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Brandteknisk klassificering av byggprodukter och byggnadselement –
Del 2: Klassificering baserad på provningsdata från metoder som mäter brandmotstånd, utom för produkter för ventilationssystem

Fire classification of construction products and building elements –
Part 2: Classification using data from fire resistance tests, excluding ventilation services

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Europastandarden EN 13501-2:2007+A1:2009 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 13501-2:2007+A1:2009.

Denna standard ersätter SS-EN 13501-2:2007, utgåva 2.

The European Standard EN 13501-2:2007+A1:2009 has the status of a Swedish Standard. This document contains the official English version of EN 13501-2:2007+A1:2009.

This standard supersedes the Swedish Standard SS-EN 13501-2:2007, edition 2.

Upplysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00.
Standarder kan beställas hos SIS Förlag AB som även lämnar allmänna upplysningar om svensk och utländsk standard.

Information about the content of the standard is available from the Swedish Standards Institute (SIS), tel +46 8 555 520 00.
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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 13501-2:2007+A1

September 2009

ICS 13.220.50

Supersedes EN 13501-2:2007

English Version

Fire classification of construction products and building elements - Part 2: Classification using data from fire resistance tests, excluding ventilation services

Classement au feu des produits et éléments de construction - Partie 2: Classement à partir des données d'essais de résistance au feu à l'exclusion des produits utilisés dans les systèmes de ventilation

Klassifizierung von Bauprodukten und Bauarten zu ihrem Brandverhalten - Teil 2: Klassifizierung mit den Ergebnissen aus den Feuerwiderstandsprüfungen, mit Ausnahme von Lüftungsanlagen

This European Standard was approved by CEN on 30 November 2006 and includes Amendment 1 approved by CEN on 17 July 2009.

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 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 Management Centre has the same status as the official versions.

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

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

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Foreword

This document (EN 13501-2:2007+A1:2009) 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 March 2010, and conflicting national standards shall be withdrawn at the latest by March 2010.

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 includes Amendment 1, approved by CEN on 2009-07-17.

This document supersedes [A1] EN 13501-2:2007 [A1].

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A1] [A1].

The first edition of this European Standard was prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, supporting essential requirements of the Construction Products Directive.

[A1] Amendment 1 provides for the use of extended application reports in the classification procedure. [A1]

CEN, CENELEC and EOTA committees preparing technical specifications which contain performance requirements against resistance to fire tests should make reference to the resistance to fire classification given in this European Standard and not refer directly to any specific fire test method.

Changes have been made in this revision to bring it in line with the relevant current EC Decisions on fire resistance classification, and experience in use in the first edition.

EN 13501 *Fire classification of construction products and building elements* consists of the following Parts:

Part 1: Classification using data from reaction to fire tests

Part 2: Classification using data from fire resistance tests, excluding ventilation services

Part 3: Classification using data from fire resistance tests on products and elements used in building service installations: fire resisting ducts and fire dampers

Part 4: Classification using data from fire resistance tests on components of smoke control systems

Part 5: Classification using data from external fire exposure to roof tests

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

Introduction

The aim of this European Standard is to define a harmonised procedure for the classification for resistance to fire of construction products and building elements. This classification is based on the test procedures listed in [A1> Clause 2 and the relevant field of application procedures <A1].

This European Standard is prepared in support of the second essential requirement in the EC Construction Products Directive (89/106/EEC) which is detailed in the Interpretative Document number 2 (ID2): Safety in case of fire (OJ C62 Vol 37). It reflects the Commission Decision of 3 May 2000 on the implementation of the Council Directive 89/106/EEC as regards the classification of the resistance to fire performance of construction products, construction works and parts thereof.

The Interpretative Document and the Commission Decision of 2 May 2000 specify performance and classes regarding fire resistance. These classes are identified by designation letters, each of which refers to an important characteristic of fire resistance behaviour.

This European Standard provides for a common understanding for these requirements. It interprets the functional requirements for the different groups of building elements and explains the method for deriving their classification on the basis of [A1> test results and/or extended application results for individual elements <A1].

[A1> NOTE Test reports constitute the basis for extended application reports as explained in prEN 15725. <A1]

1 Scope

This European Standard specifies the procedure for classification of construction products and building elements using data from fire resistance and smoke leakage tests which are within the direct field of application of the relevant test method. [A1] Classification on the basis of extended application of test results is also included in the scope of this European Standard. [A1]

This European Standard deals with:

a) loadbearing elements without a fire separating function:

walls;
floors;
roofs;
beams;
columns;
balconies;
walkways;
stairs.

b) loadbearing elements with a fire separating function, with or without glazing, services and fixtures:

walls;
floors;
roofs;
raised floors.

c) products and systems for protecting elements or parts of the works

ceilings with no independent fire resistance;
fire protective coatings, claddings and screens;

d) non-loadbearing elements or parts of works, with or without glazing, services and fixtures:

partitions;
facades (curtain walls) and external walls;
ceilings with independent fire resistance;
fire doors and shutters and their closing devices;
smoke control doors;
conveyor systems and their closures;
penetration seals;
linear joint seals;
service ducts and shafts;
chimneys.

e) wall and ceiling coverings with fire protection ability.

f) lift landing doors which are tested according to EN 81-58 are excluded from this European Standard. Lift landing doors which are tested according to EN 1634-1 are classified in accordance with 7.5.5.

Relevant test methods which have been prepared for these elements are listed in Clauses 2 and 7.

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

EN 1364-1, *Fire resistance tests for non-loadbearing elements — Part 1: Walls*

EN 1364-2, *Fire resistance tests for non-loadbearing elements — Part 2: Ceilings*

EN 1364-3, *Fire resistance tests for non-loadbearing elements — Part 3: Curtain walling - Full configuration (complete assembly)*

EN 1364-4, *Fire resistance tests for non-loadbearing elements — Part 4: Curtain walling — Part configuration*

EN 1365-1, *Fire resistance tests for loadbearing elements — Part 1: Walls*

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 1365-5, *Fire resistance tests for loadbearing elements — Part 5: Balconies and walkways*

EN 1365-6, *Fire resistance tests for loadbearing elements — Part 6: Stairs*

EN 1366-3, *Fire resistance tests for service installations — Part 3: Penetration seals*

EN 1366-4, *Fire resistance tests for service installations — Part 4: Linear joint seals*

EN 1366-5, *Fire resistance tests for service installations — Part 5: Service ducts and shafts*

EN 1366-6, *Fire resistance tests for service installations — Part 6: Raised access and hollow core floors*

EN 1366-7, *Fire resistance tests for service installations — Part 7: Conveyor systems and their closures*

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

EN 1634-3, *Fire resistance tests for door and shutter assemblies — Part 3: Smoke control doors and shutters*

EN 13216-1, *Chimneys — Test methods for system chimneys — Part 1: General test methods*

CEN/TS 13381-1, *Test methods for determining the contribution to the fire resistance of structural members — Part 1: Horizontal protective membranes*

ENV 13381-2, *Test methods for determining the contribution to the fire resistance of structural members — Part 2: Vertical protective membranes*

ENV 13381-3, *Test methods for determining the contribution to the fire resistance of structural members — Part 3: Applied protection to concrete members*

ENV 13381-4, *Test methods for determining the contribution to the fire resistance of structural members — Part 4: Applied protection to steel members*

ENV 13381-5, *Test methods for determining the contribution to the fire resistance of structural members — Part 5: Applied protection to concrete/profiled sheet steel composite members*

ENV 13381-6, *Test methods for determining the contribution to the fire resistance of structural members — Part 6: Applied protection to concrete filled hollow steel columns*

ENV 13381-7, *Test methods for determining the contribution to the fire resistance of structural members — Part 7: Applied protection to timber members*

EN 14135, *Coverings — Determination of fire protection ability*

EN 14600, *Doorsets and openable windows with fire resisting and/or smoke control characteristics — Requirements and classification*

〚A1〛 EN 15080-8, *Extended application of results from fire resistance tests — Part 8: Beams*

EN 15254-2, *Extended application of results from fire resistance tests — Non-loadbearing walls — Part 2: Masonry and gypsum blocks*

prEN 15254-5, *Extended application of results from fire resistance tests — Non-loadbearing walls — Part 5: Metal sandwich panel construction*

prEN 15254-6[1)], *Extended application of results from fire resistance tests — Non-loadbearing walls — Part 6: Curtain walling*

prEN 15254-7, *Extended application of results from fire resistance tests — Non-loadbearing walls — Part 7: Non-loadbearing sandwich panels — Ceilings*

prEN 15269-1, *Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies, including their elements of building hardware — Part 1: General requirements*

prEN 15269-2, *Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies, including their elements of building hardware — Part 2: Fire resistance of hinged and pivoted steel doorsets*

prEN 15269-3, *Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies, including their elements of building hardware — Part 3: Fire resistance of hinged and pivoted timber doorsets and openable timber framed windows*

prEN 15269-4[1)], *Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies, including their elements of building hardware — Part 4: Fire resistance of hinged and pivoted glass doorsets*

prEN 15269-5[1)], *Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies, including their elements of building hardware — Part 5: Fire resistance of hinged and pivoted, metal framed, glazed doorsets and openable windows*

prEN 15269-6[1)], *Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies, including their elements of building hardware — Part 6: Fire resistance of sliding timber doorsets*

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1) 〚A1〛 To be published. 〚A1〛

prEN 15269-7, *Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies, including their elements of building hardware — Part 7: Fire resistance of sliding steel doorsets*

prEN 15269-8[1)], *Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies, including their elements of building hardware — Part 8: Fire resistance of horizontally folding timber doorsets*

prEN 15269-9[1)], *Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies, including their elements of building hardware — Part 9: Fire resistance of horizontally folding steel doorsets*

prEN 15269-10[1)], *Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies, including their elements of building hardware — Part 10: Fire resistance of steel rolling shutters*

prEN 15269-11[1)], *Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies, including their elements of building hardware — Part 11: Fire resistance of fabric curtains*

prEN 15269-20, *Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies, including their elements of building hardware — Part 20: Smoke control for hinged and pivoted steel, timber and metal framed glazed doorsets*

prEN 15725, *Extended application reports on the fire performance of construction products and building elements*

prEN 15882-1, *Extended application of results from fire resistance tests for service installations — Part 1: Fire resisting ducts*

prEN 15882-2, *Extended application of results from fire resistance tests for service installations — Part 2: Dampers*

EN 15882-3, *Extended application of results from fire resistance tests for service installations — Part 3: Penetration seals*

prEN 15882-4[1)], *Extended application of results from fire resistance tests for service installations — Part 4: Linear joint seals* 〈A1〉

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