

Nederlandse norm

NEN-EN 1364-4

(en)

Bepaling van de brandwerendheid van niet-dragende bouwdelen - Deel 4: Vliesgevels - Gedeeltelijke opstelling

Fire resistance tests for non-loadbearing elements - Part 4: Curtain walling - Part configuration

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Voorbeeld
 Preview

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<u>vermelde norm</u>	<u>Nederlandse norm</u>	<u>titel</u>
EN 1363-1	NEN-EN 1363-1	Bepaling van de brandwerendheid - Deel 1: Algemene eisen
EN 1363-2	NEN-EN 1363-2	Bepaling van de brandwerendheid - Deel 2: Alternatieve en aanvullende procedures
EN 1364-3	NEN-EN 1364-3	Bepaling van de brandwerendheid van niet-dragende bouwdelen - Deel 3: Vliesgevels - Volledige opstelling
EN 13119	NEN-EN 13119	Vliesgevels - Terminologie
EN 13501-1	NEN-EN 13501-1+A1	Brandclassificatie van bouwproducten en bouwdelen - Deel 1: Classificatie op grond van resultaten van beproeving van het brandgedrag
EN 13501-2	NEN-EN 13501-2+A1	Brandclassificatie van bouwproducten en bouwdelen - Deel 2: Classificatie op grond van resultaten van brandwerendheidsproeven, behalve voor ventilatiesystemen
EN 13830	NEN-EN 13830	Vliesgevels - Productnorm
EN ISO 13943	NEN-EN-ISO 13943	Brandveiligheid - Woordenlijst

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Voorbeeld
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English Version

Fire resistance tests for non-loadbearing elements - Part 4: Curtain walling - Part configuration

Essais de résistance au feu des éléments non-porteurs -
Partie 4: Façades rideaux - Configuration partielle

Feuerwiderstandsprüfungen für nichttragende Bauteile -
Teil 4: Vorhangfassaden - Teilausführung

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Foreword

This document (EN 1364-4:2014) 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of an identical text or by endorsement, at the latest by August 2014, and conflicting national standards shall be withdrawn at the latest by August 2014.

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 1364-4:2007.

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Introduction

WARNING

The attention of all persons concerned with managing and carrying out this fire resistance test is drawn to the fact that fire testing can be hazardous and that there is a possibility that toxic and/or harmful smoke and gases can be developed during the test. Mechanical and operational hazards can 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 for determining the fire resistance of parts of curtain walling and of the perimeter seal. It examines the fire resistance to internal and external fire exposure of:

- the spandrel panel, i.e. downstand, upstand or a combination thereof, or
- the perimeter seal, or
- the fixing of the framing system (anchoring) used to attach the curtain walling to the floor element, or
- combinations thereof.

Results from tests according to this standard form the basis for classification of curtain walling type A (see 3.3 for definition).

For curtain walling type B (see 3.4 for definition) results may be used to determine fire resistance of parts of a curtain walling to increase the field of application when previously tested to EN 1364-3. For intended classification EW and for corner/faceted specimens EN 1364-3 should be used.

This European Standard does not cover double skin façades, over-cladding systems and ventilated façade systems on external walls. It does not deal with the reaction to fire behaviour of curtain walling.

This standard is intended to be read in conjunction with EN 1363-1 and EN 1363-2 as well as EN 1364-3 for curtain walling type B.

NOTE Annex A gives informative guidance on the principles of testing parts of curtain walling and the test method.

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

EN 13119, *Curtain walling - Terminology*

EN 13501-1, *Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests*

EN 13501-2, *Fire classification of construction products and building elements — Part 2: Classification using data from fire resistance tests, excluding ventilation services*

EN 13830, *Curtain walling - Product standard*

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, EN 13119, EN 13830, EN ISO 13943 and the following apply.

3.1

anchoring

see *fixing of the framing system*

3.2

associated wall construction

form of construction required to close the vertical side of the furnace (not part of the test specimen)

3.3

curtain walling type A

curtain walling without fire resistant glazing outside the spandrel area – fire resistant only in the spandrel area

3.4

curtain walling type B

curtain walling with fire resistant glazing outside the spandrel area - fully fire resistant curtain walling

3.5

downstand

special type of spandrel panel, hanging down from or located in front of the floor

Note 1 to entry: See Figure A.2.

3.6

fire-resistant glazing

glazing system consisting of one or more transparent or translucent panes with a suitable method of mounting, with e.g. frames, seals and fixing materials, capable of satisfying the appropriate fire resistance criteria

3.7

fire resistant translucent or transparent spandrel panel

glass product, monolithic, laminated or insulating glass unit, manufactured by a particular manufacturer and intended to be used as spandrel panel in curtain walling, which is CE marked based on a classification according to EN 13501-2 in minimum one glazed construction

Note 1 to entry: The term “insulating” when used with “insulating glass unit” according to EN 1279–1, should not be confused with the term “insulation” used in classification standard EN 13501–2.

3.8

fixing of the framing system

system used to attach the curtain wall to the loadbearing floor. It contains the brackets but not the anchor or other devices used to fix the brackets to the floor

3.9

glazing materials

all materials used to glaze the fire resistant translucent or transparent spandrel panel into its frame

3.10

horizontally faceted curtain walling

curtain walling with an angle between horizontally adjacent infill panels at the common mullion (see Figure 1)

3.11

insulating glass unit (IGU)

glass product according to EN 1279–1

EN 1364-4:2014 (E)**3.12****over-cladding system**

protection system fixed to an external wall for weather protection

3.13**overrun time**

time of fire resistance in minutes beyond the envisaged classification time, achieved in the test

3.14**perimeter seal**

see EN 13119

3.15**standard configuration**

standard arrangement of curtain walling components in a test specimen

3.16**supporting floor**

representation of a floor, forming part of the test construction, to allow the fixing of the test specimen of the curtain walling and the installation of the perimeter seal

3.17**upstand**

special type of spandrel panel, standing up from or located in front of the floor

Note 1 to entry: See Figure A.2.

4 Test equipment**4.1 General testing principles**

Table 1 defines which specific standard test configuration may be used for each part of the curtain walling depending on the type of fire exposure and type of curtain walling.

The test equipment specified in EN 1363-1 and EN 1363-2 shall be used where applicable.

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