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KLAASITUD KONSTRUKTSIOONID

Extended application of results from fire resistance
tests - Non-loadbearing walls - Part 4: Glazed
constructions

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

| | |
|---|--|
| See Eesti standard EVS-EN 15254-4:2018 sisaldab Euroopa standardi EN 15254-4:2018 ingliskeelset teksti. | This Estonian standard EVS-EN 15254-4:2018 consists of the English text of the European standard EN 15254-4:2018. |
| Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas | This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation. |
| Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 05.12.2018. | Date of Availability of the European standard is 05.12.2018. |
| Standard on kättesaadav Eesti Standardikeskusest. | The standard is available from the Estonian Centre for Standardisation. |

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EUROPEAN STANDARD

EN 15254-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 13.220.50; 91.060.10

Supersedes EN 15254-4:2008+A1:2011

English Version

Extended application of results from fire resistance tests - Non-loadbearing walls - Part 4: Glazed constructions

Extension du champ d'application des résultats des
essais de résistance au feu - Éléments non-porteurs -
Partie 4 : Constructions vitrées

Erweiterter Anwendungsbereich der Ergebnisse von
Feuerwiderstandsprüfungen - Nichttragende Wände -
Teil 4: Verglaste Konstruktionen

This European Standard was approved by CEN on 28 September 2018.

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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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European foreword

This document (EN 15254-4:2018) 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of an identical text or by endorsement, at the latest by June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 15254-4:2008+A1:2011.

Relevant changes compared to the previous edition EN 15254-4:2008+A1:2011 include:

- a) Replacement of the term “glass product group” by “glass product range”;
- b) Deletion of aspects now covered in the direct field of application (DIAP) of standard EN 1364-1:2015;
- c) Modification of exchange rules for fire resistant glass;
- d) Additional rule for decrease in dimensions for fire resistant glazed elements with classification EW;
- e) Editorial review of the standard.

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

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

1 Scope

This document provides guidance and, where appropriate, defines procedures for variations of certain parameters and factors associated with the design of fire resistant glazed elements which have been tested in accordance with EN 1364-1:2015, and classified according to EN 13501-2.

Extended application of fire resistant glazed elements is based on test evidence.

This standard only applies to vertically installed fire resistant glazed elements.

This standard does not apply to door sets and openable windows according to EN 1634-1 and does not apply to curtain walling – full configuration or curtain walling – part configuration according to EN 1364-3 and EN 1364-4.

Glass block assemblies and paver units and channel-shaped glass as defined in EN 1051-1 and EN 572-7 are excluded. There is currently insufficient information available to enable rules for extended application to be developed for these products.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1279-1, *Glass in building - Insulating glass units - Part 1: Generalities, system description, rules for substitution, tolerances and visual quality*

EN 1363-1, *Fire resistance tests - Part 1: General Requirements*

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

EN 1364-1:2015, *Fire resistance tests for non-loadbearing elements - Part 1: Walls*

EN 1995-1-2, *Eurocode 5: Design of timber structures - Part 1-2: General - Structural fire design*

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 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*

EN 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*

EN 15269-5, *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*

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

EN ISO 12543-1, *Glass in building - Laminated glass and laminated safety glass - Part 1: Definitions and description of component parts (ISO 12543-1)*

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 13501-2, EN ISO 13943, EN ISO 12543-1, EN 1279-1 and EN 1364-1:2015, together with the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

charring rate

rate at which a test specimen responds to heat evidenced by the formation of a carbonaceous residue

[SOURCE: ISO 17493:2016, 3.1, modified]

Note 1 to entry Calculated as described in EN 1995-1-2.

3.2

resistance to fire classification

resistance to fire classification of the glazed element with respect to integrity E, radiation W and insulation I in accordance with EN 13501-2

3.3

fire resistant glass

glass product, (i.e. monolithic glass, laminated glass, insulating glass units), that when used in a glazed assembly, can have its performance determined and classified in accordance with EN 13501-2

Note 1 to entry The term “insulating” when used as an insulating glass unit according to EN 1279-1, should not be confused with the term “insulation” used in EN 13501-2 classification standard for fire resistant glazed element.

3.4

glass product range

group of fire resistant glass (see 3.3) products, including products from one or more glass product families, e.g. monolithic glass, laminated glass, insulating glass units, defined and produced by one manufacturer for which the characteristic resistance to fire from any one product within the range is valid for all other products within this range

Note 1 to entry: The glass product families are defined in the relevant product standards.

3.5

glazing system material

all materials used to glaze the fire resistant glass into its frame, e.g. glazing strips, beads and bead fixings, setting blocks, gaskets and sealant

Note 1 to entry: See example in Figure 1.