

BS EN 1364-1:2015



BSI Standards Publication

Fire resistance tests for non-loadbearing elements

Part 1: Walls

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National foreword

This British Standard is the UK implementation of EN 1364-1:2015. It supersedes BS EN 1364-1:1999 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee FSH/22/-/7, Non loadbearing separating elements.

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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**Fire resistance tests for non-loadbearing elements - Part 1:
Walls**Essais de résistance au feu des éléments non porteurs -
Partie 1 : MursFeuerwiderstandsprüfungen für nichttragende Bauteile -
Teil 1: Wände

This European Standard was approved by CEN on 30 April 2015.

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European foreword

This document (EN 1364-1:2015) 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of an identical text or by endorsement, at the latest by January 2016, and conflicting national standards shall be withdrawn at the latest by January 2016.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 document supersedes EN 1364-1:1999.

This European Standard 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) locations of thermocouples are modified in line with the definitions in EN 1363-1;
- b) additional deflections measurements for larger constructions;
- c) additional thermocouples on glazed constructions;
- d) additional rules in the field of direct application for glazed constructions (Annex A);
- e) rules for testing non-loadbearing external and internal walls designed to span horizontally (Annex B).

EN 1364 'Fire resistance tests for non-loadbearing elements' consists of the following:

Part 1: Walls;

Part 2: Ceilings;

Part 3: Curtain walling - Full configuration (complete assembly);

Part 4: Curtain walling - Part configuration;

Part 5: Air transfer grilles.

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.

Introduction

The purpose of this test is to measure the ability of a representative specimen of a non-loadbearing wall to resist the spread of fire from one side to another.

It is applicable to non-loadbearing walls, with and without glazing, non-loadbearing walls consisting almost wholly of glazing and other non-loadbearing internal and external non-loadbearing walls.

It is not applicable to curtain walls (external non-loadbearing walls suspended in front of the floor slab), unless explicitly permitted under EN 1364-3 or EN 1364-4 which should contain details of the methodology to be used.

For external fire exposure to a non-loadbearing external wall, the external fire exposure curve given in EN 1363-2 is used.

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.

1 Scope

This European standard specifies a method for determining the fire resistance of non-loadbearing walls.

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

It is applicable to internal non-loadbearing walls (partitions), with and without glazing, non-loadbearing walls consisting almost wholly of glazing (glazed non-loadbearing walls) and other non-loadbearing internal and external non-loadbearing walls with and without glazing.

The fire resistance of external non-loadbearing walls can be determined under internal or external exposure conditions. In the latter case the external fire exposure curve given in EN 1363-2 is used.

It is not applicable to:

- a) curtain walls (external non-loadbearing walls suspended in front of the floor slab), unless explicitly permitted under EN 1364-3 or EN 1364-4 which contain details of the methodology to be used.
- b) non-loadbearing walls containing door assemblies that are tested according to EN 1634-1.

Specific requirements for testing glazed elements or non-loadbearing walls incorporating glazing are given in Annex A.

Specific requirements relating to the testing of non-loadbearing external and internal walls designed to span horizontally between two independently proven fire resisting vertical structural elements are given in Annex B.

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, *Fire resistance tests - Part 1: General Requirements*

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

EN ISO 13943, *Fire safety - Vocabulary (ISO 13943)*

3 Terms and definitions

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

3.1

non-loadbearing wall (partition)

wall designed not to be subject to any load other than its self-weight

3.2

internal non-loadbearing wall (partition)

wall, with or without glazing, which provides fire separation

Note 1 to entry It may be exposed separately to a fire from either side.

3.3

external non-loadbearing wall

wall forming the external envelope of a building

Note 1 to entry It may be exposed separately to an internal or an external fire.