

Fire resistance tests for loadbearing elements - Part 6: Stairs

Fire resistance tests for loadbearing elements - Part 6: Stairs

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1365-6:2005 sisaldab Euroopa standardi EN 1365-6:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 25.01.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1365-6:2005 consists of the English text of the European standard EN 1365-6:2004.</p> <p>This document is endorsed on 25.01.2005 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:</p> <p>This Part of EN 1365 specifies a method for determining the fire resistance of stairs, with or without applied fire protection systems in respect of loadbearing capacity and with no separating function. This standard is used in conjunction with EN 1363-1.</p>	<p>Scope:</p> <p>This Part of EN 1365 specifies a method for determining the fire resistance of stairs, with or without applied fire protection systems in respect of loadbearing capacity and with no separating function. This standard is used in conjunction with EN 1363-1.</p>
---	---

ICS 13.220.50

Võtmesõnad: con, definition, definitions, fire protection, fire resistance, fire safety, fire tests, fire-resistant time, flame propagation, loadbearing, part of buildings, stairs, structural fire protection, surface spread of flame, test reports, testing, testing conditions

ICS 13.220.50

English version

Fire resistance tests for loadbearing elements - Part 6: Stairs

Essais de résistance au feu des éléments porteurs - Partie
5: Escaliers

Feuerwiderstandsprüfungen für tragende Bauteile - Teil 5:
Treppen

This European Standard was approved by CEN on 9 July 2004.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, 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

	page
Foreword.....	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Test equipment	6
5 Test conditions	6
6 Test specimen	6
6.1 General.....	6
6.2 Size	6
6.3 Number	6
6.4 Design	7
6.5 Exposure.....	7
6.6 Construction.....	7
6.7 Verification	7
7 Installation of test specimen	7
7.1 General.....	7
7.2 Loading and restraint	7
8 Conditioning.....	8
9 Application of instrumentation.....	8
9.1 Furnace thermocouples (plate thermometers).....	8
9.2 Pressure.....	8
9.3 Deflection.....	8
10 Test procedure	8
11 Performance criteria.....	8
12 Test report	9
13 Field of direct application of test results	9
Annex A (informative) Examples of different stairs	10
Annex B (informative) Use of results from tests on components in classification of stairs.....	17
B.1 Introduction	17
B.2 Use of test results.....	17

Foreword

This document (EN 1365-6:2004) has been prepared by Technical Committee CEN/TC 127 "Fire safety in buildings", the secretariat of which is held by BSI.

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 May 2005, and conflicting national standards shall be withdrawn at the latest by May 2005.

This standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of the Construction Products Directive.

EN 1365 'Fire resistance tests for loadbearing elements' consists of the following parts:

Part 1: Walls,

Part 2: Floors and roofs,

Part 3: Beams,

Part 4: Columns,

Part 5: Balconies and walkways,

Part 6: Stairs.

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

Introduction

The purpose of this test is to measure the ability of a representative specimen of a stair or a part of it to maintain its loadbearing capacity when exposed to fire according to EN 1363-1.

Caution

The attention of all persons concerned with managing and carrying out this fire resistance test EN 1365-6 is drawn to the fact that fire testing can be hazardous and that there is a possibility that toxic and/or harmful smoke and gases can be evolved during the test. Mechanical and operational hazards can also arise during the construction of the test elements or structures, their testing and disposal of test residues.

An assessment of all potential hazards and risks to health should be made and safety precautions should be identified and provided. Written safety instructions should be issued. Appropriate training should be given to relevant personnel. Laboratory personnel should ensure that they follow written safety instructions at all times.

1 Scope

This Part of EN 1365 specifies a method for determining the fire resistance of stairs, with or without applied fire protection systems in respect of loadbearing capacity and with no separating function. This document is used in conjunction with EN 1363-1.

2 Normative references

The following referenced documents are indispensable for the application 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 1363-1:1999, *Fire resistance tests — Part 1: General requirements*

EN 1365-2, *Fire resistance tests for loadbearing elements — Part 2: Floors and roofs*

EN 1365-3, *Fire resistance tests for loadbearing elements — Part 3: Beams*

EN 1365-4, *Fire resistance tests for loadbearing elements — Part 4: Columns*

EN ISO 13943:2000, *Fire safety — Vocabulary (ISO 13943:2000)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1363-1:1999 and EN ISO 13943:2000, and the following apply.

3.1

stair

succession of horizontal stages (steps or landings) rising at a pitch which makes it possible to pass on foot to other levels

NOTE Figures of different stairs are given in Annex A.

3.2

landing

level platform at the end of or between two flights of stairs. It can be part of the stair or the floor

3.3

intermediate landing

landing inserted between two floors

3.4

string

inclined member supporting the end of steps

3.5

step

part of a stair consisting of a tread and possibly a riser

3.6

riser

part closing the front face of the step