SLOVENSKI STANDARD
SIST EN 13169:2013+A1:2015/oprA2:2018

01-november-2018

Toplotnoizolacijski proizvodi za stavbe - Proizvodi iz ekspandiranega perlita (EPB) - Specifikacija

Thermal insulation products for buildings - Factory made expanded perlite board (EPB) products - Specification

Wärmedämmstoffe für Gebäude - Werkmäßig hergestellte Produkte aus Blähperlit (EPB) - Spezifikation

Produits isolants thermiques pour le bâtiment - Produits manufacturés en panneaux de perlite expansée (EPB) - Spécification

Ta slovenski standard je istoveten z: **EN 13169:2012+A1:2015/prA2**

ICS:

91.100.60	Materiali za toplotno in zvočno izolacijo	Thermal and sound insulating materials

SIST EN 13169:2013+A1:2015/oprA2:2018 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 91.100.60

English Version

Thermal insulation products for buildings - Factory made expanded perlite board (EPB) products - Specification

Produits isolants thermiques pour le bâtiment - Produits manufacturés en panneaux de perlite expansée (EPB) - Spécification

Wärmedämmstoffe für Gebäude - Werkmäßig hergestellte Produkte aus Blähperlit (EPB) - Spezifikation

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 88.

This draft amendment A2, if approved, will modify the European Standard EN 13169:2012+A1:2015. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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European foreword

This document (EN 13169:2012+A1:2015/prA2:2018) has been prepared by Technical Committee CEN/TC 88 "Thermal insulating materials and products", the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

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

For relationship with EU Regulation, see informative Annex ZA which is an integral part of this document.

1 Modification to the European foreword

In the seventh paragraph, delete ", and supports essential requirements of EU Directive(s)".

Delete the ninth paragraph (list of changes) and replace the tenth and eleventh paragraph with the following:

"Amendment A2 modifies EN 13169:2012 and its A1 amendment. This amendment introduces or corrects:

a) A modified Annex ZA;

b) A modified clause “Release of Dangerous substance”;

c) A modified definition for “Class F” in the clause “reaction to fire”;

d) Editorial modifications in different parts of the text and linked to the above modifications;

e) Modifications to be in line with the CPR, e.g. PTD replaced by Type Testing;

f) Delete reference to EN 12086 and replace with EN ISO 12572;

g) Delete § 4.3.14 Continuous glowing combustion.

In the fourteenth paragraph, add the following standard to the end of the list of standards:

"EN 16069, *Thermal insulation products for buildings — Factory made products of polyethylene foam (PEF) — Specification".*

2 Modification to the Scope

*In the first paragraph, replace the word "*requirements“ *with the word "*characteristics“*.*

In the fourth paragraph, replace the term "evaluation of conformity" *with "*assesment and verification of constancy of performance (AVCP)".".

3 Modifications to Clause 2, Normative references

*Delete the reference "*EN 12086:1997*".*

Add the following refererences:

"EN 16516, *Construction products — Assessment of release of dangerous substances – Determination of emissions into indoor air"*

and

"EN ISO 12572, *Thermal insulating products for building applications — Determination of water vapour transmission properties".*

4 Modifications to Clause 3, Terms and definitions

*Delete the terms "*3.1.2 level“ *and "*3.1.3 class“ *and renumber the remaining terms accordingly.*

*Delete the abbreviated terms "*PTD" *and "*VCP".

5 Modification to Clause 4, Requirements

*Replace the term "*Requirements*" with "*Characteristics*".*

6 Modification to 4.1, General

Please replace the text in the clause with the following:

"Product properties shall be assessed in accordance with Clause 5. To comply with this standard, products shall meet the characteristics of 4.2, and the characteristics of 4.3 as appropriate.

For multilayered insulation products additional characteristics are given in Annex D.

For composite insulation products additional characteristics are given in Annex E.

One test result on a product property is the average of the measured values on the number of test specimens given in Table 7.

NOTE Information on additional properties is given in Annex F.".

7 Modification to 4.3.10, Water vapour transmission

*Replace the reference to "*EN 12086*" with a reference to "*EN ISO 12572*".*

8 Modification to 4.3.11, Release of dangerous substances

Replace the text in the clause with the following:

"If the release of dangerous substances into indoor air is tested, this shall be done according to EN 16516.[1)]

NOTE An informative database covering European and national provisions on dangerous substances is available at the Construction web site on EUROPA accessed through: http://ec.europa.eu/growth/tools-databases/cp-ds.".

9 Modification to 4.3.13, Continuous glowing combustion

Delete the whole clause.

10 Modification to 5.3.4, Water absorption by total immersion

Replace Table 7 with the following:

1) See for reference the LCI list of the European Commission « Agreed EU-LCI values » (http://ec.europa.eu/growth/sectors/construction/eu-lci/values_en).

"Table 7 — Test methods, test specimens and conditions

Dimensions in millimetres

Clause		Test method	Test specimen length and width[a]	Minimum number of measurements to get one test result	Specific conditions
No.	Title				
4.2.1	Thermal resistance – thermal conductivity	EN 12667 or EN 12939	See EN 12667 or EN 12939	1	–
4.2.2	Length and width	EN 822	Full size	1	–
4.2.3	Thickness	EN 823	Full size	3	Load: (250 ± 5) Pa See 4.2.3
4.2.4	Squareness	EN 824	Full size	1	–
4.2.5	Flatness	EN 825	Full size	1	–
4.2.6	Bending strength	EN 12089	See EN 12089	3	Method B
4.2.7	Reaction to fire of the product as placed on the market	See EN 13501-1 and EN 15715			See Clause 5 of EN 15715:2009
4.3.2	Dimensional stability under specified conditions	EN 1604	200 × 200	3	–
4.3.3	Compressive stress or compressive strength	EN 826	100 × 100	5	If $d_N \leq 100$
			150 × 150	5	If $d_N > 100$
4.3.4	Deformation under specified load and temperature conditions	EN 1605	100 × 100	3	If $d_N \leq 100$
			150 × 150	3	If $d_N > 100$
4.3.5	Tensile strength perpendicular to faces	EN 1607	80 × 80 or 100 × 100	8	See 5.3.3 If board > 1 m²
				5	See 5.3.3 If board ≤ 1 m²
4.3.6.1	Short term water absorption by partial immersion	EN 1609	200 × 200	4	Method A
4.3.6.2	Short term water absorption by total immersion	See 5.3.4	300 × 300	3	–
4.3.7	Bending strength at constant span	EN 12089	300 × 50	3	Method B Span: 250 mm
4.3.8	Point load	EN 12430	300 × 300	3	–
4.3.9	Compressive creep	EN 1606	100 × 100	3	If $d_N \leq 100$
			150 × 150	3	If $d_N > 100$
4.3.10	Water vapour transmission	EN ISO 12572	See 6.1 in EN 12086:1997	3	–
4.3.11	Release of dangerous substances	EN 16516	See EN 16516	See EN 16516	4.3.11
4.3.12	Reaction to fire of the product in standardized assemblies simulating end-use applications	See EN 13501-1 and EN 15715			See Clause 6 of EN 15715:2009

[a] Full size product thickness except for 4.2.7 when the limits of the test methods are exceeded.

".

11 Modification to Clause 6, Designation code

Replace the first sentence with the following:

"If a designation code is provided, it shall be given as following (including relevant characteristics from clause 4.3):".

12 Modification to Clause 7, Assessment and Verification of the Constancy of Performance (AVCP)

Replace the subclauses with the following:

"7.1 General

In accordance with EN 13172, the compliance of the Factory made expanded perlite board with the requirements of this standard and with the performances declared by the manufacturer in the DoP shall be demonstrated by:

— determination of the product type (Type testing);

— factory production control by the manufacturer, including product assessment.

The manufacturer shall always retain the overall control and shall have the necessary means to take responsibility for the conformity of the product with its declared performance(s).

If a manufacturer decides to group his products, it shall be done in accordance with EN 13172.

7.2 Type testing

All performances related to characteristics included in this standard shall be determined when the manufacturer intends to declare the respective performances unless the standard gives provisions for declaring them without performaning tests (e.g. use of previously existing data, CWFT and conventionaly accepted performance). Type testing description is given in Annex B.

For the relevant characteristics, Type testing on products corresponding also to EN 14303 may be used for the purpose of Type testing and Declaration of Performance (DoP) according to this standard.

7.3 Factory Production Control (FPC)

The manufacturer shall establish, document and maintain an FPC system to ensure that the products placed on the market comply with the declared performance of the essential characteristics.

The minimum frequencies of tests in the factory production control (FPC) shall be in accordance with Annex B of this standard. When indirect testing is used, the correlation to direct testing shall be established in accordance with EN 13172.

7.4 Initial inspection

The initial inspection of the factory and of FPC shall be done in accordance with EN 13172.

7.5 Continuous surveillance

The continuous surveillance of FPC shall be done in accordance with EN 13172.".

13 Modification to Clause 8, Marking and labelling

Delete the note and example.

14 Modification to A.1, General

Replace the first paragarph with the following:

"The declared values of thermal resistance and thermal conductivity shall be determined. The conformity of the product to its declared values should be demonstrated. The declared values of thermal resistance and thermal conductivity of a product are the expected values of these properties during an economically reasonable working life under normal conditions, assessed through measured data at reference conditions.".

15 Modification to A.2, Input data

Replace the first sentence with the following:

"At least ten test results for thermal resistance and thermal conductivityshall be obtained from internal or external direct measurements in order to calculate the declared values.".

16 Modification to Annex B, Product type determination (PTD) and factory production control (FPC)

*Replace the current title of the Annex with "*Type testing and factory production control (FPC)."

Replace Table B.1 with the following:

"Table B.1 — Minimum number of tests for type testing and minimum product testing frequencies

Clause		Type testing[b]	FPC[a]		
			Minimum testing frequency		
N°	Title	Minimum number of tests [c]	Direct testing	Indirect testing	
				Test method	Frequency
4.2.1	Thermal resistance – thermal conductivity	A minimum of 10 tests are needed statistically with a minimum of 4 from the **Type testing**	1 per 24 h	–	–
4.2.2	Length and width	4	1 per 4 h	–	–
4.2.3	Thickness	4	1 per 2 h	–	–
4.2.4	Squareness	4	1 per 4 h	–	
4.2.5	Flatness	4	1 per 5 years[b]	–	–
4.2.6	Bending strength	4	1 per 5 years[b]	–	–
4.2.7	Reaction to fire of the product as placed on the market	See EN 13501-1 and EN 15715	See Table B.2		
4.3.2	Dimensional stability	4	1 per 5 years[b]	–	–

Clause		Type testing[b]	FPC[a]		
		Minimum number of tests [c]	Minimum testing frequency		
N°	Title		Direct testing	Indirect testing	
				Test method	Frequency
4.3.3	Compressive stress or strength	4	1 per 8 h	–	–
4.3.4	Deformation under specified load and temperature conditions	4	1 per 5 years[b]	–	–
4.3.5	Tensile strength perpendicular to faces	4	1 per 8 h	–	–
4.3.6.1	Short term water absorption by partial immersion	4	1 per 5 years[b]	–	–
4.3.6.2	Short term water absorption by total immersion	4	1 per 8 h	–	–
4.3.7	Bending strength at a constant span	4	1 per 8 h	–	–
4.3.8	Point load	4	1 per 5 years[b]	–	–
4.3.9	Compressive creep	4	1 per 10 years[b]	–	–
4.3.10	Water vapour transmission	4	1 per 5 years[b]	–	–
4.3.11	Release of dangerous substances	EN 16516	1 per 5 years	EN 16516	1 per week
4.3.12	Reaction to fire of the product in standardised assemblies end-use applications	1	1 per 5 years	See Table B.2	

a In line with EN 13172, the minimum testing frequencies expressed in test results shall be understood as the minimum for each production unit/line under stable conditions. In addition to the testing frequencies given above, testing of relevant properties of the product shall be repeated when changes or modifications are made that are likely to affect the conformity of the product.

For mechanical properties, the testing frequencies given are independent of the change of product. In addition, the manufacturer shall establish internal rules for process adjustments related to these properties when changing the product.

b **Type testing**, see EN 13172, and is only relevant when properties are declared.

c Minimum number of tests may be reduced according to EN 13172. For !product type determination" of long term thermal, mechanical and freeze-thaw properties test results of similar products produced at different plants or lines will be recognized until testing for a new plant or line is completed.

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