Glass in building - Coated glass - Part 3: Requirements and test methods for class C and D coatings

Glass in building - Coated glass - Part 3: Requirements and test methods for class C and D coatings



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1096- 3:2001 sisaldab Euroopa standardi EN 1096-3:2001 ingliskeelset teksti.	This Estonian standard EVS-EN 1096- 3:2001 consists of the English text of the European standard EN 1096-3:2001.
Käesolev dokument on jõustatud 18.06.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 18.06.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala:	Scope:
Kasitiusala: This European Standard specifies the requirements and a test methods related to resistance to solar radiation for coated glass for use in buildings. This test is aimed at evaluating if the exposure to solar radiation over an extended period of time produces any appreciable change in light transmittance and solar transmittance of the coated glass as well as reduction of the infrared reflectance in the case of low emissivity coatings.	Scope: This European Standard specifies the requirements and a test methods related to resistance to solar radiation for coated glass for use in buildings. This test is aimed at evaluating if the exposure to solar radiation over an extended period of time produces any appreciable change in light transmittance and solar transmittance of the coated glass as well as reduction of the infrared reflectance in the case of low emissivity coatings.

ICS 81.040.20

Võtmesõnad: constru, defects, definitions, durability, expertises, glass, glass bricks, glass for building purposes, measurement, medicine, multilayer insulating glass, photometric, phototherapy, properties, size classification, specification (approval), for The second specifications, testing

Hinnagrupp H

EN 1096-3

January 2001

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

ICS 81.040.20

English version

Glass in building Coated glass

Part 3: Requirements and test methods for class C and D coatings

Verre dans la construction – Verre à couche - Partie 3: Exigences et méthodes d'essai pour les couches de classes C et D

Glas im Bauwesen – Beschichtetes Glas – Teil 3: Anforderungen an und Prüfverfahren für Beschichtungen der Klassen C und D

This European Standard was approved by CEN on 2000-12-24.

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.

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 Management Centre 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.



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

Management Centre: rue de Stassart 36, B-1050 Brussels

Contents

Page

Foreword2
1 Scope
2 Normative references
3 Terms and definitions
4 Requirements
5 Samples, test pieces and test specimens4
6 Initial evaluation of test pieces
7 Test methods for exposure to simulated solar radiation5
8 Final evaluation of exposed test pieces
9 Test report7
Annex A (normative) Special procedures for toughened or heat strengthened coated glass
Annex B (normative) Criteria to demonstrate equivalence of coatings
Annex C (informative) Example of two test apparatus which satisfy the exposure conditions given in 7.1 11
Annex D (informative) Summary of test report
Annex D (monnaive) Summary of test report
2

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 July 2001, and conflicting national standards shall be withdrawn at the latest by July 2001.

This part of the European Standard does not stand alone, it is a part of one standard:

Part 1: Definitions and classification

- Part 2: Requirements and test methods for class A, B and S coatings
- Part 3: Requirements and test methods for class C and D coatings

Part 4: Evaluation of conformity

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.

1 Scope

This European Standard specifies requirements and a test method related to resistance to solar radiation for coated glass for use in buildings.

This test is aimed at evaluating if the exposure to solar radiation over an extended period of time produces any appreciable change in light transmittance and solar transmittance of the coated glass as well as a reduction of the infrared reflectance in the case of low emissivity coatings.

This European Standard applies to Class C and D coatings as defined in EN 1096-1 and used in insulating glass units.

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 (including amendments).

EN 410, Glass in Building - Determination of luminous and solar characteristics of glazing.

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.

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

prEN 1279, Glass in Building – Insulating glass units.

prEN 1279-2 :1996, Glass in Building - Insulating glass units - Part 2: Long term test method and requirements for moisture penetration.

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

ISO 9060, Solar energy - Specification and classification of instruments for measuring hemispherical solar and direct solar radiation.

3 Terms and definitions

For the purposes of this European Standard the following terms and definitions apply.

3.1

coated annealed glass

a coated glass which has an annealed glass substrate.

3.2

toughened or heat strengthened coated glass

a coated glass which has to be toughened or heat strengthened to meet its final spectrophotometric properties.

3.3

coated toughened or heat strengthened glass

a coated glass which has a toughened or heat strengthened glass substrate.