



SLOVENSKI STANDARD

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Okrogli in žagani les - Okoljske deklaracije na proizvodih - Pravila za opredelitev vrste lesa in lesnih izdelkov/produktov za uporabo v gradbeništvu

Round and sawn timber - Environmental Product Declarations - Product category rules for wood and wood-based products for use in construction

Rund- und Schnittholz - Produkt-Kategorie-Regeln für Holz und Holz-Werkstoffe zur Umwelt-Produkt-Deklaration

Bois ronds et sciages - Déclarations environnementales de produits - Règles de définition des catégories de produits en bois et à base de bois pour l'utilisation en construction

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91.080.20	Lesene konstrukcije	Timber structures

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Round and sawn timber - Environmental Product Declarations - Product category rules for wood and wood-based products for use in construction

Bois ronds et sciages - Déclarations environnementales de produits - Règles de définition des catégories de produits en bois et à base de bois pour l'utilisation en construction

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This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 175.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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prEN 16485:2012 (E)

Foreword

This document (prEN 16485:2012) has been prepared by Technical Committee CEN/TC 175 "Round and Sawn Timber", the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

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Introduction

This 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 provides rules for Environmental Product Declarations (EPD) specifically for wood and wood-based products. It complements the core product category rules for all construction products and services as established in EN 15804.

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 ISO 14025. All common issues are covered horizontally for all product types in order to minimise vertical (branch specific) deviations. All common issues are covered horizontally for all wood and wood-based products in order to minimise intra-sectoral 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 wood and wood-based products. The approach requires that the underlying data should be consistent, reproducible and comparable.

In line with EN 15804 the EPD is expressed in a form that allows aggregation (addition) to provide complete information for buildings. 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 parameters as predefined in EN 15804. Future revisions of EN15804 may lead to the incorporation of additional predetermined parameters.

This European Standard provides the means for developing a Type III environmental declaration of wood and wood-based construction products in the context of the suite of standards that are intended to assess the sustainability of construction works.

This suite of standards includes:

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 methods*

EN 15804, *Sustainability of construction works — Environmental product declaration — Core rules for the product category of construction products*

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 format - Business to Business*

prEN 16485:2012 (E)**1 Scope**

This European standard provides the product category rules (PCR) for Type III environmental declarations for wood and wood-based products for use in construction and related construction and in-service processes.

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

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

The core PCR:

- 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.

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

Additional to the common parts of EN 15804, this European Standard for wood and wood-based products: st-

- defines the system boundaries,
- defines the modelling and assessment of material-specific characteristics such as carbon storage and energy content of wood,
- defines allocation procedures for multi-output processes along the wood chain,
- defines allocation procedures for reuse, recycling and energy recovery
- includes the rules for calculating the Life Cycle Inventory and the Life Cycle Impact Assessment underlying the EPD, including the assessment of carbon and energy content of wood,
- provides guidance/specific rules for the determination of the reference service life (RSL)

This standard is intended to be used for cradle to gate or cradle to grave assessment, provided the intention is properly stated in the system boundary description.

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, *Sustainability of construction works — Environmental product declarations — Core rules for the product category of construction products*

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*

prEN 16449, *Wood and wood-based products – Calculation of atmospheric carbon dioxide sequestration*

CEN/TR 15941, *Sustainability of construction works — Environmental product declarations — Methodology for selection and use of generic data*

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)

prEN ISO 14067, *Carbon footprint — Requirements and guidelines for quantification and communication* (ISO/DIS 14067)

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*

ISO 21930:2007, *Sustainability in building construction — Environmental declaration of building products*

3 Terms and definitions

For the purposes of this document, and additional to the terms and definitions in EN 15804, the following terms and definitions apply

3.1

additional technical information

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

[SOURCE: EN 15804: 2012]

3.2

biogenic carbon

carbon derived from/contained in biomass

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[SOURCE: derived from ISO/DIS 14067]

3.3**biomass**

material of biological origin excluding material embedded in geological formations and material transformed to fossilised material

[SOURCE: ISO/DIS 14067]

3.4**biogenic carbon neutrality**

balance of biogenic carbon uptake during growth of biomass and release during natural decay or incineration under the condition that the specified biomass carbon pool is not permanently reduced

3.5**carbon storage**

carbon dioxide removed from the atmosphere and stored as biogenic carbon over a specified period of time

[SOURCE: prEN 16449]

3.6**comparative assertion**

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

[SOURCE: EN ISO 14044:2006]

3.7**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.

[SOURCE: EN 15643-1: 2010]

3.8**construction service**

activity that supports the construction process or subsequent maintenance

[SOURCE: EN 15804:2012]

3.9**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.

[SOURCE: EN 15804:2012]

Note 2 to entry: according to COM (2007)59, (Communication from the Commission to the Council and the European Parliament on the Interpretative Communication on waste and by-products) Annex I, sawdust, wood chips and off-cuts from untreated wood as generated at saw mills or at secondary operation such as the manufacturing of furniture or pallets and packaging and customarily referred to as by-products are, for the purpose of this document, considered co-products. Materials of this type fall outside the definition of waste. However, where material of this kind requires a full recycling or

recovery operation, or contains contaminants that need to be removed before it can be further used or processed, this would indicate that the material is a waste until the recycling or recovery operation is completed.

3.10

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)

[SOURCE: EN 15804:2012, adapted from ISO 21930-1:2007]

3.11

direct land use change

change in human use or management of land at the location of the production, use or disposal of raw materials (ISO 14050:2009, 6.12), intermediate products (ISO 14050:2009, 6.2.1) and final products (3.4.1) or wastes (ISO 14050:2009, 3.12) in the product system (ISO/DIS 14067:2011, 3.4.2) being assessed.

[SOURCE: ISO/DIS 14067]

3.12

construction element

part of a construction containing a defined combination of products

[SOURCE: EN 15804:2012]

3.13

environmental performance

performance related to environmental impacts and environmental aspects

[SOURCE: ISO 15392:2008]

[SOURCE: ISO 21931-1:2010]

3.14

forest carbon pools

Compartments storing biogenic carbon in the forest: above-ground biomass, below-ground biomass, litter, dead wood and soil organic carbon

3.15

fossil carbon

carbon which is contained in fossilised material

Note 1 to entry: Examples of fossilised material are coal, oil and natural gas

[SOURCE: ISO/DIS 14067]

3.16

functional unit:

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

[SOURCE: EN ISO 14040:2006]

3.17

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

[SOURCE: EN ISO 14025:2010]

prEN 16485:2012 (E)**3.18****life cycle assessment****LCA**

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

[SOURCE: EN ISO 14044:2006]

3.19**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

[SOURCE: EN ISO 14040:2006]

3.20**non-renewable energy**

energy from sources which are not defined as *renewable energy* sources

[SOURCE: EN 15804:2012]

3.21**non-renewable resource**

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

[SOURCE: ISO 21930:2007].

3.22**performance**

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

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

[SOURCE: EN 15804:2012]

3.23**product category**

group of construction products that can fulfil equivalent functions

[SOURCE: EN 15804, adapted from ISO 14025:2010]

3.24**product category rules****PCR**

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

[SOURCE: EN ISO 14025:2010]

3.25**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

[SOURCE: EN ISO 14040:2006]