

SLOVENSKI STANDARD SIST EN 15804:2012+A2:2019

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Nadomešča:

SIST EN 15804:2012+A1:2013

Trajnostnost gradbenih objektov - Okoljske deklaracije za proizvode - Skupna pravila za kategorije proizvodov za gradbene proizvode

Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products

Nachhaltigkeit von Bauwerken Umweltproduktdeklarationen Grundregeln für die Produktkategorie Bauprodukte (standards.iteh.ai)

Contribution des ouvrages de construction au développement durable - Déclarations environnementales sur les produits - Règles dégissant les catégories de produits de construction c52f68813d53/sist-en-15804-2012a2-2019

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general

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SIST EN 15804:2012+A2:2019

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 15804;2012+A2:2019</u> https://standards.iteh.ai/catalog/standards/sist/e79e9af1-9018-4fca-abc0-c52f68813d53/sist-en-15804-2012a2-2019 **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

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English Version

Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products

Contribution des ouvrages de construction au développement durable - Déclarations environnementales sur les produits - Règles régissant les catégories de produits de construction

Nachhaltigkeit von Bauwerken -Umweltproduktdeklarationen - Grundregeln für die Produktkategorie Bauprodukte

This European Standard was approved by CEN on 10 September 2013 and includes Amendment 2 approved by CEN on 21 July 2019.

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EUROPEAN COMMITTEE FOR STANDARDIZATION 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 (EN 15804:2012+A2:2019) has been prepared by Technical Committee CEN/TC 350 "Sustainability of construction works", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by April 2020, and conflicting national standards shall be withdrawn at the latest by October 2022.

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.

This document supersedes \triangle EN 15804:2012+A1:2013 \triangle .

This document includes Amendment 1 approved by CEN on 2013-09-10 and Amendment 2 approved by CEN on 2019-07-21.

The start and finish of text introduced or altered by amendment is indicated in the text by tags $\boxed{\mathbb{A}_1}$ $\boxed{\mathbb{A}_2}$ $\boxed{\mathbb{A}_2}$.

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Introduction

This European standard 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.

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, which allow easy organisation and expression of data packages throughout the life cycle of the product. 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 (A) information for buildings and other construction works (A). 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 set of quantifiable, predetermined environmental impact indicators. This standard has been adapted to address the amendment of the standardization Mandate M/350. (A2)

This European Standard provides the means for developing a Type III environmental declaration of construction products and is part of a suite of standards that are intended to assess the sustainability of construction works.

A_2 deleted text A_2

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- EN 15643-1, Sustainability of construction works—Sustainability assessment of buildings Part 1: General framework;
- EN 15643-2, Sustainability of construction works Assessment of buildings Part 2: Framework for the assessment of environmental performance;
- EN 15978, Sustainability of construction works Assessment of environmental performance of buildings Calculation method;
- CEN/TR 15941, Sustainability of construction works Environmental product declarations Methodology for selection and use of generic data;
- EN 15942, Sustainability of construction works Environmental product declarations Communication formats: business to business.

1 Scope

This European standard provides core product category rules (PCR) for Type III environmental declarations for any construction product and construction service.

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

The core PCR:

- A defines the indicators to be declared, information to be provided and the way in which they are collated and reported, 4
- 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.

For the EPD of construction services the same rules and requirements apply as for the EPD of construction products.

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2 Normative references^{52f68813d53/sist-en-15804-2012a2-2019}

The following referenced documents are indispensable for the application 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/TR 15941, Sustainability of construction works — Environmental product declarations — Methodology for selection and use of generic data

EN 15942, Sustainability of construction works — Environmental product declarations — Communication formats: business to business

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

EN ISO 14025:2010, Environmental labels and declarations — Type III environmental declarations — Principles and procedures (ISO 14025:2006)

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

 $\stackrel{\triangle}{\longrightarrow}$ EN ISO 14067:2018, Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (ISO 14067:2018) $\stackrel{\triangle}{\longrightarrow}$

ISO 15686-1, Buildings and constructed assets — Service life planning — Part 1: General principles and framework

ISO 15686-2, Buildings and constructed assets — Service life planning — Part 2: Service life prediction procedures

ISO 15686-7, Buildings and constructed assets — Service life planning — Part 7: Performance evaluation for feedback of service life data from practice

ISO 15686-8:2008, Buildings and constructed assets — Service-life planning — Part 8: Reference service life and service-life estimation

[A] ISO 21930:2017, Sustainability in buildings and civil engineering works — Core rules for environmental product declarations of construction products and services [A]

European Commission - Joint Research Centre - Institute for Environment and Sustainability: International Reference Life Cycle Data System (ILCD) Handbook - Nomenclature and other conventions. 2010. EUR 24384 EN. Luxembourg. Publications Office of the European Union; 2010, ISBN 978-92-79-15861-2

Suggestions for updating the Product Environmental Footprint (PEF) method, EUR 29682 EN, Publications Office of the European Union, Luxembourg, 2019, ISBN 978-92-76-00654-1, doi:10.2760/424613, JRC115951) (A) STANDARD PREVIEW

3 Terms and definitions

(standards.iteh.ai)

For the purposes of this document, the following terms and definitions apply.

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additional technical information

information that forms part of the EPD by providing a basis for the development of scenarios

3.2

ancillary material

input material or product that is used by the unit process producing the product, but which does not constitute part of the product

[EN ISO 14040:2006]

$A_2 > 3.3$

average data

data representative of a product, product group or construction service, provided by one or more suppliers

Note 1 to entry: The product group or construction service can contain similar products or construction services. \bigcirc

1

¹⁾ This document is also called "PEF Guidance Document".

3.4

comparative assertion

environmental claim regarding the superiority or equivalence of one product versus a competing product that performs the same function

[EN ISO 14044:2006]

A_2 3.5

complementary product category rules

c-PCR

product group specific or horizontal PCR, which provide additional compliant and non-contradictory requirements to EN 15804

Note 1 to entry: c-PCR are meant to be used together with EN 15804.

[SOURCE: CEN/TR 16970:2016] (2)

$A_2 > 3.6 \langle A_2 \rangle$

construction product

item manufactured or processed for incorporation in construction works

Note 1 to entry: Construction products are items supplied by a single responsible body.

Note 2 to entry: Adapted from the definition in ISO 6707-1:2004 according to the recommendation of ISO/TC 59/AHG Terminology.

[EN 15643-1:2010]

A_2 3.7 A_2

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https://standards.iteh.ai/catalog/standards/sist/e79e9af1-9018-4fca-abc0-construction service

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activity that supports the construction process or subsequent maintenance

A_2 3.8 A_2

co-product

any of two or more marketable materials, products or fuels from the same unit process, but which is not the object of the assessment

Note 1 to entry: Co-product, by-product and product have the same status and are used for identification of several distinguished flows of products from the same unit process. From co-product, by-product and product, waste is the only output to be distinguished as a non-product.

A_2 3.9 A_2

declared unit

quantity of a construction product for use as a reference unit in an EPD for an environmental declaration based on one or more information modules

EXAMPLE Mass (kg), volume (m3).

Adapted from the definition in ISO 21930:2017. (A2) $\overline{\mathbb{A}_2}$ Note 1 to entry:

$A_2 > 3.10 \ A_2$

construction element

part of a construction containing a defined combination of products

$A_2 > 3.11 \langle A_2 \rangle$

environmental performance

performance related to environmental impacts and environmental aspects

[ISO 15392:2008]

[ISO 21931-1:2010]

$A_2 > 3.12 < A_2$

functional equivalent

quantified functional requirements and/or technical requirements for a building or an assembled system (part of works) for use as a basis for comparison

Note 1 to entry: Adapted from the definition in ISO 21931-1:2010.

A₂ 3.13 (A₂

functional unit

quantified performance of a product system for use as a reference unit

[EN ISO 14040:2006]

A₂ 3.14 (A₂

information module

compilation of data to be used as a basis for a Type III environmental declaration covering a unit process or a combination of unit processes that are part of the life cycle of a product

[EN ISO 14025:2010]

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(standards.iteh.ai)

A2 3.15 A2 life cycle assessment

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LCA

compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system throughout its life cycle

[EN ISO 14044:2006]

$A_2 > 3.16 \ A_2$

life cycle inventory analysis

LCI

phase of life cycle assessment involving the compilation and quantification of inputs and outputs for a product throughout its life cycle

[EN ISO 14040:2006]

$A_2 > 3.17 \langle A_2 \rangle$

non-renewable energy

energy from sources which are not defined as renewable energy sources

A₂ 3.18 (A₂

non-renewable resource

resource that exists in a finite amount that cannot be replenished on a human time scale

 A_2 deleted text A_2

A_2 3.19 A_2

performance

expression relating to the magnitude of a particular aspect of the object of consideration relative to specified requirements, objectives or targets

Adapted from the definition in ISO 6707-1:2004 according to the draft recommendation of Note 1 to entry: ISO/TC 59 Terminology.

A_2 3.20 A_2

product category

group of construction products that can fulfil equivalent functions

Note 1 to entry: Adapted from EN ISO 14025:2010.

$A_2 > 3.21 < A_2$

product category rules

PCR

set of specific rules, requirements and guidelines for developing Type III environmental declarations for one or more product categories

[EN ISO 14025:2010]

A₂ 3.22 (A₂

product system

product system collection of unit processes with elementary and product flows, performing one or more defined functions, and which models the life cycle of a product enal)

[EN ISO 14040:2006]

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 A_2 3.23 A_2

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programme operator

body or bodies that conduct a Type III environmental declaration programme

Note 1 to entry: A program operator can be a company or a group of companies, industrial sector or trade association, public authorities or agencies, or an independent scientific body or other organization.

$A_2 > 3.24 \langle A_2 \rangle$

renewable energy

energy from renewable non-fossil sources

Wind, solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, **EXAMPLES** biomass, landfill gas, sewage treatment plant gas and biogases.

Adapted from the definition in Directive 2009/28/EC. Note 1 to entry:

A_2 3.25 A_2

renewable resource

resource that is grown, naturally replenished or naturally cleansed, on a human time scale

A renewable resource is capable of being exhausted, but may last indefinitely with proper stewardship. Examples include: trees in forests, grasses in grassland, fertile soil.

A2) Note 2 to entry: Activities that occur in the technosphere such as recycling are not considered natural replenishment or natural cleansing.

Note 3 to entry: In this context, human time scale refers to the typical life time of a human rather than the time humans have been in existence.

[SOURCE: ISO 21930:2017] (2)

A₂ 3.26

reference service life

RSL

service life of a construction product which is known to be expected under a set of reference in-use conditions and which can form the basis for estimating the service life under other in-use conditions

Note 1 to entry: The RSL is described as part of the functional unit and considered in the calculation of replacements at both the construction product level and construction works level (B4) and refurbishment (B5).

Note 2 to entry: The shorter acronym, RSL, is used as the preferred term in this document.

[SOURCE: ISO 21930:2017] **(2)**

A₂ 3.27 (A₂

reference service life data

RSL data

information that includes the reference service life and any qualitative or quantitative data describing the validity of the reference service life

EXAMPLE Typical data describing the validity of the RSL include the description of the component *\overline{\Pi}\) deleted text *\overline{\Pi}\] for which it applies, the reference in-use conditions under which it applies, and its quality.

[ISO 15686-8:2008]

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A₂ 3.28 (A₂

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scenario c52f68813d53/sist-en-15804-2

collection of assumptions and information concerning an expected sequence of possible future events

A₂ 3.29 (A₂

secondary fuel

fuel recovered from previous use or from waste which substitutes primary fuels

Note 1 to entry: (2) Processes providing a secondary fuel are considered from the point where the secondary fuel enters the system from the previous system.

Note 2 to entry: (A) Any combustible material recovered from previous use or from waste from the previous product system and used as a fuel in a following system is a secondary fuel.

Note 2 3 4 to entry: Examples for primary fuels are: coal, natural gas, biomass, etc.

Note 4 4 to entry: Examples for secondary fuels recovered from previous use or as waste are: solvents, wood, tyres, oil, animal fats.

 A_2 3.30 A_2

secondary material

material recovered from previous use or from waste which substitutes primary materials

Note 1 to entry: Secondary material is measured at the point where the secondary material enters the system from another system.

Note 2 to entry: Materials recovered from previous use or from waste from one product system and used as an input in another product system are secondary materials.

Note 3 to entry: Examples for secondary materials (to be measured at the system boundary) are recycled scrap metal, crushed concrete, glass cullet, recycled wood chips, recycled plastic.

A_2 3.31 A_2

specific data

data representative of a product, product group or construction service, provided by one supplier

$A_2 > 3.32 \langle A_2 \rangle$

third party

person or body that is recognized as being independent of the parties involved, as concerns the issues in question

Note 1 to entry: "Parties involved" are usually supplier ("first party") and purchaser ("second party") interests.

[EN ISO 14024:2000]

A₂ 3.33

type III environmental declaration

environmental declaration providing quantified environmental data using predetermined indicators and, where relevant, additional environmental information

Note 1 to entry: The calculation of predetermined indicators is based on the ISO 14040 series of standards, which is made up of ISO 14040, and ISO 14044. ards.iteh.ai)

Note 2 to entry: Adapted from ISO 14025:2006.

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 $A_2 > 3.34 \langle A_2 \rangle$

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upstream, downstream process f68813d53/sist-en-15804-2012a2-2019

process(s) that either precedes (upstream) or follows (downstream) a given life cycle stage

A_2 3.35 A_2

unit process

the smallest element considered in the life cycle inventory analysis for which input and output data are quantified

[EN ISO 14040:2006]

A₂ 3.36 (A₂

waste

substance or object which the holder discards or intends or is required to discard

Note 1 to entry: Adapted from the definition in the European Waste Directive 2008/98/EC.

4 Abbreviations

A2 c-PCR Complementary product category rules (A2)

A₂ CF Characterization Factor (A₂

EPDEnvironmental product declaration

PCR Product category rules