



**SLOVENSKI STANDARD**  
**SIST EN 13171:2013+A1:2015/oprA2:2018**  
**01-november-2018**

---

**Toplotnoizolacijski proizvodi za stavbe - Proizvodi iz lesnih vlaken (WF) -  
Specifikacija**

Thermal insulation products for buildings - Factory made wood fibre (WF) products -  
Specification

Wärmedämmstoffe für Gebäude - Werksmäßig hergestellte Produkte aus Holzfasern  
(WF) - Spezifikation

Produits isolants thermiques pour le bâtiment - Produits manufacturés en fibres de bois  
(WF) - Spécification

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**  
<https://standards.iteh.ai/catalog/standards/sist/84e0091a-1e4e-4f22-b277-50d93ba343a2/sist-en-13171-2013a1-2015-opra2-2018>

**Ta slovenski standard je istoveten z: EN 13171:2012+A1:2015/prA2**

---

**ICS:**

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

**SIST EN**  
**13171:2013+A1:2015/oprA2:2018**

**en,fr,de**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 13171:2013+A1:2015/oprA2:2018](https://standards.iteh.ai/catalog/standards/sist/84e0091a-1e4e-4f22-b277-50d93ba343a2/sist-en-13171-2013a1-2015-opra2-2018)  
<https://standards.iteh.ai/catalog/standards/sist/84e0091a-1e4e-4f22-b277-50d93ba343a2/sist-en-13171-2013a1-2015-opra2-2018>

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**DRAFT**  
**EN 13171:2012+A1:2015**  
**prA2**

September 2018

ICS 91.100.60

English Version

## Thermal insulation products for buildings - Factory made wood fibre (WF) products - Specification

Produits isolants thermiques pour le bâtiment -  
Produits manufacturés en fibres de bois (WF) -  
Spécification

Wärmedämmstoffe für Gebäude - Werksmäßig  
hergestellte Produkte aus Holzfasern (WF) -  
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 13171:2012+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.

CEN members are the national standards bodies of 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 United Kingdom.

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.

**Warning** : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

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

<b>Contents</b>	<b>Page</b>
European foreword.....	3
1 Modifications to the European foreword .....	4
2 Modifications to the Scope .....	4
3 Modifications to Clause 2, Normative references .....	4
4 Modifications to Clause 3, Terms, definitions, symbols, units and abbreviated terms .....	5
5 Modifications to 4.2.1, Thermal resistance and thermal conductivity .....	5
6 Modification to 4.3.1, General.....	5
7 Modification to 4.3.2, Dimensional stability.....	6
8 Modification to 4.3.5, Tensile strength parallel to faces .....	6
9 Modification to 4.3.15, Release of dangerous substances .....	6
10 Modifications to 4.3.17, Continuous glowing combustion .....	6
11 Modification to 5.2, Conditioning .....	7
12 Modification to 5.3.2, Thermal resistance and thermal conductivity .....	7
13 Modification to Clause 6, Designation code .....	9
14 Modification to Clause 7, Assessment and Verification of the Constancy of Performance (AVCP) .....	9
15 Modification to A.2, Input data.....	10
16 Modification to Annex B, Product type determination (PTD) and factory production control (FPC).....	10
17 Modification to C.4, Evaluation of conformity.....	15
18 Modification to E.3, Shear strength.....	15
19 Modification to Annex ZA, Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation.....	15

## European foreword

This document (EN 13171:2012+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 EU Regulation, see informative Annex ZA which is an integral part of this document.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 13171:2013+A1:2015/oprA2:2018](https://standards.iteh.ai/catalog/standards/sist/84e0091a-1e4e-4f22-b277-50d93ba343a2/sist-en-13171-2013a1-2015-opra2-2018)

<https://standards.iteh.ai/catalog/standards/sist/84e0091a-1e4e-4f22-b277-50d93ba343a2/sist-en-13171-2013a1-2015-opra2-2018>

## EN 13171:2012+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 and replace the tenth and eleventh paragraphs with the following:*

"Amendment A2 modifies EN 13171:2012 and its A1 amendment. This amendment introduces or corrects:

- a) Introduced the clause "Continuous smouldering";
- b) Modified the clause "Release of Dangerous substance";
- c) Modified the definition for "class F" in the clause "reaction to fire";
- d) Editorial modifications in different parts of the text and linked to the above modification;
- e) Modifications to be in line with the CPR e.g. PTD replaced by TT;
- f) Modified the Annex ZA."

*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*".

**iTeh STANDARD PREVIEW**  
(standards.iteh.ai)

**2 Modifications to the Scope**

*Replace the first sentence with:*

[SIST EN 13171:2013+A1:2015/oprA2:2018](https://standards.iteh.ai/catalog/standards/sist/84e0091a-1e4e-4f22-b277-2501e0000008)

<https://standards.iteh.ai/catalog/standards/sist/84e0091a-1e4e-4f22-b277-2501e0000008>

"This European Standard specifies the characteristics for factory made wood fibre (WF) products, with or without facings or coatings, which are used for the thermal insulation of buildings<sup>1)</sup>".

*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 to indoor air*

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

*and*

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

---

1) Wood fibre products for applications other than thermal insulation are covered by EN 316.

## 4 Modifications to Clause 3, Terms, definitions, symbols, units and abbreviated terms

Replace the term and definition of "wood fibre products" with the following:

### "3.1.1

#### wood fibre products

insulation product including bonded products manufactured from wood fibres with or without the addition of bonding agents and/or additives consisting of at least 80 % wood fibres per mass, produced either from fresh wood or from recycled wood that contains no PCP (pentachlorophenol) or biocides

Note 1 to entry Wood fibre products are manufactured as mat, batt, felt, roll, lamella roll and board (slab)."

Delete the term and definition for "3.1.2 level" and "3.1.3 class" and modify the numbers of the remaining terms accordingly.

Add the following symbols:

"

S-NoS is the Continous-Smouldering declaration (NoS means no Smouldering and S means Smouldering)

ANP Smouldering assessment not possible

".

Delete the following abbreviated terms:

PTD is Product Type Determination (previously named ITT for Initial Type Test)

VCP is Verification of Constancy of Performance (previously named evaluation of conformity)

Add the following abbreviated term:

"

TT is Type Testing

".

## 5 Modifications 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:"

Replace the eighth item of the list with the following:

"

- the statistical value of thermal resistance,  $R_{90/90}$ , when calculated from the nominal thickness,  $d_N$ , and the corresponding declared thermal conductivity,  $\lambda_{90/90}$ , shall be rounded downwards to the nearest 0,05 m<sup>2</sup>·K/W, and declared in levels with steps of 0,05 m<sup>2</sup>·K/W;"

## 6 Modification to 4.3.1, General

Replace the paragraph with:

"If there is no requirement for a property, described in 4.3, for a product in use, then the property does not need to be determined and declared."

## EN 13171:2012+A1:2015/prA2:2018 (E)

**7 Modification to 4.3.2, Dimensional stability**

Replace the second sentence with the following:

"The test shall be carried out for the conditions given in Table 2. The test specimen shall then be reconditioned at  $(23 \pm 2)$  °C and  $(50 \pm 5)$  % relative humidity for 24 h."

**8 Modification to 4.3.5, Tensile strength parallel to faces**

Replace the first paragraph with the following:

"Tensile strength parallel to faces,  $\sigma_t$ , shall be determined in accordance with EN 1608. For handling purposes, products shall have a tensile strength parallel to faces of 1 kPa."

**9 Modification to 4.3.15, Release of dangerous substances**

Replace the text in the clause with the following:

"If the release of dangerous substances<sup>2)</sup> 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 web site on EUROPA accessed through: <http://ec.europa.eu/growth/tools-databases/cp-ds>."

**iTeh STANDARD PREVIEW**  
(standards.iteh.ai)

**10 Modifications to 4.3.17, Continuous glowing combustion**

Replace the current title with "Propensity to undergo continuous smouldering" and replace the text in the clause with the following:

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

- type of binder and additives;
- density according to EN 1602;
- thickness to be determined by test according EN 823;
- without any facings, coatings or suchlike – existing facings or coatings shall be removed when preparing the test specimens.

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 fully are also valid for products:

- of same binder type and additives;
- with equal or lower density;
- with lower thickness and also with higher thickness when 100 mm thick specimens were tested;

2) 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](http://ec.europa.eu/growth/sectors/construction/eu-lci/values_en)).



- 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”.

## 11 Modification to 5.2, Conditioning

Replace the first item on the list with the following:

"

- step 1 (dry reference): The specimens are stored at  $(70 \pm 2)^\circ\text{C}$ , in an oven ventilated with an air taken at  $(23 \pm 2)^\circ\text{C}$  and  $(50 \pm 5)\%$  relative humidity until constant mass. Constant mass is achieved when the mass of the test specimen does not change more than 0,1% between two consecutive measurements within 24 h. The mass of the test specimen at step 1 is  $m_{23,dry}$ ".

<https://standards.iteh.ai/catalog/standards/sist/84e0091a-1e4e-4f22-b277-5d4bb10220a1/en-13171-2012-a1-2015-pra2-2018>

<https://standards.iteh.ai/catalog/standards/sist/84e0091a-1e4e-4f22-b277-5d4bb10220a1/en-13171-2012-a1-2015-pra2-2018>

## 12 Modification to 5.3.2 Thermal resistance and thermal conductivity

Replace Table 8 with the following:

**"Table 8 — Test methods, test specimens and conditions**

Dimensions in millimetres

Clause		Test method	Test specimen length and width <sup>a</sup>	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	Roll, felt and matt: 1 Board and slab: 3	Method B.1 50 Pa or 250 Pa See 4.2.3
4.2.4	Squareness	EN 824	Full size	Board and slab: 1	—

## EN 13171:2012+A1:2015/prA2:2018 (E)

Clause		Test method	Test specimen length and width <sup>a</sup>	Minimum number of measurements to get one test result	Specific conditions
No	Title				
4.2.5	Flatness	EN 825	Full size	Board and slab: 1	-
4.2.6	Reaction to fire of the product as placed on the market	See EN 13501-1 and EN 15715			See EN 15715:2009, Clause 5
4.3.2	Dimensional stability under constant normal laboratory conditions	EN 1603	Full size	1	-
	Dimensional stability under specified temperature	EN 1604	200 × 200	3	
	Dimensional stability under specified temperature and humidity conditions	EN 1604	200 × 200	3	-
4.3.3	Compressive stress or strength	EN 826	200 × 200	5	Surface grinding
			300 × 300	3	
4.3.4	Tensile strength perpendicular to faces	EN 1607	200 × 200	5	-
			300 × 300	3	
4.3.5	Tensile strength parallel to faces	EN 1608	1 000 × 500 or full size	3	
4.3.6	Point load	EN 12430	300 × 300	3	-
4.3.7	Compressive creep	EN 1606	200 × 200	3	Grinding
4.3.8	Short term water absorption	EN 1609	200 × 200	4	Method A
4.3.9	Water vapour transmission	EN ISO 12572	See 6.1 in EN ISO 12572	3	b
4.3.10	Dynamic stiffness	EN 29052-1	200 × 200	3	-
4.3.11	Thickness, $d_L$	EN 12431			
	Thickness, $d_B$	EN 12431	200 × 200	3	Class T6, T7
	Long term thickness reduction	EN 1606			
4.3.12	Sound absorption	EN ISO 354	Minimum 10 m <sup>2</sup>	1	To be reported
4.3.13	Air flow resistivity	EN 29053	Apparatus dependent	9	Method A
4.3.14	Apparent density	EN 1602	≥ (200 × 200)	3	v
4.3.15	Release of dangerous substances	EN 16516	See EN 16516	See EN 16516	4.3.15

Clause		Test method	Test specimen length and width <sup>a</sup>	Minimum number of measurements to get one test result	Specific conditions
No	Title				
4.3.16	Reaction to fire of the product in standardized assemblies simulation end-use applications	See EN 13501-1 and EN 15715			See EN 15715:2009, Clause 6
4.3.17	Continuous smouldering	EN 16733	See EN 16733	See EN 16733	See EN 16733
<p><sup>a</sup> Full-size product thickness, except for 4.2.6. when the limit of the test methods are exceeded.</p> <p><sup>b</sup> Exception: When testing products with water vapour barrier, in accordance with EN 12086, the specimen thickness to measure is equal to the water vapour barrier thickness plus (2 to 3) mm.</p>					

### 13 Modification to Clause 6, Designation code

Replace the first sentence with the following:

"If a designation code is provided, it shall be given as follows:"

Add the following item to the list:

"

— Continous smouldering S - NoS or ANP

<https://standards.iteh.ai/catalog/standards/sist/84e0091a-1e4e-4f22-b277-50d93ba343a2/sist-en-13171-2013a1-2015-opra2-2018>

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

Replace the subclauses with the following:

#### "7.1 General

All performances related to characteristics included in this standard shall be determined when the manufacturer intends to declare the respective performance unless the standard gives provisions for declaring them without performing tests (e.g. use of previously existing data, CWFT and conventionally performance).

In accordance with EN 13172, the compliance of the Factory made wood fiber product with the requirements of this standard and with the performances declared by the manufacturer in the DoPO shall be demonstrated by:

- Determination of the Product Type (Type testing),
- Factory Production Control (FPC) 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 performance(s).

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