



**NSAI**  
Standards

Irish Standard  
I.S. EN 81-58:2018

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

**I.S. EN 81-58:2018**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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## National Foreword

I.S. EN 81-58:2018 is the adopted Irish version of the European Document EN 81-58:2018, Safety rules for the construction and installation of lifts - Examination and tests - Part 58: Landing doors fire resistance test

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EUROPEAN STANDARD

**EN 81-58**

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Supersedes EN 81-58:2003

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 : Essais  
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 16 July 2017.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

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**EN 81-58:2018 (E)****European foreword**

This document (EN 81-58:2018) 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 September 2018, and conflicting national standards shall be withdrawn at the latest by October 2019.

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 81-58:2003.

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

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

This standard is applicable only for new products.

Annexes A to D and G are normative.

The technical content of the test method is not changed. Main changes to previous edition incorporates:

- the list of referenced standards is updated;
- CO<sub>2</sub> -measurement accuracy changed in 11.2;
- a new note added to 11.3;
- Clause 13 (changed criteria for test termination);
- value E20 added to Table 1;
- the leakage rate accuracy changed in 15.1;
- Annex D formulas corrected;
- new informative Annexes E and F added;
- new normative Annex G for marking added;
- previous interpretations have been implemented.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, 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.

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

EN 81-20 has identified the need for lift doors to act as fire barriers against the transfer of a fire via the lift well. This European Standard specifies a procedure for this purpose. It follows the general principle of EN 1363-1 and where appropriate the procedure of EN 1634-1. Additionally a tracer gas technique for establishing the integrity of a lift landing door is used.

Lift landing doors are not included in the scope of EN 1634-1.

## EN 81-58:2018 (E)

### 1 Scope

This European Standard specifies the method of test for determining the fire resistance of lift landing doors which may be exposed to a fire from the landing side. The procedure applies to all types of lift landing doors used as a means of access to lifts in buildings and which are intended to provide a fire barrier to the spread of fire via the lift well.

The procedure allows for the measurement of integrity and if required the measurement of radiation and thermal insulation.

No requirements other than the verification that the specimen is operational are included for mechanical conditioning before the test as these are included in the relevant product standard.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 81-20:2014, *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 1363-1:2012, *Fire resistance tests - Part 1: General Requirements*

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

EN 1634-1:2014, *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*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 12100:2010 and EN 1363-1 and the following apply.

NOTE Additional definitions specifically needed for this document are added below.

#### 3.1 lift landing door

door designed to be installed in the lift well opening on a landing to provide access to the lift

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