



# SLOVENSKI STANDARD

## SIST EN 572-1:2012+A1:2016

01-junij-2016

Nadomešča:  
SIST EN 572-1:2012

---

**Steklo v gradbeništvu - Osnovni izdelki iz natrij-kalcijevega silikatnega stekla - 1. del: Definicije in splošne fizikalne in mehanske lastnosti**

Glass in building - Basic soda-lime silicate glass products - Part 1: Definitions and general physical and mechanical properties

Glas im Bauwesen - Basiserzeugnisse aus Kalk-Natronsilicatglas - Teil 1: Definitionen und allgemeine physikalische und mechanische Eigenschaften

Verre dans la construction - Produits de base verre de silicate sodo-calcique - Partie 1 : Définitions et propriétés physiques et mécaniques générales

**Ta slovenski standard je istoveten z: EN 572-1:2012+A1:2016**

**ICS:**

01.040.81	Steklarska in keramična industrija (Slovarji)	Glass and ceramics industries (Vocabularies)
81.040.20	Steklo v gradbeništvu	Glass in building

**SIST EN 572-1:2012+A1:2016** en,fr,de

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 572-1:2012+A1:2016](https://standards.iteh.ai/catalog/standards/sist/46e382c1-abe9-469d-be5c-8caf7e25203c/sist-en-572-1-2012a1-2016)

<https://standards.iteh.ai/catalog/standards/sist/46e382c1-abe9-469d-be5c-8caf7e25203c/sist-en-572-1-2012a1-2016>

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 572-1:2012+A1**

February 2016

ICS 01.040.81; 81.040.20

Supersedes EN 572-1:2012

English Version

## Glass in building - Basic soda-lime silicate glass products - Part 1: Definitions and general physical and mechanical properties

Verre dans la construction - Produits de base : verre de silicate sodocalcique - Partie 1 : Définitions et propriétés physiques et mécaniques générales

Glas im Bauwesen - Basiserzeugnisse aus Kalk-Natronsilicatglas - Teil 1: Definitionen und allgemeine physikalische und mechanische Eigenschaften

This European Standard was approved by CEN on 11 May 2012 and includes Amendment 1 approved by CEN on 22 November 2015.

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

CEN members are the national standards bodies of 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 United Kingdom.



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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

<b>Contents</b>	<b>Page</b>
European foreword.....	3
<b>1</b> Scope .....	<b>5</b>
<b>2</b> Normative references .....	<b>5</b>
<b>3</b> Terms and definitions .....	<b>6</b>
<b>4</b> General principles.....	<b>6</b>
<b>5</b> Chemical composition .....	<b>7</b>
5.1 General.....	7
5.2 Tint .....	7
<b>6</b> Physical and mechanical characteristics.....	<b>7</b>
6.1 General characteristics .....	7
6.2 Characteristic bending strength ( $f_{g,kk}$ ).....	8
6.3 Designation of clear glass.....	8
6.3.1 General.....	8
6.3.2 Clear transparent glass.....	9
6.3.3 Clear translucent glass.....	9
6.4 Stability of physical and chemical characteristics .....	10
6.5 General quality criteria and their evaluation .....	10
6.5.1 Optical .....	10
6.5.2 Appearance.....	11
Annex A  (informative) Complementary information related to REACH  .....	12
Bibliography.....	13

## European foreword

This document (EN 572-1:2012+A1:2016) 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 August 2016, and conflicting national standards shall be withdrawn at the latest by August 2016.

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 includes Amendment 1 approved by CEN on 22 November 2015.

This document supersedes  $\boxed{A_1}$  EN 572-1:2012  $\boxed{A_1}$ .

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $\boxed{A_1}$   $\boxed{A_1}$ .

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

$\boxed{A_1}$  EN 572-1:2012 was  $\boxed{A_1}$  a revision of EN 572-1:2004. The main changes in this edition  $\boxed{A_1}$  were  $\boxed{A_1}$ :

- a) a better explanation of the characteristic bending strength of glass;
- b) an extension of the minimum light transmittance value for translucent glass up to 19 mm;
- c) the bibliography has been complemented.

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

- Part 1: Definitions and general physical and mechanical properties;
- Part 2: Float glass;
- Part 3: Polished wired glass;
- 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 organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria,

**EN 572-1:2012+A1:2016 (E)**

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.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN 572-1:2012+A1:2016

<https://standards.iteh.ai/catalog/standards/sist/46e382c1-abe9-469d-be5c-8caf7e25203c/sist-en-572-1-2012a1-2016>

## 1 Scope

This Part of this European Standard specifies and classifies basic glass products and indicates their chemical composition, their main physical and mechanical characteristics and defines their general quality criteria.

Specific dimensions and dimensional tolerances, description of faults, quality limits and designation for each basic product type are not included in this Part, but are given in other Parts of EN 572 specific to each product type:

- 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.

iTeh STANDARD PREVIEW  
(standards.iteh.ai)

## 2 Normative references

[SIST EN 572-1:2012+A1:2016](https://standards.iteh.ai/catalog/standards/sist/46e382c1-abe9-469d-be5c-2601a4301000/sist-en-572-1-2012-a1-2016)

<https://standards.iteh.ai/catalog/standards/sist/46e382c1-abe9-469d-be5c-2601a4301000/sist-en-572-1-2012-a1-2016>

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

EN 572-2, *Glass in building — Basic soda lime silicate glass products — Part 2: Float glass*

EN 572-3, *Glass in building — Basic soda lime silicate glass products — Part 3: Polished wired glass*

EN 572-4, *Glass in building — Basic soda lime silicate glass products — Part 4: Drawn sheet glass*

EN 572-5, *Glass in building — Basic soda lime silicate glass products — Part 5: Patterned glass*

EN 572-6, *Glass in building — Basic soda lime silicate glass products — Part 6: Wired patterned glass*

EN 572-7, *Glass in building — Basic soda lime silicate glass products — Part 7: Wired or unwired channel shaped glass*

EN 572-8, *Glass in building — Basic soda-lime silicate glass products — Part 8: Supplied and final cut sizes*

EN 572-9, *Glass in building — Basic soda lime silicate glass products — Part 9: Evaluation of conformity/Product standard*

ISO 9385, *Glass and glass-ceramics — Knoop hardness test*

## EN 572-1:2012+A1:2016 (E)

### 3 Terms and definitions

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

**3.1 float**  
flat, transparent, clear or tinted soda-lime silicate glass having parallel and polished faces obtained by continuous casting and floatation on a metal bath

Note 1 to entry: In French called 'glace' and in German 'Floatglas'.

**3.2 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

Note 1 to entry: Drawn sheet glass covers three products: new antique drawn sheet glass, drawn sheet glass for renovation and drawn sheet glass with minimum visual faults.

**3.3 patterned glass**  
flat, translucent, clear or tinted soda-lime silicate glass obtained by continuous casting and rolling

**3.4 wired patterned glass**  
flat, translucent, clear or tinted soda-lime silicate glass obtained by continuous casting and rolling which has a steel mesh welded at all intersections incorporated in the glass during its manufacturing process

Note 1 to entry: The surfaces can be either patterned or plain.

Note 2 to entry: In German, wired patterned glass with plain surfaces is called 'Drahtglas'.

**3.5 polished wired glass**  
flat, transparent, clear soda-lime silicate glass having parallel and polished faces obtained by grinding and polishing the faces of wired patterned glass

**3.6 wired or unwired channel-shaped glass**  
translucent, clear or tinted soda-lime silicate glass, wired or unwired, obtained by continuous casting and rolling, which is formed into a U shape during the manufacturing process

### 4 General principles

EN 572-1 shall be read in conjunction with Parts 2 to 9 of this European Standard.



## 5 Chemical composition

### 5.1 General

Ⓐ The basic glass products covered by this European Standard are all manufactured from soda-lime silicate glass.

The magnitude of the proportions by mass of the principal constituents of soda-lime silicate glass covered by this European Standard is given in Table 1; see also Annex A:

**Table 1 — Magnitude of the proportions by mass of the constituents of soda-lime silicate glass**

Constituents	Proportion by mass of element
Silicon (Si)	32 % – 35 %
Calcium (Ca)	3,5 % – 10,1%
Sodium (Na)	7,4 % – 11,9%
Magnesium (Mg)	0 % – 3,7%
Aluminium (Al)	0 % – 1,6%
Others <sup>a</sup>	< 5%

<sup>a</sup> Properties other than photometric characteristics shall not be significantly altered by these other components.

### 5.2 Tint

Body tinted glass is obtained by the addition of suitable materials.

## 6 Physical and mechanical characteristics

### 6.1 General characteristics

Conventional numerical values for the physical and mechanical characteristics of basic soda-lime silicate glass products excluding 'Characteristic bending strength' ( $f_{g,kk}$ ) are given in Ⓐ Table 2 Ⓐ. These values, for normal annealed glass without any further toughening, are not precise requirements with which the glass shall strictly comply, but are the generally accepted figures for use in calculations where a high degree of accuracy is not required.

Ⓐ

SIST EN 572-1:2012+A1:2016

[https://standards.iteh.ai/catalog/standards/sist/46e382c1-abe9-469d-be5c-](https://standards.iteh.ai/catalog/standards/sist/46e382c1-abe9-469d-be5c-8cf7e25303c/sist-en-572-1-2012a1-2016)[8cf7e25303c/sist-en-572-1-2012a1-2016](https://standards.iteh.ai/catalog/standards/sist/46e382c1-abe9-469d-be5c-8cf7e25303c/sist-en-572-1-2012a1-2016)