



**SLOVENSKI STANDARD**  
**SIST EN 13166:2013/kFprA1:2014**  
**01-november-2014**

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**Toplotnoizolacijski proizvodi za stavbe - Proizvodi iz fenolne pene (PF) -  
Specifikacija**

Thermal insulation products for buildings - Factory made phenolic foam (PF) products -  
Specification

Wärmedämmstoffe für Gebäude - Werkmäßig hergestellte Produkte aus  
Phenolharzschaum (PF) - Spezifikation

Produits isolants thermiques pour le bâtiment - Produits manufacturés en mousse  
phénolique (PF) - Spécification

**Ta slovenski standard je istoveten z: EN 13166:2012/FprA1**

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**ICS:**

91.100.60	Materiali za toplotno in zvočno izolacijo	Thermal and sound insulating materials
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**SIST EN 13166:2013/kFprA1:2014**      **en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**FINAL DRAFT**  
**EN 13166:2012**

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ICS 91.100.60

English Version

## Thermal insulation products for buildings - Factory made phenolic foam (PF) products - Specification

Produits isolants thermiques pour le bâtiment - Produits manufacturés en mousse phénolique (PF) - Spécification

Wärmedämmstoffe für Gebäude - Werkmäßig hergestellte Produkte aus Phenolharzschaum (PF) - Spezifikation

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

This draft amendment A1, if approved, will modify the European Standard EN 13166:2012. 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: Avenue Marnix 17, B-1000 Brussels**

## Contents

Page

Foreword.....	3
<b>1 Modification to the Foreword .....</b>	<b>4</b>
<b>2 Modification to 3.2, Symbols, units and abbreviated terms .....</b>	<b>4</b>
<b>3 Modification to 4.3.11, Release of dangerous substances.....</b>	<b>4</b>
<b>4 Modification to Clause 7, Evaluation of conformity .....</b>	<b>4</b>
<b>5 Modification to Clause 8, Marking and labelling .....</b>	<b>5</b>
<b>6 Modification to Annex B, Initial type testing (ITT) and factory production control (FPC).....</b>	<b>5</b>
<b>7 Modification to Table D.1, Test methods, test specimens, conditions and minimum testing frequencies .....</b>	<b>5</b>
<b>8 Modification to Annex ZA, Clauses of this European Standard addressing the provisions of the EU Construction Products Directive.....</b>	<b>5</b>

## Foreword

This document (EN 13166:2012/FprA1:2014) 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 Unique Acceptance Procedure.

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 EU Directive(s).

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

**NOTE** Due to fact that the Framework Partnership Agreement between the Commission and CEN & CENELEC is not signed yet, there are currently no New Approach Consultants in place for 2014. Therefore the provisions of CEN-CENELEC Guide 15 cannot be met.

This shall not prevent the processing of draft standards nor the offering of harmonized standards to the Commission. In particular, draft standards can be sent to vote without Consultant assessment.

This note will be removed from the Foreword of the finalized publication.

This amendment (EN 13166:2012/FprA1:2014) modifies the European Standard EN 13166:2012 identifying those clauses of the standard which are needed for the compliance of the European Standard with the Construction Products Regulation (CPR).

This amendment introduces

- a) an addition to the foreword;
- b) replacement and additions in 3.2;
- c) a new subclause 4.3.11;
- d) modification of Clause 7;
- e) modification of Clause 8;
- f) modification of Annex B;
- g) modification of Table D.1;
- h) a new Annex ZA.

**EN 13166:2012/FprA1:2014 (E)****1 Modification to the Foreword**

*Replace the 5<sup>th</sup> paragraph with:*

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

**2 Modification to 3.2, Symbols, units and abbreviated terms**

*Replace*

"ITT is Initial Type Test" *with*

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

*and add the following abbreviated terms:*

"AVCP is **A**ssessment and **V**erification of **C**onstancy of **P**erformance (previously named attestation of conformity)

DoP is **D**eclaration of **P**erformance

ThIB is **T**hermal **I**nsulation for **B**uildings

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

**3 Modification to 4.3.11, Release of dangerous substances**

*Replace the text of 4.3.11 with:*

"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 Construction web site on EUROPA accessed through: <http://ec.europa.eu/enterprise/construction/cpd-ds/>".

**4 Modification to Clause 7, Evaluation of conformity**

*Replace Clause 7 with:*

"

**7 Assessment and Verification of the Constancy of Performance (AVCP)****7.1 General**

The manufacturer or his authorized representative shall be responsible for the conformity of his product with the requirements of this European Standard. The Assessment and Verification of Constancy of Performance (AVCP) shall be carried out in accordance with EN 13172 and shall be based on Product Type Determination (PTD), Factory Production Control (FPC) by the manufacturer, including product assessment and tests on samples taken at the factory.

The compliance of the product with the requirements of this standard and with the stated values (including classes) shall be demonstrated by:

- Product Type Determination (PTD),
- Factory Production Control (FPC) by the manufacturer, including product assessment.

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

## 7.2 Product Type Determination (PTD)

All characteristics defined in 4.2 and those in 4.3 if declared, shall be subject to Product Type Determination (PTD) in accordance with Annex B.

For the relevant characteristics, PTD on products corresponding also to EN 14314 may be used for the purpose of PTD and Declaration of Performance (DoP) according to this standard.

## 7.3 Factory Production Control (FPC)

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

For the relevant characteristics, FPC on products corresponding also to EN 14314 may be used for the purpose of FPC and DoP according to this standard."

## 5 Modification to Clause 8, Marking and labelling

*Add the following indent: "*

- the intended use of the phenolic foam for insulation of buildings is given by the abbreviation ThIB."

## 6 Modification to Annex B, Initial type testing (ITT) and factory production control (FPC)

*Replace "Initial type testing" with "Product type determination" and "ITT" with "PTD" within Annex B in:*

- *Annex B, title;*
- *Table B.1, title;*
- *Table B.1, 2<sup>nd</sup> column, 1<sup>st</sup> line, title;*
- *Table B.1, 3<sup>rd</sup> column, line 4.2.1;*
- *Table B.1, text of footnote c;*
- *Table B.1, text of footnote e.*

## 7 Modification to Table D.1, Test methods, test specimens, conditions and minimum testing frequencies

*Replace "ITT" with "PTD" in footnote c.*

## 8 Modification to Annex ZA, Clauses of this European Standard addressing the provisions of the EU Construction Products Directive

Replace the existing Annex ZA with the following new Annex ZA:

"

## **Annex ZA**

(informative)

### **Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation**

#### **ZA.1 Scope and relevant characteristics**

This European Standard has been prepared under Mandate M/103<sup>1)</sup> "Thermal insulation products" given to CEN by the European Commission and the European Free Trade Association.

If this European standard is cited in the Official Journal of the European Union (OJEU), the clauses of this standard, shown in this annex, are considered to meet the provisions of the relevant mandate, under the Regulation (EU) No. 305/2011.

This annex deals with the CE marking of the factory made phenolic foam intended for the use indicated in Table ZA.1 and shows the relevant clauses applicable.

This annex has the same scope as Clause 1 of this standard related to the aspects covered by the mandate and is defined by Table ZA.1.

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<sup>1)</sup> As amended by mandates M126, M130 and M367



Table ZA.1 — Relevant clauses for factory made phenolic foam and intended use

Product: <b>Factory made phenolic foam (PF) products</b>		Intended use: <b>Thermal insulation for buildings</b>	
<b>Essential Characteristics</b>	<b>Clauses in this and other European standard(s) related to essential characteristics<sup>e</sup></b>	<b>Regulatory classes</b>	<b>Notes</b>
Thermal resistance	4.2.1 Thermal resistance and thermal conductivity	—	Declared $R_D$ and $\lambda_D$ if possible
	4.2.3 Thickness	—	Declared $d_N$ and T
	4.3.10 Closed cell content	—	Declared CV
Reaction to fire	4.2.6 Reaction to fire	Euroclasses	—
Durability of reaction to fire against heat, weathering, ageing/degradation	4.2.8 Durability characteristics <sup>a</sup>	Euroclasses	—
	4.3.2 Dimensional stability	—	Declared DS(T,-) <sup>b</sup>
	4.3.3 Compressive strength	—	Declared CS(Y)
Durability of thermal resistance against heat, weathering, ageing/degradation	4.2.1 Thermal resistance and thermal conductivity	—	Declared $R_D$ and $\lambda_D$ if possible <sup>c</sup>
	4.2.8 Durability characteristics	—	c
	4.3.2 Dimensional stability	—	Declared DS(T,-) <sup>b</sup>
	Annex C Determination of the aged values of thermal resistance and thermal conductivity	—	Declared $\lambda_D$
Compressive strength	4.3.3 Compressive stress or compressive strength	—	Declared CS
Tensile/Flexural strength	4.3.4 Tensile strength perpendicular to faces <sup>c</sup>	—	Declared TR
Durability of compressive strength against ageing/degradation	4.3.5 Compressive creep	—	Declared CC
Water permeability	4.3.7.1 or 4.3.7.2 Short term water absorption	—	Declared WS or, Declared WL(P)
	4.3.7.2 Long term water absorption	—	Declared WS or, Declared WL(P)
	4.3.10 Closed cell content	—	Declared CV
Water vapour permeability	4.3.8 Water vapour transmission	—	Declared MU and/ or Z
	4.3.10 Closed cell content	—	Declared CV
Release of dangerous substances to the indoor environment	4.3.11 Release of dangerous substances <sup>d</sup>	—	—
Continuous glowing combustion	4.3.13 Continuous glowing combustion <sup>d</sup>	—	—

<sup>a</sup> No change in reaction to fire properties for PF products. The fire performance of PF does not deteriorate with time.

<sup>b</sup> For dimensional stability thickness only.

<sup>c</sup> This characteristic also covers handling and installation.

<sup>d</sup> European test methods are under development.

<sup>e</sup> Also valid and applicable for multilayers

The declaration of the product performance related to certain essential characteristics is not required in those Member States (MS) where there are no regulatory requirements on these essential characteristics for the intended use of the product. In this case, manufacturers placing their products on the market of these MS are not obliged to determine nor declare the performance of their products with regard to these essential characteristics and the option “No performance determined” (NPD) in the information accompanying the CE marking and in the declaration of performance (see ZA.3) may be used for those essential characteristics.