



# SLOVENSKI STANDARD

## SIST EN 572-4:2012

01-oktober-2012

Nadomešča:  
SIST EN 572-4:2004

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**Steklo v gradbeništvu - Osnovni izdelki iz natrij-kalcijevega silikatnega stekla - 4. del: Vlečeno steklo**

Glass in building - Basic soda lime silicate glass products - Part 2: Drawn sheet glass

Glas im Bauwesen - Basiserzeugnisse aus Kalk-Natronsilicatglas - Teil 4: Gezogenes Flachglas

**ITeH STANDARD PREVIEW**  
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Verre dans la construction - Produits de base: verre de silicate sodo-calcique - Partie 4: Verre étiré

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**Ta slovenski standard je istoveten z: EN 572-4:2012**

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**ICS:**

81.040.20      Steklo v gradbeništvu      Glass in building

**SIST EN 572-4:2012**      **en,fr,de**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 572-4**

July 2012

ICS 81.040.20

Supersedes EN 572-4:2004

English Version

## Glass in building - Basic soda lime silicate glass products - Part 4: Drawn sheet glass

Verre dans la construction - Produits de base: verre de  
silicate sodo-calcique - Partie 4: Verre étiré

Glas im Bauwesen - Basiserzeugnisse aus Kalk-  
Natronsilicatglas - Teil 4: Gezogenes Flachglas

This European Standard was approved by CEN on 11 May 2012.

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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-CENELEC Management Centre has the same status as the official versions.

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[SIST EN 572-4:2012](https://standards.iteh.ai/catalog/standards/sist/2d063f20-10e3-4093-9f3a-260587510cc2/sist-en-572-4-2012)

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

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## Foreword

This document (EN 572-4:2012) 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 January 2013, and conflicting national standards shall be withdrawn at the latest by January 2013.

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 supersedes EN 572-4:2004.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This edition is a revision of EN 572-4:2004. The main change in this edition is a new method of determination of squareness.

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

- ITC STANDARD PREVIEW**  
**(standards.iteh.ai)**
- Part 1: Definitions and general physical and mechanical properties;
  - Part 2: Float glass; [SIST EN 572-4:2012](https://standards.iteh.ai/catalog/standards/sist/2d063f20-10e3-4093-9f3a-260587510cc2/sist-en-572-4-2012)
  - Part 3: Polished wired glass; [260587510cc2/sist-en-572-4-2012](https://standards.iteh.ai/catalog/standards/sist/2d063f20-10e3-4093-9f3a-260587510cc2/sist-en-572-4-2012)
  - Part 4: Drawn sheet glass;
  - Part 5: Patterned glass;
  - Part 6: Wired patterned glass;
  - Part 7: Wired or unwired channel shaped glass;
  - Part 8: Supplied and final cut sizes;
  - Part 9: Evaluation of conformity/Product standard.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

**EN 572-4:2012 (E)****1 Scope**

This European Standard specifies dimensional and minimum quality requirements (in respect of optical and visual faults) for drawn sheet glass, as defined in EN 572-1:2012, for use in building.

This European Standard applies only to drawn sheet glass supplied in rectangular panes and in stock sizes.

EN 572-8 gives information on drawn sheet glass in sizes other than those covered by this European Standard.

**2 Normative references**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 572-1:2012, *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 document, the terms and definitions given in EN 572-1:2012 and the following apply.

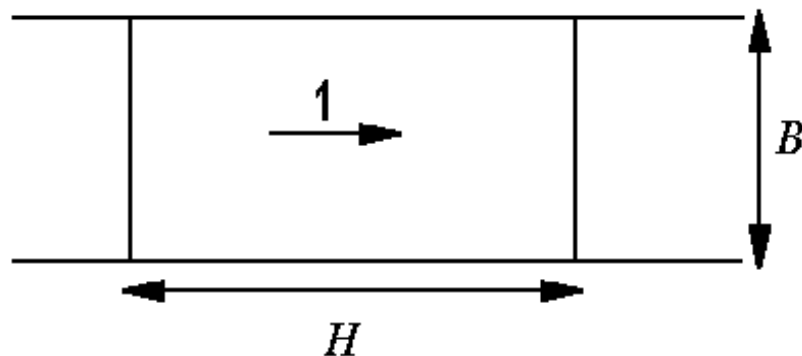
**3.1 new antique drawn sheet glass**  
glass produced by the drawn sheet process that has specific surface phenomena intentionally incorporated during the drawing process

**3.2 drawn sheet glass for renovation**  
drawn sheet glass that has been allowed to develop defects, e.g. gaseous, solid inclusions and linear/extended faults, which are representative of historic drawn sheet production

**3.3 drawn sheet glass**  
flat, transparent, clear or tinted soda-lime silicate glass obtained by continuous drawing, initially vertically, of a regular thickness and with the two surfaces fire polished containing a minimum number of visual faults

**3.4****length,  $H$ , and width,  $B$** 

defined with reference to the direction of draw of the glass ribbon as shown in Figure 1

**Key**

1 direction of draw

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

**3.5****stock sizes**

glass delivered in the sizes given in Table 1

**Table 1 — Stock sizes**  
<https://standards.iteh.ai/catalog/standards/sist/2d069220-10e3-4093-9f3a-260587510cc2/sist-en-572-4-2012>

Dimensions in millimetres

	<b>Nominal length <math>H</math></b>	<b>Nominal width <math>B</math></b>
New antique drawn sheet glass	1 200 to 2 160	1 450 to 2 160
Drawn sheet glass for renovation	1 200 to 2 160	1 450 to 2 160
Drawn sheet glass	1 600 to 2 160	2 440 to 2 880

**3.6****optical fault**

fault which leads to distortions in the appearance of objects observed through the glass

**3.7****visual fault**

fault which alters the visual quality of the glass

Note 1 to entry: Visual faults include spot faults and linear/extended faults.

**3.8****spot fault**

fault which can be on or in the glass, in the form of gaseous inclusion, solid inclusion, mark or deposit of small size

## EN 572-4:2012 (E)

- 3.9 gaseous inclusion**  
fault which consist generally of an elongated bubble of gas
- 3.10 linear/extended fault**  
fault which can be on or in the glass, in the form of deposits, marks or scratches that occupy an extended length or area
- 3.11 concentration,  $c$**   
sum of the lengths of gaseous inclusions > 1,0 mm in any circle of 400 mm diameter

## 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 2.

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<https://standards.iteh.ai/en/standards/sist/2012/01/01/EN-572-4-2012-93a-260587510cc2/sist-en-572-4-2012>  
**Table 2 — Allowable tolerances on nominal thickness**

Dimensions in millimetres

Nominal thickness	Tolerances		
	New antique drawn sheet glass	Drawn sheet glass for renovation	Drawn sheet glass
2		± 0,2	± 0,2
2,8	± 0,3		
3		± 0,3	± 0,2
4	± 0,3	± 0,3	± 0,2
5		± 0,3	± 0,3
6	± 0,3	± 0,3	± 0,3
8		± 0,4	± 0,4
10			± 0,5
12			± 0,6

### 4.2 Length, width and squareness

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

The limits of squareness are described by the difference between diagonals. Such limits are given in Table 3.



Table 3 — Limit on the difference between diagonals

Dimensions in millimetres

Nominal glass thickness	Limit on the difference between diagonals		
	Stock sizes		
	$(H, B) \leq 1\ 500$	$1\ 500 < (H, B) \leq 3\ 000$	$(H, B) > 3\ 000$
2, 2,8, 3, 4, 5 and 6	3	4	5
8, 10, 12	4	5	6

## 5 Quality requirements

### 5.1 General

Drawn sheet glass (3.3) is classified according to both optical and visual faults.

New antique sheet glass (3.1) and sheet glass for renovation (3.2) are classified according to their levels of visual faults.

### 5.2 Methods of observation and measurement

#### 5.2.1 Optical faults of drawn sheet glass

A reticulated screen is observed through the pane of glass to be examined.

The screen should have approximately the same dimensions as the pane of glass to be examined. It should consist of a matt black background (reflection coefficient between 0,2 and 0,4) having a network of lines 10 mm thick of a colour contrasting clearly with the background. The network of lines should have the appearance of a wall of bricks whose size is 200 mm × 70 mm, each line offset by 100 mm from the lines above and below.

The lighting of the screen should correspond to diffuse natural or artificial daylight.

Place the pane of glass to be examined vertically 3 m from the screen. Arrange the point of observation 1 m from the glass, keeping the direction of observation perpendicular to the screen. Arrange the pane of glass to form an angle of 45° with the plane of the screen.

Place the pane of glass to be examined vertically 3 m from the screen. Arrange the point of observation 1 m from the glass, keeping the direction of observation perpendicular to the screen. Arrange the pane of glass to form an angle of 45° with the plane of the screen.

View the screen through the glass and note any disturbing distortions to the pattern.

#### 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.

Make note of the number, dimensions and concentration of spot faults.