

# **SLOVENSKI STANDARD** SIST EN 16485:2014

01-julij-2014

### Okrogli in žagani les - Okoljske deklaracije za proizvode - Pravila za opredelitev vrste izdelka za les in lesne kompozite 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 STANDARD PREVIEW

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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#### SIST EN 16485:2014

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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**English Version** 

## 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 Rund- und Schnittholz - Umweltproduktdeklarationen -Produktkategorieregeln für Holz und Holzwerkstoffe im Bauwesen

This European Standard was approved by CEN on 3 February 2014.

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# Foreword

This document (EN 16485:2014) has been prepared by Technical Committee CEN/TC 175 "Round and sawn timber", 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of an identical text or by endorsement, at the latest by September 2014 and conflicting national standards shall be withdrawn at the latest by September 2014.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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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 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 standardization 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. 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 organization 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 EN 15804 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 method
- EN 15804, Sustainability of construction works Environmental product declarations 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

#### 1 Scope

This European Standard provides general Product Category Rules (PCR) for Type III environmental declarations for wood and wood-based products for use in construction and related construction and inservice processes.

This European Standard complements the core rules for the product category of construction products as defined in EN 15804 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:

- define the parameters to be declared and the way in which they are collated and reported;
- describe 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;
- define rules for the development of scenarios;
- include 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;
- include 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;
- define the conditions under which construction products can be compared based on the information provided by EPD.
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For the EPD of construction services, the same rules and requirements apply as for the EPD of construction products.

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

- defines the system boundaries;
- defines the rules for 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 European 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 ISO 14025, 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)

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

#### Terms and definitions 3

For the purposes of this document, the terms and definitions given in EN 15084:2012 and the following apply.

#### 3.1

#### 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

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Co-product, by-product and product have the same status and are used for identification of several Note 1 to entry: 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.

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[SOURCE: EN 15804:2012, 3.7] DIST LATORELET. https://standards.iteh.ai/catalog/standards/sist/cbdb3080-3358-455f-b269-

When further used as a material or fuel, according to COM (2007)59, (Communication from the Note 2 to entry: 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.

#### 3.2

#### biogenic carbon

carbon derived from/contained in biomass

#### 3.3

#### biomass

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

#### 3.4

#### biogenic carbon neutrality

balance of biogenic carbon uptake during growth of biomass and release during natural decay or incineration

#### 3.5

#### carbon storage

biogenic carbon stored over a specific period of time

#### 3.6

#### 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 being assessed

#### 3.7

#### forest carbon pools

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

[SOURCE: IPCC 2006, Table 1.1]

#### 3.8

#### fossil carbon

carbon which is contained in fossilised material

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

### 4 Abbreviations

EPD	Environmental Product Declaration
PCR	Product Category Rules
LCA	Life Cycle Assessment
LCI	Life Cycle Inventory analysis standards.iteh.ai)
LCIA	Life Cycle Impact Assessment
RSL	Reference Service/Lifedards.iteh.ai/catalog/standards/sist/cbdb3080-3358-455f-b269-
ESL	Estimated Service Life fe8ff86b98a3/sist-en-16485-2014
EPBD	Energy Performance of Buildings Directive
GWP	Global Warming Potential
GHG	Greenhouse Gas
CHP	Combined Heat and Power

### 5 General aspects

### 5.1 Objective of this general PCR for wood and wood-based construction products

An EPD according to this standard provides quantified environmental information for wood and wood-based construction product or related service on a harmonized and scientific basis. It also provides information on health related emissions to indoor air, soil and water during the use stage of the building. 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 this general PCR for wood and wood-based products is to ensure:

the provision of verifiable and consistent data for an EPD, based on LCA;

- the provision of verifiable and consistent product related technical data or scenarios for the assessment of the environmental performance of buildings;
- 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 buildings;
- that comparisons between construction products are carried out in the context of their application in the building;
- the communication of the environmental information of construction products from business to business;
- the basis, subject to additional requirements, for the communication of the environmental information of construction products to consumers.

Declarations based on this standard are not comparative assertions.

NOTE See definition 3.4 of EN 15804:2012 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

As in EN 15804.

### 5.3 Comparability of EPD for construction products iTeh STANDARD PREVIEW

As in EN 15804.

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#### **5.4 Additional information**

As in EN 15804. https://standards.iteh.ai/catalog/standards/sist/cbdb3080-3358-455f-b269fe8ff86b98a3/sist-en-16485-2014

#### 5.5 Ownership, responsibility and liability for the EPD

As in EN 15804.

### **5.6 Communication formats**

As in EN 15804.

### 6 Product Category Rules for LCA

#### 6.1 Product category

The product category referred to in this standard includes all wood and wood-based construction products as well as related construction services for buildings and other construction works.

#### 6.2 Life cycle stages and their information modules to be included

#### 6.2.1 General

As in EN 15804.