



SLOVENSKI STANDARD
SIST EN 13162:2013+A1:2015/oprA2:2018
01-november-2018

**Toplotnoizolacijski proizvodi za stavbe - Proizvodi iz mineralne volne (MW) -
Specifikacija**

Thermal insulation products for buildings - Factory made mineral wool (MW) products -
Specification

Wärmedämmstoffe für Gebäude - Werkmäßig hergestellte Produkte aus Mineralwolle
(MW) - Spezifikation

Produits isolants thermiques pour le bâtiment - Produits manufacturés en laine minérale
(MW) - Spécification

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Ta slovenski standard je istoveten z: EN 13162:2012+A1:2015/prA2

ICS:

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

Thermal insulation products for buildings - Factory made mineral wool (MW) products - Specification

Produits isolants thermiques pour le bâtiment -
Produits manufacturés en laine minérale (MW) -
Spécification

Wärmedämmstoffe für Gebäude - Werkmäßig
hergestellte Produkte aus Mineralwolle (MW) -
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 13162:2012+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
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European foreword

This document (EN 13162:2012+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 Construction Products Regulation (CPR), see informative Annex ZA which is an integral part of this document.

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EN 13162:2012+A1:2015/prA2:2018 (E)**1 Modifications to the European foreword**

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

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

"Amendment A2 modifies EN 13162:2012+A1:2015. This amendment introduces or corrects:

- a) Correct a mistake in 4.3.10.2;
- b) Modified the Annex ZA;
- c) Introduced the clause "Continuous smouldering";
- d) Modified the clause "Release of Dangerous substance";
- e) Modified the definition for "Class F" in the clause "reaction to fire";
- f) Editorial modifications in different parts of the text and linked to the above modification;
- g) Modifications to be in line with the CPR, e.g. PTD replaced by Type Testing;
- h) Delete reference to EN 12086 and replace with EN ISO 12572."

2 Modifications to the Scope

In paragraph 1, replace the word "requirements" with the word "characteristics".

In paragraph 3, replace the term "evaluation of conformity" with "assessment and verification of constancy of performance (AVCP)".

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

EN 16733:2016, Reaction to fire tests for building products - Determination of a building product's propensity to undergo continuous smouldering

EN ISO 12572:2016, Hygrothermal performance of building materials and products - Determination of water vapour transmission properties - Cup method (ISO 12572:2016)".

4 Modifications to 3.1, "Terms and definitions"

Delete the terms "level" and "class" and renumber other terms accordingly.

5 Modifications to 3.2, "Symbol, units and abbreviated terms"

Add the following symbols:

"

S – NoS is the Continuous Smouldering declaration (NoS means no Smouldering and S means Smouldering)

ANP Smouldering assessment not possible

".

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

6 Modification to Clause 4, "Requirements"

Replace the term "Requirements" with "Characteristics".

7 Modification to 4.1, "General"

Replace the second paragraph with the following:

"MW is anisotropic and the result of a measurement perpendicular to faces could be different from a measurement parallel to faces for many properties (e.g. thermal and mechanical properties)."

8 Modification to 4.2.1, "Thermal resistance and thermal conductivity"

Replace the second paragraph with the following:

"The thermal resistance and thermal conductivity shall be determined in accordance with Annex A and declared according to the following:"

9 Modification to 4.2.6, "Reaction to fire of the product as placed on the market"

Replace the third paragraph with:

"Reaction to fire class A1 without further test is declared when it is demonstrated by testing in accordance with EN 13820 that the products do not contain more than 1,0 % by weight of organic matter.

NOTE The European Commission Decision 96/603/EC amended by Decision 2000/605/EC and 2003/424/EC gives the conditions for classification A1 without the need for testing."

10 Modification to 4.2.7.3, "Durability of thermal resistance and thermal conductivity against ageing/ degradation"

In the title, replace the word "conductivity" with the word "conductivity".

11 Modification to 4.3.8, "Water vapour transmission"

In paragraph 1, replace the reference to "EN 12086" with "EN ISO 12572".

12 Modification to 4.3.10.2, "Thickness d_L "

Delete the second paragraph.

EN 13162:2012+A1:2015/prA2:2018 (E)**13 Modification to 4.3.13, "Release of dangerous substances"**

Replace the text in this subclause with the following:

"If the release of dangerous substances¹⁾ into indoor air is tested, this shall be done according to EN 16516.

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

14 Modification to 4.3.14, "Reaction to fire of the product in standardized assemblies simulating end-use applications"

In paragraph 1, delete the text "excluding pipe insulation".

15 Modification to 4.3.15, "Continuous glowing combustion"

Replace the entire subclause with the following new subclause:

"4.3.15 Propensity to undergo continuous smouldering"

When declared, the propensity to undergo continuous smouldering of the mineral wool shall be tested according to EN 16733. The following conditions and parameters shall be considered within the tests:

- the type of binder and additives;
- organic content (in percentage per mass), to be determined by tests according to EN 13820;
- absolute organic content expressed in [kg/m³];
- density according to EN 1602;
- thickness to be determined by test according EN 823;
- fibre orientation.

The test is intended for naked core product. Any facings or coatings are removed when preparing the test specimen

The tests shall be done without consideration of the intended end-use conditions. If the paragraph 6.2.5 of EN 16733:2016 applies, a permanent contact between the pieces shall be assured.

The results of tests considering the aforementioned parameters in full are also valid for products

- of same binder type and additives;
- having tested absolute organic content in [kg/m³] identical or lower, when the organic content in [%] is the same or lower as tested;
- with equal or lower density up to a tested density of 115 kg/m³;

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)

- if tested density is higher than 115 kg/m^3 , can be applicable to lower density if additionally tested with a density of 100 kg/m^3 ($\pm 15 \%$);
- with lower thickness and also with higher thickness when 100 mm thick specimens were tested;
- with all fibre orientations, if all relevant orientations had been tested;
- with any facings or coatings or suchlike;
- for any end-use conditions.

If the test according to Clause 11 of EN 16733:2016 has been passed, declare: “the product does not show propensity for continuous smouldering combustion”. If the test according to Clause 11 of EN 16733:2016 has been failed, declare: “the product shows propensity for continuous smouldering combustion”. If the assessment was not possible according to Clause 11 of EN 16733:2016, declare: “assessment of the propensity for continuous smouldering combustion is not possible”.

If a Designation code is given, the following abbreviations shall be used:

- the product does not show propensity for continuous smouldering combustion: NoS
- the product shows propensity for continuous smouldering combustion: S
- the assessment of the propensity for continuous smouldering combustion is not possible: ANP”.

16 Modification to 5.3.2, "Thermal resistance and thermal conductivity"

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Replace Table 5 with the following new table:

"Table 5 — Test methods, test specimens and conditions"

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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 and 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	Roll: 1 Board and Batt: 3	Method B.1, 50 Pa or 250 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

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Clause		Test method	Test specimen length and width ^a	Minimum number of measurements to get one test result	Specific conditions
No	Title				
4.3.2	Dimensional stability under specified conditions	EN 1604	200 × 200	3	-
4.3.3	Compressive stress or strength	EN 826	200 × 200	5	Surface grinding ^b
			300 × 300	3	
4.3.4	Tensile strength perpendicular to faces	EN 1607	200 × 200	5	-
			300 × 300	3	-
4.3.5	Point load	EN 12430	300 × 300	3	-
4.3.6	Compressive creep	EN 1606	200 × 200	5	Surface grinding ^b
			300 × 300	3	
4.3.7	Short term water absorption	EN 1609	200 × 200	4	Method A
	Long term water absorption	EN 12087	200 × 200	4	Method 1A
4.3.8	Water vapour transmission	EN ISO 12572	See 6.1 of EN ISO 12572:2016	3	c
4.3.9	Dynamic stiffness	EN 29052-1	200 × 200	3	-
4.3.10	Thickness, d_L	EN 12431	200 × 200	3	Classes T6 and T7
	Thickness, d_B	EN 12431			
	Long term thickness reduction	EN 1606			Level CP2
4.3.11	Sound absorption	EN ISO 354	Minimum 10 m ²	1	To be reported
4.3.12	Air flow resistivity	EN 29053	Apparatus dependent	3	-
4.3.13	Release of dangerous substances	EN 16516	See EN 16516	See EN 16516	4.3.13
4.3.14	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
4.3.15	Continuous smouldering	EN 16733	see EN 16733	See EN 16733	See EN 16733

Clause		Test method	Test specimen length and width ^a	Minimum number of measurements to get one test result	Specific conditions
No	Title				
4.3.16	Shear strength	EN 12090	250 × 50	3	Single test specimen
			200 × 100	3	Double test specimen
4.3.17	Bending strength	EN 12089	Full size	1	Method A
			150 × 5 × thickness ± 50 mm.	3	Method B

^a Full-size product thickness except for 4.2.6 when the limits of the test methods are exceeded. If for 4.3.3 and 4.3.6 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 Unfaced products shall be ground. Faced products shall have a suitable surface treatment.

^c When testing products with water vapour barrier, in accordance with EN ISO 12572 the specimen thickness to measure is the water vapour barrier thickness plus 2 mm to 3 mm.

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17 Modifications to Clause 6, "Designation code" (standard (EN 13162))

Replace the first paragraph with the following:

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

Add the following line to the list:

- "
- Continuous Smouldering S NoS ANP
- "

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

Replace the current subclauses with the following:

"7.1 General

In accordance with EN 13172, the compliance of the factory made mineral wool 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).