

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

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1279-3:2002 sisaldab Euroopa standardi EN 1279-3:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 13.12.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1279-3:2002 consists of the English text of the European standard EN 1279-3:2002.</p> <p>This document is endorsed on 13.12.2002 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: 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: 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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ICS 81.040.20

Võtmesõnad: classifications, fatigue tests, limit d, loss of gas, marking, materials testing, measuring techniques, methods, multilayer insulating glass, qualification tests, specification (approval), specifications, strength of materials, symbols, testing, testing conditions

ICS 81.040.20

English version

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

Verre dans la construction - Vitrage isolant préfabriqué
scellé - Partie 3: Méthode d'essai à long terme et
prescriptions pour le débit de fuite de gaz et pour les
tolérances de concentration du gaz

Glas im Bauwesen - Mehrscheiben-Isolierglas - Teil 3:
Langzeitprüfverfahren und Anforderungen bezüglich
Gasverlustrate und Grenzwerte für die
Gaskonzentration

This European Standard was approved by CEN on 1 September 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 1279-3:2002 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 May 2003, and conflicting national standards shall be withdrawn at the latest by May 2003.

This document is part of the series EN 1279 "*Glass in building - Insulating glass units*" that contains the following Parts:

- *Part 1: Generalities, dimensional tolerances and rules for the system description.*
- *Part 2: Long term test method and requirements for moisture penetration.*
- *Part 3: Long term test method and requirements for gas leakage rate and for gas concentration tolerances.*
- *Part 4: Methods of test for the physical attributes of edge seals.*
- *Part 5: Evaluation of Conformity.*
- *Part 6: Factory production control and periodic tests.*

The annexe A is normative. The annexes B and C are informative.

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:

- 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.

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

NOTE 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 [2] and [3].

This Part of this standard, which is inextricably bound up with the other Parts of the standard, covers:

- the gas leakage rate by testing;
- the gas concentration tolerances;

as one means of verifying whether a product made in accordance with its system description, 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 by amendment or revision. For undated references, the latest edition of the publication referred to applies (including amendments).

EN 572-1, *Glass in Building - Basic soda lime silicate glass products - Part 1: Definitions and general physical and mechanical properties.*

EN 572-2, *Glass in Building - Basic soda lime silicate glass products - Part 2: Float glass.*

EN 673, *Glass in Building - Determination of thermal transmittance (U value) - Calculation method.*

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

EN 1279-2, *Glass in Building - Insulating glass units - Part 2: Long term test method and requirements for moisture penetration.*

EN 1279-4, *Glass in Building - Insulating glass units - Part 4: Methods of test for the physical attributes of edge seals.*

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

prEN 12758, *Glass in Building - Glazing and airborne sound insulation - Definitions and determination of properties.*