SLOVENSKI STANDARD
SIST EN 15269-1:2019

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Nadomešča:
SIST EN 15269-1:2010

Razširjena uporaba rezultatov preskusov požarne odpornosti in/ali dimotesnosti za vrata, zapore in okna, ki se odpirajo, vključno z njihovim okovjem - 1. del: Splošne zahteve

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 1: General requirements

Erweiterter Anwendungsbereich von Prüfergebnissen zur Feuerwiderstandsfähigkeit und/oder Rauchdichtigkeit von Türen, Toren und Fenstern einschließlich ihrer Baubeschläge - Teil 1: Allgemeine Anforderungen

Application étendue des résultats d'essais en matière de résistance au feu et/ou d'étanchéité à la fumée des blocs-portes, blocs-fermetures et ouvrants de fenêtre, y compris leurs éléments de quincaillerie intégrés - Partie 1: Exigences générales

Ta slovenski standard je istoveten z: **EN 15269-1:2019**

ICS:

13.220.50	Požarna odpornost gradbenih materialov in elementov	Fire-resistance of building materials and elements
91.060.50	Vrata in okna	Doors and windows

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EUROPEAN STANDARD

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ICS 13.220.50; 91.060.50

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English Version

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This European Standard was approved by CEN on 30 December 2018.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 15269-1:2019) has been prepared by Technical Committee CEN/TC 127 “Fire safety in buildings”, the secretariat of which is held by BSI.

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2019, and conflicting national standards shall be withdrawn at the latest by October 2019.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 supersedes EN 15269-1:2010.

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 document: 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.

Introduction

This document is one of a series of standards listed below and intended to be used for the purpose of producing an extended application report based on the evaluation of one or more fire resistance and/or smoke control tests. These documents may also be used to identify the best selection of test specimens required to cover a wide range of product variations.

EN 15269, *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*, consists of the following parts:

— *Part 1: General requirements*

— *Part 2: Fire resistance of hinged and pivoted steel doorsets*

— *Part 3: Fire resistance of hinged and pivoted timber doorsets and openable timber framed windows*

— *Part 5: Fire resistance of metal framed glazed hinged and pivoted doorsets and openable windows*

— *Part 6: Fire resistance for timber sliding doorsets (in preparation)*

— *Part 7: Fire resistance for steel sliding doorsets*

— *Part 10: Fire resistance of steel rolling shutters*

— *Part 11: Fire resistance of operable fabric curtains (in preparation)*

— *Part 20: Smoke control for hinged and pivoted steel, timber and metal framed glazed doorsets*

A review of the doorset construction parameters can indicate that one or more characteristics may be maintained or improved by a particular parameter variation. All evaluations should be made on the basis of retaining the fire resistance classifications obtainable from testing with EN 1634-1, including those lower than the test duration, or the smoke control classifications obtainable from testing with EN 1634-3.

However, this will never lead to an increased classification for any specific fire or smoke performance parameter beyond that achieved unless specifically identified in the relevant Construction Parameter Variation tables within this series of standards.

The classification of the resistance to fire of door, shutter and openable window assemblies foresees the addition of the symbol “C” indicating that the product also satisfies the requirements for self-closing. The “C” classification may be completed with the digits 0 to 5 according to the use category for durability of self-closing on the basis of details included in the relevant product standards. The effect on the “C” classification following an extended application process is not addressed in this series of standards. However, no parameter variation will prevent the doorset from achieving the fully closed position.

1 Scope

This document sets out the general principles for the extended application of test results obtained on fire resisting and smoke control doorsets, e.g. the types of pedestrian and industrial doors, operable fabric curtains and openable windows listed in the Introduction above when tested in accordance with EN 1634-1 and/or EN 1634-3.

This document provides the general principles which are intended to be used in conjunction with the relevant part of EN 15269 depending upon the specific product type to be evaluated.

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

EN 1634-1, *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware — Part 1: Fire resistance test for door and shutter assemblies and openable windows*

EN 1634-3, *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware— Part 3: Smoke control test for door and shutter assemblies*

EN 12519, *Windows and pedestrian doors— Terminology*

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

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

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 1634-1, EN 1634-3, EN 12519, EN 15725 and EN ISO 13943 and the following apply.

3.1
test result
outcome of a testing process and its associated procedures detailed within a specific test standard (which may include some processing of the results from testing of a number of specimens)

Note 1 to entry: A test result is expressed in terms of one or more fire performance parameter(s).

3.2
direct field of application of test results
DiAp
outcome of a process (involving the application of defined rules) whereby a test result is deemed to be equally valid for variations in one or more of the product properties and/or intended end use application(s)

3.3
extended field of application of test results
EXAP
outcome of a process (involving the application of defined rules that may incorporate calculation procedures) that predicts, for a variation of a product property and/or its intended end use application(s), a test result on the basis of one or more test results to the same standard

3.4
classification
process whereby the fire performance parameters obtained from the results of one test, or a set of tests, or from a process of extended application are compared with limiting values for those parameters that are set as criteria for achieving a certain classification

Note 1 to entry: This process is defined in EN 13501-2.

Note 2 to entry: The relevant classes and related criteria for fire resistance, for reaction to fire and for external fire exposure to roofs are specified in Commission Decisions (2000/367/EC, 2000/147/EC and 2001/671/EC as respectively amended).

3.5
agreed expert opinion
results of a dialogue between a group of experts who are accepted by their peers as being knowledgeable in a particular fire test and the performance of products in that test

Note 1 to entry: Such dialogue should take place within a recognized and properly constituted forum, such as CEN/TC 127 or the CPD GNB FSG. These agreed expert opinions are then transformed into rules that may form the basis of extended application. Agreed expert opinion will lead to a classification suitable for the application of CE marking.

3.6
expert judgement
view of a recognized expert in a particular fire test, and the performance of products in that test, that may be used for the purpose of interpreting or applying results of that test in connection with the application of the particular product into parts of works for the purposes of satisfaction of National Regulations

3.7
hinged and pivoted steel doorset or openable window
doorset or openable window with a leaf (ves) constructed using steel facing sheets and for which the hinges or pivots are attached directly to the steel leaf which may be prepared to incorporate a glass vision panel

Note 1 to Entry: Such doorsets are further defined in EN 15269-2.

3.8
hinged and pivoted timber doorset or openable window
doorset or openable window with a leaf (ves) constructed from timber based material and for which the hinges or pivots are attached directly to the timber leaf which may be prepared to incorporate a glass vision panel

3.9
hinged and pivoted metal framed glazed doorset or openable window
doorset or openable window with a leaf (ves) constructed from proprietary steel or aluminium using profiles sections designed to incorporate glass and/or panels and where the hinges or pivots are attached directly to the metal profile section

Note 1 to entry: Such doorsets are further defined in EN 15269-5.

3.10
hinged and pivoted glass doorset
doorset where the leaf (ves) is a glass panel which may or may not have a decorative perimeter section attached, but where the hinges or pivots are attached directly to the glass panel

3.11
sliding timber doorset
doorset with a leaf (ves) constructed from one or more panels of timber material where the supporting elements are connected to the timber leaf

3.12
sliding steel doorset
doorset with a leaf (ves) constructed from one or more panels of steel material where the supporting elements are connected to the steel leaf

3.13
folding timber doorset

doorset with a leaf (ves) constructed from a series of timber panels where any hinges or supporting elements are connected to the timber panels

3.14
folding steel doorset
doorset with a leaf (ves) constructed from a series of steel panels, with or without a lattice based gate support, where any hinges or supporting elements are connected to the steel panels or gate frame structure

3.15
sectional doorset
doorset with a leaf (ves) comprising of a number of interconnected sections

Note 1 to entry: For more information, see also definition in EN 12433-1.

3.16
steel rolling shutter
doorset with a leaf constructed from a series of lateral steel sections which are made to coil around a supporting barrel during the opening operation

3.17
operable fabric curtain
doorset with a leaf constructed from woven material combined with other materials in one or more sections

Note 1 to entry: The complete assembly includes any frames and/or guides.

3.18
composite doorset
doorset with a leaf constructed from woven material combined with other materials in one or more sections

4 General principles of extended application for fire resisting and/or smoke control door, shutter and openable window assemblies

The rules to evaluate the field of direct application of fire resisting or smoke control door, shutter and openable window assemblies are given in EN 1634-1 and EN 1634-3 respectively and are based on the results of a single test. The Direct Application rules relate to the more common forms of product constructions, for which experience of testing has provided the knowledge that such variations can be safely accepted. The extent of the permitted variations is generally conservative and is based on the minimum level of common agreement achieved.

This document identifies the principles to be followed during the preparation of the subsequent product related standards of the EN 15269 series which define the rules for the permitted variations of products from the tested specimen. These rules, which are created in a committee by agreed expert opinion based on experience of fire resistance testing and interpolation of test results, will form the basis of the field of extended application. When these rules are applied, they will lead to a classification suitable for the application of CE marking to the modified product.

Expert judgement cannot form any part of the extended application for CE marking but may be obtained by manufacturers as a voluntarily judgement outside of CE marking.

The rules for the extended application of fire resisting and/or smoke control doorsets and openable windows are divided into the following basic construction types:

— hinged and pivoted doors;

— openable windows;

— sliding doors;

— folding doors (not currently covered by published EXAP Standards);

— sectional doors (not currently covered by published EXAP Standards);

— rolling shutters;

— operable fabric curtains.

Within each construction type, each of the following materials, when relevant, are then considered separately:

— timber;

— steel;

— aluminium;

— glass;

— textile (fabric curtains);

— composite.

Each appropriate material selection is covered in a relevant part of EN 15269.

The annexes to each part of EN 15269 give details of the various construction parameters and their potential influence on test performance. Any construction parameter which include changes in dimension for another numeral property is related to the nominal value only and do not include standard manufacturing tolerances.

A manufacturer may select an appropriate test programme to fulfil the extended application requirements for the product range.

An extended application report shall be produced in accordance with EN 15725 based on one or more of the following (for which each supporting document may or may not have been generated by the same organization or at the same time):

— a test report for each of the tests carried out;

— an analysis against the relevant construction parameter table;

— any calculations (where relevant and as defined in accordance with the relevant part of EN 15269).

This extended application report will then be used to gain the classification in accordance with EN 13501-2.

The roles of extended application, how it fits within the third party product certification and the CE marking system using the relevant product standard, and how it includes direct application, are illustrated in Annexes B and C respectively and B.1 and C.1.

An example of the process for using the Extended Application standards to design fire resistance tests and produce EXAP reports is provided in Annex D.

5 Determination of the field of extended application

5.1 Before there can be any consideration for extended application the doorset shall have been tested in accordance with EN 1634-1 or EN 1634-3 to achieve a test result which could generate a classification in accordance with EN 13501-2 at least equal to the classification subsequently required from extended application considerations.

5.2 Primary evidence for undertaking extended application shall have been generated from full tests carried out solely to European Standards. Secondary evidence, e.g. indicative tests to ENs or prENs, may also be used in support of extended application in certain cases. The acceptability of using indicative tests is given in the relevant extended application standard and varies according to the different parameters relevant for different elements.

5.3 All evaluations shall be made on the basis of retaining the classification obtained from testing to EN 1634-1 or EN 1634-3.

5.4 If, when following the extended application procedure, any part of the classified product cannot be covered by the extended application rules, then that part shall be omitted from the subsequent extended application report and classification report.

5.5 Extended application derived using test results obtained from non-EN standards is not admissible unless specifically allowed in the relevant construction parameter variation tables within this series of standards.