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**Cevni sistemi iz polimernih materialov - Okoljske deklaracije za proizvode - Pravila za kategorije proizvodov, ki dopolnjujejo EN 15804, za cevne sisteme iz polimernih materialov v stavbah**

Plastics piping systems - Environmental product declarations - Product Category rules complementary to EN 15804, for plastic piping systems inside buildings

Kunststoff-Rohrleitungssysteme - Umweltproduktdeklarationen - Produktkategorieregeln entsprechend EN 15804 für Kunststoff-Rohrleitungssysteme innerhalb von Gebäuden

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ystèmes de canalisations en plastique - Déclarations environnementales sur les produits - Règles de définition des Catégories de Produits complémentaires à l'EN 15804, pour les systèmes de canalisations en plastique à l'intérieur des bâtiments

**Ta slovenski standard je istoveten z: prEN 16904**

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## Plastics piping systems - Environmental product declarations - Product Category rules complementary to EN 15804, for plastic piping systems inside buildings

ystèmes de canalisations en plastique - Déclarations environnementales sur les produits - Règles de définition des Catégories de Produits complémentaires à l'EN 15804, pour les systèmes de canalisations en plastique à l'intérieur des bâtiments

Kunststoff-Rohrleitungssysteme - Umweltproduktdeklarationen - Produktkategorieregeln entsprechend EN 15804 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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

This document (prEN 16904:2021) 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 harmonized way.

This document, 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 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 plastics piping systems (constructions) inside buildings. The approach requires that the underlying data be consistent, reproducible and comparable.

The EPD is expressed in a form that allows aggregation (addition) to provide complete information for constructions. This document does not deal with aggregation at the building level nor does this document 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 16904:2021 (E)****1 Scope**

This document provides product category rules (PCR) for Type III environmental product declarations (EPD) as described in EN ISO 14025 and EN 15942 for “plastics piping systems” intended for hot and cold pressure, cold pressure, and soil and waste non-pressure applications inside buildings.

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

NOTE The PCR will be applied to all products covered by CEN/TC 155 in this application. A list of product standards is provided in Annex D.

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

In addition to the common parts of EN 15804, this document 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.

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**2 Normative references**

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The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. 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+A2:2019, *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 given in EN 15804:2012+A2:2019 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

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



## 4 Abbreviations

For the purposes of this document, the abbreviations given in EN 15804:2012+A2:2019 apply.

## 5 General aspects

### 5.1 Objective of the PCR for plastics piping systems inside buildings

As EN 15804.

### 5.2 Types of EPD with respect to life cycle stages covered

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

NOTE The use of biobased materials could attribute to a lower environmental impact at stage A1.

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CONSTRUCTION WORKS ASSESMENT INFORMATION																	
CONSTRUCTION WORKS LIFE CYCLE INFORMATION															SUPPLEMENTARY INFORMATION BEYOND CONSTRUCTION WORKS LIFE CYCLE		
A1 - A3 PRODUCT STAGE			A4 - A5 CONSTRUCTION PROCESS STAGE		B1 - B7 USE STAGE							C1 - C4 END OF LIFE STAGE			D BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARY		
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
Raw material supply	Transport	Manufacturing	Transport	Construction - Installation process	Use	Maintenance	Repair	Replacement <sup>1</sup>	Refurbishment	Operational energy use	Operational water use	Deconstruction/ demolition	Transport	Waste processing	Disposal	Reuse, recovery, recycling, potential	
scenario	scenario	scenario	scenario	scenario	scenario	scenario	scenario	scenario	scenario	scenario	scenario	scenario	scenario	scenario	scenario	scenario	
Cradle to gate with modules C1-C4 and module D	Mand.	Mand.	Mand.									Mand.	Mand.	Mand.	Mand.	Mandatory	
Cradle to gate with options, modules C1-C4 and module D	Mand.	Mand.	Mand.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Mand.	Mand.	Mand.	Mand.	Mandatory	
Cradle to grave and module D	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mandatory
Cradle to gate <sup>2</sup>	Mand.	Mand.	Mand.														
Cradle to gate with options <sup>2</sup>	Mand.	Mand.	Mand.	Opt.	Opt.												

**Key**

- 1 replacement of components, parts or systems
- 2 Only possible if the conditions to exclude the declaration of modules C1-C4 and module D are met

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

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### 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 document includes all plastics piping systems for inside buildings applications 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.

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#### 6.2.2 A1-A3, Product stage, information modules

As EN 15804.

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#### 6.2.3 A4-A5, Construction process stage, information modules

As EN 15804.

Except: For A4, transport to the building site attention shall be paid on the data used and most data are based on weight (tons). In case that specific data are unavailable an average load of 6 000 kg per 80 m<sup>3</sup> truck can be used.

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

As EN 15804.

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

As EN 15804, and in addition: Scenarios for B6 and B7 in EPD for installed plastics piping systems are always calculated with an impact of zero.

#### 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.