

**Liftide valmistamise ja paigaldamise
ohutuseeskirjad. Ülevaatus ja
katsetamine. Osa 58: Lifti uste
tulekindluse test**

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

| | |
|--|---|
| <p>Käesolev Eesti standard EVS-EN 81-58:2003 sisaldab Euroopa standardi EN 81-58:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 14.08.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN 81-58:2003 consists of the English text of the European standard EN 81-58:2003.</p> <p>This document is endorsed on 14.08.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p> |
|--|---|

| | |
|--|--|
| <p>Käsitlusala: 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</p> | <p>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</p> |
|--|--|

ICS 91.140.90

Võtmesõnad: electrical safety, electrical transmission system, examination, hydraulic transmission, lifting equipment, lifts, safety, safety devices, safety grips, safety measures, service lifts, shafts, specification (approval), specifications, testing, thermal insulation

ICS 91.140.90

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
élévateurs - Examen 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
Fahrschichttüren

This European Standard was approved by CEN on 18 March 2003.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

| | |
|---|----|
| Foreword..... | 4 |
| Introduction | 5 |
| 1 Scope | 6 |
| 2 Normative references | 6 |
| 3 Terms and definitions..... | 6 |
| 4 Test principle..... | 7 |
| 5 Test equipment | 7 |
| 6 Test conditions | 7 |
| 7 Test specimen | 8 |
| 7.1 Construction..... | 8 |
| 7.2 Number of specimens | 8 |
| 7.3 Size of specimen..... | 8 |
| 7.4 Installation of specimen | 8 |
| 8 Supporting construction | 8 |
| 9 Conditioning..... | 8 |
| 10 Pre-test examination..... | 8 |
| 10.1 General..... | 8 |
| 10.2 Constructional details | 9 |
| 10.3 Clearance gap measurements and depth of penetration | 9 |
| 10.4 Functionality test | 13 |
| 11 Test instrumentation | 14 |
| 11.1 Furnace thermocouples | 14 |
| 11.2 Furnace CO ₂ concentration..... | 14 |
| 11.3 Gas flow measuring system instrumentation..... | 14 |
| 11.4 Furnace pressure..... | 14 |
| 11.5 Unexposed face temperature..... | 14 |
| 11.6 Radiation measurement | 15 |
| 11.7 Deformation measurement | 15 |
| 11.8 Flow measurement verification | 16 |
| 12 Test procedure | 16 |
| 13 Test termination | 16 |
| 14 Assessment of performance..... | 16 |
| 15 Criteria of performance | 17 |
| 15.1 Integrity (E) | 17 |
| 15.2 Thermal insulation (I)..... | 17 |
| 15.3 Radiation (W)..... | 17 |
| 16 Direct field of application | 17 |
| 17 Classification procedure and declaration of performance..... | 18 |
| 17.1 Performance criteria | 18 |
| 17.2 Classification periods..... | 18 |
| 17.3 Designatory letters | 18 |
| 17.4 Declaration of performance | 18 |
| 17.5 Classes..... | 18 |
| 18 Test report | 19 |
| Annex A (normative) Description of the canopy and measuring system..... | 20 |

| | |
|---|----|
| Annex B (normative) Standard supporting construction | 23 |
| Annex C (normative) Verification procedure for leakage rate measurement | 24 |
| Annex D (normative) Calculation of leakage rate | 25 |
| D.1 Calculation of leakage rate when measuring according to EN ISO 5167-1 with an orifice plate | 25 |
| D.2 Pressure correction :..... | 26 |
| D.3 Interpreting the leakage rate curve | 27 |
| Annex ZA (informative) Relationship of this European Document with EC Directives | 28 |
| Bibliography | 29 |

This document is a preview generated by EVS

Foreword

This document EN 81-58:2003 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 **January 2004**, and conflicting national standards shall be withdrawn at the latest by **January 2004**.

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.

Annexes A to D are normative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This document is a type C standard as stated in EN 1070.

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 has identified the need for certain 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, Fire resistance tests – Part 1: General requirements, and where appropriate the procedure of EN 1634-1, Fire resistance tests for door and shutter assemblies – Part 1: Fire doors and shutters. 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.

Lift landing doors, with additional applications, that may already have been tested for other than passenger lift landing door use to EN 1634-1, are considered to satisfy the corresponding classification according to this European standard.

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

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 81-1, *Safety rules for the construction and installation of lifts – Part 1: Electric lifts.*

EN 81-2, *Safety rules for the construction and installation of lifts – Part 2: Hydraulic lifts.*

EN 1070:1998, *Safety of machinery - Terminology*

EN 1363-1:1999, *Fire resistance tests – Part 1: General requirements.*

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

EN 1634-1, *Fire resistance tests for door and shutter assemblies – Part 1: Fire doors and shutters.*

EN ISO 5167-1, *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)*

ISO 5221, *Air distribution and air diffusion – Rules to methods of measuring air flow rates in an air handling duct.*

ISO 9705, *Fire tests – Full scale room test for surface products.*

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 1070:1998 and in EN 1363-1:1999 apply.

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

3.2

thermally uninsulated lift landing door

lift landing door which is not intended to satisfy the insulation criteria of EN 1363-1 and 15.2 of this standard.

NOTE Most lift landing doors fall in this category