TECHNICAL SPECIFICATION

ISO/TS 8100-3

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Lifts for the transport of persons and goods —

Part 3: Requirements from other Standards (ASME A17.1/CSA B44 and JIS A 4307-1/JIS A 4307-2) not included in ISO 8100-1 or ISO 8100-2

Elévateurs pour le transport de personnes et d'objets —

Partie 3: Exigences d'autres normes (ASME A17.1/CSA B44 and JIS A 4307-1/JIS A 4307-2) non inclues dans l'ISO 8100-1 ou l'ISO 8100-2

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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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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 178, *Lifts, escalators, passenger conveyors*.

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.

This document is intended to be used in combination with ISO 8100-1 and ISO 8100-2.

A list of all parts in the ISO 8100 series can be found on the ISO website.

Introduction

The elevator industry has become increasingly international in nature resulting in the rationalization of many local standards and their harmonization with international Standards. ISO 8100-1 and ISO 8100-2 address the requirements in many parts of the world. However, there are standards applicable in regions of the world such as North America and Japan that have differences in specific prescriptive requirements from those in ISO 8100-1 and ISO 8100-2.

This document needs to be used in combination with ISO 8100-1 and ISO 8100-2 for the purpose of achieving equivalency with the requirements of ASME A17.1/CSA B44 and JIS A 4307-1/JIS A 4307-2 respectively, where the scopes of ASME A17.1/CSA B44 and JIS A 4307-1/JIS A 4307-2 coincide with the scope of ISO 8100-1 and ISO 8100-2. Equipment outside of the scope of ISO 8100-1 and ISO 8100-2 is not addressed in this document. While the scope of ISO 8100-1 and ISO 8100-2 addresses electric as well as hydraulic lifts, this document only addresses electric lifts (except home lifts). Future editions of this document will address hydraulic lifts, home lifts, as well as, electric lifts.

This document identifies section and requirement numbers from ASME A17.1/CSA B44 or JIS A 4307-1/JIS A 4307-2 for requirements to be used in addition to, or in place of, specific clauses in ISO 8100-1 and ISO 8100-2. The content of the specific requirements is published in ASME A17.1/CSA B44 and JIS A 4307-1/JIS A 4307-2.

This document is not a substitute for ASME A17.1/CSA B44 or the Building Standard Law of Japan (BSLJ) or JIS A 4307-1/JIS A 4307-2 and it does not evaluate or interpret requirements in those standards. It is the responsibility of the user to comply with the actual requirements in force in the particular jurisdictions.

As a further clarification, it is emphasized that, although differences exist in the various standards, it does not imply that any standard is superior to another standard covering the same scope.

In the future, the intention is to reduce differences in a gradual manner. In this context the tables in Clause 4 will serve as a summary of areas of difference for the convergence process.

The ISO 8100-2X series provides a performance-based approach for safety requirements of lifts. ISO 8100-1 and ISO 8100-2 provide detailed prescriptive safety requirements for lifts, which can assist with the application of the ISO 8100-2X series, especially ISO 8100-20.

Lifts for the transport of persons and goods —

Part 3:
Requirements from other Standards (ASME A17.1/CSA B44 and JIS A 4307-1/JIS A 4307-2) not included in ISO 8100-1 or ISO 8100-2

1 Scope

1.1 This document specifies the safety rules for permanently installed new passenger or goods passenger lifts, with traction, positive or hydraulic drive, serving defined landing levels, having a car designed for the transportation of persons or persons and goods, suspended by ropes, chains or jacks and moving between guide rails inclined not more than 15° to the vertical.

1.2 This document covers the machinery described in 1.1 and the hazards, hazardous situations and hazardous events related to their use.

NOTE Supplementary requirements can apply in special cases (use of lifts by persons with disabilities, in case of fire, potentially explosive atmosphere, extreme climate conditions, seismic conditions, transporting dangerous goods, etc.).

1.3 This document does not cover:

a) lifts with:

   1) drive systems other than those stated in 1.1;

   2) rated speed ≤0,15 m/s;

b) hydraulic lifts:

   1) with a rated speed exceeding 1 m/s;

   2) where the setting of the pressure relief valve (5.9.3.5.3) exceeds 50 MPa;

c) new passenger or goods passenger lifts in existing buildings[1)] where, in some circumstances, some requirements of ISO 8100-1 cannot be met due to limitations enforced by building constraints and local requirements, e.g. EN 81-21, should be considered;

d) lifting appliances, such as paternosters, mine lifts, theatrical lifts, appliances with automatic caging, skips, lifts and hoists for building and public works sites, ships' hoists, platforms for exploration or drilling at sea, construction and maintenance appliances or lifts in wind turbines;

e) important modifications (see Annex C) to a lift installed before this document is brought into application;

f) safety during operations of transport, erection, repairs, and dismantling of lifts.

However, this document can usefully be taken as a basis.

1) Existing building is a building which is used or was already used before the order for the lift was placed. A building whose internal structure is completely renewed is considered as a new building.

Noise and vibrations are not dealt with in this document as they are not found at levels which can be considered as harmful with regard to the safe use and maintenance of the lift.

1.4 This document is not applicable to passenger and goods passenger lifts, which are installed before the date of its publication.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ASME A17.1-2013/CSA B44-13, *Safety Code for Elevators and Escalators*

JIS A 4307-1, *Lifts for the transport of persons and goods — Part 1: Passenger and goods passenger lifts*

JIS A 4307-2, *Lifts for the transport of persons and goods — Part 2: Design rules, calculations, examinations and tests of lift components*

3 Terms and definitions

No terms and definitions are listed in this document.

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 http://www.electropedia.org/

4 Use of this document

Products designed in compliance with specific requirements of ISO 8100-1 and ISO 8100-2 may not be in compliance with specific prescriptive requirements in ASME A17.1-2013/CSA B44-13 or the Building Standard Law of Japan (BSLJ) or JIS A 4307-1 and JIS A 4307-2. JIS A 4307-1 and JIS A 4307-2 are the standards incorporating the requirements of BSLJ into ISO 8100-1 and ISO 8100-2.

Specific prescriptive requirements of ASME A17.1-2013/CSA B44-13 that shall be addressed in addition to, or in place of, requirements of ISO 8100-1 and ISO 8100-2 can be identified by referring to Tables 1 and 2,

In a similar way, Tables 3 and 4 identify requirements in JIS A 4307-1/JIS A 4307-2 that shall be addressed.

Tables 1 to 4 provide guidance and, in all cases, the relevant standards need to be consulted.

In each table, there are five columns as follows:

a) Column 1 identifies the clause number in ISO 8100-1 and ISO 8100-2;

b) Column 2 describes the subject matter;

c) Column 3 identifies the requirement to be addressed in addition to ISO 8100-1 and ISO 8100-2;

d) Column 4 identifies the requirement to be addressed in place of ISO 8100-1 and ISO 8100-2; and

e) Column 5 contains comments and explanations intended to provide guidance to the user.

NOTE Throughout this document, the term lift is used, as it is the term used in ISO 8100-1 and ISO 8100-2. In the last column of Tables 1 to 4, the term elevator is used as that is the term used in ASME A17.1/CSA B44 and the BSLJ.

Table 1 — ASME A17.1/CSA B44 requirements to be used in addition to or in place of requirements in ISO 8100-1

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
0.3.6	Passenger weight		Appendix D	A17.1/B44 assumes passenger weight different from that indicated in ISO 8100-1
5.2.1.1.1	Arrangement of lift equipment	2.7.6.3		A17.1/B44 requires different parts of elevator equipment to be located in specific spaces or rooms
5.2.1.1.2	Equipment identification	2.29.1		A17.1/B44 has additional specific requirements for equipment and component marking.
5.2.1.2.1	Use of the well, machine and pulley rooms	2.8		A17.1/B44 has additional specific requirements for equipment; permitted in the hoistway.
5.2.1.3	Ventilation	2.7.9.2 2.8.5		A17.1/B44 requires equipment manufacturer to specify and post temperature and humidity requirements. ISO 8100-1:2019, 0.4.2, 0.4.5 and 0.4.16, 0 and E.3 also pertain to ventilation.
5.2.1.4.1 b)	Pit lighting		2.2.5	A17.1/B44 requires different illumination level.
5.2.1.5.1	Electric equipment in pit		2.2.6	A17.1/B44 broadly addresses the same safety issues. Some specific requirements differ.
5.2.1.5.2	Electric equipment in machinery spaces and pulley rooms		2.7.3.5 2.26.2.4 NFPA 70 CSA C22.1	A17.1/B44 requires stop switches conforming to specific Standards.
5.2.1.8.1	Strength of walls, floors and ceilings		2.1.1 2.1.2 2.1.3	A17.1/B44 has specific constructional conditions and differing loading requirements.
5.2.1.8.2	Walls of the well	2.1.1.1 2.1.1.2 2.1.1.3 2.1.1.5		A17.1/B44 has specific constructional conditions and differing loading requirements. Building codes have additional requirements.
5.2.1.8.3	Glass enclosures		2.1.1.2.2(e) ANSI Z97.1 16 CFR Part 1201 CAN/GGSB-12.1-M90	A17.1/B44 references other Standards for glass enclosure requirements.
5.2.1.8.4 5.2.1.8.5 5.2.1.8.6	Pit floor strength		2.1.2.3	A17.1/B44 has different requirements for calculating loads.
5.2.1.9	Surfaces	2.2.2		A17.1/B44 has additional requirements for pit sump pumps.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.2.2	Access to well and to machinery spaces and pulley rooms		2.7.2, 2.7.3	A17.1/B44 contains differing requirements for accessing various rooms and spaces.
5.2.2.4	Pit access		2.2.4	A17.1/B44 contains differing requirements for pit access and ladders. ISO 8100-1:2019, Annex F includes specific requirements for pit ladders.
5.2.2.5	Access to machinery spaces and pulley rooms		2.7.3.3	A17.1/B44 contains differing requirements for access by stairs and ladders.
5.2.3	Access and emergency doors		2.7.3.4 2.11.1.2 2.11.1.3 2.11.1.4 2.14.1.10 8.1	A17.1/B44 contains differing requirements for access door sizes and security. Side exits are not permitted by A17.1/B44.
5.2.5.2.1	Well enclosure		2.1.1.1 2.1.1.2 2.1.1.3	Hoistway enclosures are subject to building code requirements or differing A17.1/B44 requirements for enclosed and non-enclosed hoistways.
5.2.5.2.2.1	Enclosed wells		2.1.1.1 2.1.1.2	A17.1/B44 contains additional requirements for fully enclosed wells.
5.2.5.2.2.2	Well projections		2.1.6	A17.1/B44 contains differing requirements for projections and recesses.
5.2.5.2.3	Partially enclosed wells		2.1.1.3	A17.1/B44 contains differing requirements for enclosure height and construction.
5.2.5.3.1	Clearances between cars and well enclosures		2.5.1.1 2.5.1.4 2.5.1.5 2.5.1.6 2.5.1.7	A17.1/B44 specifies different clearances between cars and well enclosures for various conditions.
5.2.5.4	Protection of space below well	2.6.1, 2.6.2		A17.1/B44 has additional requirements relating to protection of space below well.
5.2.5.5.1	Counterweight guarding		2.3.2	A17.1/B44 has differing requirements for counterweight guarding.
5.2.5.5.2	Well guarding		2.3.2.3 2.3.3 2.3.4	A17.1/B44 requires guarding of counterweights only and also permits remote counterweight hoistways and separate runways.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.2.5.6	Extreme positions of car and counterweight		2.4.2 2.4.3 2.4.4 2.4.5 2.4.6 2.4.8 2.4.9	A17.1/B44 specifies differing runbys and maximum upward movements under various conditions and equipment types as well as a counterweight runby data plate.
5.2.5.7	Top of car clearances and refuge space		2.4.7, 2.14.1.6.2, Appendix G	A17.1/B44 requires clearance over the entire car top (within railing) so there is no specified refuge space.
5.2.5.8	Bottom clearances and pit refuge space		2.4.1	A17.1/B44 specifies differing clearances underneath various pieces of equipment and only two refuge space sizes.
5.2.6.1	General		2.7.6.6, 2.7.9.2	Equipment is not to be exposed to the weather. Temperature and humidity is to be as specified by the manufacturer. See also ISO 8100-1 Clauses 0.3.3, 0.4.2 and 0.4.5.
5.2.6.2.1	Notices and instructions	2.29		In A17.1/B44 additional marking of switches is required to identify each elevator in buildings with more than one elevator.
5.2.6.2.2 5.2.1.1.2	Notices and instructions		NFPA 70, CSA C22.1	Markings on disconnect switches are addressed by NFPA 70 and CSA C22.1.
5.2.6.2.3	Notices and instructions		8.6.1.2.2 (d) (1)	A17.1/B44 specifies evacuation procedures to be available on site.
5.2.6.3.2	Dimensions		2.7.1.3 2.7.2 2.7.3 2.7.4	A17.1/B44 specifies differing access requirements to machine rooms and machinery spaces, maintenance clearances to equipment in the rooms and spaces and headroom. In addition, clearances around controller cabinets are specified in the electrical code.
5.2.6.3.3	Other openings		2.1.3	A17.1/B44 permits concrete or metal floors with differing specified perforations.
5.2.6.4.1.2	Clear height in well		2.7.4.5 (a)	A17.1/B44 specifies safe and convenient access to be compliant with NFPA 70 or CSA C22.1.
5.2.6.4.1.3	Necessary instructions for operation		2.7.5.2.1(b)(4)	A17.1/B44 specifies signage and instructions for various working area access and safety devices.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.2.6.4.2	Dimensions of working areas inside the well		2.7.4.2 2.7.4.3 2.7.4.5	A17.1/B44 specifies differing access and headroom requirements in various work spaces. In addition, clearances around controller cabinets are specified in the electrical code.
5.2.6.4.3	Working areas in the car or on the car roof		2.7.5.1	A17.1/B44 specifies differing requirements for working areas in the car or on the car top.
5.2.6.4.3.1	Prevent dangerous movement of the car		2.7.5.1.1 2.7.5.1.2 2.7.5.1.3	A17.1/B44 specifies differing requirements for a means to prevent unexpected vertical car movement.
5.2.6.4.3.2	Devices for emergency operation and for dynamic tests	2.7.6.4 2.7.6.5		A17.1/B44 specifies additional requirements for means necessary for tests and for the inspection and test panel.
5.2.6.4.3.3	Inspection doors in the car		2.7.5.1.4	A17.1/B44 specifies requirements for equipment access panels in the car.
5.2.6.4.3.4	In-car inspection control station		2.26.1.4	A17.1/B44 specifies differing requirements for in-car inspection operation.
5.2.6.4.4	Working areas in the pit		2.7.5.2 2.26.1.4	A17.1/B44 specifies differing requirements for working areas in the pit and pit inspection operation.
5.2.6.4.4.3	Devices for emergency operation and for dynamic tests	2.7.6.4 2.7.6.5		A17.1/B44 specifies additional requirements for means necessary for tests and for the inspection and test panel.
5.2.6.4.5	Working areas on a platform	2.7.5.3 2.7.5.4 2.7.5.5 2.26.1.4		A17.1/B44 specifies additional requirements for working platforms, and working areas on a platform.
5.2.6.4.6	Working areas outside of the well	2.7.3.4 2.7.4.4 2.7.6.3.4		A17.1/B44 specifies additional requirements for working areas outside of the hoistway.
5.2.6.5.1	Machinery cabinet	2.7.6.3.2 2.7.7 2.7.8		A17.1/B44 specifies additional requirements for motor controllers located in a locked cabinet, machine rooms and control rooms underneath the hoistway and remote machine rooms and control rooms.
5.2.6.5.2	Working area		NFPA 70, CSA C22.1	Clearances around controller cabinets are specified in the electrical codes (i.e. NFPA 70, CSA C22.1)

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.2.6.6	Devices for emergency and test operations	2.7.6.4 2.7.6.5		A17.1/B44 specifies additional requirements for means necessary for tests and for the inspection and test panel.
5.2.6.7.1	Construction and equipment of pulley rooms dimensions		2.7.2 2.7.4.1 2.7.4.4 2.7.4.6	A17.1/B44 specifies differing requirements for maintenance path and clearance to equipment and headroom in machinery spaces, machine rooms, control spaces, and control rooms.
5.2.6.7.2	Openings		2.1.3	A17.1/B44 permits concrete or metal floors with differing specified perforations.
5.3.2.1	Height of entrance		2.11.1	A17.1/B44 has differing requirements.
5.3.3.2	Guides		2.11.11	A17.1/B44 has differing requirements.
5.3.3.3	Suspension of vertically sliding doors		2.11.12	A17.1/B44 has differing requirements.
5.3.4 5.3.4.1 5.3.4.2	Horizontal door clearances		2.5.1.4 2.14.4.5.1	A17.1/B44 has differing requirements.
5.3.5	Strength of landing and car doors		2.14.4.6 2.11.11.5.7	A17.1/B44 has differing requirements.
5.3.5.2	Behaviour under fire conditions		2.11.14 8.3.4	A17.1/B44 has differing requirements.
5.3.5.3	Mechanical strength		2.11.11.5.7	A17.1/B44 has differing requirements.
5.3.5.3.2	Retainers		2.11.11.8	A17.1/B44 has differing requirements.
5.3.6.2.2	Horizontally sliding doors		2.13.4.2.1	A17.1/B44 has differing requirements.
5.3.6.2.2.1	Automatic power operated doors		2.13.4.2.1	A17.1/B44 has differing requirements.
5.3.6.2.2.1 a)	Kinetic energy	2.13.4.2.1 (b) (1)	2.13.4.2.1 (a)	A17.1/B44 has additional requirements.
5.3.6.2.2.1 b) 3)	De-activation of door protective device.		ICC/ANSI A117.1	A17.1/B44 has differing requirements.
5.3.6.2.2.1 b) 4)	Failure or deactivation of door protective device	2.13.4.2.1 (c) (1)	2.13.4.2.1 (c)	A17.1/B44 has differing requirements.
5.3.6.2.2.1 c)	Force required to prevent door closing		2.13.4.2.3	A17.1/B44 has differing requirements.
5.3.6.2.2.1 g)	Labyrinths or chicanes and Glass doors		2.11.11.5.3 2.14.5.9	In A17.1/B44 glass car doors are addressed by requirement 2.14.5.9.1.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.3.6.2.2.2	Non-automatic power operated doors (continuous pressure)		2.13.3.2	A17.1/B44 has differing requirements.
5.3.6.2.2.3	Vertically sliding doors	2.13.3.4		A17.1/B44 has additional requirements.
5.3.7.1	Local landing lighting		2.11.10.2	A17.1/B44 has differing requirements.
5.3.7.2	"Car here " indication		2.11.7.1	A17.1/B44 has differing requirements.
5.3.8.	Locking and closed landing door check	2.12.2		A17.1/B44 has differing requirements.
5.3.9.1.7	Interlock strength		2.12.2.4.1	A17.1/B44 has differing requirements.
5.3.9.3	Emergency unlocking		2.12.6	A17.1/B44 has differing requirements.
5.3.9.3.5	Distances to pit ladder		2.2.4.6	A17.1/B44 has differing requirements.
5.3.9.4	Electric safety device for proving landing door closed		2.12.2	A17.1/B44 has differing requirements.
5.3.10	Proving the locked condition and closed condition of landing door		2.12.2	A17.1/B44 has differing requirements.
5.3.11	Sliding landing door with multiple, mechanically linked panels		2.12.2.4.4	A17.1/B44 has differing requirements. Folding doors not permitted by A17.1/B44.
5.3.15	Opening car door		2.14.5.7	A17.1/B44 has differing requirements.
5.4.1	Car height		2.14.2.4	A17.1/B44 has differing requirements.
5.4.2.1	Car area		2.16.1	A17.1/B44 has differing requirements.
5.4.2.3	Number of passengers		Appendix D	A17.1/B44 has differing requirements.
5.4.2.3.2	In-car data		2.16.3	A17.1/B44 Requires an additional data plate.
5.4.3.2.1	Level of car on safety application		2.17.8.2.6 2.17.9.2	A17.1/B44 has differing requirements limiting the degree to which the car platform can be out of level after application of the safeties.
5.4.3.2.4	Glass panels in car		2.14.1.8	A17.1/B44 has differing requirements.
5.4.3.2.5	Glass markings		2.14.1.8	A17.1/B44 has differing requirements.
5.4.3.3	Glass walls below 1,1 m.		2.14.1.8.1	A17.1/B44 has differing requirements.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.4.4	Car door, floor, wall ceiling and decorative materials		2.14.2 ASTM E84 ANSI/UL 723 CAN/ULC-S102	A17.1/B44 has differing requirements.
5.4.5	Apron		2.15.9	A17.1/B44 has differing requirements.
5.4.6	Emergency trap doors and emergency doors		2.14.1.5	A17.1/B44 has differing requirements. Side emergency exits not permitted by A17.1/B44.
5.4.6.3.1	Trap door locking		2.14.1.5.1	A17.1/B44 has differing requirements.
5.4.7.4	Balustrade (guard rail)		2.10.2	A17.1/B44 has differing requirements.
5.4.8	Equipment on top of car	2.14.7.1.4	2.26.1.4.2	A17.1/B44 has differing requirements.
5.4.9	Ventilation		2.14.2.3	A17.1/B44 has differing requirements.
5.4.10	Lighting		2.14.7	A17.1/B44 has differing requirements.
5.4.10.4	Emergency lighting		2.14.7.1.3	A17.1/B44 has differing requirements.
5.4.11.2	Counterweight filler weights.	2.11.1.2		A17.1/B44 has additional requirements if tie rods are used to secure filler weights.
5.5	Suspension, compensation and related protection means		2.20 A17.6	A17.1/B44 Section 2.20 addresses suspension means and their connections. All suspension means are required to conform to ASME A17.6.
5.5.1	Suspension means		2.20.1 2.20.2	A17.1/B44 permits aramid fibre rope (AFRs), non-circular elastomeric coated suspension means (CSBs) as well as steel wire ropes (SWRs). ISO 8100-1 permits SWRs and chains but does not permit AFRs or CSBs. A17.1/B44 and ISO 8100-1 reference different normative standards for suspension means. A17.7/B44 requires suspension-means data plates.
5.5.2	Sheave, pulley, drum and rope diameter ratios, rope/chain terminations		2.20.6 2.20.9 2.24.2	A17.1/B44 has differing requirements. A17.1/B44 permits the use of various materials subject to specific requirements.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.5.2.2	Suspension means factors of safety.		2.20.3	Approach to factors of safety and values of factors of safety differ. This is also affected by references to different normative standards per item 5.5.1.
5.5.2.3	Rope terminations		2.20.9 2.20.10 2.20.11	A17.1/B44 provides requirements for terminations applicable to all permitted suspension means. (See comment to 5.5.1). Specific prescriptive requirements are elaborated and engineering tests are specified.
5.5.2.4	Chain terminations			A17.1/B44 does not permit chains as a suspension means on passenger elevators.
5.5.3	Rope traction		2.20.8 2.24.2.3	A17.1/B44 requires suspension means monitoring and protection for all permitted suspension means. This includes protection against traction loss, broken suspension member, and exceeding residual strength requirements. Testing of each of the means is also required. A17.1/B44 permits the use of non-metallic linings in traction sheaves provided specific requirements are satisfied.
5.5.4	Winding up of ropes for positive drive lifts	2.20.6 2.24.2.1.2 2.24.3		A17.1/B44 has requirements to prevent the rope ends from coming out of inside of drum and the prevention of interference. A17.1/B44 also has requirements for the material of the drum and corresponding factors of safety.
5.5.4.2	Rope turns on winding drum		2.20.7	A17.1/B44 requires not less than one full turn under same conditions as stated in 5.5.4.2.
5.5.5	Distribution of loads between ropes and chains		2.20.5	A17.1/B44 does not permit chains for suspension of passenger elevators. Various types of equalizers are permitted under specific conditions.
5.5.6	Compensation means		2.21.4	A17.1/B44 permits various compensation means provided that the required factors of safety are met.
5.5.7	Protection of sheaves, pulleys, sprockets		2.10.1 2.24.2.5	A17.1/B44 requirements address the guarding of equipment to protect against accidental contact. Retaining and guarding of suspension members is addressed in A17.1/B44 requirement 2.24.2.5.1.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.5.8	Traction sheaves, pulleys and sprockets in the well		Section 2.9	A17.1/B44 addresses the hazards related to sheaves and other equipment in hoistway by design requirements including material properties and permissible stress limits.
5.6	Precautions against free fall, excessive speed, unintended car motion and creeping of car		2.17 2.18 2.19	A17.1/B44 covers precautions against free fall, excessive speed, unintended car motion and creeping of car in Sections 2.17, 2.18 and 2.19.
5.6.1	General provisions		2.17 2.18 2.19	A17.1/B44 covers these issues in Sections 2.17, 2.18 and 2.19.
5.6.2	Safety gear and its tripping means		2.17	A17.1/B44 covers tripping means of safety gear in Section 2.17
5.6.2.1	Safety gear	2.17.5.3	2.17.12	Type A, instantaneous safeties, and Type B, progressive safeties are permitted by ISO 8100-1 as well as A17.1/B44.
		2.17.8.2		Additionally, A17.1/B44 has requirements for Type C safeties (Type A with oil buffers). Specific factors of safety are required for components of the safety gear in A17.1/B44.
		2.17.13		A17.1/B44 has specific requirements for corrosion resistant bearings on safeties. This issue can be considered under ISO 8100-2:2019, 0.4.2c) which addresses suitability for the purpose; 0.4.3 which addresses usual engineering practice, suitability of materials; and 0.4.5 which addresses environmental conditions.
		2.17.16		A17.1/B44 requirement 2.17.16 has specific requirements for rail lubricants and lubrication data plate. ISO 8100-2:2019, 5.3.5 i) requires the state of lubrication to be considered in the test.
5.6.2.1.1.2	Safety gear verification		8.10.2.2.2 (ii) A17.2 Item 2.29	Type testing of safety gear is not required in A17.1/B44. Field acceptance testing of the complete system is required.
5.6.2.1.1.3	Data plate		2.17.14	ISO 8100-1 and A17.1/B44 have differing requirements.
5.6.2.1.2.1 b)	Instantaneous type safety		2.17.7.1	ISO 8100-2 and A17.1/B44 have differences in rated speed for which instantaneous safeties are applicable.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.6.2.1.2.2	Multiple safeties		2.17.2	A17.1/B44 has additional requirements for duplex safeties.
5.6.2.1.2.3	Counterweight safety		2.17.4	ISO 8100-1 and A17.1/B44 have differences in rated speed for which instantaneous safeties are applicable on counterweights.
5.6.2.1.3	Retardation		2.17.3	ISO 8100-1 and A17.1/B44 have differences in requirements for average retardation.
5.6.2.1.6.1	Jaws not to be used as guide-shoes	2.17.10		A17.1/B44 has additional requirements.
5.6.2.1.6.3	Prevention of accidental tripping of safeties	2.17.10		A17.1/B44 has additional requirements.
5.6.2.2.1.1	General provisions	2.18.8		A17.1/B44 provides additional requirements for specific factors of safety.
5.6.2.2.1.1 a)	Tripping speeds for governors		2.18.2	ISO 8100-1 and A17.1/B44 have differing requirements for tripping speed.
5.6.2.2.1.1 b)	Governor traction sheave grooves		2.18.7.3	ISO 8100-1 and A17.1/B44 have differing requirements for traction sheave grooves.
5.6.2.2.1.1 d)	Minimum governor rope tensile force		2.18.6.1	ISO 8100-1 and A17.1/B44 have different requirements for the minimum governor rope tensile force.
5.6.2.2.1.2	Response time		2.17.11	ISO 8100-1 and A17.1/B44 have different requirements for the maximum permissible movement of governor rope to operate the safety.
5.6.2.2.1.3	Governor ropes		2.18.5 2.18.7.4	ISO 8100-1 and A17.1/B44 have different requirements for governor ropes, including normative references to different Standards.
5.6.2.2.1.6	Electrical checking		2.18.4	A17.1/B44 has specific requirements for a speed-governor over-speed switch.
5.6.2.2.1.7	Governor verification		8.10.2.2.2 (hh) 8.10.2.2.2 (ii) A17.2 Item 2.13 A17.2 Item 2.29	Type testing of governor is not required in A17.1/B44. Differing field acceptance testing of the complete system is required.
5.6.2.2.1.8	Data plate		2.18.9	ISO 8100-1 and A17.1/B44 have differing requirements.
5.6.2.2.2	Tripping by broken suspension member		2.17.8.1	A17.1/B44 has limitations and different requirements from ISO 8100-1 for tripping of the safety by broken suspension means.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.6.2.2.3	Tripping by safety rope			The tripping of the safety by an independent safety rope is not specifically addressed in A17.1/B44.
5.6.2.2.4.1	Tripping by rope		2.17.15	Tripping by rope addressed in A17.1/B44 in context of governor rope releasing carrier, which has specific requirements.
5.6.2.2.4.2	Tripping by lever			The tripping of the safety by an auxiliary lever is not specifically addressed in A17.1/B44.
5.6.3	Rupture valve		Section 3	Hydraulic elevators to be addressed in future editions of this document. In the meantime, A17.1/B44 Section 3 to be consulted.
5.6.4	Restrictors (hydraulic)		Section 3	Hydraulic elevators to be addressed in future editions of this document. In the meantime, A17.1/B44 Section 3 to be consulted.
5.6.5	Pawl device (hydraulic)		Section 3	Hydraulic elevators to be addressed in future editions of this document. In the meantime, A17.1/B44 Section 3 to be consulted.
5.6.6.1	Function		2.19.1.2	ISO 8100-1 and A17.1/B44 have differing requirements for function and performance.
5.6.6.2	Capability of performance		2.19.3	ISO 8100-1 and A17.1/B44 have differing requirements.
5.6.6.3	Retardation		2.19.3.2(h)	ISO 8100-1 and A17.1/B44 have different requirements for retardation.
5.6.6.4	Where means may act		2.19.3.2	ISO 8100-1 and A17.1/B44 have different requirements for where means may act.
5.6.6.5	Prevention of restart		2.19.1.2 (a) (4)	ISO 8100-1 and A17.1/B44 have different requirements.
5.6.6.6	Safe release of means		2.19.3.2 (k)	ISO 8100-1 and A17.1/B44 have different requirements.
5.6.6.9	Action if power is lost	2.19.1.2 (a) (1), (2), (3)		A17.1/B44 has additional requirements.
5.6.6.10	Monitoring means		2.19.1.2	ISO 8100-1 and A17.1/B44 have different requirements.
5.6.6.11	Verification of ascending car overspeed protection		2.19.3.2 (j) 8.10.2.2.2 (jj) (1)	Type testing of ascending car over-speed protection means is not required in A17.1/B44. Differing field acceptance testing of the complete system is required.
5.6.6.12	Data plate		2.19.3.3	ISO 8100-1 and A17.1/B44 have differing requirements.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.6.7.1	Purpose and function		2.19.2.1 2.19.2.2	ISO 8100-1 and A17.1/B44 have different requirements and exceptions. A17.1/B44 only addresses traction elevators and provides an exception for loss of traction.
5.6.7.2	Stopping and prevention of restart		2.19.2.2 (a) (4)	ISO 8100-1 and A17.1/B44 have different requirements.
5.6.7.3	Capability of performance		2.19.3	ISO 8100-1 and A17.1/B44 have different requirements.
5.6.7.4	Where means may act		2.19.3.2	ISO 8100-1 and A17.1/B44 have different requirements for where means may act.
5.6.7.5	Stopping distance		2.19.2.2 (b) 2.15.9	ISO 8100-1 and A17.1/B44 have different requirements.
5.6.7.6	Retardation		2.19.3.2 (h)	ISO 8100-1 and A17.1/B44 have different requirements for retardation.
5.6.7.7	Detection of unintended motion		2.19.2.2 (a)	ISO 8100-1 and A17.1/B44 have different requirements for detection.
5.6.7.8	Prevention of restart		2.19.2.2 (a) (4)	ISO 8100-1 and A17.1/B44 have different requirements.
5.6.7.10	Safe release of means		2.19.3.2(k)	ISO 8100-1 and A17.1/B44 have different requirements.
5.6.7.12	Action if power is lost	2.19.2.2 (a) (1), (2), (3)		A17.1/B44 has additional requirements.
5.6.7.13	Verification of unintended car motion protection		2.19.3.2 (j) 8.10.2.2.2 (jj) (2)	Type testing of unintended car motion protection means is not required in A17.1/B44. Field acceptance testing of the complete system is required.
5.6.7.14	Data plate		2.19.3.3	ISO 8100-1 and A17.1/B44 have different requirements.
5.6.6	Emergency brake	2.19.3		A17.1/B44 requires an emergency brake to fulfil the functions required by the ascending car over-speed protection and unintended motion protection means. A17.1/B44 requires specific factors of safety, material properties and design considerations. These issues can be considered under ISO 8100-1:2019, 5.6.6 which addresses the ascending car overspeed protection aspect and Clause 6.3.13 which addresses testing.
5.7	Guide rails		2.23	A17.1/B44 requirements differ in approach from ISO 8100-1.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.7.2.1.1 5.4.3.2	Emergency brake supports	2.19.4		A17.1/B44 requires that all components supporting the emergency brake be designed to withstand applied loads with specific factors of safety. Emergency brake support can be considered under ISO 8100-1:2019, 5.7.2.1.1 guide rail support, and 5.4.3.2 safety device support. Also ISO 8100-1:2019, 0.4.3 which addresses usual engineering practice, suitability of materials, etc.
5.8.1	Car and counterweight buffers		2.22.2	A17.1/B44 provides requirements for the use of solid bumpers, which are not addressed by ISO 8100-1.
5.8.1.1	Location of buffers		2.22.1	ISO 8100-1 and A17.1/B44 have differing requirements for the location of buffers.
5.8.1.3	Pawl device for hydraulic lifts		Section 3	Hydraulic elevators to be addressed in future editions. In the interim, A17.1/B44 Section 3 is to be consulted.
5.8.1.4	Buffers for hydraulic lifts		Section 3	Hydraulic elevators to be addressed in future editions. In the interim, A17.1/B44 Section 3 is to be consulted.
5.8.1.5	Energy accumulation buffers		2.22.3	A17.1/B44 addresses spring buffers and does not address energy accumulation buffers with non-linear characteristics.
5.8.1.7	Verification of energy accumulation buffers with non-linear characteristic and energy dissipation buffers		2.22.4.7 8.3.2 8.3.1	A17.1/B44 does not address energy accumulation buffers with non-linear characteristics. ISO 8100-1 and A17.1/B44 have different requirements for type testing and certification of oil buffers (energy dissipation buffers).
5.8.1.8	Data plate		2.22.4.11	ISO 8100-1 and A17.1/B44 have different requirements.
5.8.2.1.1.1	Stroke of energy accumulation buffers with linear characteristics		2.22.3.1	ISO 8100-1 and A17.1/B44 have different stroke requirements.
5.8.1.1.2	Load rating		2.22.3.2 2.22.3.3	ISO 8100-1 and A17.1/B44 have different load rating requirements. A17.1/B44 requires a data plate on spring buffers.
5.8.2.1.2	Performance of energy accumulation buffers with non-linear characteristics			A17.1-2013/B44-13 does not address energy accumulation buffers with non-linear characteristics. This will be addressed in future version of A17.1/B44.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.8.2.2.1	Minimum stroke of energy dissipation buffers		2.22.4.1.1	ISO 8100-1 and A17.1/B44 have different stroke requirements.
5.8.2.2.2	Minimum stroke of energy dissipation buffers when monitored slowdown is applied		2.22.4.1.2	ISO 8100-1 and A17.1/B44 have different stroke requirements when monitored slowdown (potential switch slowdown) is applied.
5.8.2.2.3	Performance of energy dissipation buffers		2.22.4.2	ISO 8100-1 and A17.1/B44 have different performance requirements.
5.8.2.2.4	Electrical checking of buffer return		2.22.4.5	A17.1/B44 includes plunger return requirements as part of the design. It does not require electrical checking of oil buffer plunger return. It has specific requirements relating to gas spring-return oil buffers.
5.8.2.2.5	Means of checking of oil level	2.22.4.6		A17.1/B44 includes additional requirements pertaining to transparent sight oil level gauges.
5.8.2.2.3 (c)	Integrity of oil buffers	2.22.4.3 2.22.4.10		A17.1/B44 requires specific factors of safety related to material properties for oil buffers and their components. A17.1/B44 provides specific requirements for the load ratings of oil buffers. These issues can be considered under ISO 8100-1:2019, 5.8.2.2.3 c) which describes condition after actuation, and 0.4.3 which addresses usual engineering practice, suitability of materials, etc. The required condition after type testing is described in ISO 8100-2:2019, 5.5.3.1.6.4.
		2.22.4.4		A17.1/B44 requirement 2.22.4.4 provides specific requirements for oil buffer components subject to compressive loading during application, to address buckling of the plunger. These issues can be considered under ISO 8100-1:2019, 0.4.3 which addresses usual engineering practice, suitability of materials, etc. Handover test per Clause 6.3.7b and type test per ISO 8100-2:2019, 5.5.4c provides additional verification.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
		2.22.4.9		A17.1/B44 requirement 2.22.4.9 provides specific properties for oil to be used in oil buffers. This issue can be considered under Clause 0.4.3 which addresses usual engineering practice, suitability of materials, etc. Also ISO 8100-2:2019, 5.5.1 b) requires identification of liquid to be used.
		2.22.4.10.3		A17.1/B44 requirement 2.22.4.10.3 provides specific requirements pertaining to oil buffers if tie-down compensation is installed. This issue can be considered under ISO 8100-1:2019, 0.4.3, which addresses usual engineering practice, suitability of materials, etc.
5.9.1.2	Protection against accessible rotating parts	2.10.1		A17.1/B44 has differing requirements.
5.9.2.1.1	Permissible drives		2.24.1	A17.1/B44 has differing requirements.
5.9.2.2	Braking systems		2.24.8 2.26.8	A17.1/B44 requirements for braking systems cover broadly the same scope as ISO 8100-1. Some differences in approach and specific differences in requirements exist.
5.9.2.2.2.7	Brake release by continuous manual operation		2.24.8.4	A17.1/B44 has differing requirements.
5.9.2.3	Emergency operation		2.27	A17.1/B44 has differing requirements.
5.9.3	Lift machine for hydraulic lifts		Section 3	Hydraulic elevators will be addressed in a future revision of this document.
5.10.1.1.1	Covers the main power switches and hoistway lighting		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.1.1.2	The lift shall comply with the requirements of EN 60204-1 and other applicable EN standards		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.1.1.5	Electrical working clearances		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.1.2.1	Label for electric shock hazard (lightning bolt)		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.10.1.2.2	Requirement for protection of incidental contact with live voltages		B44.1/A17.5	A17.1/B44 has differing requirements.
5.10.1.2.3	Requirement for overcurrent protection on voltages higher than 50 V		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.1.2.4	Protection against residual voltage		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.1.3	Insulation resistance of the electrical installation		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.2	Terminal requirements for the main line conductors	NFPA 70 CSA C22.1		A17.1/B44 has additional requirements.
5.10.3.1.1	Contactor requirements	NFPA 70 CSA C22.1		A17.1/B44 has additional requirements.
5.10.3.1.3	Relay/contactor requirements	2.26.3 2.26.8 2.26.9.5		A17.1/B44 has additional requirements.
5.10.3.2.2	Electrical spacing requirements on boards and terminals		B44.1/A17.5	A17.1/B44 has differing requirements.
5.10.4.1	Electrical protection		NFPA 70 CSAC22.1 B44.1/A17.5	A17.1/B44 has differing requirements.
5.10.5	Requirement for a main breaker and its characteristics	NFPA 70 CSA C22.1 B44.1/A17.5		A17.1/B44 has additional requirements.
5.10.5.1	Main breaker feeds	NFPA 70 CSA C22.1		A17.1/B44 has additional requirements.
5.10.5.1.2	Breaker location		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.5.2	Breaker location, no issue		NFPA 70 CSA C22.1, 2.29.1	A17.1/B44 has differing requirements.
5.10.5.3	Location of disconnecting devices		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.5.5	Depowering BBU systems when main breaker is out	NFPA 70 CSA C22.1		A17.1/B44 has additional requirements.
5.10.6.1	Conduction and cables		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.10.6.2	Size of wires		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.6.3.1	General		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.6.3.2	Conduit		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.6.3.3	Provision for no conduit		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.6.3.4	Terminal block protections		NFPA 70 CSA C22.1, A17.5	A17.1/B44 has differing requirements.
5.10.6.3.5	Voltage from more than one source marking		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.6.3.7	Wire sheathing requirements		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.7	Lighting power independence		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.7.1	Lighting power source		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.7.2	Top of car outlet power source	NFPA 70 CSA C22.1		A17.1/B44 has additional requirements.
5.10.8.1	Light control location	NFPA 70 CSA C22.1		A17.1/B44 has additional requirements.
5.10.8.3	Light control breaker requirements	NFPA 70 CSA C22.1		A17.1/B44 has additional requirements.
5.10.9	Grounding standard		NFPA 70 CSA C22.1	A17.1/B44 has differing requirements.
5.10.10	Electrical component identification		NFPA 70 CSA C22.1 B44.1/A17.5	A17.1/B44 has differing requirements.
5.11.1	Protection against electrical faults		2.26.9.3 2.26.9.4	A17.1/B44 has differing requirements.
5.11.2.1.2	Restrictions on connecting devices in parallel with EPDS		2.26.7	A17.1/B44 has differing requirements.
5.11.2.1.6	Removal of power without delay		2.26.7	A17.1/B44 cover similar requirements but some differences remain.
5.11.2.2.1	Safety contacts		2.26.4.3.1 2.26.9.4	A17.1/B44 has differing requirements.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.11.2.2.2	Emergency braking conditions	2.26.4.3.1		A17.1/B44 cover similar requirements but some differences remain.
5.11.2.2.3	Enclosure and insulation	B44.1/A17.5		A17.1/B44 has additional requirements.
5.11.2.2.4	Enclosure and insulation	B44.1/A17.5		A17.1/B44 has additional requirements.
5.11.2.3.1 5.11.2.3.2 5.11.2.3.3 5.11.2.3.4 5.11.2.3.5 5.11.2.4	Fault protection		2.25.1 2.25.2.1.2 2.25.2.1.3 2.25.3.3.1 2.25.3.4 2.25.4.1 2.25.4.2 2.26.1.3 2.26.3 2.26.5 2.26.6 2.26.8 2.26.9 2.26.10	A17.1/B44 has differing requirements.
5.11.2.6	PESSRAL requirements	2.26.4.3.2		A17.1/B44 has additional requirements.
5.12.1.1 5.12.1.1.1 5.12.1.1.2 5.12.1.1.3	Operational control buttons, control of normal operation		ICC/ANSI A117.1 A17.1/B44 Appendix E	A17.1/B44 has differing requirements.
5.12.1.1.4	Stopping accuracy		ICC/ANSI A117.1 2.26.11	A17.1/B44 has differing stopping/levelling accuracy requirements.
5.12.1.3	Slow down with reduced stroke buffers		2.25.4.1	A17.1/B44 cover similar requirements but some differences remain.
5.12.1.5	Control of inspection operation	2.26.1.4		A17.1/B44 has differing requirements.
5.12.1.6	Control of emergency electrical operation		2.26.1.4.4	A17.1/B44 cover similar requirements but some differences remain.
5.12.1.8	Door bypass		2.26.1.5	A17.1/B44 cover similar requirements but some differences remain.
5.12.1.9	Door lock monitoring		2.26.5	A17.1/B44 has differing requirements.

Table 1 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.12.1.11	Stopping devices		2.26.2.5 2.26.2.7 2.26.2.8 2.26.1.4.3	A17.1/B44 has differing requirements.
5.12.2.1 5.12.2.2.1 5.12.2.2.2 5.12.2.2.3	Final limits requirements		2.25.3	A17.1/B44 cover similar requirements but some differences remain.
5.12.2.2.4	Final limits		Section 3	Hydraulic elevator requirements are to be addressed in a future revision of this document.
5.12.2.2.5	Final limits requirements		Section 3	Hydraulic elevator requirements are to be addressed in a future revision of this document.
5.12.3.	Emergency alarm device and intercom		2.27.1	A17.1/B44 has differing requirements.
5.12.3.1	Emergency alarm device and intercom system		2.27.1	A17.1/B44 has differing requirements.
5.12.3.2	Intercom system	2.27.1.1.4		A17.1/B44 has differing requirements.
5.12.4	Priorities and signals		ICC/ANSI A117.1	A17.1/B44 has differing requirements.
7.2.2 7.2.3 Annex B	Instruction manual		8.6.1.2.2 8.6.1.4.1	A17.1/B44 has differing requirements.
Annex C	Periodic tests and examinations and inspections		8.6.4.19 8.6.4.20 8.11	A17.1/B44 has differing requirements.

Table 2 — ASME A17.1/CSA B44 requirements to be used in addition to or in place of requirements in ISO 8100-2

1	2	3	4	5
Subclause in ISO 8100-2	**Subject**	**A17.1/B44 section or requirement number to be used in addition to the subclause in ISO 8100-2**	**A17.1/B44 section or requirement number to be used in place of the subclause in ISO 8100-2**	**Comments**
5	Design rules, calculations, examination and tests	8.2		A17.1/B44 Part 8 covers broadly the same scope. Some specific differences exist. Notable calculation methods include: Minimum rated load for passenger elevators, car frame and platform stresses, impact on buffer supports, gravity stopping distances, governor tripping speeds, stopping distances for safeties, factors of safety for suspension means.
5.1	General provisions for type examinations	8.3		A17.1/B44 Section 8.3 covers engineering tests, type tests and certification.
5.1.2.6	Precision of instruments		8.3.1.5	Tolerances of test equipment accuracy are generally consistent. Some differences exist.
5.2	Type examination of landing and car door locking devices	2.12.4		These requirements apply to: listing/certification door locking devices and door or gate electric contacts. Certification and type test requirements are found in multiple sections of A17.1/B44
5.2.1.1	Field of application	2.12.4.1		A17.1/B44 contains *grandfathering* requirements for devices type tested before certain dates.
5.2.1.2.1	Schematic arrangement drawings	8.3.1.2.2		A17.1/B44 requires duplicate sets of drawings to be submitted.
5.2.2.2.2	Endurance test		8.3.3.3.1 8.3.3.4.1 8.3.3.4.3 8.3.3.4.4 8.3.3.4.5	A17.1/B44 requires the same basic endurance test, and also includes a test without lubricant; a test in moist atmosphere and a misalignment test. A17.1/B44 also addresses private residence elevators within the same section.
5.2.2.2.4	Dynamic test		8.3.3.4.11	In A17.1/B44, the electrical contact bridging means is required to be tested with a multi-directional force.
5.2.4	Type examination certificate		8.3.1.3 2.12.4.3	A17.1/B44 contains different requirements for certification and test records and also requires labelling of each device.
5.3	Type examination of safety gear		8.10.2.2.2(ii)	A17.1/B44 does not require type testing of safety gear. Acceptance inspection of the fully installed safety system is required. Reference is also made to ASME A17.2 Item 2.19.
5.4	Type examination of overspeed governors		8.10.2.2.2(hh)	A17.1/B44 does not require type testing of overspeed governors. Acceptance inspection of the fully installed safety system is required. Reference is also made to ASME A17.2 Item 2.13.

Table 3 — JIS A 4307-1 requirements to be used in addition to or in place of ISO 8100-1

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**JIS A 4307-1 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**JIS A 4307-1 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
0.2.1	Object of this document	0.2.1		JIS A 4307-1 has additional lift type (elevators for goods, and elevators for stretchers).
0.2.2.1 (a)	Persons to be safeguarded		0.2.2.1 (a)	JIS A 4307-1 does not refer to EN 13015 to comply with Japanese laws and regulations.
0.2.2.2	Property to be safeguarded (note)		0.2.2.2	JIS A 4307-1 deletes the requirements for vandalism. JIS A 4307-1 does not refer to EN 81-77 to comply with Japanese laws and regulations.
0.3.6	Passenger weight		0.3.6	JIS A 4307-1 assumes passenger weight different from that indicated in ISO 8100-1
0.4.12	Exception of the items		0.4.12	JIS A 4307-1 deletes the requirements for hydraulic elevator.
0.4.22	The fluids used for the operation of hydraulic lifts			JIS A 4307-1 deletes the requirements for hydraulic elevator.
1.3	This document does not cover	1.3		JIS A 4307-1 has additional requirements for exception. JIS A 4307-1 does not refer to EN 81-21 to comply with Japanese laws and regulations.
5.1.1	Passenger and goods passenger lifts	5.1.1		JIS A 4307-1 has requirements for elevators for goods, and elevators for stretchers to comply with Japanese laws and regulations.
5.2.1.2.1	The well, machine and pulley rooms		5.2.1.2.1	JIS A 4307-1 has different requirements for equipment which can be installed in the well, machine and pulley rooms, and permits the installation of fire-alarms, fire-prevention apparatuses, and optical fibres in the well, machine and pulley rooms to comply with Japanese laws and regulations.
5.2.1.4.1	Lighting of the well	5.2.1.4.1		JIS A 4307-1 has additional requirements for portable lamps.
5.2.1.4.2	Lighting of machinery spaces and pulley rooms		5.2.1.4.2	JIS A 4307-1 has different requirements for light intensity to comply with Japanese laws and regulations.
5.2.1.5.1	Electric equipment in the pit	5.2.1.5.1		JIS A 4307-1 has additional requirements for portable lamps.
5.2.1.6	Emergency release		5.2.1.6	JIS A 4307-1 does not refer to EN 81-28 to comply with different requirements for alarm-initiating device under Japanese laws and regulations.
5.2.1.8.2	Strength of the walls of the well		5.2.1.8.2	JIS A 4307-1 has different requirements for the value of force to comply with Japanese laws and regulations.
5.2.1.8.3	Strength of glass panels, plane or formed		5.2.1.8.3	JIS A 4307-1 has different requirements for laminated glass to comply with Japanese laws and regulations.
5.2.1.8.4	Strength of the floor of the pit to support guide rail		5.2.1.8.4	JIS A 4307-1 has different requirements for calculation method of strength of pit floor to support guide rail to comply with Japanese laws and regulations.

Table 3 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**JIS A 4307-1 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**JIS A 4307-1 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.2.1.8.5	Strength of the floor of the pit to support the car buffer		5.2.1.8.5	JIS A 4307-1 has different requirements for calculation method of strength of pit floor to support car buffer to comply with Japanese laws and regulations.
5.2.1.8.6	Strength of the floor of the pit to support the counterweight buffer		5.2.1.8.6	JIS A 4307-1 has different requirements for calculation method of strength of pit floor to support counterweight buffer to comply with Japanese laws and regulations.
5.2.1.8.7	Strength of the floor of the pit for hydraulic lifts			JIS A 4307-1 does not contain requirements for hydraulic elevator.
5.2.1.8.8	Pawl devices for hydraulic lifts			JIS A 4307-1 does not contain requirements for hydraulic elevator.
5.2.1.9	Surfaces of walls, floors and ceilings		5.2.1.9	JIS A 4307-1 deletes the portion of this clause related to hydraulic elevator, which is out of scope of JIS A 4307-1.
5.2.2.3	Access via private premises		5.2.2.3	JIS A 4307-1 does not permit access to elevators (except home elevator) for maintenance and rescue purposes through private premises to comply with Japanese laws and regulations.
5.2.2.4	A means to enter the pit		5.2.2.4	JIS A 4307-1 has different requirements to install the access means to enter a pit to comply with Japanese laws and regulations.
5.2.2.5	A safe access for persons to machinery spaces and pulley rooms		5.2.2.5	JIS A 4307-1 has different requirements for the means for safety access to pit.
5.2.3.1	The conditions of emergency door installed		5.2.3.1	JIS A 4307-1 has different requirements for the distance between consecutive landing door sills to comply with Japanese laws and regulations.
5.2.3.2 a)	The dimensions of doors		5.2.3.2 a)	JIS A 4307-1 has different requirements for the dimensions of access doors to machine rooms to comply with Japanese laws and regulations.
5.2.3.2 c)	The dimensions of doors		5.2.3.2 c)	JIS A 4307-1 delete the access trap doors for machine rooms to comply with Japanese laws and regulations.
5.2.3.2 d)	The dimensions of doors		5.2.3.2 d)	JIS A 4307-1 has different requirements for the dimensions of emergency door to comply with Japanese laws and regulations.
5.2.3.3	Access and emergency doors and inspection doors	5.2.3.3		JIS A 4307-1 has additional requirements for access, emergency and inspection doors to comply with Japanese laws and regulations.
5.2.5.1.2	The counterweight or the balancing weight		5.2.5.1.2	JIS A 4307-1 has exception to the requirements for remote counterweight well.
None	Remote counterweight well.	5.2.5.1.2 A		JIS A 4307-1 has specific requirements of the remote counterweight well.
5.2.5.1.3	Hydraulic lifts jacks			JIS A 4307-1 does not contain requirements for hydraulic elevator.

Table 3 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**JIS A 4307-1 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**JIS A 4307-1 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.2.5.2.2.1	Permissible openings of the well		5.2.5.2.2.1	JIS A 4307-1 has different requirements for the openings of well to comply with Japanese laws and regulations.
5.2.5.2.3	Partially enclosed well		5.2.5.2.3	JIS A 4307-1 has different requirements for partially enclosed well to comply with Japanese laws and regulations.
Figure 1	Partially enclosed well			JIS A 4307-1 deletes Figure 1 for partially enclosed well in ISO 8100-1 to comply with Japanese laws and regulations.
Figure 2	Partially enclosed well — distance		Figure 2	JIS A 4307-1 revises Figure 2 for the "partially enclosed well — Distance" in ISO 8100-1 to comply with Japanese laws and regulations.
5.2.5.3.1	Clearances between car and wall facing the car entrance		5.2.5.3.1	JIS A 4307-1 has different requirements for the structure of the wall of well to comply with Japanese laws and regulations.
Figure 3	Clearances between car and wall facing the car entrance		Figure 3	JIS A 4307-1 has different requirements for some dimensions of clearances between car and wall facing the car entrance to comply with Japanese laws and regulations.
5.2.5.3.2	Construction of landing doors facing a car entrance		5.2.5.3.2	JIS A 4307-1 has different requirements for the structure of landing doors facing a car entrance to comply with Japanese laws and regulations.
5.2.5.4	Protection of any spaces located below the well		5.2.5.4	JIS A 4307-1 has different requirements for the protection of spaces below well to comply with Japanese laws and regulations.
5.2.5.5.1 b)	Screen guard		5.2.5.5.1 b)	JIS A 4307-1 has different requirements for the exception of protection.
None	Protection of snag points	5.2.5.5.2 A		JIS A 4307-1 has additional requirements for the protection of snag points.
5.2.5.6.1.1	Extreme positions		5.2.5.6.1.1	JIS A 4307-1 has different requirements for the extreme positions of car, counterweight and balancing weight to comply with Japanese laws and regulations.
5.2.5.6.1.2	Reduced values of 0,035 V2		5.2.5.6.1.2	JIS A 4307-1 has different requirements for the conditions to apply the reduced value to comply with Japanese laws and regulations.
5.2.5.6.1.3	Anti-rebound device		5.2.5.6.1.3	JIS A 4307-1 has different requirements for the conditions to apply the replaced value to comply with Japanese laws and regulations.
5.2.5.6.1.4	In the case of direct acting hydraulic lifts			JIS A 4307-1 does not contain requirements for hydraulic elevator.
5.2.5.6.4	In the case of hydraulic lifts			JIS A 4307-1 does not contain requirements for hydraulic elevator.
5.2.5.7.4	Free vertical distance			JIS A 4307-1 does not contain requirements for hydraulic elevator.
5.2.5.8.1	Refuge spaces in the pit	5.2.5.8.1		JIS A 4307-1 has additional requirements for the refuge spaces, which a reduction is allowed same as on car roof.

Table 3 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**JIS A 4307-1 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**JIS A 4307-1 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.2.5.8.2	Bottom clearances		5.2.5.8.2	JIS A 4307-1 deletes the portion of this clause related to hydraulic elevator, which is out of scope of JIS A 4307-1.
None	Reduced top clearance	5.2.5.8 A		JIS A 4307-1 has additional requirements for reducing top clearance to comply with Japanese laws and regulations.
None	Reduced bottom clearance	5.2.5.8 B		JIS A 4307-1 has additional requirements for reducing bottom clearance to comply with Japanese laws and regulations.
None	Protection of cables and ropes	5.5.5.5.2.2 A		JIS A 4307-1 has additional requirements for protection of cables and ropes under seismic conditions to comply with Japanese laws and regulations.
None	Machine room	5.2.6.3.0 A		JIS A 4307-1 has additional requirements for the structure of machine room to comply with Japanese laws and regulations.
None	Machine room dimension	5.2.6.3.2.0 A		JIS A 4307-1 has additional requirements for the dimension of machine room to comply with Japanese laws and regulations.
5.2.6.3.2.1	Working areas in machine room		5.2.6.3.2.1	JIS A 4307-1 has different requirements for working area to comply with Japanese laws and regulations.
5.2.6.3.2.2	The clear height for movement		5.2.6.3.2.2	JIS A 4307-1 has different requirements for The clear height for movement to comply with Japanese laws and regulations.
5.2.6.3.2.4	Multiple levels in machine room		5.2.6.3.2.4	JIS A 4307-1 has additional requirements for multiple levels in machine room, which are completely different from those in ISO 8100-1, to comply with Japanese laws and regulations.
None	Multiple levels in machine room	Figure 8A		JIS A 4307-1 has additional Figure for multiple levels in machine room to comply with Japanese laws and regulations.
5.2.6.3.2.5	Floor finishing in machine room		5.2.6.3.2.5	JIS A 4307-1 has different requirements for floor finishing in machine room to comply with Japanese laws and regulations.
None	Example of warning labels	Figure 9A		JIS A 4307-1 has additional Figure for floor finishing in machine room to comply with Japanese laws and regulations.
5.2.6.4.2.1	Working area inside the well		5.2.6.4.2.1	JIS A 4307-1 has specific requirements for working areas to comply with Japanese laws and regulations.
5.2.6.4.3.1	Working areas in the car or on the car roof		5.2.6.4.3.1	JIS A 4307-1 has exception to the requirements for Working areas in the car or on the car roof.
None	Clear height at working areas	5.2.6.4.3.1 A		JIS A 4307-1 has additional requirements for Clear height at working areas to comply with Japanese laws and regulations.
5.2.6.4.3.3	Inspection doors.		5.2.6.4.3.3	JIS A 4307-1 has different requirements for inspection doors.

Table 3 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**JIS A 4307-1 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**JIS A 4307-1 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
None	The bottom clearance limit switch	5.2.6.4.4.1 A		JIS A 4307-1 has additional requirements for the bottom clearance limit switch for inspection operation to comply with Japanese laws and regulations.
5.2.6.4.4.2	Self-evacuation from working areas		5.2.6.4.4.2	JIS A 4307-1 has exception to ISO 8100-1 requirements for self-evacuation from working areas.
5.2.6.4.5.3	Structure of the platform		5.2.6.4.5.3	JIS A 4307-1 has different requirements for the balustrade to comply with Japanese laws and regulations. JIS A 4307-1 has different requirements for the structure of the platform to comply with Japanese laws and regulations.
5.2.6.6.1	Installation of devices for emergency and test operations		5.2.6.6.1	JIS A 4307-1 deletes the portion of this clause related to hydraulic elevator, which is out of scope of JIS A 4307-1. JIS A 4307-1 has additional requirements for portable operating devices.
5.2.6.6.2	Equipment or devices for emergency and test operations	5.2.6.6.2		JIS A 4307-1 has additional requirements for portable operating devices.
5.2.6.6.3	Lighting of devices for emergency and test operations		5.2.6.6.3	JIS A 4307-1 has different requirements for light intensity to comply with Japanese laws and regulations. JIS A 4307-1 has additional requirements for portable lamps.
None	Fixing of machine and controller	5.2.6.7 A		JIS A 4307-1 has additional requirements for strength of machine and controller under seismic conditions to comply with Japanese laws and regulations.
None	Supporting beams	5.2.6.7 B		JIS A 4307-1 has additional requirements for strength of supporting beams.
5.3.1.4	Clearance between door panels		5.3.1.4	JIS A 4307-1 has different requirements for clearance to comply with Japanese laws and regulations.
5.3.1.5	In the case of hinged car doors			JIS A 4307-1 deletes the requirements of hinged car doors to comply with Japanese laws and regulations.
5.3.2.1	Clear height of entrance		5.3.2.1	JIS A 4307-1 has different requirements for a minimum clear height.
5.3.3.1	Sills		5.3.3.1	JIS A 4307-1 has different requirements for the amount of the force applied on the sill.
5.3.3.3.3	Pitch diameter of suspension rope pulleys		5.3.3.3.3	JIS A 4307-1 has different requirements for the pitch diameter of suspension rope pulleys.
5.3.4.1	Horizontal distance between the sill of the car and sill of the landing doors		5.3.4.1	JIS A 4307-1 has different requirements for the horizontal distance to comply with Japanese laws and regulations.

Table 3 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**JIS A 4307-1 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**JIS A 4307-1 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.3.4.2	The gap between the leading edges of the car door and the landing doors		5.3.4.2	A 4307-1 has different requirements for the dimensions of the gap between the leading edges of the car door and the landing doors
5.3.4.3	In the case of the combination of deferent door type			JIS A 4307-1 deletes the requirements for the combination of different door types to comply with Japanese laws and regulations.
5.3.5.2	Behaviour under fire conditions		5.3.5.2	JIS A 4307-1 deletes the requirements for the application of EN 81-58 and ISO 3008-2 to comply with Japanese laws and regulations.
5.3.5.3.1	Mechanical static strength of landing doors and car doors		5.3.5.3.1	JIS A 4307-1 has different requirements for the static strength of landing doors and car doors to comply with Japanese laws and regulations.
5.3.5.3.2	Retaining devices of door panels	5.3.5.3.2		JIS A 4307-1 has additional requirements for the use of wired glass for pendulum shock test to comply with Japanese laws and regulations.
5.3.5.3.3	Gap between door panels			JIS A 4307-1 deletes this requirement because Japanese law and regulations prohibit the use of folding door.
5.3.5.3.4	Additional tests for glass panels	5.3.5.3.4		JIS A 4307-1 has additional note for the side frames of landing doors.
5.3.5.3.5	Laminated glass used		5.3.5.3.5	JIS A 4307-1 has specific requirements for laminated glass and additional requirements for the use of wired glass to comply with Japanese laws and regulations.
5.3.5.3.7	Markings on the glass			JIS A 4307-1 deletes the requirements for marking on glass because Japanese law and regulations has specific requirements for glass and there is no need to have additional markings.
5.3.6.2.2.1 e)	To prevent a folding door from opening			JIS A 4307-1 deletes this requirement because Japanese law and regulations prohibit the use of folding door.
5.3.6.2.2.1 f)	In case of folding car door			JIS A 4307-1 deletes this requirement because Japanese law and regulations prohibit the use of folding car door.
5.3.6.2.2.1 h)	Vision panel		5.3.6.2.1.1 h)	JIS A 4307-1 replaces vision panel by the doors with glass window to comply with Japanese law and regulations.
5.3.6.2.2.1 i	Alternative means to minimize the risk of dragging children hands		5.3.6.2.2.1 i	JIS A 4307-1 has alternative means to minimize the risk of dragging children hands.
5.3.6.2.2.3	Vertically sliding doors		5.3.6.2.2 A	JIS A 4307-1 reduces the conditions of the use of power closing condition for the vertically sliding doors.
5.3.6.2.3	Other types of doors			JIS A 4307-1 deletes this requirement because Japanese law and regulations prohibit the use of other type of doors.

Table 3 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**JIS A 4307-1 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**JIS A 4307-1 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.3.7	Local landing lighting and “car here” signal lights		5.3.7	JIS A 4307-1 deletes the title of "Car Here" signal lights because Japanese law and regulations prohibit the use of folding door.
5.3.7.2	"Car here" indication			JIS A 4307-1 deletes the requirements for "Car Here" indicator because Japanese law and regulations prohibit the use of folding door.
5.3.8.1	Protection against the risk of falling		5.3.8.1	JIS A 4307-1 has different requirements for the protection against the risk of falling.
5.3.9.1.2	Engaged dimension of locking elements			JIS A 4307-1 deletes the part of Figure 12 for hinged doors to comply with Japanese laws and regulations.
5.3.9.1.4	In the case of hinged doors			JIS A 4307-1 deletes this requirement because Japanese law and regulations prohibit the use of hinged door.
5.3.9.1.6	Effectiveness of locking	5.3.9.1.6		JIS A 4307-1 has additional requirements for the engagement of the locking elements to comply with Japanese laws and regulations.
5.3.9.1.7	Resistance force of lock		5.3.9.1.7	JIS A 4307-1 has different requirements for resistance force of lock to comply with Japanese laws and regulations.
5.3.9.1.13	Locking devices a data plate		5.3.9.1.13	JIS A 4307-1 has no requirements for the type examination certificate number
5.3.9.2	Car door locking device		5.3.9.2	JIS A 4307-1 has different requirements for application of car door locking device to comply with Japanese laws and regulations.
5.3.9.4.3	In the case of hinged landing doors			JIS A 4307-1 deletes this requirement because Japanese law and regulations prohibit the use of hinged landing door.
5.3.12	Closing of automatically operated landing doors		5.3.12	JIS A 4307-1 has specific requirements for closing time of landing door to comply with Japanese laws and regulations.
5.3.14	Sliding or folding car doors with multiple, mechanically linked panels		5.3.14	JIS A 4307-1 deletes the requirements for folding door because Japanese law and regulations only permit the use of sliding door.
5.3.14.1	Directly mechanically linked		5.3.14.1	JIS A 4307-1 deletes the requirements for folding door because Japanese law and regulations only permit the use of sliding door.
5.4.1	Height of car	5.4.1		JIS A 4307-1 has additional requirements for the height of car to comply with Japanese laws and regulations
5.4.2.1.1	Available area of the car		5.4.2.1.1	JIS A 4307-1 uses a formula based on available car area for passenger elevators, elevators for goods, and elevators for stretchers to comply with Japanese laws and regulations.
5.4.2.1.3	Calculation of maximum available car area		5.4.2.1.3	JIS A 4307-1 has different requirements for the calculations of available car area to comply with Japanese laws and regulations.

Table 3 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**JIS A 4307-1 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**JIS A 4307-1 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
Table 6	Rated load and maximum available car area		Table 6	JIS A 4307-1 replaces the Table 6 of ISO-X with new table based on a formula on available car area in accordance with comments for 5.4.2.1.1.
None	Maximum load	5.4.2.1.3 A		JIS A 4307-1 has additional requirements for the indication of rated load based on a formula on available car area commented for 5.4.2.1.1 to comply with Japanese laws and regulations.
5.4.2.1.4	Overloading of the car	5.4.2.1.4		JIS A 4307-1 has additional requirements for home elevators.
None	Requirement for reduced rated per area	5.4.2.1.4 A		JIS A 4307-1 has additional requirements to reduce the rated load per area for elevators for stretchers and home elevator.
5.4.2.2	Goods passenger lifts		5.4.2.2	JIS A 4307-1 has different requirements for elevators for goods to comply with Japanese laws and regulations.
5.4.2.3.1	Calculation of number of passengers		5.4.2.3.1	JIS A 4307-1 has different requirements for the calculation of passenger capacity for passenger elevators, elevators for goods, and elevators for stretchers to comply with Japanese laws and regulations.
Table 8	Number of passengers and minimum car available area			JIS A 4307-1 deletes Table 8 for the "Number of passengers and minimum car available area" in ISO 8100-1 because JIS A 4307-1 uses a formula based on available car area to comply with Japanese laws and regulations.
5.4.2.3.2	Signs in car		5.4.2.3.2	JIS A 4307-1 has different requirements for the signs displayed in the car to comply with Japanese laws and regulations.
5.4.2.3.3	Signs at landing		5.4.2.3.3	JIS A 4307-1 has different requirements for the signs displayed at the landing to comply with Japanese laws and regulations.
None	Accessible elevators with a wheelchair user	5.4.3 A		JIS A 4307-1 has additional requirements for accessible elevators with a wheelchair user.
5.4.3.1	Walls, floor and roof of the car		5.4.3.1	JIS A 4307-1 has different requirements for permissible opening of the car to comply with Japanese laws and regulations.
5.4.3.2.1	Inclination of the floor		5.4.3.2.1	JIS A 4307-1 has different requirements for the car frames and the car platform to comply with Japanese laws and regulations.
5.4.3.2.3	Car walls made of glass		5.4.3.2.3	JIS A 4307-1 has additional requirements for Car walls made of glass to comply with Japanese laws and regulations.
5.4.3.2.5	Markings on the glass			JIS A 4307-1 deletes the requirements for marking on glass because Japanese law and regulations has specific requirements for glass and there is no need to have additional markings.

Table 3 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**JIS A 4307-1 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**JIS A 4307-1 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.4.3.3	Car hand rails		5.4.3.3	JIS A 4307-1 has different requirements to fasten the car hand rails to comply with Japanese laws and regulations and its Interpretation.
5.4.4	Car door, floor, wall, ceiling and decorative materials		5.4.4	JIS A 4307-1 has different requirements for the materials for car floor, wall and ceiling finishes to comply with Japanese laws and regulations.
None	Trunk	5.4.4 A		JIS A 4307-1 has additional requirements for trunk to comply with Japanese laws and regulations.
5.4.5	Apron		5.4.5	JIS A 4307-1 has different requirements for apron.
5.4.6.1	Emergency trap door		5.4.6.1	JIS A 4307-1 has different requirements for an emergency trap door to comply with Japanese laws and regulations.
5.4.6.2	Emergency door		5.4.6.2	JIS A 4307-1 has different requirements for the dimensions of emergency door to comply with Japanese laws and regulations.
5.4.6.3.1.1	Structure of emergency trap door		5.4.6.3.1.1	JIS A 4307-1 has different requirements for the structure of emergency trap door to comply with Japanese laws and regulations.
5.4.7.2	Protection	5.4.7.2		JIS A 4307-1 has additional exceptions to install a balustrade at the car roof.
5.4.7.3	Protection for lift component(s) to prevent the risk of falling			JIS A 4307-1 deletes the requirements of balustrade to comply with Japanese laws and regulations.
Figure 15 and Figure 16	Example of components providing protection from falling			JIS A 4307-1 deletes Figure 15 and Figure 16 of ISO 8100-1 to comply with Japanese laws and regulations.
5.4.7.4	Balustrades		5.4.7.4	JIS A 4307-1 has different requirements for the balustrade to comply with Japanese laws and regulations.
Figure 17	Car roof balustrade — height			JIS A 4307-1 deletes Figure 17 "Car roof balustrade — Height" of ISO 8100-1 because Japanese laws and regulations fix the height of balustrade regardless of free distance.
5.4.7.5	Glass used for the car roof		5.4.7.5	JIS A 4307-1 has specific requirements for the glass used for the car roof to comply with Japanese laws and regulations.
5.4.9.2	Effective area of ventilation apertures		5.4.9.2	JIS A 4307-1 has specific requirements for the position of the opening of car to comply with Japanese laws and regulations. JIS A 4307-1 also defines the conditions not to have the opening of car.
5.4.10.1	Light intensity		5.4.10.1	JIS A 4307-1 has different requirements for light intensity to comply with Japanese laws and regulations.
5.4.10.2	Two lamps connected in parallel		5.4.10.2	JIS A 4307-1 has different requirements for home elevator.

Table 3 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**JIS A 4307-1 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**JIS A 4307-1 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.4.10.4	Emergency lights		5.4.10.4	JIS A 4307-1 has different value requirements for the light intensity to comply with Japanese laws and regulations.
5.4.11.2	Counterweight frame		5.4.11.2	JIS A 4307-1 has additional requirements for strength of counterweight frame under seismic conditions to comply with Japanese laws and regulations.
5.4.11.3	Pulleys protection		5.4.11.3	JIS A 4307-1 deletes the requirements of sprockets to comply with Japanese laws and regulations.
5.5.1.1	Type of suspension means		5.5.1.1	JIS A 4307-1 limits suspension means to wire rope to comply with Japanese laws and regulations.
5.5.1.2	Requirements for ropes		5.5.1.2	JIS A 4307-1 has different requirements for suspension means to comply with Japanese laws and regulations.
5.5.1.3	Number of ropes		5.5.1.3	JIS A 4307-1 deletes the portion of this clause related to hydraulic elevator, which is out of scope of JIS A 4307-1. JIS deletes the requirements for chains to comply with Japanese laws and regulations.
5.5.2.1	Ratio between the pitch diameter of sheaves, pulleys or drums and the nominal diameter of the suspension ropes		5.5.2.1	JIS A 4307-1 has different requirements for the ratio between the pitch diameter of pulleys and the nominal diameter of the suspension rope to comply with Japanese laws and regulations.
5.5.2.2	Safety factor of the suspension means		5.5.2.2	JIS A 4307-1 has different requirements for the safety factor of the suspension means to comply with Japanese laws and regulations.
5.5.2.3	Rope terminations		5.5.2.3	JIS A 4307-1 has different requirements for the methods of fixing the end of ropes to the car, counterweight or balancing weight to comply with Japanese laws and regulations.
None	Figure 17a-blocking with clamp	Figure 17A		JIS A 4307-1 has additional Figure 17A for methods of fixing the ropes to drums to comply with Japanese laws and regulations.
5.5.2.3.1	The ends of the ropes		5.5.2.3.1	JIS A 4307-1 has different requirements for the methods of fixing the end of ropes to the car, counterweight or balancing weight to comply with Japanese laws and regulations.
5.5.2.3.2	The fixing of the ropes		5.5.2.3.2	JIS A 4307-1 has different requirements for methods of fixing the ropes to drums to comply with Japanese laws and regulations.
5.5.2.4	The ends of each chain			JIS A 4307-1 deletes the requirements of chain to comply with Japanese laws and regulations.
5.5.4.4	Fleet angle		5.5.4.4	JIS A 4307-1 has different requirements for fleet angle to comply with Japanese laws and regulations.

Table 3 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**JIS A 4307-1 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**JIS A 4307-1 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.5.5.1.1	For chains engaging with sprockets			JIS A 4307-1 deletes the requirements of chains engaging with sprockets to comply with Japanese laws and regulations.
5.5.5.1.2	For chains in the case of multiple return sprockets			JIS A 4307-1 deletes this requirement because Japanese laws and regulations prohibit the use of chains.
5.5.5.3	Protection in the case of abnormal extension, slack rope or slack chain		5.5.5.3	JIS A 4307-1 deletes the portion of this clause related to hydraulic elevator, which is out of scope of JIS A 4307-1.
5.5.5.4	The devices for adjusting the length of ropes or chains		5.5.5.4	JIS A 4307-1 deletes the requirements of chain to comply with Japanese laws and regulations.
5.5.6.2	Whenever compensation ropes are used		5.5.6.2	JIS A 4307-1 refers to the corresponding JIS Standard (JIS G3525, and JIS G3546), quoted by Japanese laws and regulations.
5.5.7	Protection for sheaves, pulleys and sprockets		5.5.7	JIS A 4307-1 deletes the requirements of sprockets to comply with Japanese laws and regulations. JIS A 4307-1 has additional requirements for rope retainers under seismic conditions to comply with Japanese laws and regulations.
5.5.8	Traction sheaves, pulleys and sprockets in well		5.5.8	JIS A 4307-1 deletes the requirements of sprockets to comply with Japanese laws and regulations.
5.6	Precautions against free fall, excessive speed, unintended car movement and creeping of the car		5.6	JIS A 4307-1 deletes the portion of this clause related to hydraulic elevator, which is out of scope of JIS A 4307-1.
5.6.1.1	To prevent the car from several hazard		5.6.1.1	JIS A 4307-1 deletes the portion of this clause related to hydraulic elevator, which is out of scope of JIS A 4307-1.
Table 11	Protection means for traction and positive drive lifts		Table 11	JIS A 4307-1 revises Table 11 of ISO 8100-1 to add the hazardous situation of tripping in case of free fall of the car to comply with Japanese laws and regulations.
5.6.1.3	In the case of hydraulic lifts			JIS A 4307-1 does not contain requirements for hydraulic elevator.
5.6.2.1.1.1			5.6.2.1.1.1	JIS A 4307-1 has specific requirements for each type of safety gear (cf. JIS A 4305).
5.6.2.1.1.3	Data plate		5.6.2.1.1.3	JIS A 4307-1 has different requirements for the contents of data plate (cf. JIS A 4305).
5.6.2.1.2.1	Car safety gear		5.6.2.1.2.1	JIS A 4307-1 has different requirements for the maximum rated speed at which the instantaneous type safety gears can be used, to comply with Japanese laws and regulations.
5.6.2.1.4.3	Return the lift to service	5.6.2.1.4.3		JIS A 4307-1 has additional notes to comply with Japanese laws and regulations.

Table 3 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**JIS A 4307-1 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**JIS A 4307-1 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.6.2.1.6.2	Methods of preventing re-adjustment of safety gear		5.6.2.1.6.2	JIS A 4307-1 has different requirements for the methods of preventing re-adjustment of safety gear (cf. JIS A 4305).
5.6.2.1.6.5	Tripping speed of safety gear		5.6.2.1.6.5	JIS A 4307-1 deletes the requirements of safety rope.
5.6.2.2.1.1	Tripping by overspeed governor		5.6.2.2.1.1	JIS A 4307-1 has different requirements for the tripping speed of the overspeed governor to comply with Japanese laws and regulations.
5.6.2.2.1.2	Response time			JIS A 4307-1 deletes the requirements for response time (cf. JIS A 4304 [no requirement for response time)].
5.6.2.2.1.3 a)	Wire rope specification		5.6.2.2.1.3 a)	JIS A 4307-1 has the requirements for governor ropes different from EN 12385-5 (cf. JIS A 4304).
5.6.2.2.1.3 b)	Minimum breaking load of the rope	5.6.2.2.1.3 b)		JIS A 4307-1 has additional requirements for governor ropes (cf. JIS A 4304).
5.6.2.2.1.3 c)	Ratio between the pitch diameter of the pulleys and the nominal rope diameter			JIS A 4307-1 deletes the requirements for the ratio between the pitch diameter of the pulleys and the nominal rope diameter [cf. JIS A 4304 (no requirement for D/d)].
5.6.2.2.1.3 d)	Tensioning device	5.6.2.2.1.3 d)		JIS A 4307-1 has additional requirements for the case that the overspeed governor is a part of the tensioning device (cf. JIS A 4304).
5.6.2.2.1.4 c)	Conditions not to apply the requirement of accessibility of the overspeed governor		5.6.2.2.1.4 c)	JIS A 4307-1 has different conditions not to apply the requirement of accessibility of the overspeed governor.
None	Protection for fly ball type governors	5.6.2.2.1.4 A		JIS A 4307-1 has additional requirements for the protection of human body from fly-ball type governor.
5.6.2.2.1.5	Methods of preventing re-adjustment		5.6.2.2.1.5	JIS A 4307-1 has different requirements for the methods of preventing re-adjustment of overspeed governor (cf. JIS A 4304).
5.6.2.2.1.6 b)	Reset of the overspeed governor		5.6.2.2.1.6 b)	JIS A 4307-1 has different requirements for the reset of the overspeed governor to comply with Japanese laws and regulations.
None	Electrical checking of over-speed	5.6.2.2.1.6 d)		JIS A 4307-1 has additional requirements for the electrical checking of over-speed when the safety tripped by breakage of suspension means is used, to comply with Japanese laws and regulations.
5.6.2.2.1.8	Data plate on the overspeed governor		5.6.2.2.1.8	JIS A 4307-1 has different requirements for the contents of data plate (cf. JIS A 4304).
5.6.2.2.2	Tripping by breakage of suspension means		5.6.2.2.2	JIS A 4307-1 has different requirements for tripping by breakage of suspension means (cf. JIS A 4305).

Table 3 *(continued)*

1	2	3	4	5
Subclause in ISO 8100-1	**Subject**	**JIS A 4307-1 section or requirement number to be used in addition to the subclause in ISO 8100-1**	**JIS A 4307-1 section or requirement number to be used in place of the subclause in ISO 8100-1**	**Comments**
5.6.2.2.3	Tripping by safety rope			JIS A 4307-1 deletes the requirements of safety rope.
5.6.3	Rupture valve			JIS A 4307-1 does not contain requirements for hydraulic elevator.
5.6.4	Restrictors			JIS A 4307-1 does not contain requirements for hydraulic elevator.
5.6.5	Pawl device			JIS A 4307-1 does not contain requirements for hydraulic elevator.
5.6.6.4 e)	Acting object for ascending car overspeed protection means		5.6.6.4	JIS A 4307-1 has different requirements for the acting point of ascending car overspeed protection means.
5.6.6.12	Data plate for ascending car overspeed protection means		5.6.6.12	JIS A 4307-1 has no requirements for the the type examination certificate number
5.6.7.1	General		5.6.7.1	JIS A 4307-1 deletes the portion of this clause related to hydraulic elevator, which is out of scope of JIS A 4307-1.
5.6.7.3	Requirements for protection against unintended car movement		5.6.7.3	JIS A 4307-1 deletes the portion of this clause related to hydraulic elevator, which is out of scope of JIS A 4307-1.
5.6.7.4	Acting object for protection against unintended car movement		5.6.7.4	JIS A 4307-1 deletes the portion of this clause related to hydraulic elevator, which is out of scope of JIS A 4307-1.
5.6.7.5	Stopping condition for the car		5.6.7.5	JIS A 4307-1 has different requirements for the vertical distance between the landing sill and the lowest part of the car apron to comply with Japanese laws and regulations.
Figure 20	Unintended car movement — downwards and upwards movement		Figure 20	JIS A 4307-1 revises Figure 20 for the vertical distance between the landing sill and the lowest part of the car apron to comply with Japanese laws and regulations.
5.6.7.14	Data plate on the unintended movement protection means		5.6.7.14	JIS A 4307-1 has different requirements for the contents of data plate.
5.7.1.2	Manufacturing method for the guide rails	5.7.1.2		JIS A 4307-1 adds specific requirements for the materials of, and the method of processing, the guide rails.
5.7.1.3	Application for the guide rails		5.7.1.3	JIS A 4307-1 has different requirements for the conditions of application of each type of guide rails to comply with Japanese laws and regulations.
5.7.2.1.1	Requirement of guide rail	5.7.2.1.1		JIS A 4307-1 adds specific requirements for the retainer of the guide rails.
5.7.2.2	Load cases	5.7.2.2		JIS A 4307-1 has additional requirements for the seismic conditions.