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| EPD Square s.r.o |
| Product Category Rule |
| EPD Square |

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# 1. INTRODUCTION

The Product Category Rules (PCRs) in this document shall be used by parties preparing an Environmental Product Declaration (EPD) or a Carbon Footprint Product Declaration (CFP) for construction products and services, including building components and integrated technical systems used in any type of construction, and electrical products. Building elements and integrated technical systems that are part of buildings may be considered as construction products.

This PCR provides additional requirements and other relevant provisions based on the basic requirements for life cycle assessment in accordance with EN ISO 14044:2006+A2:2020 and according to the rules defined in EN 15804:2012+A2:2019+AC:2021, ISO 21930:2017, EN ISO 14067:2018 and EN 50693:2019 under the EPD programme, which is managed and owned by EPD Square, Ltd.

The PCR is valid for a predetermined period and is subject to periodic updating. The latest version of the PCR is available at www.epdsquare.com.

The publication date of the PCR is 10.01.2024.

The expiry date of the PCR is 09.01.2027.

Any comments on this PCR can be sent directly to info@epdsquare.com.

## 1.1 Creation and update of the PCR

This PCR has been prepared by EPD Square, Ltd. and has been submitted to an independent panel of experts for comment.

The expert panel was chaired by Ing. Marcela Ondová, PhD. and consisted of the experts Assoc. Ing. Eva Krídlová Burdová, PhD., Ing. Ľudmila Vaculová Mečiarová, PhD. and Ing. Vladimír Balent. All members of the expert group have at least ten years of experience in relevant fields. More on their professional profiles, can be found in the organisational structure of EPD Square.

EPD Square, s.r.o. performs PCR updates according to the general programme instructions (GPI).

## 1.2 Reference documents

The cited edition is used for dated references and the latest edition of the cited document, including any changes, is used for undated references. The latest edition of the reference document, including any amendments, is used for undated references.

EN 15804+A2:2019 Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products.

ISO 21930:2017 Sustainability in buildings and civil engineering works - Core rules for environmental product declarations of construction products and services

EN ISO 14025:2006 Environmental labels and declarations - Type III environmental declarations, Principles and procedures

EN ISO 14040:2006+A1:2020 Environmental management - Life cycle assessment - Principles and guidelines

EN ISO 14044:2006+A2:2020 Environmental management - Life cycle assessment - Requirements and guidelines

EN ISO 14067:2018 Greenhouse gases - Carbon footprint of products - Requirements and guidelines for quantification

EN 50693:2019 Product category rules for life cycle assessments of electronic and electrical products and systems.

In addition, any complementary PCR (c-PCR) aligned to EN 15804+A2:2019 may be used together with this PCR. Their use is recommended for manufacturers placing products on the EU single market.

Such c-PCRs may be used if they do not conflict with EN 15804+A2:2019, ISO 21930:2017, EN 50693:2019, EN ISO 14067:2018 and this PCR. In cases where there is conflicting information between this PCR and the c-PCR, this PCR shall be followed.

In such conflicting cases, the provision of additional information according to the c-PCR may be performed but is not required.

## 1.3 Terms and definitions

The following terms and definitions are used throughout this document:

**Type III environmental declaration**: an environmental declaration that provides quantified environmental data based on predetermined parameters and, where appropriate, supplementary environmental information

**Life cycle assessment (LCA)**: the inventory and assessment of the inputs and outputs and the potential environmental impacts of a product system during its life cycle

**Life cycle inventory analysis (LCI)**: the life cycle assessment phase which consists of collecting and quantifying the inputs and outputs of a given product during its life cycle

**Co-product**: any of two or more saleable materials, products or fuels in the same unit process that is not subject to assessment.

**Average data**: data characterising a product, group of products or service in the construction industry, provided by one or more suppliers.

**Declared unit**: the quantity of a construction product used as a reference unit in the EPD for the environmental statement based on one or more information modules. EXAMPLE weight (kg), volume (m3).

**Functional unit**: the quantified behaviour of a product system used as a reference unit.

**Information module**: a set of data to be used as a basis for a Type III environmental statement, covering a unit process or combination of unit processes forming part of the product life cycle.

**Product category rules (PCR)**: a set of specific rules, requirements, and guidelines for the development of Type III environmental statements for one or more product groups

**Reference service life (RSL)**: the service life of a construction product which is assumed based on a subset, i.e. a reference set of use conditions, and which may form the basis for estimating the service life under other use conditions.

## 1.4 Abbreviations

**c-PCR**: Complementary product category rules

**EPD**: Environmental product declaration

**GPI**: General programme instructions

**LCA**: Life cycle assessment

**LCI**: Life cycle inventory analysis

**PCR**: Product category rules

**RSL**: Reference service life

# 2. GENERAL PRINCIPLES

## 2.1. Objective of the basic product group rules

An Environmental Product Declaration (EPD) provides quantified environmental information about a product or service on a consistent and scientific basis. The aim of the EPD is to provide a basis for the evaluation of products and to identify those that cause less environmental burden.

The aim of the product group ground rules is to ensure:

* The provision of accurate and verifiable information for EPDs based on LCA,
* providing accurate and verifiable technical data/scenarios related to the product for the environmental performance assessment,
* interpretation of environmental product information in the business environment,
* the basis, subject matter of additional requirements for communicating environmental product information to users,
* compliance with EN 15804+A2:2019, ISO 21930:2017,
* meet the requirements of ISO 14025 and ISO 14044,
* to allow better comparability between different EPDs.

Further details are defined in EN 15804+A2:2019 (5.1), ISO 21930:2017 (5.1) and EN ISO 14067:2018 (6.2). In addition, other requirements, and other relevant provisions under the EPD and CFP are specified in this PCR.

## 2.2 Types of EPDs with respect to the life cycle phases

The types of EPDs are defined in EN 15804+A2:2019 (5.2), ISO 21930:2017 (5.2.1, 5.2.2) and EN ISO 14067:2018 (5.2). In addition, this PCR provides further requirements and other relevant provisions for different types of EPDs and CFPs.

The use of EPDs from cradle to gate is restricted by the provisions given in EN 15804+A2:2019 and EN 50693:2019.

If the EPD is developed in accordance with EN 50693:2019, the EPD shall follow the impact and characterisation categories of EN 15804+A2:2019 and the EPD shall use the modular structure and other provisions of Annex D 'Relationship to EN 15804'.

As stated in EN 15804+A2:2019, Modules A1-A3, Modules C1-C4 and Module D must be provided for all construction products. Only products that meet all three conditions below can be exempted from this requirement:

* The product or material is physically connected to other products during installation so that it cannot be physically separated from them at the end of its useful life,
* the product or material is no longer identifiable at the end of its service life due to physical or chemical transformation; and
* the product or material does not contain biogenic carbon.

Modules C1-C4 and Module D do not need to be considered for construction products and materials that are identified as exemptions. Any omission of Modules C1-C4 and Module D shall be justified. An EPD that does not include C1-C4 and Module D must provide information on where to find scenarios for end-of-life modules.

## 2.3 Comparability based on modularity and disclaimer

This section is defined in EN 15804+A2:2019 (5.3), ISO 21930:2017 (5.3, 5.4, 5.5), EN ISO 14067:2018 (5.6, 5.7, 5.8; 5.9, 5.10).

Comparison of EPDs at product level shall be avoided. If similar calculation procedures, scenarios and assumptions are not followed and the EPDs do not belong to the same programme, they cannot be compared.

The EPD shall include the following statement of responsibility: "EPDs of construction products may not be comparable if they do not comply with EN 15804 and if they are not compared in the context of the building."

# 3. QUANTIFICATION METHODOLOGY (PCR FOR LCA)

## 3.1 Product groups

This PCR mainly focuses on the types of sectors, products and services listed above. This PCR requires the selection of a standard for alignment. The statement can be developed based on the normative regulations for alignment: EN 15804+A2:2019, EN 50693:2019, ISO 21930:2017 and EN ISO 14067:2018. They are available for the following industries:

* Building products
* electronic and electrical products
* mechanical products
* energy systems
* environment, civil and infrastructure
* other

Sector definitions:

* Construction products: are any products or structures which are manufactured and placed on the market to be permanently incorporated into construction works or parts thereof, and whose characteristics affect the performance of the construction works with respect to the essential requirements of the works (definition according to the European construction product regulation).
* Electronic products: composed of electronic components (e.g. printed circuit boards, etc.) and powered by electricity.
* Structures in the built environment: parts of infrastructure such as pavement and earthworks

## 3.2 TYPES OF EPDS

Specific EPDs and average EPDs

**Specific EPD**

The EPD for a specific product is the primary option. In specific EPDs there is no variation in the declared product.

**Average EPD**

In the case of an EPD that covers several manufacturing plants or several similar products, the reported average result for GWP-total should not differ by more than ±10 % compared to the GWP-total results for any of the covered products.

For the same product produced at multiple different manufacturing site, when the differences are larger than 10%, the grouping of products and production sites must be justified in the LCA report. Although a deviation of more than 10 % is allowed in the EPD of the same products manufactured at multiple sites, it is recommended to split the EPD into individual manufacturing sites to keep the deviation below 10 %, as according to some national regulations the EPD is only considered 'specific' in this case. If the EPD covers several production sites in A3, all production sites shall be listed in the EPD.

**Sectoral EPDs**

An industry association or any other group of companies may prepare an EPD as a sectoral EPD. A sectoral EPD declares the average product of several companies in a clearly defined sector in a clearly defined geographical area. The same declaration/functional unit shall apply to the products covered by the sectoral SPD. Sectoral EPDs describe the products and companies covered by the EPDs.

If the results for GWP-total differ by more than 10 % for A1-A3 (A1-A5 for services) between the products and establishments represented, these differences shall be indicated in the EPD and the reason for these differences shall be qualitatively described. If the deviation is less than 10 %, the actual deviation or '<10 %' shall be indicated.

Any communication of results from the sectoral EPD should include an indication that the results are based on average values obtained from the sector as defined in the EPD. The notification must not claim that the results of the sectoral EPD are representative of a particular manufacturer or its product.

**Life cycle phases and information modules to be included**

The life cycle phases and information modules to be included are defined in EN 15804+A2:2019 (6.2), ISO 21930:2017 (7.1.1), EN ISO 14067:2018 (6.1, 6.3.2). Optional modules in the construction phase (A4 and A5) and modules in the use phase (B1-B7). In the EPD and CFP from cradle to gate, modules representing the end-of-life phase (C1-C4) and net benefits outside the system boundary (D) may be excluded.

## 3.4 Life cycle inventory and assessment of life cycle impacts

### 3.4.1. Modelling and LCA analysis

Modelling and LCA analysis are defined in EN 15804+A2:2019 (6.3.1), ISO 21930:2017 (7.1.1), EN ISO 14067:2018 (6.3.1, 6.3.2).

### 3.4.2 Declared unit

EPDs based on this PCR without complementary PCR (c-PCR) document use a declared unit that is defined and specified in the International System of Units (SI units) and related to the typical use of the products.

The declared unit is defined in EN 15804+A2:2019 (6.3.3), ISO 21930:2017 (7.1.3), EN ISO 14067:2018 (6.3.3), EN 50693:2019 (4.2.2).

EPDs based on this PCR together with c-PCR may use a functional unit if c-PCR allows it. Additional information on water and energy consumption may be provided for products that are not exclusively construction products but are nevertheless used in buildings and the phase of use is not declared (e.g. HVAC systems). This information may be provided in the form of additional technical information according to EN 15804+A2:2019 (Table 14, Chapter 7.3.3.3). The moisture content in relation to their dry mass shall be declared for bio-based components (e.g. wood-based).

### 3.4.3. Reference Service Life

The reference service life (RSL) is defined in EN 15804+A2:2019 (6.3.4), ISO 21930:2017 (7.1.4), EN ISO 14067:2018 (6.3.7), EN 50693:2019 (4.2.2). In this PCR, the declaration of reference service life (RSL) is optional unless a phase of use is declared, in which case the RSL is mandatory.

It is permissible to use an estimate or refer to the Estimated Service Life (ESL), which is usually found in the technical manuals of buildings, if it is not possible to determine the RSL. Such an estimated life shall be accompanied by text in the EPD explaining the origin of the data or indicating that it is an estimate.

### 3.4.4. System boundary

System boundaries are defined in detail in EN 15804+A2:2019 (6.3.5.1), ISO 21930:2017 (7.1.5, 7.1.6, 7.1.7), EN ISO 14067:2018 (6.3.4.1), EN 50693:2019 (4.2.3).

This PCR is guided by the following two principles:

1. the "Modularity Principle", where emissions generated by specific processes are assigned to the life cycle modules in which they occur.

2. The "polluter pays principle", where emissions originating from waste treatment up to the end-of-waste stage are attributed to the system in which the waste is generated.

The LCA system boundary of the product system under consideration defines a set of unit processes to be included and excluded by physical and temporal means. In EPDs, and sub-CFPs aimed at use in the construction sector, the system extension is not used.

NOTE: This PCR does not allow system extension even if ISO 14067:2018 is used.

**Product phase**

The product phase is defined in EN 15804+A2:2019 (6.3.5.2), ISO 21930:2017 (7.1.7.2), EN ISO 14067:2018 (6.3.4.2, 6.4.9.4), EN 50693:2019 (4.2.4.2).

In production (A3), the data set for the electricity mix used in the production facility shall be selected in the following order:

1. If power is generated at or in the immediate vicinity of the production facility for a production facility with a direct connection to the production facility, the specific mix for the supply shall be used.

2. A specific supply mix for the generation site if the purchase of only electricity from renewable sources is contracted with guarantees of origin or a comparable instrument.

3. A specific electricity supply mix for a generation site if it is contractually committed to purchase only carbon-free electricity with proof of electricity supply.

4. The average electricity market mix for the generation site (country or state).

For the sake of clarity, market average data must be used in the case of electricity supply from non-renewable sources. For such electricity supplies, the use of a contract-specific mix is not allowed. For a specific mix of electricity, the generator must demonstrate the continuous use of this supply.

**End-of-life phase**

The end-of-life phase is defined in EN 15804+A2:2019 (6.3.5.5), ISO 21930:2017 (7.1.7.5), EN 50693:2019 (4.2.4.7), and in this PCR the end-of-life system boundary of the product system under consideration to the downstream product system (Module D) is set where material outputs have reached end-of-waste status.

### 3.4.5 Input and output exclusion criteria

The exclusion criteria for inputs and outputs are defined in EN 15804+A2:2019 (6.3.6), ISO 21930:2017 (7.1.8), EN ISO 14067:2018 (6.3.4.3), EN 50693:2019 (4.2.3.3), and in this PCR, the exclusion rules for the product phase modules (A1 to A3) and the end-of-life phase modules (C1 to C4) are a maximum of 5% total per module of energy and mass. The exclusion criterion of 1% is for the consumption of renewable and non-renewable primary energy and 1% for the total mass input of the unit process.

In addition, the environmental impacts of the excluded materials or processes shall be taken into account if they are known to be significant and proportionally much higher than their contribution to mass or energy. As defined in ISO 14044 (4.3.3.4), the significance of the environmental impacts of excluded materials or processes may be taken into account.

A minimum of 95 % of the total inputs (mass and energy) per module shall include LCI data according to EN 15804. In addition, if less than 100 % of the inputs are taken into account, surrogate data or extrapolation should be used to achieve 100 % completeness. Inputs that are not included in the LCA must be documented in the EPD.

### 3.4.6. Selection of data

General requirements and guidelines for the use of general and specific data and the quality of these data are described in EN 15804, clauses 6.3.7 and 6.3.8, ISO 21930:2017 (7.1.9), EN ISO 14067:2018 (6.3.5), EN 50693:2019 (4.2.7.1).

In addition, the following rules apply:

* Annual average or site-specific data shall be used for the production of the product. Deviations shall be justified in the EPD.
* The actual age of the data (i.e. when the data were collected) shall be indicated.
* In the case of previous processes, data from the EPD followed by specific data shall be preferred. General data should only be used if the other two categories are not available.
* If PCRs for other underlying data are available, the procedures outlined in the relevant PCRs should be followed.

### 3.4.7. Data quality

Data quality is defined in EN 15804+A2:2019 (6.3.8), ISO 21930:2017 (7.1.9), EN ISO 14067:2018 (6.3.5), EN 50693:2019 (4.2.7.2).

If the EPD is not for a specific product, there will be outliers in the LCIA results. These deviations shall be handled according to the procedure below:

### 3.4.8 Development of product-level scenarios

Scenarios are defined in EN 15804+A2:2019 (6.3.9), ISO 21930:2017 (7.1.7), EN ISO 14067:2018 (6.3.6, 6.3.7), EN 50693:2019 (4.3).

## 3.5 Inventory analysis

### 3.5.1. Data collection

Data collection shall be carried out according to EN 15804+A2:2019 (6.4.1), ISO 21930:2017 (7.2.1), EN ISO 14067:2018 (6.4.2).

### 3.5.2. Calculation procedures

The calculation procedure is defined in EN 15804+A2:2019 (6.4.2), ISO 21930:2017 (7.2.2), EN ISO 14067:2018 (6.4.3, 6.4.4, 6.4.5).

The net calorific value of fuels according to scientifically based and accepted combustible material-specific values shall be used in the transformation of combustible material inputs and outputs into energy inputs and outputs.

### 3.5.3. Allocation

**General**

As defined in EN 15804+A2:2019 (6.4.3.1), ISO 21930:2017 (7.2.5.1), EN ISO 14067:2018 (6.4.6.1).

EN 15804 defines by-products as "any two or more marketable materials, products or fuels from the same unit process but not subject to assessment" and waste as "a substance or object that the holder is disposing of or is required to dispose of". Further, if the waste is used for a specific purpose, it requires further treatment to cease to be waste and thus leaves the product system. A material or energy stream ceases to be waste when all criteria for end-of-waste status are met (see Section 4.5.2). In other words, if any of the criteria are not met at some point, it is waste and the waste allocation procedures of section 4.5.2 apply; if all criteria are always met, it is a co-product, and the co-product allocation procedures of section 4.5.1 apply. This is a general rule of thumb to distinguish between co-products and waste and thus decide which allocation procedure to use.

Flows that reach the end-of-waste status in Modules A1-A3 shall be allocated as concurrent products unless allocation of concurrent products is not possible (see section 6.3.5.2 of EN 15804). As consistent and uniform allocation procedures are applied for similar flows and processes throughout the study, inputs from Modules A1-A3 of the upstream product system (e.g. production scrap) are considered as co-products of Modules A1-A3 of the upstream system and thus enter the product of the system with the environmental load (according to the rules for allocation of co-products in section 4.5.1).

During the use phase (Module B) and the end-of-life phase (Module C), 'all outputs from the dismantling, dismantling or demolition of the building, from maintenance, repair, replacement or renovation processes, all debris, all construction products, materials or building elements, etc, In other words, such building outputs are modelled as waste and are assumed to leave the product system without burdening the environment once the end-of-waste criteria have been met (according to the waste allocation rules in section 4.5.2).

Regardless of the allocation between product systems, product and packaging characteristics, such as calorific value or biogenic or fossil carbon content, must not be allocated and must always follow the physical flow into the product system that eventually uses them.

**Allocation of co-products**

As defined in ISO 21930:2017 (7.2.5.2), EN ISO 14067:2018 (6.4.6.2), EN 50693:2019 (4.2.51), in this PCR, aspects and impacts are allocated between products and co-products in a way that reflects the underlying physical relationships between them. In a production system, the inputs and outputs of common unit processes are partitioned based on the relevant underlying physical relationship.

In the case of the allocation of concurrent products, the sum of the inputs and outputs allocated to the products equals the total inputs and outputs from the same unit process, and consistent allocation procedures are uniformly applied to similar system inputs and outputs within the systems under consideration. This means that no double counting or omission of inputs or outputs through allocation is allowed.

When allocating concurrent products, the following procedure shall apply:

1. If possible, by splitting the unit process into two or more sub-processes and collecting LCI data, allocation to each sub-process shall be avoided. This option shall not be used in the case of concurrent processes, which are described in ISO 21930 as follows: "...if each of the co-products can be produced without the other(s), or if the ratio of co-products normally varies in normal production, then it is not a common co-process. The by-products cannot be avoided and the processes which produce the by-products are therefore common concurrent processes."

2. Allocation is based on physical characteristics (e.g. mass, volume) if (i) there is a relevant underlying physical relationship between the products and the co-products and (ii) the difference in revenue per mass (or per unit of energy in the case of electricity, heat or the like) from the products and co-products is small. A relevant basic physical relationship exists when the quantities of inputs and outputs are changed by quantitative changes in the quantities of products or functions supplied by the system.

3. In all other cases, the allocation is based on the economic values of products and coproducts as they leave the unit process. For example, the economic values may be the revenue generated by each product and by the concurrent products. Income is price multiplied by output. Representative values (e.g. rolling annual values) should be determined for both price and output. If economic attribution is used, a sensitivity analysis tracking the impact of the choice of economic value must be carried out and included in the LCA report.

**Allocation procedure for reuse, recycling, and recovery**

The allocation procedure for reuse, recycling and recovery is defined in EN 15804+A2:2019 (6.4.3.3), ISO 21930:2017 (7.2.6), whereby in this PCR any net benefits of net flows that have passed through the end of waste are included and counted as potential avoided impacts in the downstream product system (Module D). This also means that any impacts within the life cycle of the product under consideration are no longer addressed from this point onwards.

Information on biogenic carbon content

Information on biogenic carbon content is defined in EN 15804+A2:2019 (6.4.4, 7.2.5), ISO 21930:2017 (7.2.12), EN ISO 14067:2018 (6.4.9.3, 6.4.9.8).

The biogenic carbon content (kg C) shall be reported separately for the product and the packaging. If the weight of the materials containing biogenic carbon in the product is less than 5 % of the weight of the product and if the weight of the packaging materials containing biogenic carbon is less than 5 % of the total weight of the packaging, the indication of the biogenic carbon content of the product and the indication of the biogenic carbon content of the packaging may be omitted.

## 3.6. Environmental impact assessment

### 3.6.1. General

As defined in EN 15804+A2:2019 (6.5.1), ISO 21930:2017 (7.3), EN ISO 14067:2018 (6.5.1), EN50693:2019 (4.4).

### 3.6.2 Baseline environmental impact indicators

As defined in EN 15804+A2:2019 (6.5.2, 7.2.3.1, Annex C) and ISO 21930:2017 (7.3, 7.2.7, 7.2.9, 7.2.11).

For the removal of biogenic carbon dioxide (removal of kg CO2e from the atmosphere) declared in the GWP-biogenic impact indicator, a balancing must be done when the product containing biogenic carbon is passed on to the next life cycle or theoretically released back into the atmosphere. The amount of biogenic carbon released shall be assigned to module C3 or C4 at the latest. This information is required in all cases of materials containing biogenic carbon.

As EN ISO 14067:2018 (6.5.1, 6.5.2, 6.4.9.4, 6.4.9.5, 6.4.9.6) only applies to impact indicators related to GWP and its subcategories, they can be used for the CFP declaration. In this PCR, the GWP CFP indicators are defined according to the GWP-total, GWP-fossil, GWP-biogenic and GWP-luluc indicators as defined in EN 15804+A2:2019 (Annex C). According to EN ISO 14067:2018 (6.4.9.7), in some cases it is required to include aircraft emissions from air transport in the CFP. These emissions are documented separately as additional information in the CFP report. The EPD according to EN 50693:2019 follows the impact indicators and characterisation factors according to EN 15804+A2:2019 (6.5.2, 7.2.3.1, Annex C). See note in Annex B.1 to EN 50693:2019.

NOTE: EN 15804:2012+A2:2019 defines that the unit for eutrophication of aquatic freshwaters (EP-freshwaters) is given in kg PO4eq, although the reference "EUTREND model, Struijs et al., 2009b, implemented in ReCiPe" defines the unit as kg Peq. In this PCR, the unit kg Peq. is used because it is defined in the reference. The use of the unit kg PO4eq. in EN 15804 is probably an error in the standard, but it can be assumed that it will be corrected in a future version. To obtain the freshwater EP impact in kg PO4eq. as required by EN 15804:2012+A2:2019, the results in kg Peq. need to be multiplied by 3.07.

### 3.6.3 Other environmental impact indicators

Additional environmental impact indicators are defined in EN 15804+A2:2019 (6.5.3, 7.2.3.2, Annex C), ISO 21930:2017 (8.2), and additional impact indicators may optionally be included in the EPD in this PCR.

EPDs according to EN 50693:2019 are guided by the impact indicators and characterisation factors according to EN 15804+A2:2019 (6.5.3, 7.2.3.2, Annex C). See note in Annex B.1 to EN 50693:2019.

# 4. CONTENTS OF THE EPD

## 4.1 Statement of general information

EPDs based on this PCR contain the information described in this chapter. Flexibility in formatting and layout is allowed provided that the EPD still contains the prescribed information. A generic EPD template is available at www.epdsquare.com.

The above requirements are not exhaustive as all requirements of EN 15804+A2:2019 (7.1(d)), ISO 21930:2017 (9.2(d)) as well as requirements in the GPI must also be met unless they conflict with a requirement under this PCR or EN 15804 and ISO 21930:2017. Note that the requirements for the content of the LCA report and other requirements to enable and facilitate EPD verification in EN 15804, ISO 21930:2017 and GPI must also be met.

The content of the EPD must:

* Be in accordance with the requirements and guidelines set out in ISO 14020 (Environmental labels and declarations - General principles),
* be verifiable, accurate, relevant, and not misleading,
* not contain evaluations, opinions, or direct comparisons with other products,
* the EPD should have an appropriate number of pages for the intended customers and use.

## 4.2 Environmental information statement from the LCA

### 4.2.1. General information

As defined in EN 15804+A2:2019 (7.2.1), ISO 21930:2017 (9.5), EN ISO 14067:2018 (6.4.9.8), EN 50693:2019 (E.1).

### 4.2.2 LCA information declaration rules for individual modules

LCA information declaration rules for individual modules are defined in EN 15804+A2:2019 (7.2.2), ISO 21930:2017 (9.5), EN 50693:2019 (E.2.4) with the exception of electrical products used in buildings, which are governed by EN 15804+A2:2019 (7.2.2).

### 4.2.3 Indicators describing environmental impacts based on Life Cycle Impact Assessment (LCIA)

**Baseline environmental impact indicators**

As defined in section 3.5.2 in this PCR.

**Additional environmental impact indicators**

As defined in section 3.5.3 of this PCR.

**Reservations to environmental impact indicators**

As defined in EN 15804+A2:2019 (7.2.3.3).

### 4.2.4. Indicators describing resource use and environmental information based on life cycle inventory (LCI)

**General**

As defined in EN 15804+A2:2019 (7.2.4.1).

**Indicators describing resource use**

As defined in EN 15804+A2:2019 (7.2.4.2) and ISO 21930:2017 (7.2.10, 7.2.13), EPD according to EN 50693:2019 shall follow EN 15804+A2:2019 (7.2.4.2).

**Environmental information describing waste categories**

As defined in EN 15804+A2:2019 (7.2.4.3) and ISO 21930:2017 (7.2.14), the EPD according to EN 50693:2019 shall follow EN 15804+A2:2019 (7.2.4.2).

**Environmental information describing output flows**

As defined in EN 15804+A2:2019 (7.2.4.4) and ISO 21930:2017 (7.2.14), the EPD according to EN 50693:2019 shall follow EN 15804+A2:2019 (7.2.4.2).

### 4.2.5 Information on biogenic carbon content

As defined in section 3.5.4 in this PCR.

## 4.3 Scenarios and other technical information

### 4.3.1. General

As defined in EN 15804+A2:2019 (7.3.1) and ISO 21930:2017 (9.4.1), EN 50693:2019 (E.2.4).

### 4.3.2 Installation phase

**A4, Transport to the construction site**

As defined in EN 15804+A2:2019 (7.3.2.1) and ISO 21930:2017 (9.4.2), EN 50693:2019 (E.2.4). In this PCR these aspects and impacts are considered optional.

**A5, In-building installation**

As defined in EN 15804+A2:2019 (7.3.2.2) and ISO 21930:2017 (9.4.3), EN 50693:2019 (E.2.4). In this PCR these aspects and impacts are considered optional.

### 4.3.3 Use phase B1-B7

**Use phase B1-B7**

As defined in EN 15804+A2:2019 (7.3.3.1 and 7.3.3.3), ISO 21930:2017 (9.4.4 and 9.4.5) and EN ISO 14067:2018 (6.3.7), EN 50693:2019 (E.2.4). In this PCR, these aspects and impacts are considered optional.

**Reference lifetime**

As defined in EN 15804+A2:2019 (7.3.3.2 and ISO 21930:2017 (7.1.4, Annex A), EN 50693:2019 (E.2.4). This PCR considers these aspects and impacts to be optional.

### 4.3.4 End of life

As defined in EN 15804+A2:2019 (7.3.4 and ISO 21930:2017 (9.4.6, 7.2.14), EN 50693:2019 (e.2.4).

## 4.4. Further information on releases to indoor air, soil and water during the use phase

In this report, information on releases to indoor air, soil and water during use (including Module B1) of the product that is not based on LCA is excluded.

# 5. PROJECT REPORT

## 5.1 General

The project report is a systematic and comprehensive summary of product information supporting the verification of the EPD. As defined in EN 15804+A2:2019 (8.1), ISO 21930:2017 (10.1) and EN ISO 14067:2018 (7.1), EN 50693:2019 (4.5.1).

## 5.2 LCA-related parts of the project report

The LCA-related part of the project report shall record the LCA-based information and other information as specified in EN 15804+A2:2019 (8.2), ISO 21930:2017 (10.2) and EN ISO 14067:2018 (7.2). and 7.3), EN 50693:2019 (4.5.2-4.5.4).

## 5.3 Documentation of additional information

As defined in EN 15804+A2:2019 (8.3), ISO 21930:2017 (10.4) and EN ISO 14067:2018 (7.4), EN 50693:2019 (4.5.5.5).

### 5.4 Availability of data for verification

As defined in EN 15804+A2:2019 (8.4) and ISO 21930:2017 (10.5). In this PCR, which applies to third party verified EPD and CFP statements. For EPDs according to EN 50693:2019 as defined in EN 15804+A2:2019 (8.4).

# 6. VERIFICATION AND VALIDITY

Verification and validity are defined in EN 15804+A2:2019 and ISO 21930:2017. In this PCR that applies to third party verified EPD and CFP statements. In the case of EPDs according to EN50693:2019, the procedure as defined in EN 15804+A2:2019

An EPD based on this PCR shall, once verified, be valid from its registration and publication on www.epdsquare.com and for a period of five years starting from the date of issue of the verification report ("approval date") or until the EPD registration is cancelled from epd square.

During its validity, the EPD shall be updated and re-verified if changes in technology or other circumstances occur, namely:

▪ an increase of 10% or more in any of the outcome indicators,

▪ errors in the information declared; or

▪ significant changes to the declared product information, content declaration or additional environmental information.

If such changes have occurred but the EPD is not updated, the EPD owner will contact the Secretariat to have the EPD removed from the registry so that it can be removed from [www.epdsquare.com](http://www.epdsquare.com).

# 7. REFERENCES

EN 15804:2012+A1:2013, Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products.

EN 50693 Product category rules for life cycle assessments of electronic and electrical products and systems.

EN 15804:2012+A2:2019/AC:2021, Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products.

ISO 14020:2000, Environmental labels and declarations - General principles

ISO 14025:2006, Environmental labels and declarations - Type III environmental declarations - Principles and procedures

ISO 14040:2006, Environmental management - Life cycle assessment - Principles and framework

ISO 14044:2006, Environmental management - Life cycle assessment - Requirements and guidelines

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

ISO 14067:2018, Greenhouse gases - Carbon footprint of products - Requirements and guidelines for quantification