

**Klaas ehitusmaterjalina. Spetsiaalsed põhitooted. Osa 1:
Boorsilikaatklaasid**

Glass in building - Special basic products - Part 1:
Borosilicate glasses

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1748-1:2000 sisaldab Euroopa standardi EN 1748-1:1997 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 11.01.2000 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

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This standard is ratified with the order of Estonian Centre for Standardisation dated 11.01.2000 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

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Descriptors: construction, glass, glassware, borosilicate glass, definitions, chemical composition, mechanical properties, physical properties, dimensions, dimensional tolerances, classifications, defects, acceptability, designation

English version

**Glass in building - Special basic products - Part 1:
Borosilicate glasses**

Verre dans la construction - Produits de base
spéciaux - Partie 1: Verres borosilicates

Glas im Bauwesen - Spezielle Basiserzeugnisse
- Teil 1: Borosilicatgläser

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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of an identical text or by endorsement, at the latest by February 1998, and conflicting national standards shall be withdrawn at the latest by February 1998.

This European Standard consists of the following parts, under the general title "Glass in building - Special basic products" :

- Part 1 : Borosilicate glasses
- Part 2 : Glass ceramics
- Part 3 : Evaluation of conformity of borosilicate glasses and glass ceramics.

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 and classifies borosilicate glasses for use in building. It indicates their chemical composition, main physical and mechanical properties, dimensional and minimum quality requirements (in respect of optical and visual faults).

This standard applies only to borosilicate glasses supplied in stock sizes.

This standard does not apply to borosilicate glasses supplied in cut sizes for final end use.

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 in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

prEN 410 Glass in building - Determination of light transmittance, solar direct transmittance, total solar energy transmittance, ultraviolet transmittance and related glazing characteristics

3 Definitions

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

3.1 borosilicate glass: Silicate glass containing between 7% and 15% boron oxide. As a result of the composition it has a high thermal shock resistance and a very high hydrolytic and acid resistance.

3.2 borosilicate float glass: Flat, transparent, clear or tinted borosilicate glass having parallel and polished faces which can be manufactured by continuous casting and flotation on a metal bath.

3.3 drawn sheet borosilicate glass: Flat, transparent, clear or tinted borosilicate glass obtained by continuous drawing, initially vertically, of a regular thickness and with two surfaces fire polished.

3.4 rolled borosilicate glass: Flat, transparent or translucent, clear or tinted borosilicate glass obtained by rolling.

3.5 cast borosilicate glass: Flat, translucent, clear or tinted borosilicate glass obtained by casting.