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3 პირველად

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English Version

Fire resistance tests for non-loadbearing elements - Part 1: Walls

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

Feuerwiderstandsprüfungen für nichttragende Bauteile -
Teil 1: Wände

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

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.

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Contents

Page

European foreword.....	5
Introduction.....	6
1 Scope	7
2 Normative references.....	7
3 Terms and definitions.....	7
4 Test equipment	9
5 Test conditions.....	9
6 Test specimen	9
6.1 Size	9
6.2 Number.....	9
6.3 Design	9
6.3.1 General.....	9
6.3.2 Vertical joints	10
6.3.3 Horizontal joints.....	10
6.3.4 Restraint.....	10
6.4 Construction	11
6.5 Verification.....	11
7 Installation of test specimen.....	11
7.1 General.....	11
7.2 Supporting construction	11
8 Conditioning	11
9 Application of instrumentation.....	12
9.1 Thermocouples.....	12
9.1.1 Furnace thermocouples (plate thermometers).....	12
9.1.2 Unexposed face thermocouples.....	12
9.2 Pressure	13
9.3 Deflection	13
9.4 Radiation	13
9.5 Impact.....	13
10 Test procedure	13
11 Performance criteria	13
12 Test report.....	13
13 Field of direct application of test results.....	14
13.1 General.....	14
13.2 Extension of width	14
13.3 Extension of height.....	14
13.4 Supporting constructions.....	15
13.4.1 Standard supporting constructions.....	15

13.4.2	Non-standard supporting constructions	15
Annex A (normative)	Specific requirements for testing glazed elements or non-loadbearing walls incorporating glazing	36
A.1	General	36
A.2	Test specimen design.....	36
A.3	Test specimen instrumentation.....	37
A.3.1	General.....	37
A.3.2	Average temperature rise.....	37
A.3.2.1	Fully glazed test specimen	37
A.3.2.2	Partly glazed test specimen.....	37
A.3.3	Maximum temperature rise	37
A.3.4	Radiation measurement.....	38
A.3.5	Deflection measurement	38
A.4	Field of direct application of test results	38
A.4.1	General.....	38
A.4.2	Field of direct application rules not requiring overrun time.....	38
A.4.2.1	Glazed element	38
A.4.2.1.1	Installation angle.....	38
A.4.2.1.2	Height of the glazed element	39
A.4.2.1.3	Width of the glazed element.....	39
A.4.2.2	Glazing system (see Figure 16).....	39
A.4.2.2.1	Linear dimensions.....	39
A.4.2.2.2	Aspect ratio.....	39
A.4.2.2.3	Glazing beads.....	40
A.4.2.3	Framing system (see Figure 16).....	40
A.4.2.4	Supporting constructions	40
A.4.2.4.1	General.....	40
A.4.2.4.2	Standard supporting constructions.....	40
A.4.2.4.3	Non-standard supporting construction	41
A.4.3	Field of direct application rules requiring overrun time	41
A.4.3.1	General	41
A.4.3.2	Dimensions of the glazed element.....	41
A.4.3.2.1	Height	41
A.4.3.2.2	Width	41
A.4.3.3	Dimensions and area of individual rectangular glass panes	42
A.4.3.4	Aspect ratio	42
A.4.3.5	Area of individual circular, triangular and four side non-rectangular glass panes	42
Annex B (normative)	Specific requirements for testing non-loadbearing external and internal walls designed to span horizontally between two independently proven fire resisting vertical structural elements.....	43

EN 1364-1:2015 (E)

B.1	General	43
B.2	Test specimen	43
B.2.1	Size	43
B.2.2	Number.....	43
B.2.3	Design	43
B.2.4	Boundary and Restraint conditions	43
B.3	Test specimen instrumentation.....	44
B.4	Test procedure	44
B.5	Performance criteria	44
B.6	Field of direct application of test results	44
B.6.1	General.....	44
B.6.2	Supporting constructions.....	45
B.6.3	Extension of width.....	45
B.6.4	Extension of height	45
	Bibliography	46

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.