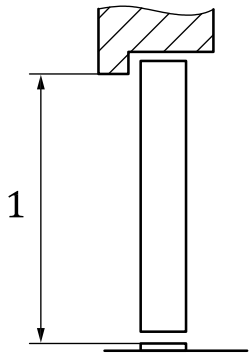
Note 1 to entry: See Figure 16.

3.2.3
bottom rail
horizontal component at the bottom of a door leaf construction

Note 1 to entry: See Figure 10.

3.2.4
clear opening height
minimum clear height of the door opening, which allows unrestricted passage through the open doorway

Note 1 to entry: See Figure 12.



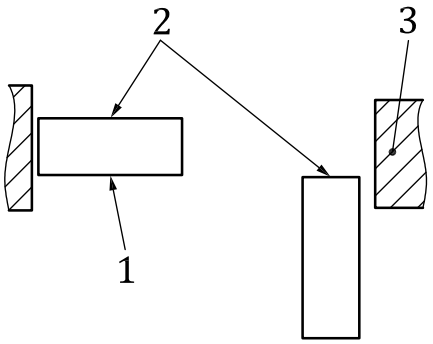
Key
1 clear opening height

Figure 12 — Clear opening height

3.2.5
closed
movable parts rest in or at the fixed parts in a way in which they may be fastened (latched and/or locked)

3.2.6
closing face
face of a door leaf which is the first to move into the closed position

Note 1 to entry: See Figure 13.

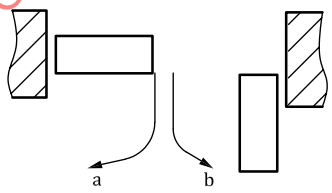


Key
1 opening face
2 closing face
3 reveal

Figure 13 — Closing face

3.2.7
direction of rotation
movement of a hinged or pivoted door leaf around its fixing, either clockwise or counter-clockwise

Note 1 to entry: See Figure 14.



[a] Direction of rotation – clockwise.
[b] Direction of rotation – counter-clockwise.

Figure 14 — Direction of rotation

3.2.8
doorset
door
building component which is designed and used to close a permanent opening in separating elements and supplied complete with all essential parts from a single source, and for which the main intended use is the access of pedestrians

3.2.9
door assembly
building component consisting of a frame and one or more leaves, together with essential building hardware, and supplied from separate sources which, when fitted together, will form a working door (for which the main intended use is the access of pedestrians)

3.2.10
door leaf
hinged, pivoted or sliding part within the door frame of a door assembly or door set

Note 1 to entry: See Figure 20.

3.2.11
door panel
sheet of transparent or opaque material fitted in an aperture within a door leaf

3.2.12
double action door
hinged or pivoted door leaf which can be opened in either direction

Note 1 to entry: See Figure 15.

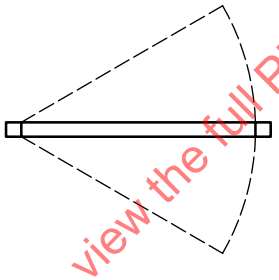
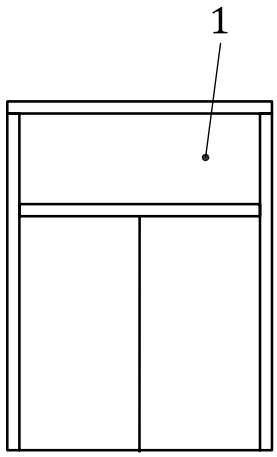


Figure 15 — Double action door

3.2.13
external doorset
external door
door in the building envelope which separates the exterior climate from the interior of a building

3.2.14
fanlight
infill panel of glass or translucent or opaque material fitted within a door frame, above the door leaf or leaves and with a solid member (transom) between it and the moving part(s)

Note 1 to entry: See Figure 16.



Key

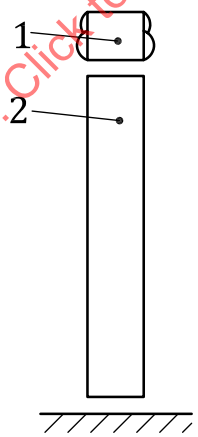
1 fanlight

Figure 16 — Fanlight

3.2.15
fastened
where the movable part is restrained at one or more points

3.2.16
flush door leaf
door leaf with flat faces, without any openings or mouldings

Note 1 to entry: See Figure 17.



Key

1 frame

2 flush door leaf

Figure 17 — Flush door leaf

3.2.17
frame
component forming the perimeter of a doorset, enabling it to be fixed to the surrounding building structure and from which the door leaf is supported

Note 1 to entry: See Figure 10 and Figure 17 and Figure 20.

3.2.18
glazed door leaf
door leaf containing one or more panes of glass or other translucent material

3.2.19
glazing bar
member subdividing the glazed area into smaller panes, either physically (Georgian bar) or visually (cross- or attached bar)

Note 1 to entry: See A.2 for different types of glazing bar.

3.2.20
glazing bead
section which retains the infill within its frame

Note 1 to entry: "glazing stop" is also used in some countries when the infill is glass

3.2.21
head
top horizontal member of a door frame

Note 1 to entry: See Figure 10.

3.2.22
head rail
top rail
top horizontal member of a door leaf

Note 1 to entry: See Figure 10.

3.2.23
infill
panel of transparent or opaque material or combination of materials

3.2.24
internal doorset
building component, which is designed and used to close a permanent opening in internal separating elements and for which the main intended use is the access of pedestrians

Note 1 to entry: Entrance doorsets to flats and apartments within the enclosed structure of a building are considered to be internal doorsets.

3.2.25
interlocking stile
stile that is one of a pair of stiles that are designed to engage with each other in the closed position for sliding products

3.2.26
jamb
vertical side member of a door frame

Note 1 to entry: See Figure 10.

3.2.27
latched
movable part is returned to its closed position and restrained by either a) a self-engaging fastener, or b) a roller catch or c) a latch

3.2.28
left hand opening
door which opens with a rotating movement with the hinge position on the left side when viewed from the opening face and which when viewed on plan, will move to open in a clockwise direction.

3.2.29
locked
movable part is further restrained in the closed position by additional operations (of e.g. handle, key, automatic device(s) or electronic device(s)) to engage integrated locking devices (e.g. nutbolts or deadbolts) which will affect the product's characteristics

3.2.30
meeting stile
one of a pair of stiles designed to meet each other in the closed position of the door

3.2.31
meeting edges
point at which the leaves in a double leaf doorset are adjacent

3.2.32
mullion
vertical or inclined component which subdivides a door leaf or overpanel or fanlight into panels

3.2.33
muntin
vertical components that fit between horizontal rails to form individual panels

Note 1 to entry: See Figure 10.

3.2.34
opening face
face of a door leaf which is the first to move away from the closed position

Note 1 to entry: See Figure 13.

3.2.35
overpanel
solid infill panel, commonly of the same construction as the door leaf or leaves, fitted within a door frame, above the door leaf or door leaves and either without a lower framing member (flush overpanel) or with a solid member between it and the door leaf or door leaves (overpanel with transom)

Note 1 to entry: See Figure 10.

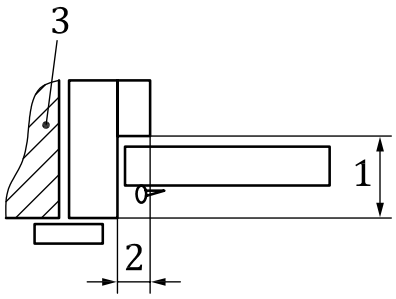
3.2.36
passive leaf
leaf of a multi-leafed doorset, intended to be moved after the active leaf

Note 1 to entry: See Figure 11.

3.2.37
rebate
recess in a frame into which a moving element fits

Note 1 to entry: See Figure 18.

Note 2 to entry: A rebate has two measurements, "*r*" the width of the rebate measured in the same plane as the width of the door and "*R*" the depth of the rebate measured in the same plane as the thickness of the moving element.



Key

1 rebate "*R*"
2 rebate "*r*"
3 wall

Figure 18 — Rebate

Note 3 to entry: For details of different types of rebated door leaves and frames see B.2.

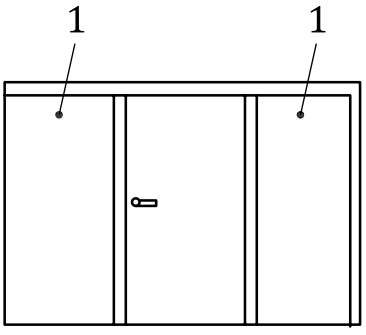
3.2.38
reveal
internal side surface of an opening or recess of a door frame or supporting structure

3.2.39
right hand opening
door which opens with a rotating movement with the hinge position on the right side when viewed from the opening face and which, when viewed on plan, will move to open in a counter-clockwise direction

3.2.40
secured
any action(s) which prevent unauthorised release of the fastening device(s) to allow exit or entry (e.g. child safety, burglary)

3.2.41
sidepanel
infill panel incorporated within the overall framework of a doorset which shares at least one framing member with a door leaf

Note 1 to entry: See Figure 19.



Key

1 sidepanel

Figure 19 — Sidepanel

3.2.42
sill
bottom horizontal member of a door frame

Note 1 to entry: In some English-speaking countries, the fixed part of threshold is called “sill”.

3.2.43
single action
hinged or pivoted door leaf which can only be opened in one direction

3.2.44
stile
vertical edge member of a door leaf

Note 1 to entry: See Figure 10.

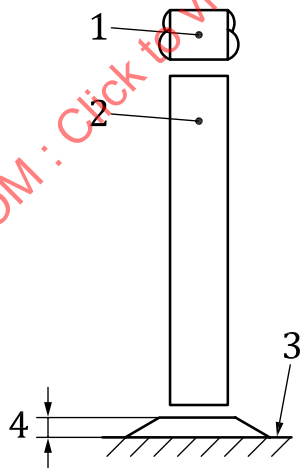
3.2.45
threshold
horizontal member at the bottom of a door frame above which the door leaf rests and which forms a division at floor level between two adjacent areas

Note 1 to entry: In some English-speaking countries, the fixed part of threshold is called “sill”.

Note 2 to entry: See Figure 10.

3.2.46
threshold height
difference in height between the highest point of any threshold fitted and finished floor level

Note 1 to entry: See Figure 20.



Key
1 frame
2 door leaf
3 finished floor level
4 threshold height

Figure 20 — Threshold height

3.2.47
transom
horizontal component which sub-divides a door leaf or leaves from an overpanel or fanlight

Note 1 to entry: See Figure 10.

3.2.48
unframed glass doorset
door assembly where the leaf (leaves) and/or adjacent part(s) is (are) made of glass (single or insulating glass unit) and without any load bearing or load transferring framework

Annex A
(informative)

Figures for windows

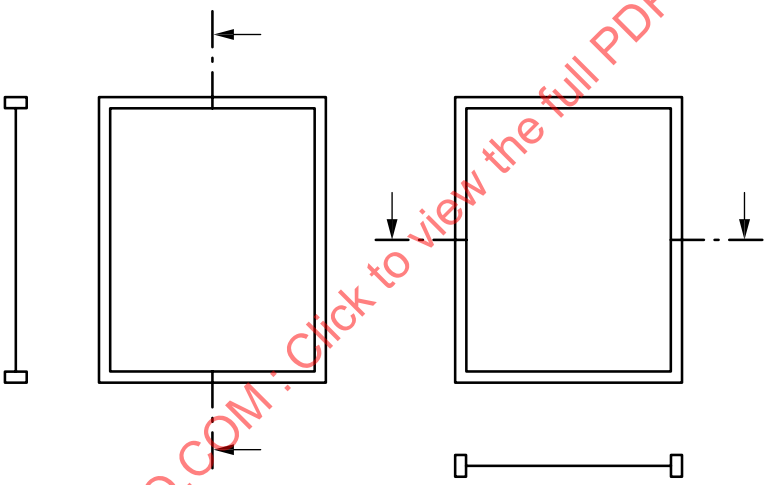
A.1 Types of windows and door height windows

A.1.1 General

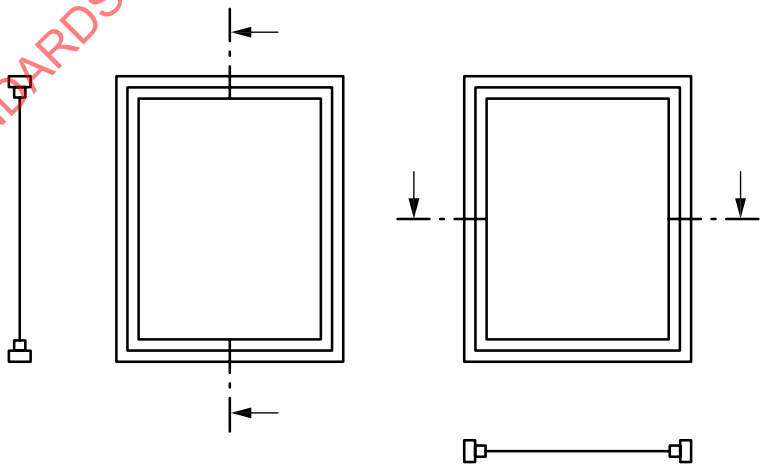
This annex shows the most common types of window and their modes of action. Where the window is not symmetrical, a stylised figure is shown, to indicate the approach side of the window. The words 'In' and 'Out' are used to identify interior and exterior conditions.

Note 1 to entry In some countries there is a different convention to identify the hinge side.

A.1.2 Fixed light and fixed window



a) Fixed light

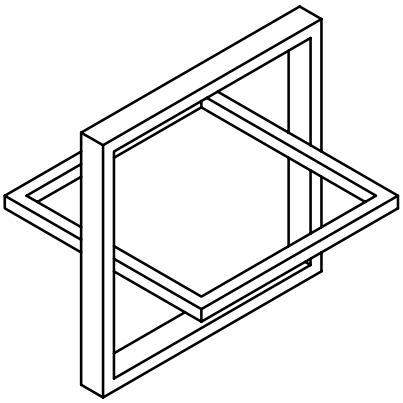


b) Fixed window

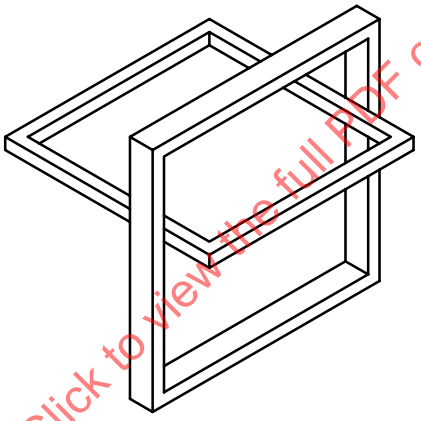
Figure A.1 — Fixed light and fixed window

A.1.3 Types of pivoted window

A.1.3.1 Horizontal pivot casement



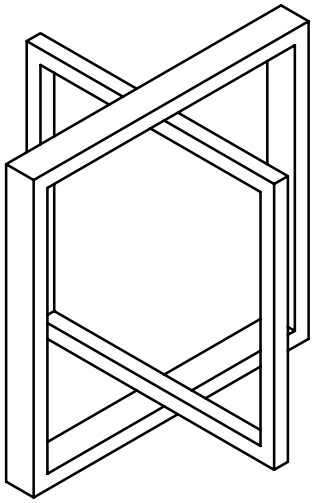
a) Horizontal pivot casement



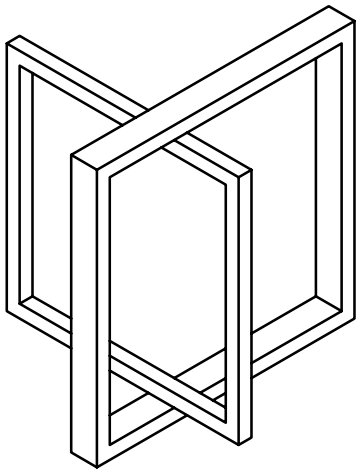
b) Off-centre horizontal pivot casement

Figure A.2 — Types of horizontal pivot casements

A.1.3.2 Vertical pivot casement



a) Vertical pivot casement

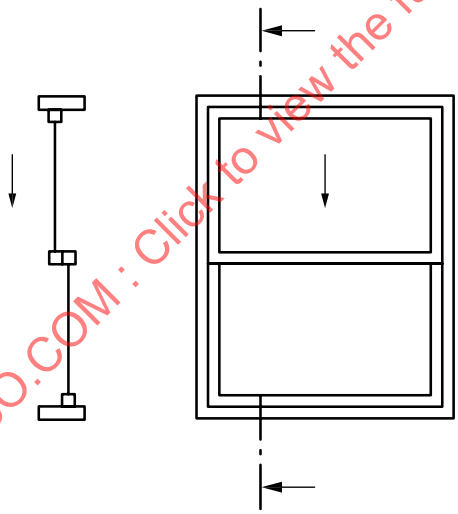


b) Off-centre vertical pivot casement

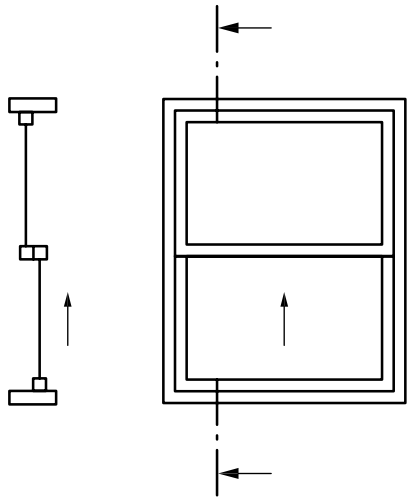
Figure A.3 — Types of vertical pivot casements

A.1.4 Types of sash windows

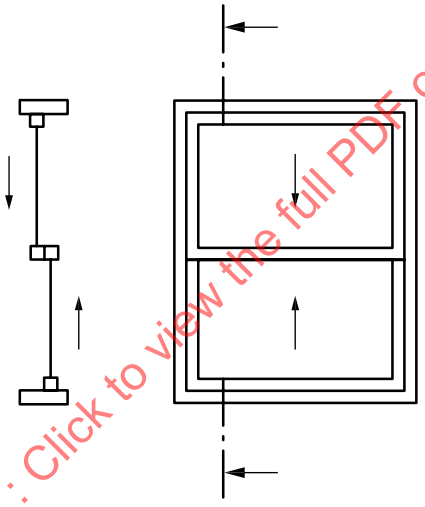
A.1.4.1 Vertical sliding sash



a) Top vertical sliding sash



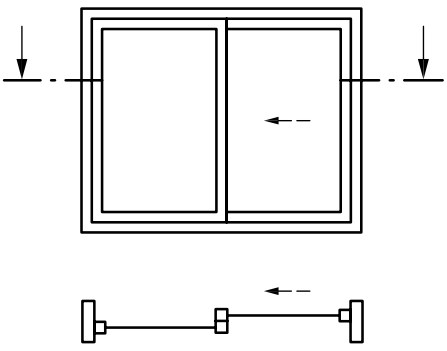
b) Bottom vertical sliding sash



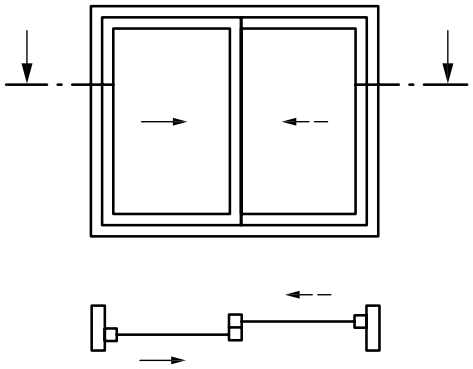
c) Double vertical sliding sash

Figure A.4 — Types of vertical sliding sashes

A.1.4.2 Horizontal sliding sash



a) Single horizontal sliding sash



b) Double horizontal sliding sash

Figure A.5 — Types of horizontal sliding sashes

A.1.4.3 Lifting/tilting sliding sash

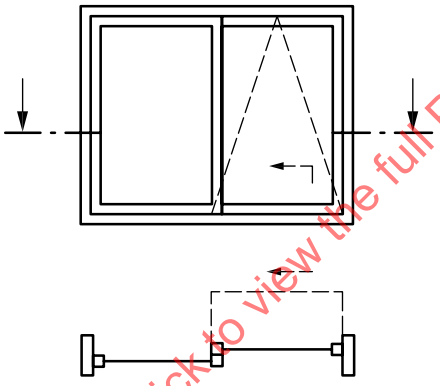


Figure A.6

A.1.4.4 Lifting sliding sash

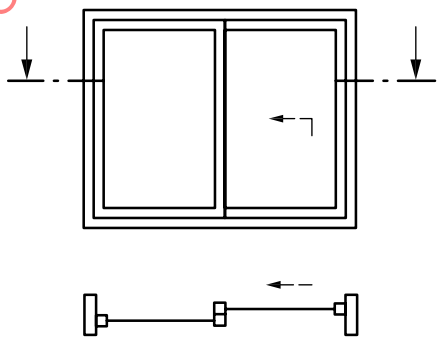


Figure A.7

A.1.5 Types of casement windows

A.1.5.1 Side hung casement window

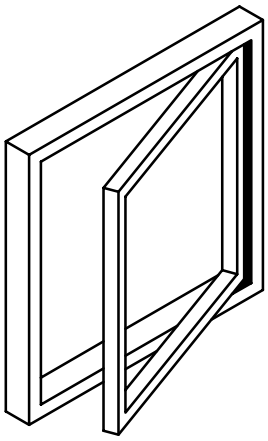


Figure A.8

A.1.5.2 Top hung casement window

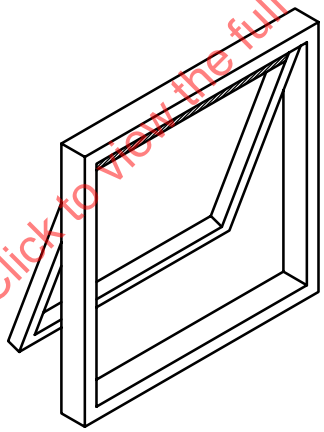


Figure A.9

A.1.5.3 Bottom hung casement window/tilt window

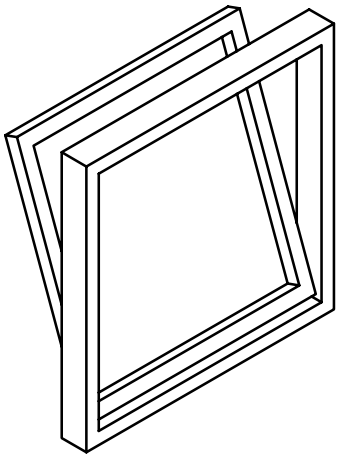


Figure A.10

A.1.6 Types of sliding, projecting casement windows

A.1.6.1 Side-hung projecting casement window

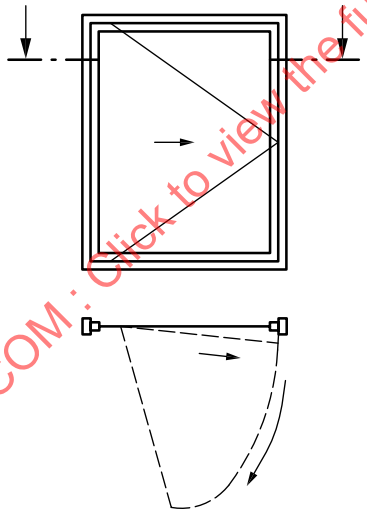


Figure A.11

A.1.6.2 Side-hung projecting reversible casement window

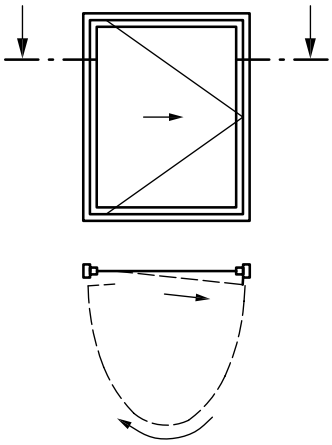


Figure A.12

A.1.6.3 Top-hung projecting casement window

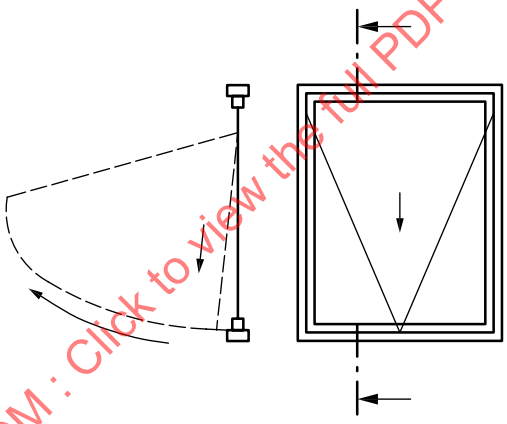


Figure A.13

A.1.6.4 Top-hung projecting reversible casement window

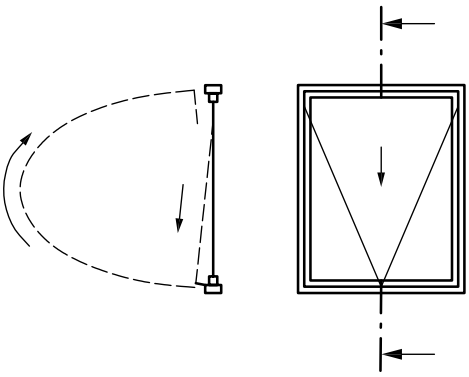


Figure A.14

A.1.6.5 Parallel projecting window

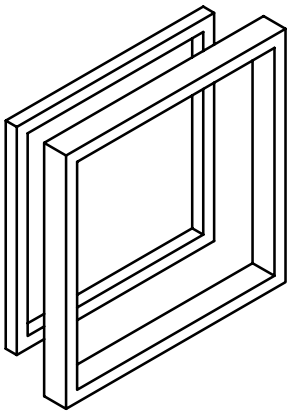


Figure A.15

A.1.6.6 Projecting bottom hung window

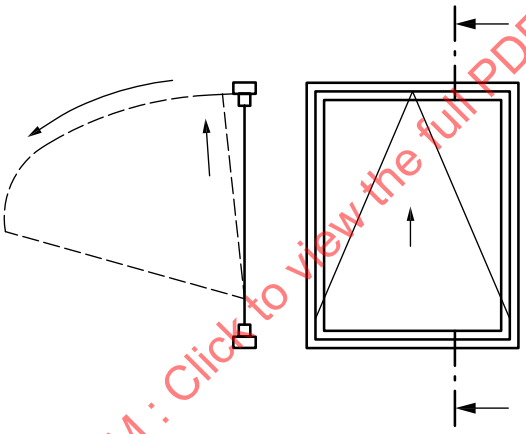


Figure A.16

A.1.7 Tilt and turn (or turn and tilt) window

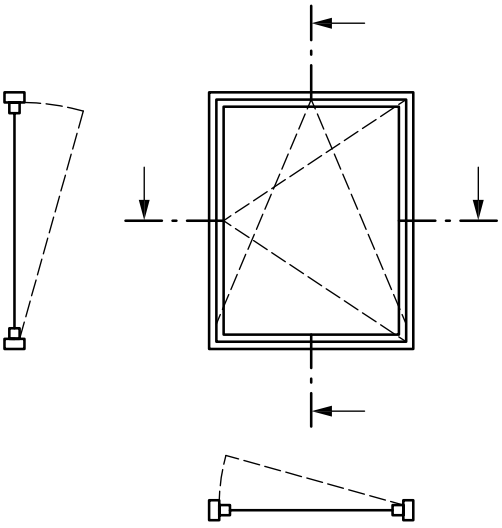


Figure A.17

A.1.8 Louvered window with intermediate axis

A.1.8.1 Horizontal

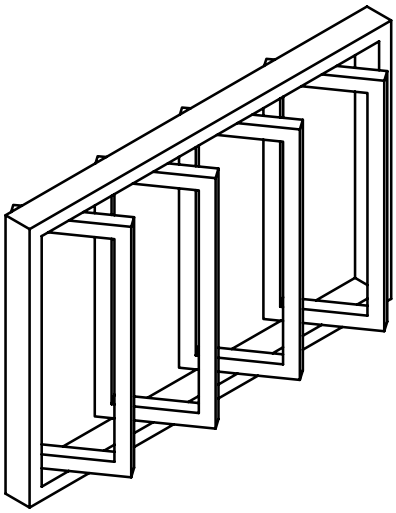


Figure A.18

A.1.8.2 Vertical

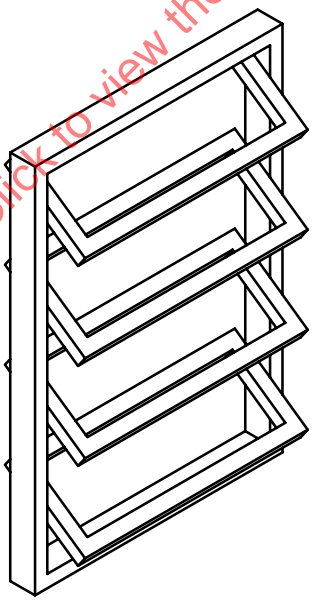


Figure A.19

A.1.9 Folding window

A.1.9.1 Folding window (centre pivot)

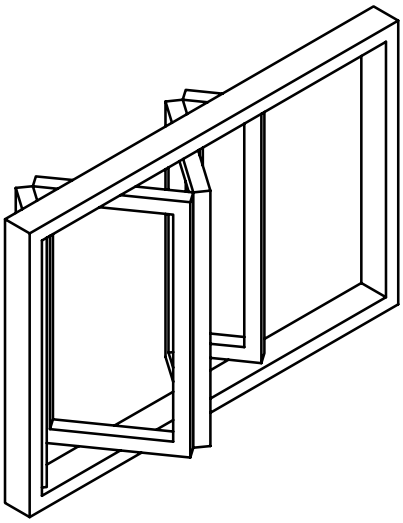


Figure A.20

A.1.9.2 Folding window (fixed one edge)

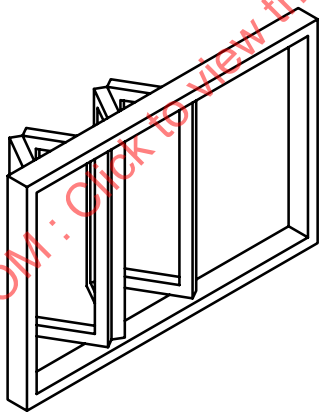


Figure A.21

A.2 Types of glazing bar

A.2.1 Attached bars

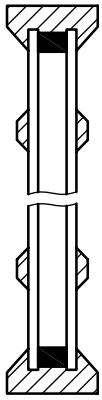


Figure A.22

A.2.2 Single cross bar in the IGU with or without attached bars

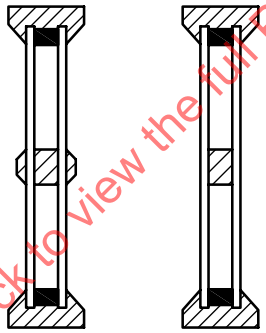


Figure A.23

A.2.3 Multiple cross bars in the IGU

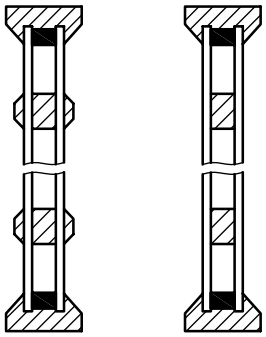


Figure A.24

A.2.4 Glazing bar (Georgian)

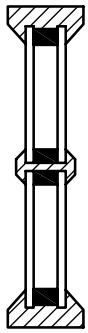
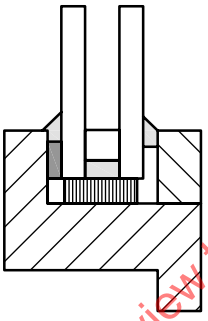
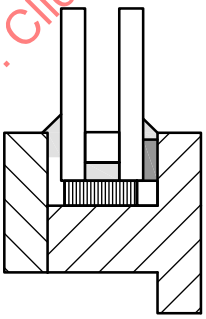


Figure A.25

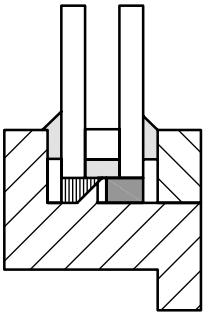
A.3 Types of direct glazing



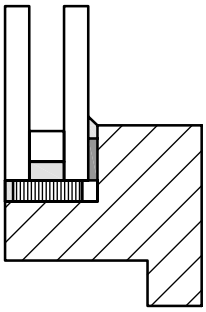
a) Adhesive on external overlap (position 1) of insulating glass unit with mechanical retention by glazing bead



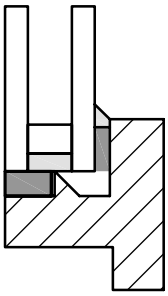
b) Adhesive on internal overlap (position 4) of insulating glass unit, e.g. aluminium cladded wood window



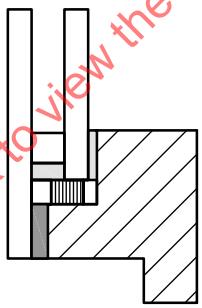
c) Adhesive in glazing rebate platform with mechanical retention by glazing bead



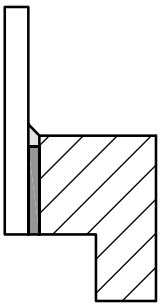
d) Adhesive at position 4 of insulating glass unit towards casement member, mechanical load accommodation of dead weight of glass by setting blocks



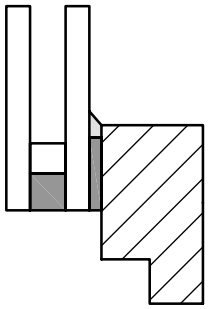
e) Adhesive on glazing rebate platform and at position 4 without mechanical retention by glazing bead / glass stops



f) Adhesive at position 2 of insulating glass unit with stepped glass towards casement member



g) Adhesive at position 2 of a monolithic glass product towards casement member



h) Adhesive at position 4 of insulating glass unit towards casement member with load bearing bonding of insulating glass units as per EN 13022-1

Key

adhesive

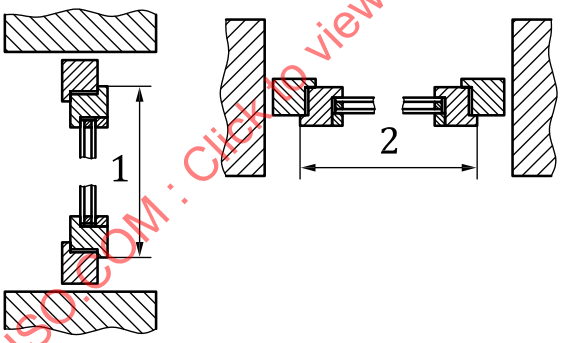
seal

setting block (to transfer the glass load)

Figure A.26 — Types of direct glazing

A.4 Supplemental figures for window terminologies

A.4.1 Casement or sash height/width



Key

1 overall casement or sash height

2 overall casement or sash width

Figure A.27