

## **Ehitusklaas. Eritooted. Osa 1-1: Boorsilikaatklaas**

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

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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| <p>Käesolev Eesti standard EVS-EN 1748-1-1:2004 sisaldab Euroopa standardi EN 1748-1-1:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN 1748-1-1:2004 consists of the English text of the European standard EN 1748-1-1:2004.</p> <p>This document is endorsed on 23.11.2004 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></p> <p>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 to borosilicate glasses supplied in stock sizes or in cut sizes for final end use. This European standard does not apply to final cut sizes having a dimension less than 100 mm or a surface area less than 0,05 m<sup>2</sup>.</p> | <p><b>Scope:</b></p> <p>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 to borosilicate glasses supplied in stock sizes or in cut sizes for final end use. This European standard does not apply to final cut sizes having a dimension less than 100 mm or a surface area less than 0,05 m<sup>2</sup>.</p> |
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Võtmesõnad:

English version

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

Verre dans la construction - Produits de base spéciaux -  
Verres borosilicates - Partie 1-1 : Définitions et propriétés  
physiques et mécaniques générales

Glas im Bauwesen - Spezielle Basiserzeugnisse -  
Borosilicatgläser - Teil 1-1: Definitionen und allgemeine  
physikalische und mechanische Eigenschaften

This European Standard was approved by CEN on 21 June 2004.

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## Foreword

This document (EN 1748-1-1:2004) has been prepared by Technical Committee CEN /TC 129 "Glass in building", the secretariat of which is held by BIN.

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 March 2005, and conflicting national standards shall be withdrawn at the latest by March 2005.

This document supersedes EN 1748-1:1997.

This document consists of the following parts:

|             |  |
|-------------|--|
| EN 1748-1-1 | <i>Glass in building - Special basic products - Borosilicate glasses – Part 1-1:<br/>Definition and general physical and mechanical properties</i> |
| EN 1748-1-2 | <i>Glass in building - Special basic products - Borosilicate glasses – Part 1-2:<br/>Evaluation of conformity/Product standard</i>                 |

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.

## 1 Scope

This document 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 document applies to borosilicate glasses supplied in stock sizes or in cut sizes for final end use.

This document does not apply to final cut sizes having a dimension less than 100 mm or a surface area less than 0,05 m<sup>2</sup>.

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

## 3 Terms and definitions

For the purposes of this document, 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 or translucent, clear or tinted borosilicate glass having parallel and polished faces obtained by continuous casting and flotation on a metal bath.

### 3.3

#### **drawn sheet borosilicate glass**

flat, transparent or translucent, clear or tinted borosilicate glass obtained by continuous drawing 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, transparent or translucent, clear or tinted borosilicate glass obtained by casting.

### 3.6

#### **nominal length, *H* and nominal width, *B***

pane length or pane width defined with reference to the direction of draw of the glass ribbon as shown in Figure 1, except for cast borosilicate glass which does not have a direction of draw.