

STN	Rozšírená aplikácia výsledkov skúšok požiarnej odolnosti a/alebo tesnosti proti prieniku dymu zostáv dverí, uzáverov a otváracích okien a prvkov ich stavebného kovania Časť 11: Požiarna odolnosť otváracích textilných roliet	STN EN 15269-11+AC 92 0223
------------	--	--

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/19

Obsahuje: EN 15269-11:2018+AC:2019

Oznámením tejto normy sa ruší
STN EN 15269-11 (92 0223) z novembra 2018

129017

EUROPEAN STANDARD

EN 15269-11:2018+AC

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2019

ICS 13.220.50; 91.060.50

Supersedes EN 15269-11:2018

English Version

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 11: Fire resistance for operable fabric curtains

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 11 : Résistance au feu des rideaux en toile manoeuvrables

Erweiterter Anwendungsbereich von Prüfergebnissen zum Feuerwiderstand und/oder zur Rauchdichtigkeit von Türen, Toren, Abschlüssen und Fenstern einschließlich ihrer Baubeschläge - Teil 11: Feuerwiderstandsfähigkeit von Feuerschutzvorhängen

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 2019-04-17.

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 20 March 2019.

This European Standard was approved by CEN on 8 January 2018 and includes Corrigendum issued by CEN on 3 March 2019.

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.

CEN members are the national standards bodies of 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 United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN 15269-11:2018+AC:2019 (E)

Contents	Page
European foreword	4
Introduction	6
1 Scope	7
2 Normative references	7
3 Terms, definitions and abbreviations	8
3.1 Terms and definitions.....	8
3.2 Abbreviations used for Annex B and C calculations	8
4 Determination of the field of extended application	11
4.1 General	11
4.2 Procedure for maximum field of extended application	11
4.3 Interpretation of test results.....	12
4.4 Additional measurements.....	12
5 Extended application report	13
6 Classification report.....	13
Annex A (normative) Construction parameter variations for Fabric Curtain assemblies	14
Annex B (normative) Calculations for curtain assemblies carrying mainly horizontal loads (closed curtains).....	54
B.1 Scope of calculation	54
B.2 Calculation principles	54
B.3 Calculation method increasing curtain width and height	54
B.4 Test specimen	55
B.5 Shrinkage of curtain material	55
B.6 Maximum fabric stress in up scaled curtain in horizontal direction	58
B.7 Maximum fabric stress in up scaled curtain in vertical direction.....	60
B.8 Maximum Load bearing capacity (Figure A.7, Figure A.8)	62
B.9 Calculation of limiting stress.....	63
B.10 Barrel calculations.....	64

B.11	Barrel support bracket calculations	65
B.12	Axle calculations.....	67
B.13	Endplate calculations	68
B.14	Bottom bar expansion allowance.....	70
B.15	Maximum length of the bottom bar resp. bottom bar sections see Figure A.49 / Figure A.50.....	71
B.16	Allowances for thermal expansion	71
Annex C	(normative) Calculations for curtain assemblies carrying mainly vertical loads (overlapping modular curtains, curtains without retaining assemblies).....	72
C.1	Scope of calculation.....	72
C.2	Calculation principles.....	72
C.3	Calculation method increasing curtain width and height.....	72
C.4	Test Specimen for modular systems	73
C.5	Shrinkage of curtain.....	73
C.6	Maximum fabric stress in up scaled curtain in vertical direction	75
C.7	Maximum fabric stress in up scaled curtain in horizontal direction.....	78
C.8	Maximum Load bearing capacity (Figure A.8)	80
C.9	Up scaling overlaps and end curtains.....	80
C.10	Example for increasing overlapping systems.....	81
C.11	Calculation of limiting stress	83
C.12	Barrel calculations	83
C.13	Barrel support bracket calculations	85
C.14	Axle calculations.....	86
C.15	Endplate calculations	87
C.16	Bottom bar expansion allowance.....	89
C.17	Maximum length of the bottom bar resp. bottom bar sections see Figure A.49 / Figure A.50.....	90
C.18	Allowances for thermal expansion	90
	Bibliography	91

EN 15269-11:2018+AC:2019 (E)**European foreword**

This document (EN 15269-11:2018+AC:2019) 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 September 2019, and conflicting national standards shall be withdrawn at the latest by September 2019.

This document includes Corrigendum 1 issued by CEN on 6 March 2019.

The start and finish of text introduced or altered by corrigendum is indicated in the text by tags AC.

This document supersedes EN 15269-11:2018.

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

EN 15269, *Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies, including their items of building hardware*, consists of the following parts:

- *Part 1: General requirements;*
- *Part 2: Fire resistance of hinged and pivoted steel door assembly;*
- *Part 3: Fire resistance of hinged and pivoted timber door assemblies and openable timber framed windows;*
- *Part 5: Fire resistance of hinged and pivoted, metal framed, glazed doorsets and openable windows AC deleted text AC;*
- *Part 6: Fire resistance of sliding timber door assemblies AC) AC;*
- *Part 7: Fire resistance of sliding steel door assemblies;*
- *Part 10: Fire resistance of steel rolling shutter assemblies;*
- *Part 11: Fire resistance of operable fabric curtains AC deleted text AC;*
- *Part 20: Smoke control for hinged and pivoted steel, timber and metal framed glazed doorsets.*

¹⁾ Under preparation.

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.

EN 15269-11:2018+AC:2019 (E)**Introduction**

This European Standard is one of a series of standards 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 standards may also be used to identify the best selection of test specimens required to cover a wide range of product variations.

Before there can be any consideration for extended application the doorset should have been tested in accordance with EN 1634-1 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.

A review of the door assembly construction parameters can indicate that one or more characteristics may be improved by a particular parameter variation. All evaluations should be made on the basis of retaining the fire resistance classifications obtainable from testing to EN 1634-1, including those lower than the test duration. However, this should never lead to an increased classification for any specific fire resistance and/or smoke control performance parameter beyond that achieved during any one test unless specifically identified in the relevant Construction Parameter Variation tables within this series of standards.

The effect on the maintaining of the self closing function (C-classification) of the door assemblies following an extended application process is not addressed in this series of standards.

1 Scope

This document covers vertically mounted types of manual or powered, operable fabric curtain assemblies with downward closing operation. Curtain systems are different from (are separated from) door systems due to their not rigid closure element typically made of thin walled materials as for instance woven or knitted fabrics and foils. These closure elements are not able to carry significant loads normal to their surface by their bending stiffness. In other words: curtain systems are separated from door systems because they can only conduct pulling forces by tensile stress in plane to their surface. Pushing forces are not conducted in plane to their surface.

This document establishes the methodology for extending the application of test results obtained from test(s) conducted in accordance with the EN 1634-1 test method for shutters.

Subject to the completion of the appropriate test or tests selected from those identified in Clause 4, the extended application may cover all or some of the following non-exhaustive list of examples:

- uninsulated (E), radiation (EW) or insulated (EI1 or EI2) classifications;
- coiling mechanisms;
- wall/ceiling fixed elements;
- items of building hardware;
- decorative finishes;
- intumescent, draught or acoustic seals;
- alternative supporting construction(s).

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

EN 15269-1, *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*

EN 1993-1-2, *Eurocode 3: Design of steel structures — Part 1-2: General rules — Structural fire design*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN