



SLOVENSKI STANDARD
SIST EN 13167:2013+A1:2015/oprA2:2018
01-november-2018

**Toplotnoizolacijski proizvodi za stavbe - Proizvodi iz penjenega stekla (CG) -
Specifikacija**

Thermal insulation products for buildings - Factory made cellular glass (CG) products -
Specification

Wärmedämmstoffe für Gebäude - Werkmäßig hergestellte Produkte aus Schaumglas
(CG) - Spezifikation

Produits isolants thermiques pour le bâtiment - Produits manufacturés en verre cellulaire
(CG) - Spécification

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Ta slovenski standard je istoveten z: EN 13167:2012+A1:2015/prA2

ICS:

91.100.60	Materiali za toplotno in zvočno izolacijo	Thermal and sound insulating materials
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EUROPEAN STANDARD
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EN 13167:2012+A1:2015
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ICS 91.100.60

English Version

Thermal insulation products for buildings - Factory made cellular glass (CG) products - Specification

Produits isolants thermiques pour le bâtiment -
Produits manufacturés en verre cellulaire (CG) -
Spécification

Wärmedämmstoffe für Gebäude - Werkmäßig
hergestellte Produkte aus Schaumglas (CG) -
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 13167:2012+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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 13167:2012+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 mandate given to CEN by the European Commission and the European Free Trade Association.

For relationship with Construction Products Regulation (CPR), see informative Annex ZA which is an integral part of this document.

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EN 13167:2012+A1:2015/prA2:2018 (E)**1 Modifications to the European foreword**

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

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

"Amendment A2 modifies EN 13167:2012 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 TT;
- 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

Replace the third paragraph with:

"This standard describes product characteristics and includes procedures for testing, assessment and verification of constancy of performance (AVCP), marking and labelling."

3 Modifications to Clause 2, Normative references

Delete the reference "EN 12086:1997".

Add the following references:

"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, definitions, symbols, units and abbreviated terms

Delete the term and definition for "3.1.6 level" and "3.1.7 class" and modify the numbers of the remaining terms accordingly.

Delete the following abbreviated terms:

PTD is **P**roduct **T**ype **D**etermination (previously named ITT for Initial Type Test)

VCP is **V**erification of **C**onstancy of **P**erformance (previously named evaluation of conformity)

Add the following abbreviated term:

"

TT is **T**ype **T**esting

".

5 Modification to Clause 4, Requirements

In the title, replace the term "Requirements" with "Characteristics".

6 Modification to 4.1, General

Replace the first sentence of 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."

7 Modification to 4.3.2, Dimensional stability

Replace in Table 1 - first row in the header, the term "Requirement" with "Characteristic".

8 Modifications to 4.3.3, Compressive strength

Replace the first sentence with the following:

"Compressive strength, σ_m , shall be determined in accordance with EN 826."

Add the following paragraph above the Table 2:

"For cellular glass, EN 826:1996 compressive behaviour test method Annex A shall be respected in which test specimens shall be capped with hot bitumen to cover the open cut cells. In absence of hot bitumen, an alternative capping shall be foreseen having the same smoothness and cell filling capacity as hot bitumen, e.g. soft butyl or other elastomeric thin foils or membranes."

Replace in Table 2 - first row the term "Requirement" with "Characteristic".

9 Modification to 4.3.4, Bending strength

Replace in Table 3 - first row in the header the term "Requirement" with "Characteristic".

10 Modification to 4.3.5, Point load

Replace in Table 4 - first row in the header the term "Requirement" with "Characteristic".

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11 Modification to 4.3.10, Water vapour transmission

Replace the first sentence with the following:

"Water vapour transmission properties shall be determined in accordance with EN ISO 12572, and declared as the water vapour diffusion resistance factor, μ , for homogeneous products and as the water vapour resistance, Z , for faced or non-homogeneous products."

12 Modification to 4.3.12, Release of dangerous substances

Replace the clause with the following:

"Cellular glass products do not contain dangerous substances or releases to indoor climate.

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>."

13 Modification to 4.3.14, Continuous glowing combustion

Delete the whole clause.

14 Modification to 5.3.2, Thermal resistance and thermal conductivity

Replace Table 5 with the following table:

"Table 5 — Test methods, test specimens and conditions

Dimensions in millimetres

No	Title	Test method	Test specimen length and width ^a	Minimum number of measurements to get one test result	Specific conditions
4.2.1	Thermal resistance — thermal conductivity	EN 12667 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	1	(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	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 at specified temperature	EN 1603	Full-size	1	Method A
	Dimensional stability under specified temperature and humidity conditions	EN 1604	200 × 200	3	—
4.3.3	Compressive strength	EN 826	Quarter board	3 (CS 400-1000)	Annex A
			200 × 200	4 (CS 1200-3000)	
4.3.4	Bending strength	EN 12089		4	Method B

Clause		Test method	Test specimen length and width ^a	Minimum number of measurements to get one test result	Specific conditions
No	Title				
4.3.5	Point load	EN 12430	Full size	1	Annex A
4.3.6	Tensile strength parallel to faces	EN 1608	500 × 250	5	-
4.3.7	Tensile strength perpendicular to faces	EN 1607	150 × 150	3	-
4.3.8	Compressive creep	EN 1606	200 × 200	3	Test specimen: see EN 826:1996, Annex A with use of reference points on the edge
4.3.9	Short term water absorption	EN 1609	200 × 200	4	Method A
	Long term water absorption	EN 12087	200 × 200	4	Method 1A
4.3.10	Water vapour transmission	EN ISO 12572	See 6.1 of EN ISO 12572	5	
4.3.11	Sound absorption	EN ISO 354	Minimum 10 m ²	1	To be reported
4.3.12	Release of dangerous substances	^b	-	-	-
4.3.13	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 4.2.6 when the limits of test methods are exceeded. If for 4.3.3 and 4.3.8 the thickness of the test specimen is greater than the width, the length and the width shall be at least equal to the thickness of the test specimen.					
^b Not yet available.					

15 Modification to Clause 6, Designation code

Replace the first paragraph with the following:

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

Delete the eighth bullet point of the list "Tensile strength parallel to faces".

Replace the Example and NOTE by the following:

"EXAMPLE CG — EN 13167 — DS(70,90) — CS(Y)600 — PL(P) 1 - BS400 — TR100 — WS - WL(P) - MU

NOTE The characteristics determined in 4.2 are not included in the designation code if a limit value (threshold value) is given for the product."