Tabelle A.2 — Prüfung mit einer Anordnung zur Einhaltung von E 1.1.1 oder E.1.1.2

Geprüft	Ermöglicht																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
1	x	x							x	x	x	x															x		
2		x							x	x	x	x															x		
3	x	x	x	x	x	x	x	x	x	x	x	x													x	x	x		
4	x	x		x		x		x	x	x	x	x													x		x		
5	X	x		x	x	x	x	x	x	x	x	x													x	x	x		
6	x	x				x		x	x	x	x	x													x		x		
7	x	x		x		x	x	x	x	x	x	x													x	x	x		
8	x	x						x	x	x	x	x													x		x		
9									x																				
10									x	x	x	x																	
11									x		x	x																	
12									x		x	x																	
13	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
14	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
15	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
16	x	x		x		x		x	x	x	x	x				x		x		x	x	x	x	x	x	x	x	x	x
17	x	x	x	x	x	x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	x	x	x	x	x
18	x	x		x		x		x	x	x	x	x						x		x	x	x	x	x	x	x	x		x
19	x	x	x	x	x	x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	x	x	x	x	x
20	x	x		x		x		x	x	x	x	x						x		x	x	x	x	x	x	x	x		x
21	x	x		x		x		x	x	x	x	x									x				x	x	x		
22	x	x		x		x		x	x	x	x	x									x	x	x	x	x	x	x		
23	x	x		x		x		x	x	x	x	x									x		x	x	x	x	x		
24	x	x		x		x		x	x	x	x	x									x		x	x	x	x	x		
25	x	x							x	x	x	x													x		x		
26	x	x		x		x		x	x	x	x	x													x	x	x		
27									x	x	x	x															x		
28	x	x		x		x		x	x	x	x	x				x	x	x	x	x	x	x	x	x	x	x	x	x	x
29	x	x		x		x		x	x	x	x	x									x	x	x	x	x	x	x		x

Anhang B
(normativ)

Konstruktionsparametervariation durch Anwendung zusätzlicher Gewichte

Variationen (Tabelle A.1 dieses Dokuments) sind möglich, vorausgesetzt, dass die durch die Variation hervorgerufene Gesamtmasse (Gewicht) des Türflügels nicht gesteigert wird. Der Probekörper Prüfung der Dauerhaftigkeit der Selbstschließung kann mit zusätzlichen Gewichten beladen werden, die an der Oberfläche des Türflügels angebracht werden, um eine größere Masse (Gewicht) der variierten Tür unter den folgenden Bedingungen zu simulieren:

Zusätzliche Gewichte müssen gleichermaßen außerhalb und innerhalb des gefüllten Paneels angebracht werden, sodass der Schwerpunkt und die Masse die variierte Tür nachbilden.

Für zweiflügelige Türen ist die Regel entsprechend anzuwenden.

– Entwurf –

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT prEN 17020-4

February 2020

ICS 13.220.50; 91.060.50

English Version

Extended application of test results on durability of self-closing for doorsets and openable windows - Part 4: Durability of self-closing of fire resistance hinged and pivoted metal framed glazed doorsets and openable windows

Erweiterter Anwendungsbereich von Prüfergebnissen zur Dauerhaftigkeit der Selbstschließung für Feuerschutz- und/oder Rauchschutztüren und zu öffnende Fenster - Teil 4: Dauerhaftigkeit der Selbstschließung von verglasten Drehflügeltüren und zu öffnenden Fenstern mit Metall(rohr)rahmen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 127.

If this draft becomes a European Standard, 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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European foreword

This document (prEN 17020-4:2020) has been prepared by Technical Committee CEN/TC 127 “Fire safety in buildings”, the secretariat of which is held by BSI.

This document is currently submitted to the CEN Enquiry.

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

Introduction

The EN 15269 series of standards covering 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, does not include the durability of self-closing of the doorsets following an extended application process. This document is one of the EN 17020 series of standards intended to be used for the purpose of producing an extended application report based on the evaluation of one or more durability self-closing tests. These European Standards may also be used to identify the best selection of test specimens required to cover a wide range of product variations.

1 Scope

This document covers single and double leaf, hinged and pivoted metal framed, glazed doorsets or openable windows as covered by EN 15269-5 or EN 15269-20.

This document prescribes the methodology for extending the application of test results obtained from durability of self-closing test(s) conducted in accordance with EN 1191.

Subject to the completion of the appropriate self-closing test(s), the extended application may cover all or some of the following non-exhaustive list:

— doorsets and openable windows;

— door/window leaf;

— wall/ceiling fixed elements (frame/suspension system);

— glazing and non-glazed panels in doorset and openable window, side, transom and/or overpanels;

— items of building hardware;

— decorative finishes;

— intumescent, smoke, 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 1154, *Building hardware - Controlled door closing devices - Requirements and test methods*

EN 1191, *Windows and doors - Resistance to repeated opening and closing - Test method*

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 1935, *Building hardware - Single-axis hinges - Requirements and test methods*

EN 12209, *Building hardware - Mechanically operated locks and locking plates - Requirements and test methods*

EN 13501-2:2016, *Fire classification of construction products and building elements — Part 2: Classification using data from fire resistance tests, excluding ventilation services*

EN 13637, *Building hardware - Electrically controlled exit systems for use on escape routes - Requirements and test methods*

EN 14846, *Building hardware - Locks and latches - Electromechanically operated locks and striking plates - Requirements and test methods*

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 15269-5:2014+A1:2016, *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 15269-20, *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 20: Smoke control for hinged and pivoted steel, timber and metal framed glazed doorsets*

EN 15685:2011, *Building hardware – Multipoint locks, latches and locking plates - Requirements and test methods*

EN 16034, *Pedestrian doorsets, industrial, commercial, garage doors and openable windows – Product standard, performance characteristics – Fire resistance and/or smoke control characteristics*

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 1191, EN 1363-1, EN ISO 13943, EN 1634-1, EN 1634-3, EN 12519, EN 15269-1, EN 15269-5 and EN 15269-20, and the following apply.

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

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

3.1
full scale test
test of a full size doorset/openable window in accordance with EN 1191

4 Determination of the field of extended application

4.1 General

4.1.1 Before there can be any consideration for extended application, the doorset/openable window shall have been tested with EN 1191 to achieve a test result which could generate a classification in accordance with EN 13501-2 and EN 16034.

4.1.2 A review of the doorset/openable window construction parameters can indicate that one or more characteristics may be improved by a particular parameter variation. All evaluations shall be made on the basis of retaining the classifications obtainable from testing to EN 1191, including those with a lower number of opening and closing cycles. However, this shall never lead to an increased classification for any specific parameter beyond that achieved by testing, unless specifically identified in the relevant Construction Parameter Variation tables.

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

4.2 Procedure for evaluation

4.2.1 Identify the variations from the original test specimen(s) which are required to be covered by an extended application report.

4.2.2 Locate the variations in the appropriate parameter variation by reference to columns (1) and (2) of Annex A, Table A.1.

4.2.3 Establish from the contents of column (3) of Annex A, Table A.1 whether any extended application is available without the need for further testing.

4.2.4 Where this is deemed to be possible, this can be recorded in the extended application report, together with any appropriate restrictions and the stated rules from column (3) in Annex A, Table A.1.

4.2.5 Where the variations required can only be achieved from additional testing according to column (4), the additional test can be made on a similar specimen type to the original test against which the extended application is sought. Alternatively, column (4) in Annex A, Table A.1 identifies an option for alternative testing and relevant test parameters.

4.3 Procedure for maximum field of extended application

4.3.1 It is possible to provide a limited field of extended application from the results of a single test. However, where a manufacturer intends to produce a range of doorsets and openable windows incorporating single doors and also double doors with or without glazing, with alternative elements of building hardware, etc., it is recommended that careful consideration is given to the complete range of doorset designs and openable window designs and options in order to minimize the testing required before testing commences.

4.3.2 Establish all the parameter variations which are required to be part of the product range.

4.3.3 Determine which are the most important specification requirements and incorporate as many as possible into the specimen(s) for the first tests in the series.

4.3.4 Conduct the first durability test or a series of tests and then establish which of the original desired parameter variations have not been covered by this test(s).

4.3.5 Identify these parameter variations in Annex A, Table A.1 and establish if any extended application is possible without further testing.

4.3.6 Record this for the extended application report together with any restrictions and rules given in column (3) in Annex A, Table A.1.

4.3.7 Evaluate which, if any, of the desired parameter variations have not been covered by the initial field of extended application derived from 4.3.6 above.

4.3.8 Determine if the product range is to include only single leaf doorsets or if the range is also to include double leaf configurations. Where only single doorsets are to be part of the product range, the outstanding construction parameter variations shall only be incorporated into specimens for the single leaf doorsets. Where single leaf and double leaf doorsets are to be included in the product range, the outstanding construction parameter variations for the extended application of single leaf doorsets may