



SLOVENSKI STANDARD

oSIST prEN 16904:2015

01-oktober-2015

Cevni sistemi iz polimernih materialov - Trajnostnost gradbenih objektov - Pravila za kategorije proizvodov (PCR) za cevne sisteme iz polimernih materialov v stavbah

Plastics piping systems - Sustainability of construction works - Product Category Rules (PCR) for plastics piping systems inside buildings

Kunststoff-Rohrleitungssysteme - Nachhaltigkeit von Bauwerken - Produktkategorieregeln (PCR) für Kunststoff-Rohrleitungssysteme innerhalb von Gebäuden

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Systèmes de canalisations en plastique - Développement durable des ouvrages de construction - Règles régissant les catégories de produits (RCP) pour les systèmes de canalisations en plastique à l'intérieur des bâtiments

Ta slovenski standard je istoveten z: prEN 16904

ICS:

23.040.20 Cevi iz polimernih materialov Plastics pipes

oSIST prEN 16904:2015

en,fr,de

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 16904

August 2015

ICS 23.040.20; 23.040.45

English Version

Plastics piping systems - Sustainability of construction works - Product Category Rules (PCR) for plastics piping systems inside buildings

Systèmes de canalisations en plastique - Développement durable des ouvrages de construction - Règles régissant les catégories de produits (RCP) pour les systèmes de canalisations en plastique à l'intérieur des bâtiments

Kunststoff-Rohrleitungssysteme - Nachhaltigkeit von Bauwerken - Produktkategorieeregeln (PCR) für Kunststoff-Rohrleitungssysteme innerhalb von Gebäuden

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 155.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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prEN 16904:2015 (E)

European foreword

This document (prEN 16904:2015) has been prepared by Technical Committee CEN/TC 155 “Plastics piping systems and ducting systems”, the secretariat of which is held by NEN.

This document is currently submitted to the CEN Enquiry.

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Introduction

European standard EN 15804 provides core product category rules for all construction products and services. It provides a structure to ensure that all Environmental Product Declarations (EPD) of construction products, construction services and construction processes are derived, verified and presented in a harmonised way.

This European Standard, based on EN 15804, specifies the Product Category Rules for Environmental Product Declarations (EPD) of plastics piping systems inside buildings.

An EPD communicates verifiable, accurate, non-misleading environmental information for products and their applications, thereby supporting scientifically based, fair choices and stimulating the potential for market-driven continuous environmental improvement.

The standardisation process has taken place in accordance with EN ISO 14025. All common issues are covered horizontally for all product types in order to minimise vertical (branch specific) deviations.

EPD information is expressed in information modules as defined in EN 15804, which allow easy organisation and expression of data packages throughout the life cycle of the plastics piping systems (constructions) inside buildings. The approach requires that the underlying data should be consistent, reproducible and comparable.

The EPD is expressed in a form that allows aggregation (addition) to provide complete information for constructions. This standard does not deal with aggregation at the building level nor does this standard describe the rules for applying EPD in a building assessment.

The standard deals with a limited number of quantifiable predetermined parameters defined in EN 15804. Future revisions may incorporate additional predetermined parameters in line with the changes of EN 15804.

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prEN 16904:2015 (E)**1 Scope**

This European standard provides product category rules (PCR) for Type III environmental product declarations (EPD) for “plastics piping systems” intended for hot & cold pressure, cold pressure, and soil & waste non-pressure applications inside buildings.

This PCR covers the entire life cycle from cradle to grave.

NOTE 1 Examples of standards for which this standard could be applied are listed in **Annex C**.

This European Standard specifies the rules for the product category of construction products as defined in and is intended to be used in conjunction with EN 15804.

NOTE 2 The assessment of social and economic performances at product level is not covered by this standard

NOTE 3 For the purpose of this standard the word “building” used in **EN 15804** is always replaced by “plastics piping systems” or constructions

NOTE 4 If a comparison is made it must be based on the same functional unit, the same layout with same needed minimum flow capacity of the outlets, the same installation, same assumptions and the same LCI datasets

The core PCR: (as EN 15804)

- defines the parameters to be declared and the way in which they are collated and reported;
- describes which stages of a product’s life cycle are considered in the EPD and which processes are to be included in the life cycle stages;
- defines rules for the development of scenarios;
- includes the rules for calculating the Life Cycle Inventory and the Life Cycle Impact Assessment underlying the EPD, including the specification of the data quality to be applied;
- includes the rules for reporting predetermined, environmental and health information, that is not covered by LCA for a product, construction process and construction service where necessary;
- defines the conditions under which construction products can be compared based on the information provided by EPD.

In addition to the common parts of EN 15804 this European Standard for European plastics piping systems inside building defines:

- the Functional Unit;
- the system boundaries;
- the elements and conditions of installations;
- the transport scenarios for both the raw materials and complete systems;
- the reference service life (RSL);
- end of life scenarios;
- the rules for calculating the Life Cycle Inventory and the Life Cycle Impact Assessment underlying the EPD.

This standard is intended to be used for cradle to grave assessment.

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

EN ISO 14044:2006, *Environmental management - Life cycle assessment - Requirements and guidelines (ISO 14044:2006)*

3 Terms and definitions

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

3.1

plastics piping systems

plastics piping systems” for hot and cold pressure, cold pressure and soil and waste water applications inside buildings

3.2

construction

plastics piping system installed inside buildings

3.3

construction product

plastics piping system components manufactured or processed for incorporation in construction works

Note 1 to entry: modification of 3.5 of EN 15804:2012 +A1:2013.

Note 2 to entry: Construction products are items supplied by a single responsible body.

Note 3 to entry: Adapted from the definition in ISO 6707-1:2014 according to the recommendation of ISO/TC 59/AHG Terminology.

4 Abbreviations

For the purposes of this document, the abbreviations listed in EN 15804:2012+A1:2013 apply.

5 General aspects

5.1 Objective of the PCR for plastics piping systems inside buildings

An EPD according to this standard provides quantified environmental information for plastics piping systems on a harmonized and scientific basis. It also provides information on health related emissions to indoor air, soil and ground water during the use stage of the construction. The purpose of an EPD in the construction sector is to provide the basis for assessing buildings and other construction works, and identifying those, which cause less stress to the environment.

Thus, the objective of the PCR for plastics piping systems inside buildings is to ensure:

— the provision of verifiable and consistent data for an EPD, based on LCA;

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- the provision of verifiable and consistent product related technical data or scenarios for the assessment of the environmental performance of plastics piping systems;
- the provision of verifiable and consistent product related technical data or scenarios potentially related to the health of users for the assessment of the performance of plastics piping systems;
- the communication of the environmental information of plastics piping systems from business to business;
- the basis, subject to additional requirements, for the communication of the environmental information of plastics piping systems to consumers.

NOTE See definition 3.4 of EN 15804:2012+A1:2013 and ISO 14044:2006, 5.1 for more information concerning LCA used for comparative assertion

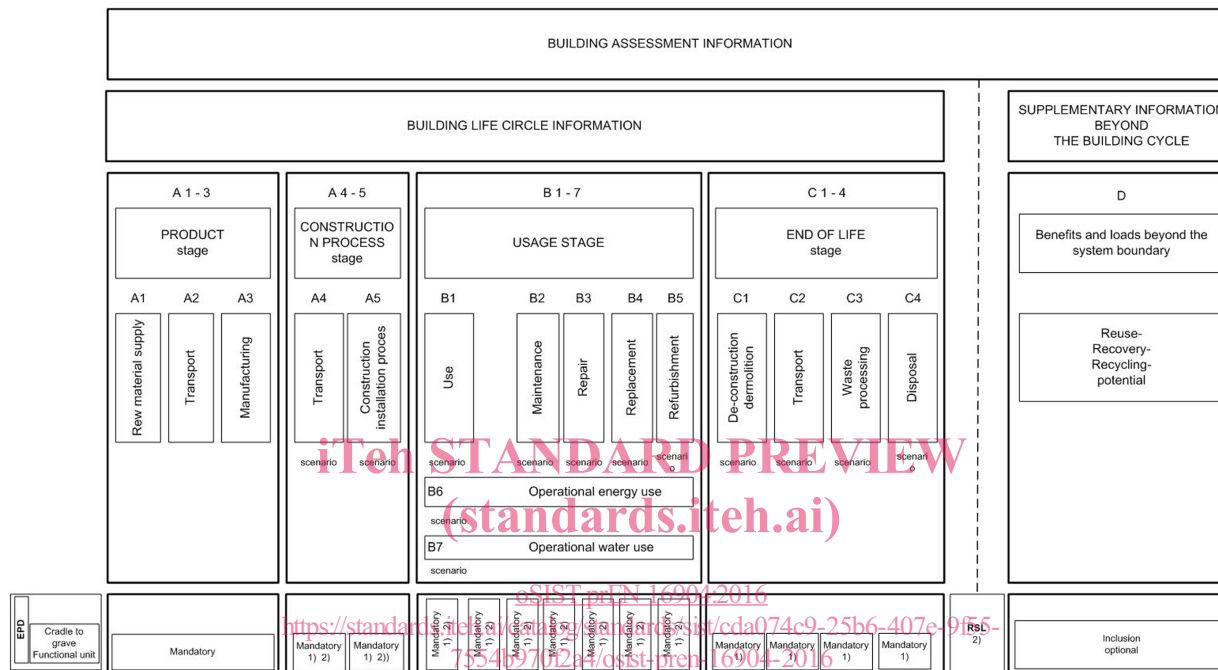
5.2 Types of EPD with respect to life cycle stages covered

The information in an EPD based on LCA shall cover all life cycle stages and information modules from A1 to C4 and may also include module D (see Figure 1).

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- 1) Inclusion for a declared scenario
- 2) If all scenarios are given

Figure 1 —Types of EPD with respect to life cycle stages covered and life cycle stages and modules for the building assessment