



SLOVENSKI STANDARD

SIST EN 12365-1:2003

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Building hardware - Gasket and weatherstripping for doors, windows, shutters and curtain walling - Part 1: Performance requirements and classification

Baubeschläge - Dichtungen und Dichtungenprofile für Fenster, Türen und andere Abschlüsse sowie vorgehängte Fassaden - Teil 1: Anforderungen und Klassifizierung

Quincaillerie pour le bâtiment - Profils d'étanchéité de vitrage et entre ouvrant et dormant pour portes, fenestres, fermetures et façades rideaux - Partie 1: Exigences de performance et classification

Ta slovenski standard je istoveten z: **EN 12365-1:2003**

ICS:

91.060.50 Vrata in okna Doors and windows

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EUROPEAN STANDARD
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Building hardware - Gasket and weatherstripping for doors, windows, shutters and curtain walling - Part 1: Performance requirements and classification

Quincaillerie pour le bâtiment - Profilés d'étanchéité de vitrage et entre ouvrant et dormant pour portes, fenêtres, fermetures et façades rideaux - Partie 1: Exigences de performance et classification

Baubeschläge - Dichtungen und Dichtungenprofile für Fenster, Türen und andere Abschlüsse sowie vorgehängte Fassaden - Teil 1: Anforderungen und Klassifizierung

This European Standard was approved by CEN on 1 August 2003.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This document (EN 12365-1:2003) 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 March 2004, and conflicting national standards shall be withdrawn at the latest by March 2004.

EN 12365, *Building hardware* — Gaskets and weatherstripping, consists of the following Parts:

- *Part 1 : Performance requirements and classification.*
- *Part 2 : Linear compression force test method.*
- *Part 3 : Deflection recovery test method.*
- *Part 4 : Recovery after accelerated ageing test method.*

The performance requirements and classification in this Part of EN 12365 relate to test methods given in Parts 2, 3 and 4.

This Standard is one of a series of European Standards for building hardware.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

EN 12365-1:2003 (E)**1 Scope**

This European Standard specifies the performance requirements of gaskets and weatherstripping for the control of the passage of air, water, noise and energy between openable and fixed parts of doors, windows, shutters and curtain walling.

The general performance requirements in this Standard are applicable to gaskets and weatherstripping of all materials.

This European Standard is not applicable to sealants, mastics, putties, or any such materials which are extruded in liquid or viscous form into the final place of use.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of this publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 12365-2, *Building hardware — Gaskets and weatherstripping for doors, windows, shutters and curtain walling — Part 2: Linear compression force test methods.*

EN 12365-3, *Building hardware — Gaskets and weatherstripping for doors, windows, shutters and curtain walling — Part 3: Deflection recovery test method.*

EN 12365-4, *Building hardware — Gaskets and weatherstripping for doors, windows, shutters and curtain walling — Part 4: Recovery after accelerated ageing test method.*

prEN 12519:2003, *Windows and doors - Terminology*

3 Terms and definitions

For the purposes of this European Standard the terms and definitions given in prEN 12519:2003 and the following apply.

3.1**deflection recovery**

ability of a gasket or weatherstripping to recover its free height after being compressed or deflected

3.2**free height**

height of the gasket or weatherstripping at zero load

3.3**gasket**

packing material firmly held between contact surfaces on two components whose joint is to be sealed

3.4**linear compression force**

force needed to deflect a specimen to its maximum working range, at a temperature of $23\text{ °C} \pm 2\text{ °C}$

3.5**maximum working temperature**

condition below which the gasket or weatherstripping is considered to be capable of performing

3.6**minimum width**

- a) the minimum width of a gasket is the sum of the gaps between the infilling and the frame or bead, each side;
- b) the minimum width of weatherstripping is the distance between a point related to the mounting surface and a point of the contact surface.

3.7**product**

building product such as a window or a door

3.8**sample**

complete batch of test material (profile), as supplied by the manufacturer, and from which the test pieces shall be cut

3.9**specimen**

one or more test pieces mounted ready to be placed in the test apparatus, so as to be tested together as one unit

3.10**test pieces**

lengths of material cut at random from various places within the sample to provide test specimens

3.11**user**

person who is supplied with the gaskets or weatherstripping for use in the product

3.12**weatherstripping**

strip, often of flexible material, attached to a door, window or shutter, to cover the space between the edge or bottom of the door, window or shutter and the frame or threshold

3.13**working range**

distance through which a gasket or weatherstripping can be compressed or deflected when used in an assembly

4 Classification**4.1 Coding system**

For the purposes of this European Standard, gaskets and weatherstripping for use on doors, windows, shutters and curtain walling shall be classified according to the following six digit coding system (see Table 1) described in 4.2 to 4.7.

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Table 1

Digit	1	2	3	4	5	6
Category	Category of use	Working range	Linear compression force	Working temperature range	Deflection recovery	Recovery after ageing

4.2 Category of use (first digit)

Two categories are identified:

- type G: gasket;
- type W: weatherstripping.

4.3 Working range (second digit)

Nine grades are identified:

- grade 1: ≤ 1 mm;
- grade 2: > 1 mm to ≤ 2 mm;
- grade 3: > 2 mm to ≤ 4 mm;
- grade 4: > 4 mm to ≤ 6 mm;
- grade 5: > 6 mm to ≤ 8 mm;
- grade 6: > 8 mm to ≤ 10 mm;
- grade 7: > 10 mm to ≤ 15 mm;
- grade 8: > 15 mm to ≤ 30 mm;
- grade 9: > 30 mm.

4.4 Linear compression force (third digit)

Nine grades are identified:

- grade 1: ≤ 10 N/m;
- grade 2: > 10 N/m to ≤ 20 N/m;
- grade 3: > 20 N/m to ≤ 50 N/m;
- grade 4: > 50 N/m to ≤ 100 N/m;
- grade 5: > 100 N/m to ≤ 200 N/m;
- grade 6: > 200 N/m to ≤ 500 N/m;
- grade 7: > 500 N/m to ≤ 700 N/m;

- grade 8: > 700 N/m to ≤ 1 000 N/m;
- grade 9: > 1 000 N/m.

4.5 Working temperature range (fourth digit)

Six grades are identified:

- grade 1: 0 °C to +45 °C;
- grade 2: -10 °C to +55 °C;
- grade 3: -20 °C to +85 °C;
- grade 4: -25 °C to +100 °C;
- grade 5: -40 °C to +70 °C;
- grade 6: 0 °C to +200 °C.

4.6 Deflection recovery (fifth digit)

Eight grades are identified:

- grade 0: no performance requirement;
- grade 1: > 30 % to 40 %;
- grade 2: > 40 % to 50 %;
- grade 3: > 50 % to 60 %;
- grade 4: > 60 % to 70 %;
- grade 5: > 70 % to 80 %;
- grade 6: > 80 % to 90 %;
- grade 7: > 90 %.

4.7 Recovery after ageing (sixth digit)

Eight grades are identified:

- grade 1: no performance requirement;
- grade 1: > 30 % to 40 %;
- grade 2: > 40 % to 50 %;
- grade 3: > 50 % to 60 %;
- grade 4: > 60 % to 70 %;

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