

Institut luxembourgeois de la normalisation de l'accréditation, de la sécurité et qualité des produits et services

ILNAS-EN 16783:2017

Thermal insulation products - Product category rules (PCR) for factory made and in-situ formed products for preparing environmental product

Produits isolants thermiques - Règles régissant les catégories de produits (RCP) pour les produits manufacturés et formés en place, destinées à la préparation des

Wärmedämmstoffe -Produktkategorieregeln (PCR) für werkmäßig hergestellte und an der Verwendungsstelle hergestellte

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National Foreword

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Thermal insulation products - Product category rules (PCR) for factory made and in-situ formed products for preparing environmental product declarations

Produits isolants thermiques - Règles régissant les catégories de produits (RCP) pour les produits manufacturés et formés en place, destinées à la préparation des déclarations environnementales des produits

Wärmedämmstoffe - Produktkategorieregeln (PCR) für werkmäßig hergestellte und an der Verwendungsstelle hergestellte Wärmedämmstoffe zur Erstellung von Umweltproduktdeklarationen

This European Standard was approved by CEN on 16 January 2017.

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

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Con	Lontents	
Europ	pean foreword	3
Introduction		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	
4	Symbols and abbreviations	
5	General aspects	
5.1	Objective of the complementary PCR for insulation products	
5.2	Types of EPD with respect to life cycle stages covered	
5.3	Comparability of EPD for construction products	
5.4	Additional information	
5.5	Ownership, responsibility and liability for the EPD	
5.6	Communication formats	
6	Product Category Rules for LCA	
6.1	Product category	
6.2	Life cycle stages and their information modules to be included	
6.3	Calculation rules for the LCA	
6.3.1	Functional unit	9
6.3.2	Declared unit	
6.3.3	Reference service life (RSL)	
6.3.4	System boundaries	
6.3.5	Criteria for the exclusion of inputs and outputs	
6.3.6	Selection of data	
6.3.7	Data quality requirements	
6.3.8	Developing product level scenarios	
6.3.9	Units	
6.4	Inventory analysis	
6.5	Impact assessment	11
7	Content of the EPD	12
8	Project report	12
9	Verification and validity of an EPD	12
Anne	x A (normative) Applications for thermal insulation	13
Rihlingranhy		16

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European foreword

This document (EN 16783:2017) has been prepared by Technical Committee CEN/TC 88 "Thermal insulating materials and products", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2017, and conflicting national standards shall be withdrawn at the latest by October 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: 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 the United Kingdom.

Introduction

This European Standard provides rules for the assessment and quantification of parameters describing the environmental impact of thermal insulation products to prepare environmental product declarations.

It defines complementary product category rules for thermal insulation products based on the core rules for all construction products established in EN 15804. These rules are intended to be used in conjunction with EN 15804.

These PCR apply to all CEN/TC 88 thermal insulation product Standards (EN 13162 to EN 13171, EN 14063-1, EN 14064-1, EN 14303 to EN 14309, EN 14313, EN 14314, EN 14315-1 to EN 14320, EN 14933, EN 14934, prEN 15100-1, EN 15101-1, EN 15501, EN 15599-1, EN 15600-1, EN 15732, EN 16069) in order to minimize intra-sectoral deviations. These PCR are also valid for thermal insulation products outside of CEN/TC88 and for thermal insulation products involved in other CEN TCs.

As in EN 15804, the results from the assessment are expressed following the modularity principle in a form that allows aggregation (addition) to provide complete information for construction works. These PCR do not deal with aggregation at the construction works level nor does it describe the rules for applying the environmental parameters in a construction works assessment.

The reduction in energy used and the reduction of emissions produced during the installed life of insulation products exceed by far the energy used and in most cases the emissions occurring during the production, installation and disposal processes. Clause 5.4 of this European Standard provides the rules for declaration of any such benefits as additional information.

NOTE The titles of the clauses in this European Standard follow the EN 15804 to enhance readability.

1 Scope

This European Standard provides the product category rules (PCR) for Type III environmental declarations (as in EN 15804) for factory made and *in situ* thermal insulation products.

Complementary to EN 15804, the PCR described in this European Standard:

- specify the declared unit to be used;
- define the system boundaries for thermal insulation products;
- specify/describe the default scenarios and rules for defining scenarios for certain life cycle information modules.

These PCR are intended to be used for cradle to gate, cradle to gate with options or cradle to grave assessment, provided the intention is properly stated in the system boundary description.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 13172, Thermal insulation products - Evaluation of conformity

EN 15804:2012+A1:2013, Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products

EN 15942, Sustainability of construction works - Environmental product declarations - Communication format business-to-business

EN 15978, Sustainability of construction works - Assessment of environmental performance of buildings - Calculation method

EN ISO 9229, Thermal insulation - Vocabulary (ISO 9229)

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 9229, EN 15804:2012+A1:2013 and the following apply.

3.1

biogenic carbon

carbon derived from/contained in biomass

3.2

biomass

material of biological origin excluding material embedded in geological formations and material transformed to fossilised material

4 Symbols and abbreviations

For the purpose of this document, the abbreviations given in EN ISO 9229 and EN 15804 and the abbreviations given in Annex A apply.

5 General aspects

5.1 Objective of the complementary PCR for insulation products

As in EN 15804 and the Scope of this European Standard.

5.2 Types of EPD with respect to life cycle stages covered

These PCR identify three main families of EPD:

- 1) EPD for factory made insulation products;
- 2) EPD for products intended to be used as in situ insulation products excluding installation;
- 3) EPD for products to be used as *in situ* insulation products including installation.

To be in compliance with this European Standard, the declaration of the product stage modules A1-A3 is required as a minimum for those thermal insulation products that have their applicable technical characteristics (e.g. thermal resistance) at the factory gate. In addition, for *in situ* formed thermal insulation products that establish their applicable technical characteristics after activities on site, the declaration of Module A5 "installation" of the construction process stage is also required. The declaration of the modules of the other life cycle stages is optional.

For each of these EPD, mandatory and voluntary stages to be covered are described as in Figure 1.