# Ehitusklaas. Isolatsioonklaasi plokid. Osa 1: Üldnäitajad, mõõtelised lubatud kõrvalekalded ja süsteemide kirjeldamise eeskirjad

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



### EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

	Käesolev Eesti standard EVS-EN 1279- 1:2004 sisaldab Euroopa standardi EN 1279-1:2004 + AC:2006 ingliskeelset teksti.	This Estonian standard EVS-EN 1279- 1:2004 consists of the English text of the European standard EN 1279-1:2004 + AC:2006.	
	Käesolev dokument on jõustatud 23.09.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 23.09.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.	
	Standard on kättesaadav Eesti	The standard is available from Estonian	
	standardiorganisatsioonist.	standardisation organisation.	
	Käsitlusala:	Scope:	
	This European Standard is the product	This European Standard is the product	
	standard for insulating glass units, which	standard for insulating glass units, which	
	defines insulating glass units, and	defines insulating glass units, and	
	ensures by means of the evaluation of	ensures by means of the evaluation of	
	conformity to this standard that over time:	conformity to this standard that over time:	
	<ul> <li>energy savings are made because the</li> </ul>	<ul> <li>energy savings are made because the</li> </ul>	
	U-value and solar factor do not change	U-value and solar factor do not change	
	significantly; – health is preserved	significantly; – health is preserved	
	because sound reduction and vision do	because sound reduction and vision do	
	not change significantly; – safety is	not change significantly; – safety is	
	provided because mechanical resistance	provided because mechanical resistance	

provided because mechanical resistance does not change significantly. It covers characteristics that are of importance for trade. Marking conditions are included.

### ICS 81.040.20

**Võtmesõnad:** I, marking, materials testing, measurement, measuring techniques, mounting, multilayer insulating glass, properties, qualification tests, quality, specification (approval), specifications, symbols, testing, testing conditions, tolerances, tolerances (measurement)

## **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

## EN 1279-1

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ICS 81.040.20

English version

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

Verre dans la construction - Vitrage isolant préfabriqué et scellé - Partie 1 : Généralités, tolérances dimensionnelles et règles de description du système

Glas im Bauwesen - Mehrscheiben-Isolierglas - Teil 1: Allgemeines, Maßtoleranzen und Vorschriften für die Systembeschreibung

This European Standard was approved by CEN on 2 January 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, 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 1279-1: 2004) 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 December 2004, and conflicting national standards shall be withdrawn at the latest by December 2004.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative annex Z, which is an integral part of this document.

This European Standard "Glass in Building - Insulating glass units" consists of 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 annexes A and B are normative, and annex C is 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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### 1 Scope

This European Standard is the product standard for insulating glass units, which defines insulating glass units, and ensures by means of the 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 characteristics that are of importance for trade. Marking conditions are included.

NOTE 1: For glass products with electrical wiring or connections for, e.g. alarm or heating purposes, other directives, e.g. Low Voltage Directive, may apply.

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 2: 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.

Units that are intended for artistic purposes are excluded from this standard.

This Part of this European standard, which is inextricably bound up with the other Parts of the standard, covers the materials, the rules for the system description, the optical and visual quality and the dimensional tolerances for 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.

EN 572 Glass in Building - Basic soda lime silicate glass products -

Parts 1: Definitions and general physical and mechanical properties

Part 2: Float glass

Part 3: Polished wired glass

Part 4: Drawn sheet glass

Part 5: Patterned glass

Part 6: Wired patterned glass I

Part 8: Supplied and final cut sizes

EN 1096-1 Glass in Building - Coated glass - Part 1: Definitions and classification

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

EN 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

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

EN 1748-1-1 Glass in Building - Special Basic products - Part 1-1: Borosilicate glasses

EN 1748-2-1 Glass in Building - Special Basic products - Part 2-1: Glass ceramics - Definition and description

EN 1863-1 Glass in Building - Heat strengthened soda lime silicate glass - Part 1: Definition and description

EN 12150-1 Glass in Building - Thermally toughened soda lime silicate safety glass - Part 1: Definition and description

EN 12337-1 Glass in Building - Chemically strengthened soda lime silicate glass - Part 1: Definition and description

EN ISO 12543 Glass in Building - Laminated glass and laminated safety glass

Part 1: Definition and description of component parts (ISO 12543-1:1998)

Part 2: Laminated safety glass (ISO 12543-2:1998)

Part 3: Laminated glass (ISO 12543-3:1998)

Part 6: Appearance (ISO 12543-6:1998)

EN 13024-1 Glass in Building - Thermally toughened borosilicate safety glass - Part 1: Definition and description

prEN 14178-1 Glass in Building - Basic alkaline earth silicate glass products - Part 1: Float glass

prEN 14179-1 Glass in Building - Heat soaked thermally toughened soda lime silicate safety glass - Part 1: Definition and description

prEN 14321-1 Glass in Building - Thermally toughened alkaline earth silicate safety glass - Part 1: Definition and description

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### 3 Definitions

For the purpose of this standard, the following definitions apply.

### 3.1

#### insulating glass unit (IGU)

an assembly consisting of at least two panes of glass, separated by one or more spacers, hermetically sealed along the periphery, mechanically stable and durable (see 5.1).

NOTE: systems are available where the spacer and hermetic seal are included within a single edge sealing system.