SLOVENSKI STANDARD

SIST EN 12207:2017

01-februar-2017

Nadomešča:
SIST EN 12207:2000

Okna in vrata - Prepustnost zraka na pripirah - Klasifikacija

Windows and doors - Air permeability - Classification

Fenster und Türen - Lutfdurchlässigkeit - Klassifizierung

Fenêtres et portes - Perméabilité à l'air - Classification

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Ta slovenski standard je istoveten z: SIST EN 12207:2016 **EN 12207:2016**

ICS:

91.060.50	Vrata in okna	Doors and windows

SIST EN 12207:2017 en,fr,de

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EUROPEAN STANDARD

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Supersedes EN 12207:1999

English Version

Windows and doors - Air permeability - Classification

Fenêtres et portes - Perméabilité à l'air - Classification

Fenster und Türen - Luftdurchlässigkeit - Klassifizierung

This European Standard was approved by CEN on 15 October 2016.

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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 COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 12207:2016 E

EN 12207:2016 (E)

Contents

European foreword

This document (EN 12207:2016) has been prepared by Technical Committee CEN/TC 33 "Doors, windows, shutters, building hardware and curtain walling", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by June 2017, and conflicting national standards shall be withdrawn at the latest by June 2017.

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 12207:1999.

The revision of this European Standard clarifies only the classification method and does not affect existing classification evidence of EN 12207:1999.

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

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1 Scope

This European Standard defines the classification of test results for:

— windows; and

— external and internal pedestrian doorsets;

completely assembled, of any materials after testing in accordance with EN 1026.

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 1026, *Windows and doors - Air permeability - Test method*

3 Terms and definitions

For the purposes of this document the terms and definitions given in EN 1026 apply.

4 Classification

4.1 General

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The classification is based on a comparison of the air permeability of the test specimen related to overall area and on the air permeability related to the length of opening joint(s).

4.2 Classification based on the air permeability related to the overall area

The total air permeability through the test specimen, measured in accordance with EN 1026 is divided by its overall area and the result recorded in $m^3/(h \cdot m^2)$.

A range of classes is defined for air permeability related to the overall area.

4.3 Classification based on the air permeability related to the length of opening joint(s)

The total air permeability through the test specimen, measured in accordance with EN 1026 is divided by the length of the opening joints and the result recorded in $m^3/(h \cdot m)$.

A range of classes is defined for air permeability related to the total length of opening joint(s).

4.4 Definition of the classes

The reference air permeabilities for overall area and opening joint length are defined at a reference test pressure of 100 Pa. For other pressure steps, the following equation is used:

$$Q = Q_{100}\left(\frac{p}{100\text{Pa}}\right)^{\frac{2}{3}}$$

where

Q_{100} is the reference air permeability in cubic metres per hour at a test pressure of 100 Pa;

Q is the air permeability in cubic metres per hour (m^3/h) at a test pressure p, (p in Pascal).

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The lines in Figure A.1 (for windows and pedestrian doorsets) and Figure A.2 (for internal pedestrian doorsets) defining the upper limits of each class are derived from the reference air permeabilities at 100 Pa related to the overall area and the length of opening joint (see 4.5 and 4.6).

A specimen belongs to a specified class if the measured air permeability does not exceed the upper limit at any test pressure step in that class.

4.5 Classification based on the overall area

4.5.1 Classification for windows and pedestrian doorsets

Table 1 — Reference air permeability related to overall area

Class	Reference air permeability at 100 Pa $m^3/(h \cdot m^2)$	Maximum test pressure Pa
1	50	150
2	27	300
3	9	600
4	3	600

NOTE   This table also applies to internal pedestrian doorsets upon customer's request.

4.5.2 Classification for internal pedestrian doorsets

Table 2 — Reference air permeability related to overall area

Class	Reference air permeability at 100 Pa $m^3/(h \cdot m^2)$	Maximum test pressure Pa
A	50	100
B	27	100
C	9	150
D	3	150

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4.6 Classification based on opening joint length

4.6.1 Classification for windows and pedestrian doorsets

Table 3 — Reference air permeability related to opening joint length

Class	Reference air permeability at 100 Pa m^3/(h · m)	Maximum test pressure Pa
1	12,50	150
2	6,75	300
3	2,25	600
4	0,75	600

NOTE   This table also applies to internal pedestrian doorsets upon customer's request.

4.6.2 Classification for internal pedestrian doorsets

Table 4 — Reference air permeability related to opening joint length

Class	Reference air permeability at 100 Pa m^3/(h · m)	Maximum test pressure Pa
A	12,50	100
B	6,75	100
C	2,25	150
D	0,75	150

4.7 Relation between the classifications based on the overall area and the length of the opening joint

If a specimen is classified according to the overall area and the length of the opening joint, which give:

— the same class, the specimen shall be classified in one and the same class;

— two adjacent classes, the specimen shall be classified in the most favourable class (with lower rate);

— a difference of two classes, the specimen shall be classified in the mean class;

— a difference of more than two classes, the specimen shall not be classified.

NOTE   For windows without any opening parts, no classification regarding the length of the opening joint will be made.

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If a window or a pedestrian doorset does not reach at least class 1 respectively class A based on both the overall area and the length of opening joint, when tested either with positive or negative pressure, it shall not be classified. There shall be no individual classification for either positive or negative pressure. Therefore it is necessary to evaluate each test separately.

That means:

— positive pressure based on the overall area;

— negative pressure based on the overall area;

— positive pressure based on the length of opening joint, not applicable for fixed windows;

— negative pressure based on length of opening joint, not applicable for fixed windows.

Every classification shall reach at least class 1 respectively class A.

The overall classification is the numeral average of the two air permeability values (m^3/h) at each pressure step tested according to EN 1026. The results, related to the overall area and the length of opening joint, shall be summarized as stated above. But only if all test results have reached a classification of class 1 respectively class A or better an overall classification of class 1 respectively class A will be possible.

5 Classification report

In addition to the information given in the test report, at least the following shall be recorded:

— the classification of the specimen according to:

— the overall area;

— the length of opening joint(s);

— the final classification of the specimen.