

Ehitusklaas. Klaasplokid ja klaasist sillutiskivid. Osa 2: Vastavushindamine

Glass in building - Glass blocks and glass pavers -
Part 2: Evaluation of conformity/Product standard

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1051-2:2007 sisaldab Euroopa standardi EN 1051-2:2007 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 22.11.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1051-2:2007 consists of the English text of the European standard EN 1051-2:2007.</p> <p>This document is endorsed on 22.11.2007 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>
--	---

<p>Käsitlusala:</p> <p>This document covers the evaluation of conformity and the factory production control requirements of and recommendations for glass block and glass paver units. This standard does not cover panels incorporating glass blocks or glass paver units.</p>	<p>Scope:</p> <p>This document covers the evaluation of conformity and the factory production control requirements of and recommendations for glass block and glass paver units. This standard does not cover panels incorporating glass blocks or glass paver units.</p>
--	--

ICS 81.040.20

Võtmesõnad:

ICS 81.040.20

English Version

**Glass in building - Glass blocks and glass pavers - Part 2:
Evaluation of conformity/Product standard**

Verre dans la construction - Briques et dalles de verre -
Partie 2: Evaluation de la conformité/Norme produit

Glas im Bauwesen - Glassteine und Betongläser - Teil 2:
Konformitätsbewertung/Produktnorm

This European Standard was approved by CEN on 18 August 2007.

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 CEN 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, 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

Contents

Page

Foreword.....	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Requirements	6
4.1 Conformity with the product family glass blocks and glass paver units	6
4.2 Determination of the performances of characteristics	6
4.2.1 Characteristics of glass blocks and glass paver units	6
4.2.2 Determination of essential characteristics of glass blocks and glass paver units	7
4.3 Durability	9
4.4 Characteristics other than those listed in 4.2	9
4.5 Dangerous substances	9
5 Evaluation of conformity	10
5.1 General	10
5.2 Initial type testing of the product (5.1, 2)	10
5.2.1 General	10
5.2.2 Type testing if products belong to the product family glass blocks and glass paver units	11
5.2.3 Type testing of performances of characteristics	11
5.3 Factory production control and inspection of samples in accordance with a prescribed test plan (5.1, 1a and 1.b)	12
5.4 Initial inspection of factory and of factory production control (5.1, 1b)	12
5.5 Continuous surveillance and assessment of the factory production control (5.1, 1c)	13
6 Marking and labelling	13
6.1 General	13
6.2 Product marking	13
6.3 Product characteristics	13
6.4 "Characteristics/performance identification paper"	13
Annex A (normative) Factory production control	15
A.1 Factory Production Control Requirements	15
A.1.1 General	15
A.1.2 Organisation	15
A.1.3 Control system	15
A.2 Marking	16
A.3 Inspection and testing tables of glass blocks and glass paver unit production	16
A.3.1 Information on Table A.1	16
A.3.2 Use of proxy testing	17
Annex B (normative) Residual stress/Thermal shock	20
B.1 Requirement	20
B.2 Test method	20
B.2.1 General	20
B.2.2 Factory production control	20
B.2.3 On-going evaluation of conformity	20
B.3 Evaluation of test results	21
B.3.1 Factory production control	21
B.3.2 On-going evaluation of conformity	21
Annex C (normative) Determination of the thermal transmittance (U-value) of glass blocks and glass paver units	22

C.1	General	22
C.2	Massive glass blocks and glass paver units	22
C.3	Hermetic closed hollow glass blocks and glass paver units.....	22
Annex D	(normative) Modelling of glass blocks and glass paver units for the determination of the light transmittance, light reflectance and solar energy characteristics	24
Annex E	(normative) Compression strength test method, sampling, requirements and evaluation in factory production control	25
E.1	Glass blocks	25
E.1.1	Test equipment and procedure.....	25
E.1.2	Test specimen preparation.....	25
E.2	Glass paver units.....	26
E.2.1	Test equipment and procedure.....	26
E.2.2	Test specimen preparation.....	27
E.3	Requirements.....	27
E.3.1	Glass blocks	27
E.3.2	Glass paver units.....	27
E.4	Evaluation.....	27
Annex F	(informative) Provisions for voluntary involvement of third party(ies).....	28
F.1	General	28
F.2	Voluntary tasks for third parties	28
F.3	Marking and labelling.....	28
Annex ZA	(informative) Clauses of this European Standard addressing the provisions of EU Construction Products Directive	29
ZA.1	Scope and relevant characteristics	29
ZA.2	Procedure(s) for the attestation of conformity of basic soda lime silicate glass products	31
ZA.2.1	System(s) of attestation of conformity.....	31
ZA.2.2	EC Certificate and Declaration of conformity.....	33
ZA.3	CE marking and labelling.....	34
Bibliography	38

Foreword

This document (EN 1051-2:2007) has been prepared by Technical Committee CEN/TC 129 “Glass in building”, the secretariat of which is held by NBN.

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 2008, and conflicting national standards shall be withdrawn at the latest by July 2009.

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

- EN 1051-1: Glass in building — Glass blocks and glass pavers — Part 1: Definitions and description
- EN 1051-2: Glass in building — Glass blocks and glass pavers — Part 2: Evaluation of conformity/Product standard

This document contains other aspects of importance to trade.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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 EC Directive(s).

For relationship with EC Directive(s), see informative Annex ZA, 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, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This document covers the evaluation of conformity and the factory production control requirements of and recommendations for glass block and glass paver units.

This standard does not cover panels incorporating glass blocks or glass paver units.

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

EN 673, *Glass in building — Determination of thermal transmittance (U value) — Calculation method*

EN 1051-1:2003, *Glass in building — Glass blocks and glass pavers — Part 1: Definitions and description*

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

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

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

EN ISO 7459, *Glass containers — Thermal shock resistance and thermal shock endurance — Test methods (ISO 7459:2004)*

EN ISO 7500-1, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system (ISO 7500-1:2004)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1051-1:2003 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