SLOVENSKI STANDARD
SIST EN 572-2:2004

01-september-2004

Nadomeġļa:
SIST EN 572-2:1999

Steklo v stavbah - Osnovni proizvodi iz natrij-kalcijevega silikatnega stekla - 2. del: Ravno steklo

Glass in Building - Basic soda lime slicate glass products - Part 2: Float glass

Glas im Bauwesen - Basiserzeugnisse aus Kalk-Natronsilicatglas - Teil 2: Floatglas

Verre dans la construction - Produits de base : verre de silicate sodocalcique - Partie 2: Glace

Ta slovenski standard je istoveten z: EN 572-2:2004

ICS:

81.040.20 Steklo v gradbeništvu Glass in building

SIST EN 572-2:2004 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 572-2

June 2004

ICS 81.040.20

Supersedes EN 572-2:1994

English version

Glass in Building - Basic soda lime slicate glass products - Part 2: Float glass

Verre dans la construction - Produits de base : verre de silicate sodocalcique - Partie 2: Glace

Glas im Bauwesen - Basiserzeugnisse aus Kalk-Natronsilicatglas - Teil 2: Floatglas

This European Standard was approved by CEN on 1 April 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

Ref. No. EN 572-2:2004: E

Contents

Foreword

This document (EN 572-2:2004) 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 December 2004, and conflicting national standards shall be withdrawn at the latest by December 2004.

This document supersedes EN 572-2:1994.

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).

This European Standard “Glass in building – Basic soda lime silicate glass products” consists of the following parts:

- EN 572-1 Definitions and general physical and mechanical properties
- EN 572-2 Float glass
- EN 572-3 Polished wired glass
- EN 572-4 Drawn sheet glass
- EN 572-5 Patterned glass
- EN 572-6 Wired patterned glass
- EN 572-7 Wired or unwired channel shaped glass
- EN 572-8 Supplied and final cut sizes
- EN 572-9 Evaluation of conformity/Product standard

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 Part of this European Standard specifies dimensional and minimum quality requirements (in respect of optical and visual faults) for float glass, as defined in EN 572-1, for use in building.
This Part of this standard applies only to float glass supplied in jumbo sizes (see note 1) and split sizes (see note 2).

NOTE 1 Jumbo sizes — PLF (plateau largeur de fabrication) — Bandmasse.

NOTE 2 Split sizes — DLF (dimension largeur de fabrication) — Geteilte Bandmasse.

EN 572-8 gives information on float glass in sizes other than those covered by this Part.

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 572-1:2004, *Glass in building — Basic soda lime silicate glass products — Part 1: Definitions and general physical and mechanical properties.*

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 572-1:2004 and the following apply.

3.1
length, *H*, and width, *B*
defined with reference to the direction of draw of the float glass ribbon as shown in Figure 1

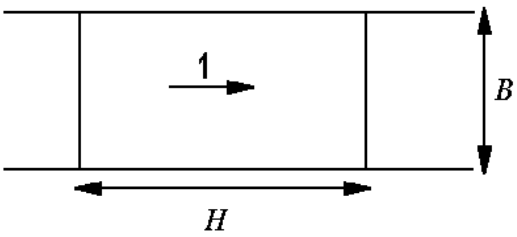

Figure 1 — Relationship between length, width and direction of draw

Key 1 direction of draw

3.2
jumbo sizes
glass delivered in the following sizes:

Nominal length *H*: 4 500 mm, 5 100 mm or 6 000 mm

Nominal width *B*: 3 210 mm

NOTE The usual width is 3 210 mm. Exceptional production requirements can cause this to be reduced but the nominal width is never below 3 150 mm

3.3
split sizes
glass delivered in the following size ranges:

Nominal length *H*: 1 000 mm to 2 550 mm

Nominal width *B*: 3 210 mm

NOTE The usual width is 3 210 mm. Exceptional production requirements can cause this to be reduced but the nominal width is never below 3150 mm.

3.4
optical faults
faults, which lead to distortions in the appearance of objects observed through the glass

3.5
visual faults
faults, which alter the visual quality of the glass. They are spot faults and linear/extended faults

3.6
spot fault
spot fault is a nucleus, which is sometimes accompanied by a halo of distorted glass. The dimension of a spot fault comprising a nucleus with a halo is obtained by multiplying the dimension of the nucleus by a factor of approximately 3

3.7
linear/extended faults
faults which can be on or in the glass, in the form of deposits, marks or scratches that occupy an extended length or area

4 Dimensional requirements

4.1 Thickness

4.1.1 General

The actual thickness shall be the average of four measurements, taken to the nearest 0,01 mm, one taken at the centre of each side. Measurement shall be by means of an instrument of the calliper micrometer type.

4.1.2 Tolerances

The actual thickness, rounded to the nearest 0,1 mm shall not vary from the nominal thickness by more than the tolerances shown in Table 1.

Table 1 — Tolerances on nominal thickness

Nominal thickness (mm)	Tolerances (mm)
2	± 0,2
3	± 0,2
4	± 0,2
5	± 0,2
6	± 0,2
8	± 0,3
10	± 0,3
12	± 0,3
15	± 0,5
19	± 1,0
25	± 1,0

4.2 Length, width and squareness

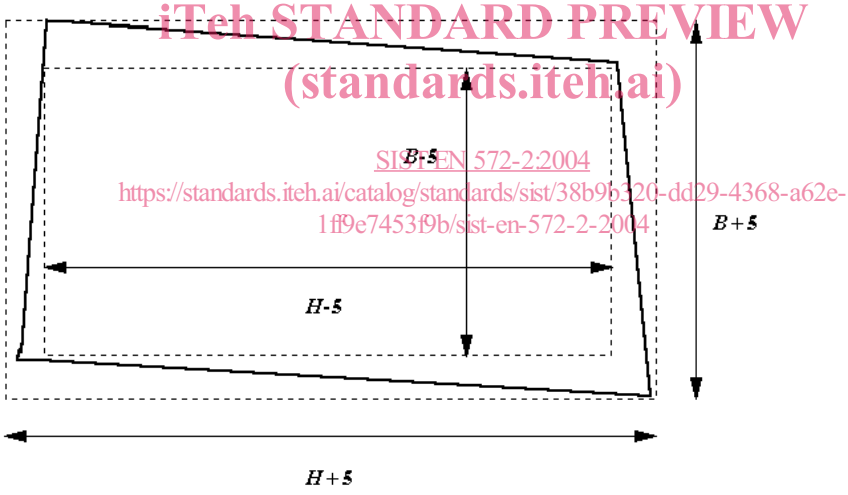

Figure 2 — Determination of length, width and squareness

4.2.1 The nominal dimensions for length, *H*, and width, *B*, being given, the pane shall not be larger than a prescribed rectangle resulting from the nominal dimensions increased by the permissible plus tolerance or smaller than a prescribed rectangle reduced by the permissible minus tolerance. The sides of the prescribed rectangles shall be parallel to one another and these rectangles shall have a common centre (see Figure 2).
The limits of squareness shall also be prescribed by these rectangles.

4.2.2 Tolerances

The tolerances on nominal dimensions length, *H*, and width, *B*, are ± 5 mm.

5 Quality requirements

5.1 General

One quality level is considered in this standard. This is determined by evaluation of the optical and visual faults.
NOTE The manufacturer(s) should be consulted if higher levels of quality are required.

5.2 Methods of observation and measurement

5.2.1 Optical faults

A screen bearing an assembly of black and white stripes (zebra) is observed through the glass to be examined.
The usual size of screen is between 1 500 mm × 1 150 mm and 2 500 mm × 2 000 mm. It consists of a translucent white background with parallel black stripes, 25 mm wide and 25 mm apart, inclined at 45°.
The screen is uniformly lit from behind with white daylight fluorescent tubes. The illuminance of the screen measured 1 m from it shall be between 400 lux and 1 200 lux. The measurement shall be taken at a point on a line normal to the centre of the screen. The walls of the test room should be painted with a dark non-reflective paint having a diffuse reflection ≤ 0,10.
The glass to be examined shall be held vertically in a support frame. The centre of the glass shall be at a distance of 4,5 m from the screen and on a line normal to the centre of the screen. The glass shall be capable of being rotated around a vertical axis. The glass shall be held with the direction of draw of the glass vertical. Appropriate critical viewing angles, α, formed by the glass and the screen should be indicated (see Figure 3). The observer stands still at a distance of 9 m from the centre of the screen on a line passing through the axis of rotation.

The glass being examined is rotated from an angle $a = 90°$ until there is no longer any distortions of the lines on the screen. The angle, a (see Figure 3), at which this occurred is noted.
The glass sample taken, with a length, H, between 300 mm and 500 mm and a width, B, of 3 210 mm, is split into four. This gives samples of width approximately 800 mm. The distortion is measured in the areas D and d as shown in Figure 4.

5.2.2 Visual faults

5.2.2.1 Spot faults

Measure the largest dimension (diameter or length) of these faults with a micrometer with graduations in tenths of a millimetre.
Note the number and dimensions of the spot faults and relate to the four categories of spot faults as shown in Table 2.

Table 2 — Categories of spot faults

Category	Dimension of nuclei of spot faults (mm)
A	> 0,2 and ≤ 0,5
B	> 0,5 and ≤ 1,0
C	> 1,0 and ≤ 3,0
D	> 3,0

5.2.2.2 Linear/extended faults

The glass pane to be examined is illuminated in conditions approximating to diffuse daylight and is observed in front of a matt black screen (reflection coefficient between 0,2 and 0,4).
Place the pane of glass to be examined vertically in front of the screen and parallel to it. Arrange the point of observation 2 m from the glass, keeping the direction of observation normal to the glass surface.
View the pane of glass, and note the presence of visually disturbing faults.