



**SLOVENSKI STANDARD**  
**SIST EN 13163:2013/kFprA1:2014**  
**01-november-2014**

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**Toplotnoizolacijski proizvodi za stavbe - Proizvodi iz ekspaniranega polistirena (EPS) - Specifikacija**

Thermal insulation products for buildings - Factory made expanded polystyrene (EPS) products - Specification

Wärmedämmstoffe für Gebäude - Werkmäßig hergestellte Produkte aus expandiertem Polystyrol (EPS) - Spezifikation

Produits isolants thermiques pour le bâtiment - Produits manufacturés en polystyrène expansé (EPS) - Spécification

**Ta slovenski standard je istoveten z: EN 13163:2012/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 13163:2013/kFprA1:2014**      **en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
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**FINAL DRAFT**  
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ICS 91.100.60

English Version

## Thermal insulation products for buildings - Factory made expanded polystyrene (EPS) products - Specification

Produits isolants thermiques pour le bâtiment - Produits manufacturés en polystyrène expansé (EPS) - Spécification

Wärmedämmstoffe für Gebäude - Werkmäßig hergestellte Produkte aus expandiertem Polystyrol (EPS) - 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 13163:2012. 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

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## Foreword

This document (EN 13163:2012/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 13163:2012/FprA1:2014) modifies the European Standard EN 13163:2012 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) an addition in 3.2;
- c) a new subclause 4.3.19;
- d) modification of Clause 7;
- e) modification of Clause 8;
- f) modification of Annex B;
- g) modification of Annex E;
- h) a new Annex ZA.

**EN 13163:2012/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 Modifications 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 4.3.19, Release of dangerous substances**

*Replace the text of 4.3.19 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 13499, EN 14309, EN 14933 and EN 15037-4 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 13499, EN 14309, EN 14933 and EN 15037-4 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 bullet point: "

- the intended use of the expanded polystyrene for insulation of buildings is given by the abbreviation ThIB."

## 6 Modifications 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, text of footnote b;*
- *Table B.1, text of footnote e;*
- *Table B.1, text of footnote g.*

## 7 Modifications to Annex E, Verification of the reaction to fire classification of raw materials

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

- *E.3, last sentence;*

**EN 13163:2012/FprA1:2014 (E)**

- *E.4, title;*
- *E.4, first sentence;*
- *E.6.3;*
- *Table E.1.*

**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 expanded polystyrene 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 expanded polystyrene and intended use

Product:		Factory made expanded polystyrene (EPS) products		
Intended use:		Thermal insulation for buildings		
Essential Characteristics	Clauses in this and other European standard(s) related to essential characteristics <sup>f</sup>	Regulatory classes	Notes	
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	
Reaction to fire	4.2.6 Reaction to fire	Euroclasses	—	
Durability of reaction to fire against heat, weathering, ageing/degradation	4.2.7 Durability characteristics <sup>a</sup>	Euroclasses	—	
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>b</sup>	
	4.2.7 Durability characteristics	—	c	
Compressive strength	4.3.4 Compressive stress or compressive strength	—	Declared CS(10)	
Tensile/Flexural strength	4.3.5 Bending strength <sup>d</sup>	—	Declared BS	
	4.3.6 Tensile strength perpendicular to faces	—	Declared TR	
Durability of compressive strength against ageing/degradation	4.3.8 Compressive creep	—	Declared CC	
	4.3.12 Freeze-thaw resistance	—	Declared FTCD and FTCl	
	4.3.15.5 Long term thickness reduction	—	Declared CP	
Water permeability	4.3.11.1 Long term water absorption by immersion	—	Declared WL(P) and WL(T) or Declared WD(V)	
	4.3.11.2 Long term water absorption by diffusion			
Water vapour permeability	4.3.13 Water vapour transmission	—	Declared MU or Z	
Impact noise transmission index ( <i>for floors</i> )	4.3.14 Dynamic stiffness	—	Declared SD	
	4.3.15.2 Thickness, $d_L$	—	Declared $d_L$ and class T	
	4.3.15.4 Compressibility, $c$	—	Declared CP	
Continuous glowing combustion	4.3.18 Continuous glowing combustion <sup>e</sup>	—	—	
Release of dangerous substances to the indoor environment	4.3.19 Release of dangerous substances <sup>e</sup>	—	—	
<p><sup>a</sup> The fire performance of EPS does not deteriorate with time.</p> <p><sup>b</sup> Thermal conductivity of EPS products does not change with time, experience has shown the cellular structure to be stable.</p> <p><sup>c</sup> For dimensional stability thickness only.</p> <p><sup>d</sup> This characteristic also covers handling and installation.</p> <p><sup>e</sup> European test methods are under development.</p> <p><sup>f</sup> Also valid and applicable for multi-layered products</p>				

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