

Glass in building - Insulating glass units - Part 4: Methods of test for the physical attributes of edge seals

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Methods of test for the physical attributes of edge
seals

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1279-4:2002 sisaldab Euroopa standardi EN 1279-4:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 06.08.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1279-4:2002 consists of the English text of the European standard EN 1279-4:2002.</p> <p>This document is endorsed on 06.08.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard is the product standard for insulating glass units, which defines insulating glass units, and ensures by means of an adequate evaluation of conformity to this standard that over time: - energy savings are made because the U-value and solar factor do not change significantly; - health is preserved because sound reduction and vision do not change significantly; - safety is provided because mechanical resistance does not change significantly</p>	<p>Scope:</p> <p>This European Standard is the product standard for insulating glass units, which defines insulating glass units, and ensures by means of an adequate evaluation of conformity to this standard that over time: - energy savings are made because the U-value and solar factor do not change significantly; - health is preserved because sound reduction and vision do not change significantly; - safety is provided because mechanical resistance does not change significantly</p>
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Võtmesõnad: insulating g, laminated glass, loss of gas, materials testing, measuring techniques, methods, multilayer insulating glass, partitions, physical properties, rim, roofs, specification (approval), specifications, symbols, testing, testing conditions, tightness, windows

ICS 81.040.20

English version

**Glass in building - Insulating glass units - Part 4: Methods of test
for the physical attributes of edge seals**

Verre dans la construction - Vitrage isolant préfabriqué
scellé - Partie 4: Méthodes d'essai des propriétés
physiques des produits de scellement

Glas im Bauwesen - Mehrscheiben-Isolierglas - Teil 4:
Prüfmethoden der physikalischen Eigenschaften des
Randverbundes

This European Standard was approved by CEN on 5 March 2002.

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, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

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Foreword

This document EN 1279-4:2002 has been prepared by Technical Committee CEN/TC 129 "Glass in building", the secretariat of which is held by IBN.

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 January 2003, and conflicting national standards shall be withdrawn at the latest by January 2003.

The described testing is part of type evaluation of insulating glass units.

This Part of the standard does not stand alone, it is part of one standard:

- prEN 1279-1, Glass in building - Insulating glass units - Part 1: Generalities, dimensional tolerances and rules for the system description.
- prEN 1279-2, Glass in building - Insulating glass units - Part 2: Long term test method and requirements on moisture vapour penetration.
- prEN 1279-3, Glass in building - Insulating glass units - Part 3: Long term test method and requirements for gas leakage rate and for gas concentration tolerances.
- EN 1279-4, Glass in building - Insulating glass units - Part 4: Methods of test for the physical attributes of edge seals.
- prEN 1279-5, Glass in building - Insulating glass units - Part 5: Evaluation of conformity.
- EN 1279-6, Glass in building - Insulating glass units - Part 6: Factory production control and periodic tests.

The annexes A, B, C and D are normative. The annexes E and F are informative.

This standard includes a Bibliography.

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, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard is the product standard for insulating glass units, which defines insulating glass units, and ensures by means of an adequate evaluation of conformity to this standard that over time:

- energy savings are made because the U-value and solar factor do not change significantly;
- health is preserved because sound reduction and vision do not change significantly;
- safety is provided because mechanical resistance does not change significantly.

It covers additional characteristics that are of importance for trade. Marking conditions are included.

For glass products with electrical wiring or connections for e.g. alarm or heating purposes, this standard covers only wiring subject for electrical potential difference to earth less than 50 V a.c. or less than 75 V d.c.

The main intended uses of the insulating glass units are installations in buildings and constructions such as in windows, doors, curtain walling, roofs and partitions where there exists protection against direct ultraviolet radiation at the edges.

NOTE 1 In cases where there is no protection against direct ultraviolet radiation at the edges, such as structural sealant glazing systems, additional European technical specifications should be followed. See Bibliography [4] and [5].

NOTE 2 Units where the nature is only artistic are not part of this standard.

This European Standard, which is inextricably bound up with the other Parts of the standard, covers evaluation of the edge seal strength, and partial evaluation of moisture and gas permeation through sealants, by testing and/or report examination as means of verifying whether a product made in accordance with its system description, and its variations in accordance with prEN 1279-1, conforms with the relevant aspects of the definition of insulating glass units.

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 these 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 410, *Glass in building - Determination of luminous and solar characteristics of glazing.*

EN 1096, *Glass in building - Coated glass.*

prEN 1279-1, *Glass in building - Insulating glass units - Part 1: Generalities, dimensional tolerances and rules for the system description.*

prEN 1279-2, *Glass in building - Insulating glass units - Part 2: Long term test method and requirements on moisture vapour penetration.*

prEN 1279-3, *Glass in building - Insulating glass units - Part 3: Long term test method and requirements for gas leakage rate and for gas concentration tolerances.*

EN 1279-6, *Glass in building - Insulating glass units - Part 6: Factory production control and periodic tests.*