SLOVENSKI STANDARD
SIST EN 14209:2017

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Predoblikovane mavčne plošče - Definicije, zahteve in preskusne metode

Preformed plasterboard cornices - Definitions, requirements and test methods

Hohlkehlleisten aus kartonummanteltem Gips - Begriffe, Anforderungen und Prüfverfahren

Corniches préformées en plâtre revêtues de carton - Définitions, exigences et méthodes d'essai

Ta slovenski standard je istoveten z: EN 14209:2017

ICS:

91.100.10	Cement. Mavec. Apno. Malta	Cement. Gypsum. Lime. Mortar

SIST EN 14209:2017 **en,fr,de**

EUROPEAN STANDARD

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EUROPÄISCHE NORM

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ICS 91.100.10

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Preformed plasterboard cornices - Definitions, requirements and test methods

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This European Standard was approved by CEN on 29 July 2016.

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 14209:2017) has been prepared by Technical Committee CEN/TC 241 “Gypsum and gypsum based products”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by January 2018, and conflicting national standards shall be withdrawn at the latest by April 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14209:2005.

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 Regulation (EU) No. 305/2011.

For relationship with Regulation (EU) No. 305/2011, see informative Annex ZA, which is an integral part of this document.

The main technical changes that have been made in this new edition of EN 14209 are the following:

a) normative references have been updated;

b) new clause symbols and abbreviations has been introduced;

c) Annex ZA and Clause 6 have been revised to be in line with the Construction Products Regulation (CPR);

d) document has been editorially revised.

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, 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

Preformed plasterboard cornices are composed of gypsum plaster encased in and firmly bonded to strong durable paper liners in the shape of narrow lengths with various face profiles.

The composition and finish is identical to that of gypsum plasterboard which makes them particularly suitable for use in situations where a compatible product is required to aesthetically enhance the junction between gypsum plasterboard lined or gypsum plastered walls and ceilings. As well as concealing unsightly cracks, they can be used to provide a permanent and effective seal. They can also be used for decorative and acoustic purposes.

Preformed plasterboard cornices are installed with gypsum adhesive or mechanically fixed and can be finished with direct surface decoration.

1 Scope

This European Standard specifies the characteristics and performance of preformed plasterboard cornices intended to be used in building construction works either as part of the original specification or subsequently for improved decorative enrichment of the wall/ceiling angle in rooms.

This standard covers the performance characteristics: reaction to fire and flexural strength.

This standard covers also additional technical characteristics that are of importance for the use and acceptance of the product by the Construction Industry and the reference tests for these characteristics.

It provides the assessment and verification of constancy of performance of the products.

This standard does not cover plain plaster and gypsum fibrous plasterwork cornices.

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 520:2004+A1:2009, *Gypsum plasterboards — Definitions, requirements and test methods*

EN 13501-1:2007+A1:2009, *Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests*

EN 13823:2010+A1:2014, *Reaction to fire tests for building products — Building products excluding floorings exposed to the thermal attack by a single burning item*

EN 14496:2017, *Gypsum based adhesives for thermal/acoustic insulation composite panels and gypsum boards — Definitions, requirements and test methods*

3 Terms and definitions, symbols and abbreviations

3.1 Terms and definitions

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

3.1.1
plasterboard cornice
preformed paper covered gypsum section with profiled face supported by shoulders

3.1.2
face
exposed surface usually concave, or partially concave with further contours to add embellishment

3.1.3
edge
boundary between the face and back angle which defines thickness (AC)

Note 1 to entry: See Figure 1.

3.1.4
back angle
return from edge, preset at a nominal 90° to facilitate positioning during application

3.1.5
end
cut section of length

3.1.6
girth
dimension measured indicating the projection of the profile at 90° (XC)

Note 1 to entry: See Figure 1.

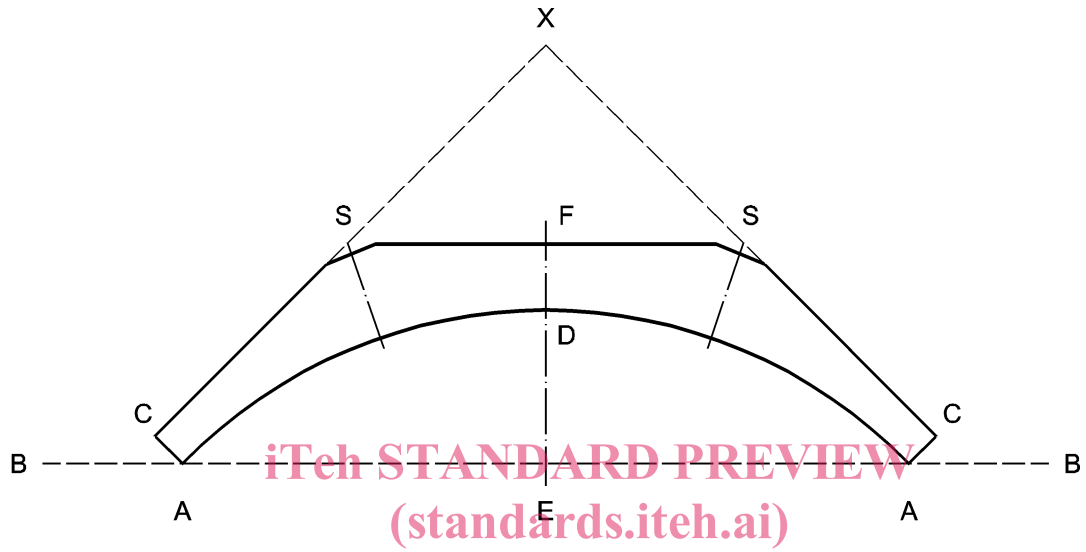


Figure 1 — Example of profile

3.2 Symbols and abbreviations

Table 1 — Symbols and abbreviations

Requirement	Sub-clause	Symbol or abbreviation
Reaction to fire	4.1	R2F
Flexural strength	4.2	F
Dangerous substances	4.3	DS

4 Requirements

4.1 Reaction to fire

Where subject to regulatory requirements, preformed plasterboard cornices shall be tested and classified in accordance with EN 13501-1.

Preformed plasterboard cornices tested according to EN 13823 (SBI test) shall be mounted and fixed in accordance with Annex B or when the manufacturer wishes to claim performance for a specific intended use, the mounting and fixing shall be representative of that intended use.

4.2 Flexural strength (expressed as bending behaviour)

Individual lengths shall be capable of being handled and installed using recommended practice. When tested in accordance with 5.4, the cornice shall not fracture.

4.3 Dangerous substances

National regulations on dangerous substances may require verification and declaration on release, and sometimes content, when construction products covered by this standard are placed on those markets.

In the absence of European harmonized test methods, verification and declaration on release/content should be done taking into account national provisions in the place of use.

NOTE An informative database covering European and national provisions on dangerous substances is available at the Growth website on EUROPA accessed through: https://ec.europa.eu/growth/tools-databases/cp-ds

4.4 Composition

Preformed plasterboard cornices shall have constituents common to gypsum plasterboard to EN 520. The paper shall be suitable to receive decoration or be pre-finished. The abutting paper edges on the back of the cornice are, usually, concealed and secured by a self-adhesive paper tape. The core may contain additives, aggregates and/or fibres.

4.5 Profile and dimensions

4.5.1 General

Preformed plasterboard cornices are manufactured in a variety girths, lengths and profiles to the producer's declared nominal dimensions. The lettering in the sub-clauses below refers to Figure 1.

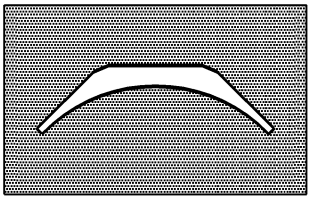
4.5.2 Profile

Preformed plasterboard cornices shall be manufactured to provide a continuous section of regular profile and thickness to permit, subsequently, cut lengths to match their shape and thickness when ends are placed together. The ends shall be end finished, square and clean cut.

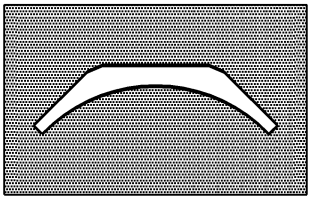
4.5.3 Face

The face and edges shall be free from bumps, grooves, voids, blisters, burrs, scuffing and staining.

The distance ED shall lie within the tolerance limits of ± 1 mm when checked in accordance with 5.3.



a) minimum dimensions (“NOT GO”)



b) maximum dimensions (“GO”)

Figure 2 — Silhouette template

4.5.4 Back angle

The back angle (CXC) designed to facilitate positioning to the wall/ceiling angle shall be not less than 90° when checked in accordance with 5.3.

4.5.5 Side angle

The side angle (DAC) shall be of the specified profile e.g. square, bevelled or rounded when checked in accordance with 5.3.

4.5.6 Face width

The face width of the product (AA) shall lie within the tolerance limits of 2 mm when checked in accordance with 5.3.

4.5.7 Thickness

Thickness should be related to the constituents, composition and profile which combined shall provide the desired shape to facilitate handling and fixing. The main section (DF) shall have a minimum thickness of 9,5 mm and may require to be greater than that of section (AC) which shall have a minimum thickness of 5,5 mm when measured in accordance with 5.2.1.

4.5.8 Length

The length shall be measured in accordance with 5.2.2 and compared with the nominal length. The deviations shall be $^{+20}_{0}$ mm.

4.5.9 Squareness and integrity of ends

The sections shall be end-finished, square and clean cut.

5 Test methods

5.1 Sampling

A minimum of three cornices shall be subjected to the physical testing described in 5.2.1, 5.2.2 and 5.3.

5.2 Dimensional measurements

5.2.1 Thickness

5.2.1.1 Principle

The thickness of the main member (DF) shall be measured and the side member (AC) in three separate positions per specimen.

5.2.1.2 Apparatus

A micrometer (callipers) permitting readings to 0,01 mm.

5.2.1.3 Procedure

Measure the thickness between the surfaces of the main and side members at representative surface areas and positions.

5.2.1.4 Expression of results

Record three measurements of thickness per length for each main and side member. All three specimens shall comply with 4.5.7.

5.2.2 Length

5.2.2.1 Principle

The length of the specimen shall be measured and the tolerances shall be compared.

5.2.2.2 Apparatus

a) Flat surface;

b) metal rule permitting readings to 1,0 mm.

5.2.2.3 Procedure

Place the specimen on the flat surface and measure the length.

5.2.2.4 Expression of results

Record the measurements of the three specimens. All specimens shall comply with 4.5.8.

5.3 Determination of accuracy of profile

5.3.1 Principle

The accuracy, symmetry and angles of the profile across its length shall be checked for each specimen.

5.3.2 Apparatus

A rigid plastics or aluminium sheet cut to provide a template, comprising two silhouettes, of the end profile of the cornice design. One cut to the minimum and one cut to the maximum tolerance specification (see Figure 2).

5.3.3 Procedure

Place the templates in turn over one end of the specimen and pull each along the length of the specimen to check its compliance with the specification of the profile, noting freedom from identifiable bumps and grooves on the exposed face CADAC.

5.3.4 Expression of results

Record the results of the exercise on all three specimens. All specimens shall comply with the profile requirements in 4.5.2.

5.4 Determination of bending behaviour

5.4.1 Principle

The ability of the full size specimen shall be established to resist fracture when flexed under its own mass.

5.4.2 Apparatus

a) A balance with a capacity of 100 N permitting readings to 0,01 N;

b) a timer capable of measuring 5 min;

c) two (25 ± 5) mm diameter cylindrical steel supports, minimum 200 mm in length placed horizontally and parallel with a means of securing at one end or both ends to allow them to be spaced 1,5 m apart. The position should also permit the testing of cornice of maximum length.