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BS EN 13501-2:2016



BSI Standards Publication

Fire classification of construction products and building elements

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

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This British Standard is the UK implementation of EN 13501-2:2016. It supersedes BS EN 13501-2:2007+A1:2009 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee FSH/22, Fire resistance tests.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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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 23 April 2016.

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



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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 13501-2:2016) has been prepared by Technical Committee CEN/TC 127 "Fire safety in buildings", the secretariat of which is held by BSI.

This document supersedes EN 13501-2:2007+A1:2009.

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 December 2016, and conflicting national standards shall be withdrawn at the latest by December 2016.

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

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 components of normal 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*
- *Part 6: Classification using data from reaction to fire tests on electric cables*

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 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 Clause 2 and the relevant field of application procedures.

This European Standard is prepared in support of the second basic requirement, in the EC Construction Products Regulation (305/2011) and is detailed in the Interpretative Document number 2 (ID2): Safety in case of fire (OJC62 Vol 37).

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 test results and/or extended application results for individual elements.

NOTE Test reports constitute the basis for extended application reports as explained in EN 15725.

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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. Classification on the basis of extended application of test results is also included in the scope of this European Standard.

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;
 - raised floors;
 - fire doors and shutters and their closing devices;