

## **Ehitusklaas. Pinnatud klaas. Osa 1: Määratlused ja liigitus**

Glass in building - Coated glass - Part 1: Definitions and classification

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1096-1:2002 sisaldab Euroopa standardi EN 1096-1:1998 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.11.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1096-1:2002 consists of the English text of the European standard EN 1096-1:1998.</p> <p>This document is endorsed on 11.11.2002 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><b>Käsitlusala:</b> Käesolev standard määratleb ehituses kasutatava pinnatud klaasi näitajad, omadused ja liigituse. Vastupidavuse määramiseks rakendatavad katsemeetodid ja -moodused on esitatud selle standardi teises ja kolmandas osas. Käesolev standard kehtib tavatingimustes kasutatavate olme- ja ärihoonete klaasimiseks kasutatava pinnatud klaasi kohta. Käesolev standard ei kehti järgmiste materjalide kohta: plastkiled klaasil, peeglid ja emailklaas.</p>	<p><b>Scope:</b> This standard defines the characteristics, properties and classification of coated glass for use in building. Test methods and procedures used to establish durability are indicated in parts two and three of this standard. This standard applies to coated glass for application for use in normally occupied domestic or commercial premises. This standard is not applicable to: plastic films on glass, mirrors, enamelled glass.</p>
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**ICS** 01.040.81, 81.040.20

**Võtmesõnad:** aknaklaas, defektid, ehitised, keemiline pindamine, klaas, liigitus, läbilaskvustegur, määratlused, näitajad, spektrofotomeetria, valgusläbilaskvus, vastuvõetavus

ICS 01.040.81; 81.040.20

Descriptors: Building, coated glass, terminology, classification.

**English version**

Glass in building  
**Coated glass**

Part 1: Definitions and classification

Verre dans la construction – Verre à  
couche – Partie 1: Définitions et  
classification

Glas im Bauwesen – Beschichtetes  
Glas – Teil 1: Definitionen und  
Klasseneinteilung

This European Standard was approved by CEN on 1998-11-13.

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.

The European Standards exist 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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

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## Foreword

This European Standard 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 1999, and conflicting national standards shall be withdrawn at the latest by May 1999.

CEN/TC 129/WG6, "Coated glass for windows" divided the standard into the four following parts:

Glass in building - Coated glass:

- Part 1: Definitions and classification
- Part 2: Test methods for durability of A, B and S coatings
- Part 3: Test methods for durability of C and D coatings
- Part 4: Factory production control and evaluation of conformity

The present document constitutes Part 1 of the standard.

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, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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## 1 Scope

This European Standard defines the characteristics, properties and classification of coated glass for use in building.

Test methods and procedures used to establish durability are indicated in parts two and three of this standard.

This standard applies to coated glass for glazing application for use in normally occupied domestic or commercial premises.

This standard is not applicable to:

- plastics films on glass
- mirrors
- enamelled glass

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. The 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.

EN 410	Glass in building - Determination of luminous and solar characteristics of glazing
EN 572-2	Glass in building - Basic soda lime silicate glass products - Part 2: Float glass
EN 572-4	Glass in building - Basic soda lime silicate glass products - Part 4: Drawn sheet glass
EN 572-6	Glass in building - Basic soda lime silicate glass products - Part 6: Wired patterned glass
EN 572-7	Glass in building - Basic soda lime silicate glass products - Part 7: Wired or unwired channel shaped glass
EN 673	Glass in building - Determination of thermal transmittance (U value) - Calculation method
prEN 1096-2	Glass in building - Coated glass - Part 2: Test methods for durability of A, B and S coatings
prEN 1096-3	Glass in building - Coated glass - Part 3: Test methods for durability of C and D coatings
prEN 1863	Glass in building - Heat strengthened glass
prEN 12150	Glass in building - Thermally toughened safety glass
EN ISO 12543-2	Glass in building - Laminated glass and laminated safety glass - Part 2 : Laminated safety glass (ISO 12543-2:1998)

EN ISO 12543-3 Glass in building - Laminated glass and laminated safety glass - Part 3 :  
Laminated glass (ISO 12543-3:1998)

prEN 13024-1 Glass in building - Thermally toughened borosilicate safety glass - Part 1:  
Specifications

### 3 Definitions

For the purposes of this European Standard, the following definitions apply.

#### 3.1 Basic definitions

**3.1.1 coated glass:** Glass substrate as defined in 3.1.2 to which has been applied a coating, as defined in 3.1.3 in order to modify one or more of its properties.

**3.1.2 glass substrate:** A basic glass, thermally toughened safety glass, thermally toughened borosilicate safety glass, heat-strengthened glass, heat-strengthened borosilicate glass, laminated glass or laminated safety glass.

**3.1.3 coating:** One or more thin solid layers of inorganic materials applied on to the surface of a glass substrate by various methods of deposition.

**3.1.4 on-line coating:** The treatment of the surface of a moving continuous ribbon of a basic glass, at a stage during its manufacture, before it is cut.

**3.1.5 off-line coating:** The application of a coating to individual pieces of glass within a manufacturer's or processor's premises.

**3.1.6 additive methods of deposition:** Single or multilayer systems (consisting of metals, oxides, nitrides, fluorides or other compounds) added to the surface of the glass by different methods.

#### 3.2 Definitions of additive methods of deposition

**3.2.1 chemical film formation processes:** Processes where chemical reactions produce films on the glass from liquid, vapour or powder.

**3.2.1.1 wet chemical deposition:** A mixture of a dissolved metal salt and a reducing compound is sprayed on to the glass surface. A reduction reaction takes place and fine grained metal is precipitated.

**3.2.1.2 sol-gel coating:** Solutions of metallo-organic-compounds are dip coated and pyrolytically transformed into suitable oxides.

**3.2.1.3 chemical-vapour deposition:** Compounds in a vapour phase reacting chemically on the hot surface of the glass substrate.

**3.2.1.4 spray-coating:** Sprayed liquids reacting pyrolytically on the hot surface(s) of the glass substrate.

**3.2.1.5 powder coating:** Powders reacting chemically on the hot surface of the glass substrate.