

LIFTIDE KONSTRUKTSIOONI JA PAIGALDUSE
OHUTUSEESKIRJAD. KONTROLLIMINE JA KATSED. OSA
58: LIFTIUSTE TULEKINDLUSTEST

Safety rules for the construction and installation of lifts
- Examination and tests - Part 58: Landing doors fire
resistance test

EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN 81-58:2022 sisaldab Euroopa standardi EN 81-58:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 81-58:2022 consists of the English text of the European standard EN 81-58:2022.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
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EUROPEAN STANDARD

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English Version

**Safety rules for the construction and installation of lifts -
Examination and tests - Part 58: Landing doors fire
resistance test**

Règles de sécurité pour la construction et l'installation
des ascenseurs - Examens et essais - Partie 58 : Essai de
résistance au feu des portes palières

Sicherheitsregeln für die Konstruktion und den Einbau
von Aufzügen - Überprüfung und Prüfverfahren - Teil
58: Prüfung der Feuerwiderstandsfähigkeit von
Fahrschachttüren

This European Standard was approved by CEN on 20 April 2022.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 81-58:2022) has been prepared by Technical Committee CEN/TC 10 “Lifts, escalators and moving walks”, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2022, and conflicting national standards shall be withdrawn at the latest by May 2024.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 81-58:2018.

In comparison with the previous edition, the following significant changes have been made:

- the structure of the standard has been reorganized;
- the wordings of 6.12 a) and 6.12 b) and the associated Annexes D and E have been clarified;
- hazards due to emission of gasses have been excluded from the scope;
- normative references have been updated;
- Annex ZA has been modified.

No technical changes have been made in Clauses 4 and 5 during this revision.

This document is intended to be used in conjunction with EN 81-20:2020, which gives the basic requirements for passenger and goods passenger lifts.

This document is part of the EN 81 series of standards. The structure of the EN 81 series is described in CEN/TR 81-10:2008.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This document is a type-C standard as stated in EN ISO 12100.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance, etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises);
- consumers (in case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate in the drafting process of this document.

The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the Scope of this document.

When requirements of this type-C standard are different from those which are stated in type-A or type-B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard.

EN 81 series has identified the need for lift doors to act as fire barriers against the transfer of a fire via the lift well. This document specifies requirements for this purpose. It follows the general principle of EN 1363-1:2020 and where appropriate the procedure of EN 1634-1:2014+A1:2018. Additionally, a tracer gas technique for establishing the integrity of a lift landing door is used.

NOTE Lift landing doors are not included in the scope of EN 1634-1:2014+A1:2018.

1 Scope

This document specifies the fire resistance requirements for lift landing doors which are intended to provide a barrier to the spread of fire from the landing side and via the lift well in buildings during a defined period of time. The fire resistance requirements are expressed in terms of integrity (E), insulation (EI) and radiation (EW).

It is applicable to lift landing doors installed in the lift well openings at landings and used as means of access to lift car.

It also specifies the method of testing and classification of fire resistance of lift landing doors. The test method is only valid for furnaces where the door is mounted in a vertical position. The test method specifies the measurement of integrity and if required the measurement of radiation and thermal insulation.

This document does not cover other technical requirements in addition to fire resistance requirements.

This document refers to CO₂ as means of tracing the propagation of fire. The document does not cover hazards due to emission of gases.

This document is not applicable to 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.

EN 81-20:2020, *Safety rules for the construction and installation of lifts — Lifts for the transport of persons and goods — Part 20: Passenger and goods passenger lifts*

EN 1363-1:2020, *Fire resistance tests — Part 1: General requirements*

EN 1363-2:1999, *Fire resistance tests — Part 2: Alternative and additional procedures*

EN 1634-1:2014+A1:2018, *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware — Part 1: Fire resistance test for door and shutter assemblies and openable windows*

EN ISO 5167-1:2003, *Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full — Part 1: General principles and requirements (ISO 5167-1:2003)*

EN ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction (ISO 12100:2010)*

ISO 9705-1:2016, *Reaction to fire tests — Room corner test for wall and ceiling lining products — Part 1: Test method for a small room configuration*