EUMEPS guidance for EPS manufacturers on the Construction Products Regulation (CPR)

This Guidance is to be regarded as a 'live' document, which will be updated periodically when additional information clarifying any points becomes available.



Version 5 – June 2013 Dolf van Moorsel

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1.Introduction

This Guidance paper is written to help EPS manufacturers with he introduction of the Construction Products Regulations¹ (CPR). For the construction industry the Construction Products Directive (CPD) was introduced in 1988. The CPD will be replaced by the CPR, as from 1 July 2013. From that date on, it will be mandatory for all manufacturers of construction products to apply CE marking to any of their products that are covered by the harmonised technical specifications from the CPR. EPS converters are referred to as manufacturers in this guidance document.

2. Why CPR?

The CPD was considered to be a voluntary directive by some Member States, who did not affix the CE marking. The CPR is a regulation and therefore legally mandatory. Also the CPR is expanded with the Basic Requirement sustainability. At the same time, the CPR has been used to clarify inconsistencies in the CPD. For manufacturers in the Member States not using the CPD, the implementation of the CPR will be a major change; for manufacturers that already affixed the CE marking under the CPD, the transition should be straightforward. The CPR has changed a part of the terminology compared to the CPD. Clarification and explanation is given in Appendix B.

3. The CPR (in short)

The purpose of the CPR is the removal of technical barriers to trade, to allow free movement of construction products between Member States and EFTA countries. To achieve this, the CPR provides for five main elements:

- a system of harmonised technical specifications
- Declaration of Performance (DoP)
- CE marking of products.
- an agreed system or systems of Assessment and Verification of Constancy of performance (AVCP) for each product family
- a framework of notified bodies

A manufacturer placing a construction product on the market is responsible for all declarations.

The CPR harmonises the methods of assessment and test, the means of declaration of product performance and the AVCP systems of construction products, but NOT national building regulations. The choice of the required values for the intended use is to be set by national regulators. The CPR introduces "micro enterprises", being enterprises employing less than 10 persons and a yearly turn over/balance sheet less than € 2million. Implications for micro enterprises are not included in this Guidance.

4. Harmonised technical specifications

Under the CPR, two kinds of harmonised technical specifications exist: harmonised European product standards (hENs) and European Assessment Documents (EADs). hENs are established by CEN/CENELEC; EADs by the European Organisation for Technical Approvals (EOTA) as the basis for issuing ETAs for products not covered by hENs.

The harmonised technical specification for a product defines methods of assessing and declaring all the performance characteristics required by regulations in any Member State which affect the ability of construction products to meet seven basic requirements for construction works.

These requirements cover:

¹ The CPR can be found at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:088:0005:0043:EN:PDF

- 1. Mechanical resistance and stability
- 2. Safety in case of fire
- 3. Hygiene, health and environment
- 4. Safety and accessibility in use
- 5. Protection against noise
- 6. Energy economy and heat retention
- 7. Sustainable use of natural resources.

European product standards also can address characteristics not regulated in any Member State. Because of this, all hENs under the CPR include an Informative Annex (Annex ZA), listing the regulated requirements according to a mandate. In this way, Annex ZA forms a checklist for CE marking from which the manufacturer can find all the mandatory requirements for their product and how they can be met.

EADs will have a section serving the same function as Annex ZA in a hEN.

5. Declaration of Performance (DoP)

In order to be able to produce CE marking for a product, a manufacturer has to draw up a Declaration of Performance (DoP), comprising legal responsibility for the conformity of the construction product with its declared performance.

The DoP must be written in the language or languages of the Member State where the product is put on the market. This means, when a product is placed on market in other Member States, translations must be made. A DoP shall be supplied for each product (see examples of DoP) either on paper or by electronic means. However, when requested by the recipient, a paper version shall be supplied. The DoP shall be based on existing information (initial type testing, test, certificate); no additional test or documents are needed. For new products or products with modified parameters to be placed on the market the DoP must be based on the corresponding AVCP system or systems, indicating that the product is accordance with the harmonised technical specification.

The manufacturer shall decide which declarations of essential characteristics the DoP shall contain. When no performance is declared, NPD (No Performance Declared) shall be used, with two exceptions:

- at least one essential characteristic has to be declared (NPD cannot be declared for all essential characteristics)
- the EC can indicate essential characteristics for which NPD is not allowed (according to EN 13163:2012, Table ZA.1, at least one essential characteristic must be declared)

The characteristics that must be declared are given in Annex ZA and can be limited to the characteristics related to the application.

Content of DoP

The requirements on the content of a DoP are given in the CPR, Annex III and hereunder. Examples on two DoP's and corresponding CE marking are given in Appendix A.

DECLARATION OF	PERFORMANCE		
Content			Remarks*
Reference number to year/month/day is to can be revised)			TC 88 has decided to include the year of issue in the reference number
	cation of the produ	ıct-type:	This is the code to identify without any doubt the product type
allowing identi	serial number or ar fication of the cons r Article 11(4) of the	truction product as	It is the number to identify the product. It can be the same code as the Unique Identification code of the product-type.
with the applic specification, a 4. Name, register mark and cont	or uses of the const table harmonised to us foreseen by the n ed trade name or r act address of the r	echnical nanufacturer: egistered trade	Intended use or uses are given in the hEN. In case it does not contain this information, it shall be obtained from Table ZA.1 from Annex ZA (of the hEN). Name, registered trade name or registered trade mark and contact address of the manufacturer. The address
	ble, name and cont		shall indicate a single point at which the manufacturer can be contacted. Authorised representative performing the tasks
the tasks speci 6. System or syste constancy of p	resentative whose fied in Article 12(2) ems of assessment erformance of the cout in CPR, Annex \	: and verification of construction	specified in the Mandate; Not applicable if the manufacturer is in charge of these tasks. Assessment and Verification of the Constancy of the Performance (AVCP) system(s) applied. If more than one system is applied indicate which of them are covered for every system.
a construction	product covered by e and identification		Only for products covered by a hEN.
 8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued Name - name and identification number of the Technical Assessment Body, if relevant Issued - reference number of the European Technical Assessment On the basis of - reference number of the European Assessment Document Performed under system - description of the third party tasks as set out in CPR Annex V And issued - certificate of constancy of performance, certificate of conformity of the factory production control, test/calculation reports - as relevant 		a European sued on number of the f relevant theE uropean mber of the tent scription of the CPR Annex V stancy of onformity of the	Only for products covered by an EAD Full list of essential characteristics, their performance
9. Declared perfo	Performance**	Harmonised technical specification	and related hEN as determined in the hEN Annex ZA, Table 1
10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.		leclared tration of sole responsibility	Each DoP (the original) has to be signed by the person in charge who has bee appointed by the manufacturer for drawing up he DoP. Name and function as well as the place and date of issue shall be indicated.
Signed for and on b name and function. place and date of is signature	sue		

Where minimum or maximum values have been set in the technical specifications, these need not be repeated in the DoP. Classes of performance may be declared within the DoP, with the key to the classes appearing in the technical specification. A detailed knowledge of the technical specification is therefore often needed.

Provided that the manufacturer has met the requirements of at least one characteristic in the DoP, they are not required to determine and/or declare values relating to characteristics for which regulations do not exist in the chosen market sector (i.e. Member State/intended use). In these cases, a declaration of 'no performance determined' (NPD) may be made, as provided for in the hEN.

This means that different DoPs may appear in different Member states. E.g. For cavity wall insulation: if Member State 1 has requirements on dimensional stability under specified temperature and humidity conditions and Member State 2 has not, the DoP in Member 1 must contain a declaration on that dimensional stability, but not in Member State 2.

For custom made products, a DoP is not always necessary. Custom made products are not included in this Guidance.

Hazardous and Dangerous substances

Where applicable, the DoP should be accompanied by information on the release of hazardous substances from the construction product to improve the possibilities for sustainable construction.

In all existing hENs no information of the way of expressing this information is given yet.

For the content of dangerous substances, EPS falls under REACH. Information on REACH must be available on a website and eventually (on request) been sent to a customer (within 40 days after the request).

6.CE marking

CE marking shall be affixed to those products a manufacturer has drawn up a DoP. It indicates that a product is consistent with its Declaration of Performance (DoP) as made by the manufacturer.

By affixing the CE marking the manufacturer indicates he takes responsibility for the conformity of the product with the declared performance. CE marking enables a product to be placed legally on the market in any Member State. However, this does not necessarily mean that the product will be suitable for all end uses in all Member States.

If the performance of one or more declared characteristics does not meet the requirements of local Building Regulations, the product is not suitable for the intended application in that area.

^{*} Every product manufactured from the same materials using the same production process and fulfilling the same essential characteristics belongs to the same product type and shall use the same identification code. The difference between product types of EPS products often can be found in the declaration of different essential characteristics.

***For essential characteristics where e.g. the declaration is different for different thickness a table is needed instead of a single value in the table in point 9.

Content of CE marking

The requirements on the content of a CE marking are given hereunder. Examples of two CE markings connected to corresponding DoP's are given in Appendix A.

> CE conformity marking, consisting of the "CE"-symbol given in Directive 93/68/EEC.



Identification number of the certification body (for products under system 1)

Name or identifying mark and registered address of the producer Last two digits of the year in which the marking was affixed (ITT) Certificate number (for products under system 1)

> No. of dated version of European Standard Description of product

Information on regulated characteristics (if any) Reaction to fire - Euroclass Declared thermal resistance² Declared thermal conductivity Nominal thickness³

Designation code (in accordance with clause 6 of the hEN for the relevant characteristics according to Table ZA.1)

7. Assessment and verification of constancy of performance

The system of Assessment and Verification of Constancy of Performance (AVCP) defines the degree of involvement of third parties in assessing the conformity of the product according to the relevant technical specification(s). To achieve this, the CPR describes five main elements:

- Factory production control (FPC) on the basis of documented, permanent and internal control of production in a factory, in accordance with the relevant harmonised technical specifications
- Initial inspection of the manufacturing plant and of FPC
- Continuous surveillance, assessment and evaluation of FPC
- Determination of product type on the basis of type testing, type calculation, tabulated values and/or descriptive documentation of the product
- Audit testing of samples taken before placing the product on the market.

³ For characteristics where e.g. the declaration is different for different thickness a table is needed instead of a single value

Depending on the system of AVCP one or more of those elements are to be used. The five systems of AVCP and the level of involvement of notified bodies in each is as follows:

System 1+	Product certification comprising the issuing of a certificate of constancy of
	performance with determination of the product-type, continuous surveillance and
	audit testing by a notified product certification body

System 1 Product certification comprising the issuing of a constancy of performance with determination of the product-type and continuous surveillance by a notified product certification body

System 2+ Factory production control certification with continuous surveillance by a notified factory production control certification body

System 3 Determination of product type by a notified testing laboratory

System 4 Manufacturer's tasks only

The tasks for the manufacturer and for any notified body for each system are summarised in Appendix C.

For all systems the manufacturer is required to have a fully documented FPC system. The records have to be kept for ten years. The criteria are included in the harmonised technical specification, which reference to EN 13172 (currently under revision).

The procedures for conformity assessment for a product are set out in the relevant technical specification. For standards these appear usually in Annex ZA.2, and for ETAs in a section in the relevant EAD/ETA.

An outline of the manufacturer's DoP and for the certificate of constancy of performance (if relevant), will be included in Annex ZA.3 of the hEN or in a section in the relevant EAD.

8. Voluntary additional marks

The only legal mark required to show that a product has been legally placed on the market under the CPR is the CE marking.

Recital 33 of the CPR states: "... other markings may be used, provided that they help to improve the protection of users of construction products and are not covered by existing EU harmonisation legislation".

Manufacturers can use voluntary marks where they add value to the CE marking and do not cause confusion. For example:

- to support information in respect of the 'voluntary' (non-harmonised) part of a hEN.
- to include additional third-party involvement above that required by the prescribed system of AVCP, such as durability, installation etc., that is outside of the scope of the harmonised technical specification.
- to place the test characteristics in context in the area of use, e.g. in relation to Building Regulation compliance.

9.Implications

Time line

The CPR will entry in force the 1st July 2013. Before that date, manufacturers must provide a Declaration of Conformity and CE marking in accordance to the CPD, for products placed on the market before the 1st of July 2013. Before July 1st 2013 manufacturers may voluntary provide a DoP and CE marking in accordance with the CPR. However, for new products or products with modified performance to be placed on the market after this date, manufacturers are obliged to provide a DoP and CE marking based on an appropriate AVCP system in accordance with the CPR. Next to that he can provide information on the content of hazardous substances (not regulated in hEN's yet), Instructions and safety information. hEN's will be upgraded to the CPR as soon as possible.

Manufacturers

Manufacturers must be aware of the harmonised technical specifications and changes hereto. The introduction of the CPR implies that for all products put on the market, a DoP and CE marking must be made. The DoP must be made in the language of the Member State the product is put on the market, This means that a manufacturer must familiarise himself with the relevant product requirements set in that Member State.

Other important actions for the manufacturer include:

- keeping the technical documentation for a period of 10 years after the construction product has been placed on the market
- keeping the records of the FPC for a period of 10 years after the construction product has been placed on the market
- keeping a register of all complaints about a product's non-conformance or product recalls, and keeping distributors informed of any product recalls
- adherence to specific marking requirements see CPR Articles11.4 & 11.5
- supplying instructions and safety information in the language of the Member State in which the product is being sold.
- taking immediate corrective measures if a product is found not to be in conformity with the DoP
- ensuring that the product maintains its conformity with the DoP after storage and distribution
- providing all relevant information about a product if a request is made by a competent national authority.

Public bodies

Articles 8.4 and 8.5 of the CPR place obligations on Member States to ensure that the use of construction products bearing CE marking shall not be impeded by rules imposed by public bodies or private bodies acting as a public undertaking. Those acting as such a body, in a monopoly position or under a public mandate should not specify the performance of products other than in accordance with the basic requirements covered by the harmonised section of the hEN or ETA under which the CE marking is applied. The obligations placed on public procurers by the CPR also have implications for any industry association or other body drafting an industry wide standard specification or standard that is intended to or hoped to be adopted by public procurers. Authors of such documents must also take account of other legislation that affects public procurers.

Designers / Contractors

Providing local Building Regulations are met, designers, specifiers and users are free to set their own requirements on the performance of the works and, therefore, construction products. The information contained in the DoP should allow them to make comparisons between products as the methods of assessment, test and declaration of results will be the same.

10. Service providers

Notified bodies

Notified bodies are the product certification bodies, FPC certification bodies and testing laboratories, who are considered to be competent to carry out the conformity assessment tasks. Such bodies are first approved by their respective Member States and then notified to the European Commission and other Member States. A complete list can be found on the website of NANDO (New Approach Notified and Designated Organisations) Information system. Hence, they are variously called 'approved bodies', 'designated bodies' or' notified bodies'. They are referred to as 'notified bodies' in this Guidance.

Once a harmonised technical specification is available for their product, a manufacturer can choose any notified body within the EC for the required AVCP system. He does not have to use a body operating in the same country as the place of manufacture or where the product is to be used.

With respect to the function of notified bodies involved in the AVCP for construction products, distinction must be made between:

- testing laboratory: a notified laboratory which carries out the determination of the product-type on the basis of type testing (based on sampling carries out by the manufacturer), type calculation, tabulated values or descriptive documentation of the product.
- factory production control certification body: a notified body possessing the necessary competence and responsibility to carry out factory production control certification in accordance with given rules of procedure and management
- product certification body: a notified body possessing the necessary competence and responsibility to carry out product certification in accordance with given rules of procedure and management.

For EPS products usually AVCP system 3 is applicable.

Technical Assessment Bodies (TAB's)

These are organisations designated by their respective Member States as competent to produce EADs, assess products and, on this basis, to issue ETAs. The name and address of each TAB and the product areas for which it is designated are communicated to the European Commission and other Member States. The process of issuing the ETA in first instance is a separate process from the subsequent AVCP procedures. Hence, once an ETA has been issued for a product, the manufacturer should choose a competent notified body to carry out the AVCP system procedures.

Technical Assessment Bodies carry out assessments and issue European Technical Assessments in the product areas (listed in the CPR Annex IV) for which they have been designated.

11. Transition issues

hEN

Construction products which have been placed on the market and have the CE marking affixed in accordance with the CPD before 1 July 2013 are deemed to comply with the CPR. A manufacturer may draw up a DoP on the basis of a Certificate of Conformity or a Declaration of Conformity which has been issued (in accordance with the CPD) before 1 July 2013.

ETAG

Manufacturers may use European Technical Approvals issued in accordance with the CPD before July 1, 2013 as European Technical Assessments throughout the period of validity (usually five years from the date of issue) of those approvals. Manufacturers engaging in the process of achieving a European Technical Approval before 1 July 2013 should discuss the specific transition issues related to their case with their Approval Body/Technical Assessment Body.

Appendix A: Examples of DoP and CE marking

Example 1: DoP and CE marking for EPS Roofboard

DECLARATION OF PERFORMA	NCE		
No. 0123-CPR - year/month/day			
1. Unique identification of the	EPS Roofboard		
product-type:			
2. Type, batch or serial number	Not applicable		
or any other element allowing			
identification of the			
construction product as			
required under Article 11(4) of			
the CPR:			
3. Intended use or uses of the	Thermal insulation for buildings		
construction product with the			
applicable harmonised technical			
specification, as foreseen by the			
manufacturer:			
4. Name, registered trade name	EPS Co Ltd		
or registered trade mark and	PO Box 100		
contact address of the	B-1050 Brussels		
manufacturer as required under			
Article 11(5):			
5. Where applicable, name and	Not applicable		
contact address of the			
authorised representative			
whose mandate covers the			
tasks specified in Article 12(2):			
6. System or systems of	AVCP system 3		
assessment and verification of			
constancy of performance of			
the construction product as set			
out in CPR, Annex V:			
7. In case of the declaration of	Notified testing laboratory No. 1234		e determination of the
performance concerning a	product type on the basis of type te	sting	
construction product covered			
by a harmonised standard:			
8. In case of the declaration of	Not applicable		
performance concerning a			
construction product for which			
a European Technical			
Assementhas been issued:			
9. Declared performance	Ī		
Essential characteristic	Performance		Harmonised
			technical
			specification
Reaction to Fire	Reaction to Fire of the product as	E	EN 13163:2012
	placed on the market		
		NDD 4	
Continuous glowing	Continuous glowing combustion	NPD *	
combustion			
Water permeability	Water absorption	NPD	
Release of dangerous	Relase of dangerous substances	NPD *	
substances to the indoor			
environment			

Direct airborne sound	Dynamic stiffness	NPD	
insulation index			
Thermal resistance	Thermal resistance	See Table 1	
	Thermal conductivity	$\lambda_{\rm D}$ = 0,032 W/mK	
	Thickness tolerance	T2	
Water vapour permeability	Water vapour transmission	NPD	
Compressive strength	Compressive stress	CS(10)100	
Tensile strength	Bending strength	BS150	
Durability of reaction to fire against heat, weathering, ageing/ degradation	Durability characteristics	Pass	
Durability of thermal resistance against heat, weathering, ageing/ degradation	Durability characteristics	Pass	
Durability of compressive strength against ageing and degradation	Compressive creep	NPD	
*: No EN test method available		•	
Table 1			
Nominal thickness mm	Thermal resistance R _D (m ² K/W)		
80	2,5		
90	2,8		
100	3,1		
120	3,7		
140	4,3		
180	5,6		
200	6,2		

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by

name and function
place and date of issue
signature

CE

EPS Co Ltd, PO Box 100, B-1050 Brussels

13

No. 0123-CPR - year/month/day

EN 13163:2012

EPS Roofboard

RtF – E

 λ_{D} - 0,032 W/m·K

EPS - EN 13163 – T1 – S1 - P3 - DS(70;90)3 - CS(10)100 – BS150			
d _N (mm)	R _D (m²K/W)		
80	2,5		
90	2,8		
100	3,1		
120	3,7		
140	4,3		
180	5,6		
200	6,2		

Example 2: DoP and CE marking for EPS Cavity wall Insulation1.

DECLARATION OF PERFORMA	NCE		
No. 0456-CPR – year/month/day			
1. Unique identification of the	EPS cavity Extra		
product-type:			
2.Type, batch or serial number	Not applicable		
or any other element allowing			
identification of the			
construction product as			
required under Article 11(4) of			
the CPR:			
3. Intended use or uses of the	Thermal insulation for buildings		
construction product with the			
applicable harmonised technical			
specification, as foreseen by the			
manufacturer:			
4. Name, registered trade name	EPS Co Ltd		
or registered trade mark and	PO Box 100		
contact address of the	B-1050 Brussels		
manufacturer as required under			
Article 11(5):	Not explicable		
5. Where applicable, name and	Not applicable		
contact address of the			
authorised representative			
whose mandate covers the			
tasks specified in Article 12(2):	AVCD system 2		
6. System or systems of	AVCP system 3		
assessment and verification of			
constancy of performance of			
the construction product as set			
out in CPR, Annex V:	Notified testing laborates No. 122	IE norformod the d	otormination of the
7. In case of the declaration of	Notified testing laboratory No. 1234	=	etermination of the
performance concerning a construction product covered	product type on the basis of type te	sung	
by a harmonised standard:			
8. In case of the declaration of	Not applicable		
performance concerning a	1101 applicable		
construction product for which			
a European Technical			
Assementhas been issued:			
9. Declared performance	1		
Essential characteristic	Performance		Harmonised
			technical
			specification
Reaction to Fire	Reaction to Fire of the product as	E	EN 13163:2012
	placed on the market		
Continuous glowing	Continuous glowing combustion	NPD *	
combustion			
Water permeability	Water absorption	NPD	
Release of dangerous	Release of dangerous substances	NPD *	
substances to the indoor			
environment			
Direct airborne sound	Dynamic stiffness	NPD	
insulation index	,		
Thermal resistance	Thermal resistance	See Table	
	Thermal conductivity	0,035 W/mK	
Nominal thickness	Thickness tolerance	T(2)	
Water vapour permeability	Water vapour transmission	NPD	
1 1	1		i

Compressive strength	Compressive stress	NPD	
Tensile strength	Bendingstrentgh	NPD	
Durability of reaction to fire against heat, weathering, ageing/ degradation	Durability characteristics	Pass	
Durability of thermal resistance against heat, weathering, ageing/ degradation	Durability characteristics	Pass	
Durability of compressive strength ageing and degradation	Compressive creep	NPD	
*: No EN test method available	·	•	•
Table 1			
Nominal thickness mm	Thermal resistance R _D m ² K/W		
60	1,7		
75	2,1		
90	2,5		
105	3,0		
120	3,4		
150	4,2		

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

signature.....

CE			
EPS Co Ltd, PO Box 100, B-1050 Brussels			
13			
No. 0456-CPR - year/month/day			
EN 13163:2012			
EPS cav	EPS cavity Extra		
RtF	E		
$\lambda_{ extsf{D}}$ - 0,03	4 W/m·K		
EPS - EN 13163 – T1 – S1 - P3 - DS(70;90)3			
d _N	R_D		
(mm)	₍ m²K/W)		
80	2,3		
90	2,6		

100	2,9
120	3,5
150	4,4

Example 3: DoP and CE marking for EPS Road slab

NOTE: The text in red and italic does not need to be given

DECLARATION OF PERFORMAN	CE			
No. 0789-CPR – year/month/day				
1. Unique identification of the	EPS Road slab			
product-type:	El 3 Roda sias			
2. Type, batch or serial number	Not applicable			
or any other element allowing	itot applicable			
identification of the construction				
product as required under Article				
11(4) of the CPR:				
3. Intended use or uses of the	Civil engineering application			
construction product with the	Civil eligilieerilig application			
applicable harmonised technical				
specification, as foreseen by the				
manufacturer:				
	EDC Co. Ltd			
4. Name, registered trade name	EPS Co Ltd			
or registered trade mark and	PO Box 100			
contact address of the	B-1050 Brussels			
manufacturer as required under				
Article 11(5):	N			
5. Where applicable, name and	Not applicable			
contact address of the authorised				
representative whose mandate				
covers the tasks specified in				
Article 12(2):				
6. System or systems of	AVCP system 3			
assessment and verification of				
constancy of performance of the				
construction product as set out in				
CPR, Annex V:				
7. In case of the declaration of	Notified testing laboratory No. 123	-	he determination of the	
performance concerning a	product type on the basis of type t	esting		
construction product covered by				
a harmonised standard:				
8. In case of the declaration of	Not applicable			
performance concerning a				
construction product for which a				
European Technical Assementhas				
been issued:				
9. Declared performance				
Essential characteristic	Performance		Harmonised	
			technical	
			specification	
Reaction to Fire	Reaction to fire	Е		
I Redection to The				
			EN 14933:2007	
Academic Collic			EN 14933:2007	
Continuous glowing combustion	Continuous glowing combustion	NPD *	EN 14933:2007	
		NPD *	EN 14933:2007	
Continuous glowing combustion	Continuous glowing combustion Resistance to cyclic compressive		EN 14933:2007	
Continuous glowing combustion Resistance to dynamic loading	Continuous glowing combustion Resistance to cyclic compressive loading	NPD	EN 14933:2007	
Continuous glowing combustion Resistance to dynamic loading Water permeability	Continuous glowing combustion Resistance to cyclic compressive loading Water absorption	NPD WL(T) 3	EN 14933:2007	
Continuous glowing combustion Resistance to dynamic loading Water permeability Release of dangerous	Continuous glowing combustion Resistance to cyclic compressive loading Water absorption Release of dangerous	NPD	EN 14933:2007	
Continuous glowing combustion Resistance to dynamic loading Water permeability Release of dangerous substances to the indoor	Continuous glowing combustion Resistance to cyclic compressive loading Water absorption Release of dangerous substances to the indoor	NPD WL(T) 3	EN 14933:2007	
Continuous glowing combustion Resistance to dynamic loading Water permeability Release of dangerous substances to the indoor environment	Continuous glowing combustion Resistance to cyclic compressive loading Water absorption Release of dangerous substances to the indoor environment	NPD WL(T) 3 NPD *	EN 14933:2007	
Continuous glowing combustion Resistance to dynamic loading Water permeability Release of dangerous substances to the indoor	Continuous glowing combustion Resistance to cyclic compressive loading Water absorption Release of dangerous substances to the indoor environment Thermal resistance and thermal	NPD WL(T) 3	EN 14933:2007	
Continuous glowing combustion Resistance to dynamic loading Water permeability Release of dangerous substances to the indoor environment	Continuous glowing combustion Resistance to cyclic compressive loading Water absorption Release of dangerous substances to the indoor environment	NPD WL(T) 3 NPD *	EN 14933:2007	

Water vapour permeability	Water vapour transmission	NPD
Compressive strength	Compressive stress	CS(10)150
Tensile/Flexural strength	Bending strength	BS200
Durability of reaction to fire against heat, weathering, ageing/ degradation	Durability characteristics	Pass
Durability of thermal resistance against ageing/ degradation	Durability characteristics	Pass
Durability of compressive strength against heat, weathering, ageing/ degradation	Compressive creep	Pass
Durability of compressive strength against ageing and degradation		Pass
Durability of resistance to dynamic loads	Resistance to cyclic compressive loading	Pass

*: No EN test method available.

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by

name and function
place and date of issue
signature

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EPS Co Ltd, PO Box 100, B-1050 Brussels

08

No. 0789-CPR - year/month/day

EN 14933:2007

EPS Road slab

RtF – E

 $d_{\rm N}$ – 500 mm

EPS - EN 14933 - T1 -WL(T)3 - CS(10)150 - BS200

Example 4: DoP and CE marking for EPS pipe insulation

		S pipe insulation		
DECLARATION OF PERFORMA				
No. 101112-CPR - year/month/	day			
1. Unique identification of the	EPS Pipe s	section		
product-type:				
2. Type, batch or serial	Not applicable			
number or any other element				
allowing identification of the				
construction product as				
required under Article 11(4) of				
the CPR:				
3. Intended use or uses of the	Thermal i	nsulation for building equip	ment and industrial in	stallation
construction product with the	<u> </u>			
applicable harmonised				
technical specification, as				
foreseen by the manufacturer:				
4. Name, registered trade	EPS Co Ltd	<u> </u>		
name or registered trade mark		PO Box 100		
and contact address of the	B-1050 Br			
manufacturer as required	2 2000 2.	4550.5		
under Article 11(5):				
5. Where applicable, name and	Not applic	rahle		
contact address of the	Not applic	Cable		
authorised representative				
whose mandate covers the				
tasks specified in Article 12(2):				
6. System or systems of	AVCD syst	om 3		
assessment and verification of	AVCP syst	.em 3		
constancy of performance of				
the construction product as				
set out in CPR, Annex V:				
7. In case of the declaration of		esting laboratory No. 12345	-	mination of the
performance concerning a	product ty	ype on the basis of type test	ing	
construction product covered				
by a harmonised standard:				
8. In case of the declaration of	Not applic	cable		
8. In case of the declaration of performance concerning a	Not applic	cable		
8. In case of the declaration of performance concerning a construction product for which	Not applic	cable		
8. In case of the declaration of performance concerning a construction product for which a European Technical	Not applic	cable		
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued:	Not applic	cable		
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance	Not applid			
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued:	Not applic	cable Performance		Harmonised
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance	Not applic			technical
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance Essential characteristic	Not applic	Performance		
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance	Not applic		E	technical specification
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance Essential characteristic	Not applic	Performance	E	technical specification EN 13409: 2009 +
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance Essential characteristic Reaction to Fire	Not applic	Performance Reaction to fire		technical specification
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance Essential characteristic	Not applic	Performance Reaction to fire Thermal resistance and	E $\lambda_{\rm D} = 0.036 \text{W/mK}$	technical specification EN 13409: 2009 +
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance Essential characteristic Reaction to Fire	Not applic	Performance Reaction to fire Thermal resistance and thermal		technical specification EN 13409: 2009 +
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance Essential characteristic Reaction to Fire	Not applic	Performance Reaction to fire Thermal resistance and thermal conductivity	$\lambda_{\rm D}$ = 0,036 W/mK	technical specification EN 13409: 2009 +
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance Essential characteristic Reaction to Fire	Not applic	Performance Reaction to fire Thermal resistance and thermal	$\lambda_{\rm D} = 0.036 {\rm W/mK}$ $l: \pm 0.6 \% {\rm or} \pm 3 {\rm mm}$	technical specification EN 13409: 2009 +
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance Essential characteristic Reaction to Fire	Not applic	Performance Reaction to fire Thermal resistance and thermal conductivity	$\lambda_{\rm D} = 0.036 {\rm W/mK}$ $l: \pm 0.6 \% {\rm or} \pm 3 {\rm mm}$ $d: \pm 2 {\rm mm}$	technical specification EN 13409: 2009 +
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance Essential characteristic Reaction to Fire	Not applic	Performance Reaction to fire Thermal resistance and thermal conductivity	$\lambda_{\rm D} = 0.036 {\rm W/mK}$ $l: \pm 0.6 \% {\rm or} \pm 3 {\rm mm}$ $d: \pm 2 {\rm mm}$ $D_1: + 2 \% {\rm or} + 3 {\rm mm}$	technical specification EN 13409: 2009 +
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance Essential characteristic Reaction to Fire Thermal resistance	Not applic	Performance Reaction to fire Thermal resistance and thermal conductivity Dimensional tolerances	$\lambda_{\rm D} = 0.036 \text{ W/mK}$ $l: \pm 0.6 \% \text{ or } \pm 3 \text{ mm}$ $d: \pm 2 \text{ mm}$ $D_1: +2 \% \text{ or } +3 \text{ mm}$ $S_b: \pm 3 \text{ mm/m}$	technical specification EN 13409: 2009 +
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance Essential characteristic Reaction to Fire Thermal resistance	Not applic	Performance Reaction to fire Thermal resistance and thermal conductivity Dimensional tolerances Water absorption	$\lambda_{\rm D} = 0.036 {\rm W/mK}$ $l: \pm 0.6 \% {\rm or} \pm 3 {\rm mm}$ $d: \pm 2 {\rm mm}$ $D_1: +2 \% {\rm or} +3 {\rm mm}$ $S_b: \pm 3 {\rm mm/m}$ WL(T) 3	technical specification EN 13409: 2009 +
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance Essential characteristic Reaction to Fire Thermal resistance	Not applic	Performance Reaction to fire Thermal resistance and thermal conductivity Dimensional tolerances Water absorption Water vapour diffusion	$\lambda_{\rm D} = 0.036 \text{ W/mK}$ $l: \pm 0.6 \% \text{ or } \pm 3 \text{ mm}$ $d: \pm 2 \text{ mm}$ $D_1: +2 \% \text{ or } +3 \text{ mm}$ $S_b: \pm 3 \text{ mm/m}$	technical specification EN 13409: 2009 +
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance Essential characteristic Reaction to Fire Thermal resistance Water permeability Water vapour permeability	Not applic	Performance Reaction to fire Thermal resistance and thermal conductivity Dimensional tolerances Water absorption Water vapour diffusion resistance	$\lambda_{D} = 0.036 \text{ W/mK}$ $l: \pm 0.6 \% \text{ or } \pm 3 \text{ mm}$ $d: \pm 2 \text{ mm}$ $D_{1}: + 2 \% \text{ or } + 3 \text{ mm}$ $S_{b}: \pm 3 \text{ mm/m}$ WL(T) 3 NPD	technical specification EN 13409: 2009 +
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance Essential characteristic Reaction to Fire Thermal resistance	Not applic	Performance Reaction to fire Thermal resistance and thermal conductivity Dimensional tolerances Water absorption Water vapour diffusion	$\lambda_{\rm D} = 0.036 {\rm W/mK}$ $l: \pm 0.6 \% {\rm or} \pm 3 {\rm mm}$ $d: \pm 2 {\rm mm}$ $D_1: +2 \% {\rm or} +3 {\rm mm}$ $S_b: \pm 3 {\rm mm/m}$ WL(T) 3	technical specification EN 13409: 2009 +
8. In case of the declaration of performance concerning a construction product for which a European Technical Assementhas been issued: 9. Declared performance Essential characteristic Reaction to Fire Thermal resistance Water permeability Water vapour permeability	Not applic	Performance Reaction to fire Thermal resistance and thermal conductivity Dimensional tolerances Water absorption Water vapour diffusion resistance	$\lambda_{D} = 0.036 \text{ W/mK}$ $l: \pm 0.6 \% \text{ or } \pm 3 \text{ mm}$ $d: \pm 2 \text{ mm}$ $D_{1}: + 2 \% \text{ or } + 3 \text{ mm}$ $S_{b}: \pm 3 \text{ mm/m}$ WL(T) 3 NPD	technical specification EN 13409: 2009 +

	pH-value	
Release of dangerous substances to the indoor environment	Release of dangerous substances	NPD **
Continuous glowing combustion	Continuous glowing combustion	NPD **
Durability of reaction to fire against ageing/degradation	Durability characteristics	Pass
Durability of thermal resistance against ageing/degradation	Durability characteristics	Pass
Durability of reaction to fire against high temperature	Durability characteristics	Pass
Durability of thermal resistance against high temperature	Durability characteristics	Pass

^{*:} whichever gives the greatest numerical tolerance

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by

name and function
place and date of issue
signature

CE

EPS Co Ltd, PO Box 100, B-1050 Brussels

08

No. 101112-CPR - year/month/day

EN 14309: 2009 + A1: 2013

EPS Pipe section

RtF – E

 λ_D = 0,036 W/mK

d – 85 mm

EPS - EN 14933 -WL(T)3 - CS(10)60 - BS100

^{**:} No EN test method available.

Appendix B: Terminology

Equivalent terms		
CPD	CPR	
Essential requirement (ER)	Basic Requirement (BR)	
Attestation of conformity (AoC)	Assessment and Verification of Constancy of Performance (AVCP)	
Evaluation of Conformity (EoC)	Verification of the Constancy of Performance (VCP)	
Declaration of Conformity (DoC)	Declaration of Performance (DoP)	
Initial Type testing (ITT)	Product Type determination (PTD)	
Factory Production Control (FPC)	Factory Production Control (FPC)	
Characteristics	Essential characteristics	

Abbreviations	
AVCP	Assessment and Verification of Constancy of Performance
CEN	Comité Européen de Normalisation
CENELEC	Comité Européen de Normalisation Électrotechnique
CPD	Construction Products Directive
CPR	Construction Products Regulation
DoP	Declaration of Performance
EAD	European Assessment Document
EC	European Commission
EEA	European Economic Area
EOTA	European Organisation for Technical Approvals
ETA	European Technical Assessment
FPC	Factory Production Control
ETAG	European Technical Approval Guideline
hEN	Harmonised European standard
NANDO	New Approach Notified and Designated Organisations Information
	System
NPD	No performance determined
TAB	Technical Assessment Body

Glossary	
Term	Meaning
Manufacturer	Any natural or legal person who manufactures a construction product or who has
	such a product designed or manufactured, and markets that product under their
	name or trademark.
Distributor	Any natural or legal person in the supply chain, other than the manufacturer or the
	importer, who makes a construction product available on the market.
Importer	Any natural or legal person established within the EEC, who places a construction
	product from a third country on the EEC market.
Authorised representative	Any natural or legal person established within the Union who has received a written
	mandate from a manufacturer to act on his behalf in relation to specified tasks
Assessment and	The method for attesting the conformity of construction products to harmonised
Verification of Constancy	technical specifications including the amount of involvement from an independent
of Performance (AVCP)	certification body/laboratory
CE symbol	The logo the manufacturer applies to their product when they are satisfied that all the
	requirements have been met.
CEN	Comité Européen de Normalisation (European Committee for Standardisation). CEN's
	main objective is to remove technical rade barriers for European industry and
	consumers. It provides a platform for the development of European Standards (ENs)
	and other consensus documents. CEN works in a decentralised way. Its members –
	the National Standardisation Bodies of the EEA countries – operate the technical
	groups that draw up the standards; the CEN Management Centre (CMC) in Brussels
	manages and co-ordinates this system.
EOTA	This organisation comprises the Technical Assessment Bodies nominated to issue
	European Technical Assessments (ETAs) by EEA member states who have contracted
	to the European Economic Area Agreement. A construction product with an ETA,
	satisfying the AVCP provisions, can carry CE marking and can be placed on the market
	in any of the EEA countries. EOTA is constituted as a legal body under Belgian law. The
	role of EOTA is primarily to monitor and progress the drafting of European
	Assessment Documents (EADs) and to co-ordinate all activities relating to the issuing
	of ETAs. EOTA operates in close co-operation with the European Commission, EFTA,
	CEN, European trade associations and industrial organisations, who are also present
Dania Daniana anta (DD)	as observers at various EOTA levels.
Basic Requirements (BR)	The general and specific criteria with which construction works must comply where
NANDO	this is laid down in Member State regulations.
NANDO	New Approach Notified and Designated Organisations Information System. The
	NANDO website lists all harmonised technical specifications and Notified Bodies and their designated tasks, and TABs and their designated product areas.
Harmonicad European	Harmonised European standards (hENs) are the harmonised technical Specifications
Harmonised European Standards	adopted by CEN on mandates given by the European Commission. Harmonised
Stallualus	European standards are identified by the inclusion of an Annex ZA.
Harmonised technical	Harmonised European Standards (hENs) and European Assessment Documents (EADs)
specifications	for construction products developed either by CEN or EOTA.
Notified body	Certification, inspection or testing body designated by the Notifying Authority of an
1.0 tilled body	EEA Member State to perform the Assessment and Verification of Constancy of
	Performance of products. Minimum requirements for the bodies to be notified are
	laid down in the CPR. Member States may add requirements for the bodies they
	notify. Additional requirements can include accreditation, participation in the GNB,
	restrictions on sub-contracting, etc. (additional information can be found in the
	guidance and position papers of the GNB).
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Appendix C: Assessment and Verification of Constancy of Performance tasks

System type	Responsibility	Type of notified body	Tasks
System 1+	Manufacturer		Factory Production Control; Further testing of samples taken at the factory with the described test plan
	Notified body	Product certification body	Determination of the product-type on the basis of type testing (including sampling), type calculation, tabulated values or descriptive documentation of the product; Initial inspection of the manufacturing plant and of FPC; Continuous surveillance, assessment and evaluation of FPC; Audit-testing of samples taken before placing the productOn the market
System 1	Manufacturer		Factory Production Control; Further testing of samples taken at the factory with the described test plan
	Notified body	Product certification body	Determination of the product-type on the basis of type testing (including sampling), type calculation, tabulated values or descriptive documentation of the product; Initial inspection of the manufacturing plant and of FPC; Continuous surveillance, assessment and evaluation of FPC
System 2+	Manufacturer		Determination of product type on the basis of type testing (including sampling), type calculation, tabulated values or descriptive documentation of the product; FPC;Testing of samples taken the factory in accordance with the described test plan
	Notified body	Factory production control certification body	Initial inspection of the manufacturing plant and FPC; Continuous surveillance, assessment and evaluation of FPC
System 3	Manufacturer		FPC
	Notified body	Test Laboratory	Determination of product-type on the basis of type testing (based on sampling carried out by the manufacturer), type calculation, tabulated values or descriptive documentation of the product
System 4	Manufacturer	No independent involvement	Determination of product type on the basis of type testing, type calculation, tabulated values or descriptive documentation of the product; FPC