



SLOVENSKI STANDARD
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Steklo v gradbeništvu - Steklo z nanosi - 2. del: Zahteve in preskusne metode za nanose razredov A, B in S

Glass in building - Coated glass - Part 2: Requirements and test methods for class A, B and S coatings

Glas im Bauwesen - Beschichtetes Glas - Teil 2: Anforderungen an und Prüfverfahren für Beschichtungen der Klassen A, B und S

Verre dans la construction - Verre à couche - Partie 2: Exigences et méthodes d'essai pour les couches de classes A, B et S

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Glass in building - Coated glass - Part 2: Requirements and test methods for class A, B and S coatings

Verre dans la construction - Verre à couche - Partie 2:
Exigences et méthodes d'essai pour les couches de
classes A, B et S

Glas im Bauwesen - Beschichtetes Glas - Teil 2:
Anforderungen an und Prüfverfahren für Beschichtungen
der Klassen A, B und S

This draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 129.

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Foreword

This document (FprEN 1096-2:2011) 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 1096-2:2001.

The main changes compared to the previous edition are:

- reference to the future EN 1096-5, *Test method and classification for the Self-cleaning performances of coated glass surfaces*;
- the introduction of a method to deal with toughenable / heat strengthenable and to be toughened / to be heat strengthened coated glass, see Annex A.

1 Scope

This European Standard specifies requirements and test methods related to artificial weathering and abrasion of coatings on glass for use in buildings.

These tests are aimed at evaluating the resistance of the coating to attack by simulated natural weathering conditions as well as to abrasion. This attack can be considered as representative of that which could be found on the external and/or internal face of the glazing.

This European Standard applies to Class A, B and S coatings, as described in EN 1096-1.

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*

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

EN 12898, *Glass in building — Determination of emissivity*

3 Terms and definitions

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

For the purposes of these definitions, the term thermally toughened also applies to heat soaked thermally toughened.

3.1

coated annealed glass

coated glass which has an annealed glass substrate

3.2

coated toughened or heat strengthened glass

coated glass which has a thermally toughened or heat strengthened glass substrate

3.3

thermally treated coated glass

coated glass that is thermally toughened or heat strengthened

3.3.1

coated glass - to be toughened or to be heat strengthened

coated glass which has to be thermally toughened or heat strengthened to meet its final spectrophotometric properties

3.3.2

toughenable or heat strengthenable coated glass

coated glass which can be thermally toughened or heat strengthened while keeping its final spectrophotometric properties

4 Requirements

The coated glass complying with this European Standard shall respect the requirements related to the different characteristics given in Table 1.

Table 1 — Requirements

Characteristics	Test Method	Requirements	
		Visual Inspection	Spectrophotometric measurements
Condensation resistance	Annex B	<ul style="list-style-type: none"> - No defect, as defined in EN 1096-1, greater than 3 mm length - Maximum one defect between 2 mm and 3 mm length - Maximum five defects between 1 mm and 2 mm length <p>In addition, no scratches, staining of the coating or clusters of pinholes greater than 1 mm shall be allowed (see EN 1096-1).</p> <p>When compared with the reference test piece, in both reflection and transmission, there shall be no significant colour change. This observation shall be made within 20 s^a.</p>	<p>The transmittance measured at 550 nm and 900 nm shall differ by no more than $\pm 0,03$ from the corresponding measured value on the reference test piece.</p>
Acid resistance	Annex C	No requirements	
Neutral salt spray resistance	Annex D	<ul style="list-style-type: none"> - No defect, as defined in EN 1096-1, greater than 3 mm length - Maximum one defect between 2 mm and 3 mm length - Maximum five defects between 1 mm and 2 mm length <p>In addition, no scratches, staining of the coating or clusters of pinholes greater than 1 mm shall be allowed (see EN 1096-1).</p> <p>When compared with the reference test piece, in both reflection and transmission, there shall be no significant colour change. This observation shall be made within 20 s^a.</p>	For a glass claimed to have a low emissivity coating the reflectance at 8 μm shall decrease by no more than 0,02.
Abrasion resistance	Annex E	No requirement other than to ensure that the abraded area is uniform	Total (diffuse plus direct) transmittance measured at 550 nm and 900 nm shall differ by no more than $\pm 0,05$ from the corresponding value measured for the reference test piece.

^a The time for observation is fixed to 20 s in order to have a reference period which can influence the visual inspection.