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NSAI Standards

Irish Standard
I.S. EN 1365-1:2012

Fire resistance tests for loadbearing elements - Part 1: Walls

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1365-1:2012/AC

April 2013
Avril 2013
April 2013

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English version
Version Française
Deutsche Fassung

Fire resistance tests for loadbearing elements - Part 1: Walls

Essais de résistance au feu des éléments porteurs - Partie 1: Murs

Feuerwiderstandsprüfungen für tragende Bauteile - Teil 1: Wände

This corrigendum becomes effective on 24 April 2013 for incorporation in the three official language versions of the EN.

Ce corrigendum prendra effet le 24 avril 2013 pour incorporation dans les trois versions linguistiques officielles de la EN.

Die Berichtigung tritt am 24. April 2013 zur Einarbeitung in die drei offiziellen Sprachfassungen der EN in Kraft.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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1 Modification to dated reference EN 1363-1:1999

*Replace the reference "*EN 1363-1:1999*" with "*EN 1363-1*" in the following instances:*

- *Clause 1, 4th paragraph;*
- *Clause 2, 1st reference;*
- *Clause 3, introductory sentence;*
- *4,1;*
- *5.1;*
- *5.2;*
- *6.2;*
- *6.4;*
- *6.5;*
- *Clause 8;*
- *9.1.1;*
- *9.1.2.1, 2nd and 3rd paragraphs;*
- *9.2;*
- *9.3.1;*
- *9.3.2, 3rd paragraph;*
- *10.2;*
- *11.1;*
- *11.2;*
- *Clause 12, 1st paragraph.*

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1365-1

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Fire resistance tests for loadbearing elements - Part 1: Walls

Essais de résistance au feu des éléments porteurs - Partie 1: Murs

Feuerwiderstandsprüfungen für tragende Bauteile - Teil 1: Wände

This European Standard was approved by CEN on 13 July 2012.

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Foreword

This document (EN 1365-1:2012) 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 April 2013, and conflicting national standards shall be withdrawn at the latest by April 2013.

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

This document supersedes EN 1365-1:1999.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

The main changes with respect to the previous edition are listed below:

a) the introduction of mechanical loading into the test specimen;

b) changes as a consequence of the modifications in EN 1363-1.

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 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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Introduction

The purpose of this test is to measure the ability of a representative specimen of a loadbearing wall to resist the spread of fire from one side to another and to maintain its loadbearing capacity. It is applicable to internal and external walls.

Caution

The attention of all persons concerned with managing and carrying out this fire resistance test is drawn to the fact that fire testing may be hazardous and that there is a possibility that toxic and/or harmful smoke and gases may be evolved during the test. Mechanical and operational hazards may 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.

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1 Scope

This European Standard specifies a method of testing the fire resistance of loadbearing walls. It is applicable to both internal and external walls. The fire resistance of external walls can be determined under internal or external exposure conditions.

The fire resistance performance of loadbearing walls is normally evaluated without perforations such as doors, glazing or fire resistant ducts. If it can be demonstrated that the design of the opening is such that load is not transmitted to the perforation, then the perforation need not be tested in the loaded condition. If perforations are to be included, the effects of these will need to be separately established.

This test method is not applicable to non-separating loadbearing walls which, in short widths, can be tested as columns to EN 1365-4.

This European Standard is used in conjunction with EN 1363-1:1999.

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 1363-1:1999, *Fire resistance tests — Part 1: General requirements*

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

EN ISO 13943:2010, *Fire safety — Vocabulary (ISO 13943:2008)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1363-1:1999 and EN ISO 13943:2010 together with the following apply.

3.1
loadbearing wall
wall designed to support an applied load

3.2
internal wall
wall which provides fire separation and which may be exposed separately to a fire from either side

3.3
external wall
wall forming the external envelope of a building which may be exposed separately to an internal or an external fire

3.4
insulated wall
wall, which satisfies both the integrity and insulation criteria for the anticipated fire resistance period

3.5
uninsulated wall
wall which satisfies the integrity and, where required, the radiation criteria for the anticipated fire resistance period, but which is not intended to provide insulation

Note 1 to entry: Such a loadbearing wall may consist entirely of uninsulated fire resistant panels

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