



Technical Specification

ISO/TS 8100-23

Lifts for the transport of persons and goods —

Part 23: Requirements for bodies certifying lifts, model lifts, lift components and lift functions

Ascenseurs pour le transport de personnes et d'objets —

*Partie 23: Exigences pour les organismes de certification des
ascenseurs, des ascenseurs modèles des composants et des
fonctions des ascenseurs*

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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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 document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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

This document was prepared by Technical Committee ISO/TC 178, *Lifts, escalators and moving walks*.

This first edition of ISO/TS 8100-23 cancels and replaces ISO/TS 22559-4:2011, which has been technically revised.

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

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

Introduction

0.1 The objective of the ISO 8100 series of performance-based documents is stated in the Introduction to ISO 8100-20 and ISO/TS 8100-21.

0.2 ISO 8100-20 has established global essential safety requirements (GESRs) for lifts (elevators) by addressing hazards and safety risks that can be encountered on a lift (elevator). The GESRs state safety objectives that a lift (elevator) should achieve.

0.3 ISO/TS 8100-21 sets criteria for achieving conformity with safety requirements of GESRs by specifying global safety parameters (GSPs) that should be used and implemented, where applicable, in a lift (elevator) to eliminate hazards or mitigate safety risks addressed in the GESRs.

0.4 ISO/TS 8100-22 sets prerequisite requirements that must be fulfilled before applying for certification in accordance with this document.

0.5 This document sets procedures for certification of lifts, model lifts, lift components and lift functions, and supplements related requirements of ISO/IEC 17065 for certification bodies for lifts (LCBs).

[Clauses 4, 5, 6, 7](#) and [8](#) specify the application of ISO IEC 17065.

Clauses and subclauses, indicated in parentheses, supplement and clarify the corresponding requirements of ISO/IEC 17065.

0.6 The ISO 8100 series of performance-based documents provides a process for conformity assessment and certification of lifts, model lifts, lift components and lift functions with the safety requirements specified in ISO 8100-20. It includes a structured methodology for establishing, documenting and demonstrating that necessary and appropriate protective measures are taken to eliminate hazards or sufficiently mitigate risks. This process is particularly useful for establishing safety of lifts, model lifts, lift components and lift functions involving innovative design or new technologies. If one is using the process, ISO 8100-20, ISO 8100-21, ISO 8100-22 and ISO 8100-23 should be used.

0.7 This document assumes that the applicant (see [3.1](#)) uses a quality management system, e.g. ISO 9001. Assessment of conformity to the ISO 8100 series of performance-based documents does not imply conformity to the quality management system.

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Lifts for the transport of persons and goods —

Part 23:

Requirements for bodies certifying lifts, model lifts, lift components and lift functions

1 Scope

This document specifies requirements for conformity assessment bodies (CABs) performing certification of new lifts (elevators), model lifts, lift components and lift functions.

NOTE Hereinafter in this document, the term “lift” is used instead of the term “elevator”.

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.

ISO 8100-20:2018, *Safety requirements for lifts (elevators) — Part 20: Global essential safety requirements (GESRs)*

ISO/TS 8100-21:2018, *Safety requirements for lifts (elevators) — Part 21: Safety parameters meeting the global essential safety requirements (GESRs)*

ISO/TS 8100-22:2023, *Safety requirements for lifts (elevators) — Part 22: Prerequisites for certification of conformity of lifts, model lifts, lift components and lift functions*

ISO 9000, *Quality management systems — Fundamentals and vocabulary*

ISO 14798:2009, *Lifts (elevators), escalators and moving walks — Risk assessment and reduction methodology*

ISO/IEC 17000:2020, *Conformity assessment — Vocabulary and general principles*

ISO/IEC 17065:2012, *Conformity assessment — Requirements for bodies certifying products, processes and services*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 8100-20, ISO/TS 8100-21, ISO 9000, ISO/IEC 17000 and the following apply.

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

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

applicant

party that applies for certification of a lift, model lift, lift component or a lift function

Note 1 to entry: An applicant could be the manufacturer, or the installer or their authorized representative.

3.2

authorized representative

any natural or legal person established within the country where the lift, model lift, lift component or lift function will be made available and who has received a written mandate from an installer or a manufacturer to act on his behalf in relation to specified tasks

3.3

certification

third-party attestation related to an object of conformity assessment, with the exception of accreditation

[SOURCE: ISO/IEC 17000:2020, 7.6]

3.4

certification body

third-party conformity assessment body operating certification schemes

Note 1 to entry: Where the term “certification body” is used in ISO/IEC 17065, it shall be understood to mean certification body for lifts (LCB) in this document (see ISO/TS 8100-23:—, Clauses 5 and 6).

Note 2 to entry: The LCB performs conformity assessment and certification activities for lifts, model lifts, lift components and lift functions.

Note 3 to entry: A certification body, accredited in accordance with this document for this activity by a Multilateral Recognition Agreement (MLA) member of the International Accreditation Forum (IAF) would normally be assumed to meet the requirements of an LCB.

[SOURCE: ISO/IEC 17065:2012, 3.12, modified — Note to entry has been replaced.]

3.5

global essential safety requirement

GESR

globally agreed upon essential safety requirement

[SOURCE: ISO 8100-20:2018, 3.9]

3.6

global safety parameter

GSP

globally agreed upon safety parameter

[SOURCE: ISO/TS 8100-21:2018, 3.10]

3.7

installer

legal or natural person taking responsibility to erect and commission the lift at its final location

3.8

lift component

element or part contributing to the composition of the lift

3.9

lift function

mode of action by which a lift, model lift or lift component fulfils its purpose

3.10

manufacturer

organization that takes responsibility for the design and manufacture of the lift, model lift, lift component or lift function

3.11

model lift

defined range of lifts whose technical compliance documentation shows the way in which the GESRs will be met for (series-produced) lifts.

Note 1 to entry: All permitted variations and configurations of the lift shall be clearly specified.

3.12

representative specimen lift

lift which has been provided by the applicant and having the necessary characteristics to allow the LCB to assess if the model lift with all its permitted variations and configurations meets the GESRs

3.13

technical compliance documentation

TCD

assembly of various data and documents prepared to document compliance with GESRs

4 General requirements

The requirements of ISO/IEC 17065:2012, Clause 4 apply.

5 Structural requirements

The requirements of ISO/IEC 17065:2012, Clause 5 apply.

6 Resource requirements

The requirements of ISO/IEC 17065:2012, Clause 6 apply.

(6.1.1.2) LCB personnel involved in certification activities shall have, where appropriate for their task and responsibility:

- a) sufficient knowledge and experience in engineering to adequately perform the work required;
- b) knowledge of ISO 14798 risk assessment methodology;
- c) knowledge of ISO 8100-20, ISO/TS 8100-21, ISO/TS 8100-22 and ISO/TS 8100-23;
- d) knowledge of ISO lift-related safety codes and standards including ISO 8100-1, ISO 8100-2, ISO/TS 8100-3;
- e) familiarity with lift industry terminology;
- f) ability to read and understand architectural-, installation-, layout drawings and circuit diagrams;
- g) working knowledge of electrical, electronic, mechanical, hydraulic and other principles related to lifts, lift components and lift functions being evaluated, assessed and certified;
- h) working knowledge of the functions and operations of lifts, lift components and lift functions being evaluated, assessed and certified.

7 Process requirements

7.1 General

The requirements of ISO/IEC 17065:2012, Clause 7 apply.

The requirements of ISO/IEC 17065:2012, 7.1 apply.

(7.1) Certification of a lift versus a model lift

- a) In the case of a model lift, the certificate shall be obtained based on the assessment of the representative specimen lift(s).
- b) For subsequent series-produced lifts with the same design and configuration as the representative specimen lift, or within the permitted limits of its variations (model lift), an additional certificate is not required.

In order to ensure that the installation has been completed in accordance with the certificate holder's requirements, a final inspection should be performed by a competent body after installation on each subsequent series-produced lift.

- c) Where a lift, not designated as a series-produced lift, is installed, it shall be certified individually.

7.2 Application

7.2.1 The requirements of ISO/IEC 17065:2012, 7.2, apply.

The LCB shall obtain the application for certification of a lift, model lift, lift component or lift function.

7.2.2 The application shall include:

- a) Name and address of:
 - 1) the applicant, and
 - 2) if the applicant for certification is the authorized representative of the manufacturer or the authorized representative of the installer, the name of the manufacturer or the installer, and
 - 3) place(s) of manufacture, if applicable.
- b) Technical compliance documentation (see ISO/TS 8100-22:2024, 4.6);
- c) Lift component and lift function samples or lift location for examination, as follows:
 - 1) in the case of a lift component or lift function, one or more representative samples of the component or function or details of the location where it can be examined, or
 - 2) in the case of a lift or model lift, details of the location where the lift or the representative specimen lift can be examined.

This lift or representative specimen lift shall include all parts and be capable of serving at least three levels (top, middle and bottom) unless the lift or model lift is specifically limited in scope to two levels.

7.2.3 When an application is submitted to another LCB, the LCB is permitted to accept the application under the following conditions:

- a) any previous application, with identification information, shall be submitted;
- b) written detailed explanation as to why the application is being submitted to another LCB; and
- c) if a certificate has been previously refused, the LCB's documented grounds for refusal shall be provided.

7.3 Application review

The requirements of ISO/IEC 17065:2012, 7.3 apply.

(7.3.1) The LCB shall review the application of the manufacturer, the installer, or its authorized representative for a certificate for lifts, model lifts, lift components or lift functions, whichever is applicable.

7.4 Evaluation

The requirements of ISO/IEC 17065:2012, 7.4 apply.

(7.4.3) The ISO 8100 performance-based certification by the LCB includes an examination of the applicant's TCD.

The LCB shall evaluate the products submitted for certification by the applicant against the requirements of ISO 8100-20 and ISO/TS 8100-22. The LCB shall examine the TCD to verify that the lift, model lift, lift component or lift function conforms to the relevant GESRs, and

- a) for a lift component or lift function, perform or have performed appropriate checks and tests necessary to determine whether the solutions adopted by the manufacturer of the component or function conform to the requirements of ISO 8100-20, allowing the component or function to perform properly when correctly fitted on a lift as specified in the applicable TCD, or
- b) for a lift, perform or have performed the appropriate checks and tests necessary to determine whether the lift conforms to the requirements of ISO 8100-20, or
- c) for a representative specimen lift, perform or have performed the appropriate checks and tests necessary to determine whether
 - the model lift(s) conform(s) to the requirements of ISO 8100-20, and
 - the solutions adopted by the manufacturer of the model lift(s) allowing the series-produced lifts to be installed as specified in the applicable TCD, conform to the requirements of ISO 8100-20.

7.5 Review

The requirements of ISO/IEC 17065:2012, 7.5 apply.

7.6 Certification decision

The requirements of ISO/IEC 17065:2012, 7.6 apply.

7.7 Certification documentation

The requirements of ISO/IEC 17065:2012, 7.7 apply.

(7.7.1) When the LCB concludes that the lift, model lift, lift component or lift function conforms to the applicable requirements of ISO 8100-20 and ISO/TS 8100-22, the LCB shall issue a certificate to the applicant, authenticated by an officer who has been assigned such responsibility.

The certificate and any supporting documents shall include the following:

- a) name and address of the certificate holder (applicant);
- b) name and address of the manufacturer(s) or the installer, if applicable;
- c) place(s) of manufacture, if applicable;
- d) name, address and signature of the LCB;
- e) unique identification and description of the product certified, which shall be identified by the:
 - address of installation for single lift certifications; or
 - scope of the certification, and model, type or range of application for model lifts, lift components and lift functions;
- f) name and address of the test laboratory and date and identification of test report(s);
- g) statement of conformity to ISO 8100-20 and ISO/TS 8100-22; and

h) place, date of issue, and, if applicable, the term (time limit) of the certificate.

7.8 Directory of certified products

The requirements of ISO/IEC 17065:2012, 7.8 apply.

(7.8) The LCB shall maintain information on certified products which contains at least the following:

- a) name and address of the certificate holder;
- b) name(s) and address(es) of the manufacturer(s) of the product(s);
- c) name and type of products;
- d) geographical location of the headquarters and any sites of a multi-site manufacturer who is the holder of the certificate;

7.9 Surveillance

The requirements of ISO/IEC 17065:2012, 7.9 apply.

(7.9.1) Surveillance by the LCB is required. The LCB shall initiate surveillance of the product(s) covered by the certificate(s).

7.10 Changes affecting certification

The requirements of ISO/IEC 17065:2012, 7.10 apply.

(7.10.2.1) The holder of a certificate for a model lift, lift component or lift function shall inform the LCB in writing of any intended modifications to the model lift, lift component or lift function on which the current certification depends. The LCB shall examine the intended modifications and inform the certificate holder whether the certificate remains valid.

NOTE Modification to an installed lift is subject to national regulation(s).

(7.10.2.2) Where an LCB is requested to certify modifications to a model lift, lift component or lift function for which the certificate was issued by a different LCB, the LCB shall obtain the relevant information from the original certificate holder or the original LCB, having first obtained permission from the original certificate holder.

NOTE 1 Modification to an installed lift is subject to national regulation(s).

NOTE 2 Certification of modifications can occur to address unique site conditions which require a single modification to a certified product.

7.11 Termination, reduction, suspension or withdrawal of certification

The requirements of ISO/IEC 17065:2012, 7.11 apply.

(7.11.1) Where the LCB has evidence that a certified Lift, model lift, lift component or lift function used in accordance with its intended purpose is liable to endanger the safety of persons, the LCB shall suspend its certificate and require the certificate holder to inform all interested parties immediately.

(7.11.3) If under suspension, the certificate is temporarily invalid. The LCB shall have enforceable arrangements with the holder of its certificate to ensure that in case of suspension the holder of the certificate refrains from further promotion of its certification. The LCB shall make the suspended status of the certification publicly available and shall take any other measures it deems appropriate.

(7.11.4) Other actions could include withdrawal or reduction of the scope of the certificate.