SLOVENSKI STANDARD
kSIST FprEN 13024-1:2011

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Steklo v gradbeništvu - Toplotno kaljeno borosilikatno varnostno steklo - 1. del: Definicija in opis

Glass in building - Thermally toughened borosilicate safety glass - Part 1: Definition and description

Glas im Bauwesen - Thermisch vorgespanntes Borosilicat-Einscheiben-Sicherheitsglas - Teil 1: Definition und Beschreibung

Verre dans la construction - Verre borosilicate de sécurité trempé thermiquement - Partie 1: Définition et description

Ta slovenski standard je istoveten z: **FprEN 13024-1**

ICS:

81.040.20	Steklo v gradbeništvu	Glass in building

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English Version

Glass in building - Thermally toughened borosilicate safety glass - Part 1: Definition and description

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Contents

Page

Foreword

This document (FprEN 13024-1:2011) has been prepared by Technical Committee CEN/TC 129 “Glass in building”, the secretariat of which is held by NBN.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede EN 13024-1:2002.

Introduction

Thermally toughened borosilicate safety glass has a higher thermal shock resistance and a safer breakage behaviour when compared with annealed glass. When it should be used to offer protection under accidental human impact, thermally toughened borosilicate safety glass also should be classified according to EN 12600.

NOTE CEN/TC129/WG8 is producing standards for the determination of the design strength of glass and is preparing a design method.

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.*

1 Scope

This European Standard specifies tolerances, flatness, edgework, fragmentation and physical and mechanical characteristics of monolithic flat thermally toughened borosilicate safety glass for use in buildings.

Information on curved thermally toughened borosilicate safety glass is given in Annex A, but this product does not form part of this standard.

Other requirements, not specified in this standard, can apply to thermally toughened borosilicate safety glass which is incorporated into assemblies, e.g. laminated glass or insulating glass units, or undergo an additional treatment, e.g. coating. The additional requirements are specified in the appropriate product standard. Thermally toughened borosilicate safety glass, in this case, does not lose its mechanical or thermal characteristics.

This standard does not cover glass sandblasted after toughening.

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

EN 1288-3, *Glass in building — Determination of the bending strength of glass — Part 3: Test with specimen supported at two points (four point bending)*

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

EN 12600*, Glass in building — Pendulum tests — Impact test method and classification for flat glass*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
curved thermally toughened borosilicate safety glass
thermally toughened borosilicate safety glass which has been deliberately given a specific profile during manufacture (see Annex A)

3.2
edge deformation
deformation of the edge because of the tong marks

3.3
edge lift (also referred to as edge dip)
distortion produced in horizontal toughened glass, at the leading and trailing edge of the plate. This is a distortion produced by a reduction in surface flatness

3.4
enamelled thermally toughened borosilicate safety glass
thermally toughened borosilicate safety glass which has a ceramic frit fired into the surface during the toughening process. After toughening, the ceramic frit becomes an integral part of the glass