Ehitusklaas. Termiliselt tugevdatud borosilikaat-turvaklaas. Osa 2: Vastavuse hindamine/Tootestandard

Glass in building - Thermally toughened borosilicate safety glass - Part 2: Evaluation of conformity/Product standard



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev dokument on jõustatud 21.12.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 13024-2:2004 consists of the English text of the European standard EN 13024-2:2004.

This document is endorsed on 21.12.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This European Standard covers the evaluation of conformity and the factory production control of flat thermally toughened borosilicate safety glass for use in buildings.

Scope:

This European Standard covers the evaluation of conformity and the factory production control of flat thermally toughened borosilicate safety glass for use in buildings.

ICS 81.040.20

Võtmesõnad: conform, conformity tests, construction, definitions, depth, evaluations, glass, glass for building purposes, marking, materials testing, measurement, safety glass, shallow, testing, tolerances, tolerances (measurement), toughened safety glass, ultimate behaviour

EUROPEAN STANDARD NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 13024-2

October 2004

ICS 81.040.20

English version

Glass in building - Thermally toughened borosilicate safety glass - Part 2: Evaluation of conformity/Product standard

Verre dans la construction - Verre borosilicaté de sécurité trempé thermiquement - Partie 2: Evaluation de la conformité

Glas im Bauwesen - Thermisch vorgespanntes Borosilicat-Einscheibensicherheitsglas - Teil 2: Konformitätsbewertung/Produktnorm

This European Standard was approved by CEN on 27 May 2004.

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

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

COII	tents	Page
	7.0	
Forew	/ord	
1	Scope	5
2	Normative references	5
3	Definitions	6
4	Requirements	6
4.1	Product description	
4.2	Conformity with the definition of thermally toughened borosilicate safety glass	7
4.3	Determination of the characteristic's performances	
4.3.1	Characteristics of thermally toughened borosilicate safety glass	7
4.3.2	Determination of characteristics of thermally toughened borosilicate safety glass	0
4.4	products	۵ ۱۸
4.4 4.5	Dangerous substances	
5	Evaluation of conformity	
5.1 5.2	General	
ວ.∠ 5.2.1	GeneralGeneral	
5.2.1 5.2.2	Initial type testing of thermally toughened borosilicate safety glass	
5.2.3	Initial type testing of characteristic's performances	
5.3	Factory production control and inspection of samples in accordance with a	
	prescribed test plan (see 5.1, 1a and b)	16
5.4	Initial inspection of factory and of factory production control (see 5.1, 1c)	16
5.5	Continuous surveillance and assessment of the factory production control (see	
	5.1, 1c)	
6	Marking and/or labelling	
6.1	General	
6.2	Product marking	
6.3	Product characteristics	
6.4	"Characteristics/performance identification paper"	
Annex	x A (normative) Factory production control	19
A .1	Factory Production Control Requirements	
A.1.1	General	
A.1.2	Organisation	
A.1.3	Control system	
A.2 A.3	MarkingInspection and testing tables of thermally toughened borosilicate safety glass	20
A.3	productionproduction	20
A.3.1	Information on Table A.1	
A.3.2	Use of proxy testing	
	k B (informative) Tests for factory production control	
Annex B.1	Strength measurement	
в. і В.1.1	Four point bending strength test	
B.1.1	Optical surface pre-stress measurement	
B.2	Fragmentation test	
B.2.1	Requirements	
B.2.2	Test method	
Anney	C (informative) Provisions for voluntary involvement of third party(ies)	27

C.1	General	
C.2 C.3	Voluntary tasks for third parties	
	ZA (informative) Clauses of this European Standard addressing the provisions of EU Construction Products Directive	
ZA.1	Scope and relevant characteristics	
ZA.2	Procedure(s) for the attestation of conformity of thermally toughened borosilicate	
74 2 4	safety glass products	
	EC Certificate and Declaration of conformity	
	E marking and labelling	
Bibliog	graphy	36
	graphy	

Foreword

This document (EN 13024-2:2004) has been prepared by Technical Committee CEN/TC 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 April 2005, and conflicting national standards shall be withdrawn at the latest by July 2006.

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 ZA, B, C or D, which is an integral part of this document.

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.

No existing document is superseded

This part of the document does not stand-alone; it is a part of one document:

- EN 13024-1: Glass in Building Thermally toughened borosilicate safety glass Part 1:
 Definition and description
- EN 13024-2: Glass in Building Thermally toughened borosilicate safety glass Part 2: Evaluation of conformity/Product standard

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

This document contains other aspects of importance of trade.

1 Scope

This document covers the evaluation of conformity and the factory production control of flat thermally toughened borosilicate safety glass for use in buildings.

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

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 356, Glass in building - Security glazing - Testing and classification of resistance against manual attack

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

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

EN 1063, Glass in building - Security glazing - Testing and classification of resistance against bullet attack

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

EN 1096-2, Glass in building - Coated glass - Part 2: Requirements and test methods for class A, B and S coatings

EN 1096-3, Glass in building - Coated glass - Part 3: Requirements and test methods for class C and D coatings

EN 1748-1-1, Glass in building - Special basic products -Borosilicate glasses - Part 1-1: Definition and general physical and mechanical properties

EN 12600, Glass in building - Pendulum test - Impact test method and classification for flat glass

EN 12758, Glass in building - Glazing and airborne sound insulation - Product descriptions and determination of properties

EN 12898, Glass in building - Determination of the emissivity

EN 13024-1:2002, Glass in building – Thermally toughened borosilicate safety glass – Part 1: Definition and description

prEN 13474, Glass in building - Design of glass panes

EN 13501-1, Fire classification of construction products and building elements – Part 1: Classification using test data from reaction to fire tests

EN 13501-2, Fire classification of construction products and building elements – Part 2: Classification using data from fire resistance tests, excluding ventilation services

prEN 13501-5, Fire classification of construction products and building elements - Part 5: Classification using test data from external fire exposure to roof tests

EN 13541, Glass in building - Security glazing - Testing and classification of resistance against explosion pressure

3 Definitions

For the purposes of this document, the terms and definitions given in EN 13024-1:2002 and the following apply.

3.1

initial type testing

determination of the performance of a product (characteristic, durability), on the basis of either actual tests or other procedures (such as conventional, standardised, tabulated or general accepted values, standardised or recognised calculation methods, test reports when made available, ...), in accordance with this standard that demonstrates compliance with this standard

3.2

test report

document that covers the results of tests undertaken on a representative sample of the product from production or on a prototype design of the product

3.3

product description

document that details the relevant parameters, e.g. process conditions, structure, etc., for defining a product that complies with the standard. It includes specific reference(s) to characteristics that are modified by the production process

3.4

significant change

variation in performance beyond the permitted tolerance for the characteristic

4 Requirements

4.1 Product description

For conformity purposes the thermally toughened glass manufacturer is responsible for the preparation and maintenance of the product description. This description shall describe the product and/or product families.

Disclosure of the product description shall be at the discretion of the thermally toughened glass manufacturer or his agent except in the case of regulatory requirements.

The description shall contain at least a normative part. The description may also contain an informative part, when the manufacturer foresees further development of the product.

The normative part of the description shall contain the following minimum information:

- a reference to EN 13024 parts 1 and 2 and all other standards with which the manufacturer claims compliance.
- the radiometric properties and durability of coated glass, i.e. coated glass that conforms with EN 1096-1, EN 1096-2, EN 1096-3, when those properties are changed, intentionally or unintentionally, by the thermal toughening process.