



SLOVENSKI STANDARD
oSIST prEN 16903:2015
01-oktober-2015

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

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

Kunststoff-Rohrleitungssysteme - Nachhaltigkeit von Bauwerken - Produktkategorieregeln (PCR) für erdverlegte Kunststoff-Rohrleitungssysteme
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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 enterrés de canalisations en plastique
<https://standards.iteh.ai/catalog/standards/siv/7918304d-4514-49cd-80c5-11d187fd/osist-pren-16903-2015>

Ta slovenski standard je istoveten z: prEN 16903

ICS:

23.040.20 Cevi iz polimernih materialov Plastics pipes

oSIST prEN 16903:2015

en,fr,de

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 16903

August 2015

ICS 23.040.20; 23.040.45

English Version

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

Systèmes de canalisations en plastique - Développement durable des ouvrages de construction - Règles régissant les catégories de produits (RCP) pour les systèmes enterrés de canalisations en plastique

Kunststoff-Rohrleitungssysteme - Nachhaltigkeit von Bauwerken - Produktkategorieregeln (PCR) für erdverlegte Kunststoff-Rohrleitungssysteme

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 16903:2015) 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

The 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 harmonized way.

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

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

EPD information is expressed in information modules as defined in EN 15804, which allow easy organization and expression of data packages throughout the life cycle of the buried plastics piping systems (constructions). 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 16903:2015 (E)**1 Scope**

This European standard provides product category rules (PCR) for Type III environmental product declarations for “buried plastics piping systems” intended for buried pressure and non-pressure applications outside building structure.

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” is always replaced by “buried plastics piping systems” or constructions.

NOTE 4 If a comparison is made it has to 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 data sets.

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 buried plastics piping systems defines:

- the Functional Unit;
- the system boundaries;
- the elements of installation;
- the transport scenarios for both the raw material and the complete system;
- the trench conditions;
- 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

construction

buried plastics piping system

3.2

construction product

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

Note 1 to entry: <https://standards.iteh.ai/catalog/standards/sist/79f8364d-a314-49e3-80e5-c7ad1a878d76/osst-pr-en-16903-2016> 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 buried plastics piping systems

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 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 buried plastics piping systems 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 buried plastics piping systems;
- the communication of the environmental information of buried plastics piping systems from business to business;
- the basis, subject to additional requirements, for the communication of the environmental information of buried plastics piping systems to consumers.

NOTE See definition 3.4 of EN 15804:2012+A1:2013 and EN 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).

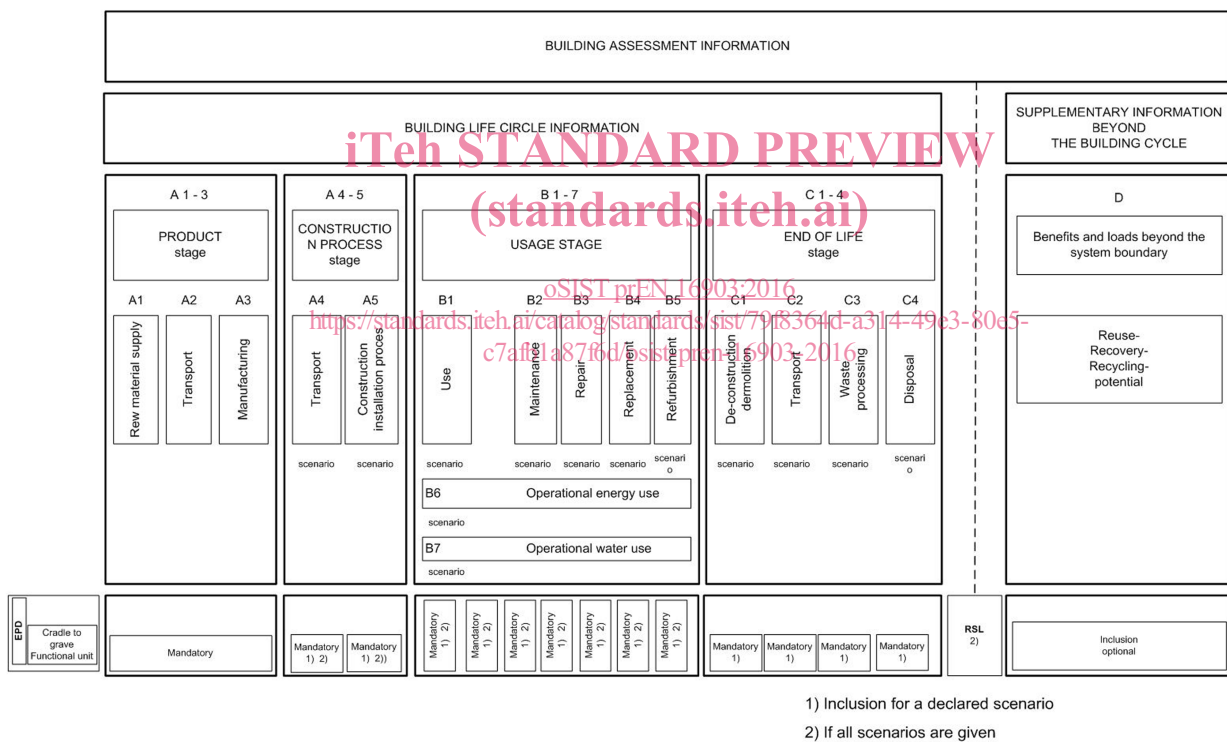


Figure 1 —Types of EPD with respect to life cycle stages covered and life cycle stages and modules for the construction assessment

5.3 Comparability of EPD for construction products

As EN 15804.

5.4 Additional information

As EN 15804.

5.5 Ownership, responsibility and liability for the EPD

As EN 15804.

5.6 Communication formats

As EN 15804.

6 Product Category Rules for LCA

6.1 Product category

The product category referred to in this standard includes all buried plastics piping systems and related services of all life cycle stages.

6.2 Life cycle stages and their information modules to be included

6.2.1 General

As EN 15804.

6.2.2 A1-A3, Product stage, information modules

As EN 15804.

6.2.3 A4-A5, Construction process stage, information modules

As EN 15804.

6.2.4 B1-B5, Use stage, information modules related to the buried plastics piping systems

The use stage, related to the buried plastics piping systems only includes:

— B2, maintenance

As EN 15804 but only for

— Water use for cleaning;

— Energy use for cleaning.

6.2.5 B6-B7, use stage, information modules related to the operation of the buried plastics piping systems

Not relevant.

6.2.6 C1-C4 End-of-life stage, information modules

As EN 15804.

6.2.7 D, Benefits and loads beyond the system boundary, information module

As EN 15804.

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