

STN	Potrúbné systémy z plastov uložené mimo konštrukcie budov Environmentálne vyhlásenia o výrobkoch Pravidlá kategórie výrobkov, ktoré dopĺňajú EN 15804	STN EN 16903 64 3280
------------	--	--

Plastic piping systems buried outside the building structure - Environmental product declarations - Product category rules complementary to EN 15804

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/26

Obsahuje: EN 16903:2025

141840

EUROPEAN STANDARD

EN 16903

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2025

ICS 23.040.20; 23.040.45; 91.010.99

English Version

Plastic piping systems buried outside the building structure - Environmental product declarations - Product category rules complementary to EN 15804

Systèmes de canalisations en plastique enterrés à l'extérieur de la structure du bâtiment - Déclarations environnementales des produits - Règles régissant les catégories de produits complémentaires de l'EN 15804

Erdverlegte Kunststoff-Rohrleitungssysteme außerhalb von Gebäuden - Umweltproduktdeklarationen - Produktkategorieregeln entsprechend EN 15804

This European Standard was approved by CEN on 13 July 2025.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.



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

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

EN 16903:2025 (E)

Contents	Page
European foreword	5
Introduction	6
1 Scope.....	7
2 Normative references.....	8
3 Terms and definitions	8
4 Abbreviations.....	10
5 General aspects.....	10
5.1 Objective of the PCR for plastic piping systems buried outside the building structure.....	10
5.2 Types of EPD with respect to life cycle stages covered	10
5.3 Comparability of EPD for construction products	12
5.4 Additional information	12
5.5 Ownership, responsibility and liability for the EPD.....	12
5.6 Communication formats.....	12
6 Product category rules for LCA	12
6.1 Product category	12
6.2 Life cycle stages and their information modules to be included	12
6.2.1 General.....	12
6.2.2 A1-A3, Product stage, information modules	12
6.2.3 A4-A5, Construction process stage, information modules.....	12
6.2.4 B1-B5, Use stage, information modules related to the plastic piping systems buried outside the building structure	12
6.2.5 B6-B7, use stage, information modules related to the operation of the plastic piping systems buried outside the building structure	12
6.2.6 C1-C4 End-of-life stage, information modules.....	12
6.2.7 D, Benefits and loads beyond the system boundary, information module	13
6.3 Calculation rules for the LCA	13
6.3.1 Functional or declared unit.....	13

6.3.2	Functional unit	13
6.3.3	Declared unit.....	14
6.3.4	Reference service life (RSL)	14
6.3.5	System boundaries.....	14
6.3.6	Criteria for the exclusion of inputs and outputs	20
6.3.7	Selection of data.....	20
6.3.8	Data quality requirements.....	21
6.3.9	Developing product level scenarios.....	21
6.3.10	Units.....	23
6.4	Inventory analysis.....	23
6.4.1	Collecting data	23
6.4.2	Calculation procedures.....	23
6.4.3	Allocation of input flows and output emissions	23
6.4.4	Information on biogenic carbon content	23
6.5	Impact assessment.....	23
7	Content of the EPD.....	24
7.1	Declaration of general information	24
7.2	Declaration of environmental indicators derived from LCA	25
7.3	Scenarios and additional technical information	25
7.3.1	General	25
7.3.2	Construction process stage	25
7.3.3	B1-B7 use stage	26
7.3.4	End-of-life	26
7.4	Additional information on release of dangerous substances to, soil and ground water during the use stage	26
7.4.1	Indoor air.....	26
7.4.2	Soil and ground water.....	26
7.5	Aggregation of information modules	27

EN 16903:2025 (E)

8	Project report.....	27
8.1	General.....	27
8.2	LCA-related elements of the project report.....	27
8.3	Documentation on additional information	27
8.4	Data availability for verification	27
9	Verification and validity of an EPD.....	27
	Annex A (informative) Waste.....	28
A.1	End-of-waste	28
A.2	Properties of hazardous wastes for Table 5 of EN 15804:2012+A2:2019	28
	Annex B (informative) Examples for functional and declared units.....	29
B.1	Example 1: Functional unit - Life cycle assessment of a PE piping system buried outside the building structure for water distribution – pressure system.....	29
B.2	Example 2: Functional unit -Life Cycle Assessment of a buried solid wall sewer pipe system	31
B.3	Example 3: Declared unit -Life Cycle Assessment of a double wall plastic non-pressure gravity pipe for surface water drainage	33
	Annex C (informative) List of product standards	35
	Annex D (informative) Applications and intended used of plastic piping systems buried outside building structure.....	37
	Annex E (informative) Reading guide.....	38
	Bibliography	39

European foreword

This document (EN 16903:2025) has been prepared by Technical Committee CEN/TC 155 “Plastics piping systems and ducting systems”, the secretariat of which is held by NEN.

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 April 2026, and conflicting national standards shall be withdrawn at the latest by April 2026.

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.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

EN 16903:2025 (E)**Introduction**

The European standard EN 15804+A2 specifies core product category rules for all construction products and services. It specifies 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+A2, specifies the Product Category Rules for Environmental Product Declarations (EPD) plastic piping systems buried outside the building structure and their main structural components.

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 specified in EN 15804+A2, which allow easy organization and expression of data packages throughout the life cycle of the plastic piping systems buried outside the building structure (construction work). 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 construction works. This document does not deal with aggregation at the construction work level nor does this document describe the rules for applying EPD in a construction work assessment.

The document deals with a set of quantifiable predetermined parameters defined in EN 15804+A2. Future revisions may incorporate additional predetermined parameters in line with the changes of EN 15804+A2.

A reading guide of this document is provided in Annex E.

1 Scope

This document specifies product category rules (PCR) for Environmental Product Declarations (EPDs), as described in EN ISO 14025 and EN 15942.

This document is applicable to:

- functional unit as plastic piping systems buried outside building structure;
- declared unit as one or more main structural components, as specified by the list of product standards provided in Annex C.

Main structural components are:

- pipes;
- fittings (e.g. flange couplers, bends and reducers, valves and electrofusion fittings);
- manholes, inspection chambers and infiltration boxes.

This document gives guidelines for both pressure and non-pressure applications.

The intended function of the system considered is to convey fluids according to EN 476 (for sewers, drain and surface water), EN 805 (water supply), or EN 12007 (gas supply).

This document provides in Annex D a non-exhaustive list of application fields. In addition, the following applications and materials are not in scope of this document: GRP pipes and fittings, and district heating pipes.

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+A2.

In addition to EN 15804+A2, this document specifies:

- the functional unit (consisting of pipes, fittings, manholes and inspection chambers and ancillary components) and declared unit (consisting of pipes and/or fittings and/or manholes and /or inspection chambers);
- the system boundaries and additional mandatory modules to be declared;
- the processes to be included in the installation phase;
- scenarios for module A4, A5;
- use conditions for the use phase (B modules);
- reference service life (RSL);
- end of life scenarios.

EN 16903:2025 (E)**2 Normative references**

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.

CEN/TS 1046, *Thermoplastics piping and ducting systems — Outside the building structures for gravity and pressurised systems — Trench installation*

EN 476, *General requirements for components used in drains and sewers*

EN 805 (series), *Water supply — Requirements for systems and components outside buildings*

EN 12007 (series), *Gas infrastructure — Pipelines for maximum operating pressure up to and including 16 bar — Part 2: Specific functional requirements for polyethylene (MOP up to and including 10 bar)*

EN 15804:2012+A2:2019¹, *Sustainability of construction works — Environmental product declarations — Core rules for the product category of construction products*

EN 15941, *Sustainability of construction works — Data quality for environmental assessment of products and construction work — Selection and use of data*

ISO 22057, *Sustainability in buildings and civil engineering works — Data templates for the use of environmental product declarations (EPDs) for construction products in building information modelling (BIM)*

ISO/TR 10501:1993, *Thermoplastics pipes for the transport of liquids under pressure — Calculation of head losses*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

¹ As impacted by EN 15804:2012+A2:2019/AC:2021.