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| **AUSTRIAN EPD-PLATFORM** **for Construction related Products and services****General Guidelines****GENERAL PRINCIPLES AND GUIDELINES (BASIS DOCUMENT)** **For preparation of EPDs (Environmental Product Declarations) according to the EPD programme of the BAU EPD GmbH** |
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| **BASIS Document version 12th February 2018for preparation of Environmental Product Declarations Type III** |
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# General information

**This draft of the basis document was authored according to the following Austrian standards:**

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

ÖNORM EN 15804, Sustainability of construction works - environmental product declarations. Core rules for the product category of construction products

ÖNORM EN 15942, Sustainability of construction works - environmental product declarations. Communication format business-to-business

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# Introduction

The Austrian EPD platform for construction related products and services sets the framework for the preparation of Type III environmental product declarations for building related products according to the Austrian standard ÖNORM EN ISO 14025.

In July 2013 the Bau EPD GmbH (Ltd) was founded as the Austrian programme operator for the preparation and publication of EPD. The Bau EPD GmbH works hand in hand with the members and supporting parties of the Austrian EPD Platform.

Type III environmental product declarations are principally designed to guarantee the exchange of information within construction economy (Producers, Planers and executive construction companies), although their application as a basis for the exchange of information between the economy and consumers shall not be precluded according to ÖNORM EN ISO 14025.

The environmental product declarations are based on third party verified data from LCA, inventory analysis or information modules and additional information that shall together cover the essential environmental aspects of the product.

# Applications

##  Application of the document at hand

The Austrian standard ÖNORM EN ISO 14025, describing the principles and procedures for preparation, actualisation and publication of Type III environmental product declarations as well as the interaction of the required actors, demands in clause 6.4 the written formulation and publication of the rules that are necessary for operating the programme for environmental product declarations. By issuing this basis document this condition is met by the Austrian Bau EPD GmbH.

## Application of the programme for environmental product declarations

The programme for environmental product declarations has been created as a service for producers of construction related products. Within the term “construction related products” come building materials, materials for interior fittings, components of building services and techniques (domestic services) and sanitary fittings or building elements for buildings or other structures. The construction related products are aggregated into product categories or product groups that fulfil equivalent functions in the building or structure. EPD are not considered to be tools for comparing quality criteria of single building related products or services. Within the application of an EPD the whole life cycle of a product must be considered, and so the EPD Type III environmental product declaration can only be useful for comparison within the whole system of the building.

# Co-applicable documents

The General Principles and Programme Guidelines required for the operation of a programme for environmental product declarations are described in three different documents: in the basis document on hand, the „Product category rules for construction related products and services Part° A” (calculation rules for the LCA and requirements on the backround report) and in the „Guidelines for screening emissions into indoor air and environment“. In addition to these three documents, the standards quoted in clause 13 of the document on hand must be considered. For different product categories the special PCR documents Part B are also binding.

# Abbreviations

EPD Environmental Product Declaration (Typ III)

ARGE EPD Arbeitsgemeinschaft EPD

PCR Product Category Rules

ISO 14025 Austrian Standard ÖNORM EN ISO 14025

EN 15804 Austrian Standard ÖNORM EN 15804

EN 15942 Austrian Standard ÖNORM EN 15942

# The Austrian EPD Platform

## Target groups and objectives

The goal of the Austrian EPD Platform for construction products is to create rules for the preparation of EPD within a widely accepted corporative consensus. These rules can be considered as a coherent basis for the declaration of construction products in accordance to the EPD programme of the Bau EPD GmbH.

The EPD programme is scheduled for communication between companies (business to business) but its application as a basis for a normative regulated information exchange between businesses and consumers in future shall not be precluded. For this application the Bau EPD GmbH provides an online platform for publication of (www.bau-epd.at).

Following ISO 14025, the superordinated goal of EPD is to support supply and demand of less pollutive products by verifiable, exact and by no means misleading information about environmental aspects. With that the potential of a market orientated, continuous improvement shall be achieved. EPD allow professional purchasers and planners to estimate environmental aspects of construction materials. EPD shall contain information based on LCAs according to ISO 14025, clause 4 a and additional information that are not based on LCAs according to ISO 14025, clause 4 d to cover the environmental aspects of products through their whole life cycle.

EPD can serve for weak point analysis over the product life cycle, for comparison in context of its application in the building etc.

## Organization of the Austrian EPD Platform for construction related products and services

The essential elements of organisation within the EPD programme are:

⎯ the Bau EPD GmbH as programme operator;

⎯ industry and producers of construction materials and their associations;

⎯ the PCR review panel (advisory board, in Austria called PCR-Gremium);

⎯ the product group panels;

⎯ interested parties.

The following chart shows the interaction of actors:



## Programme Operator

The Bau EPD GmbH operates with the Austrian EPD platform for construction materials the objective programme for Type III environmental product declarations. The Bau EPD GmbH is according to ISO 14025, clause 6.3 responsible for the set-up and administration of this programme.

The administration contains the following list of tasks which may not be complete:

a) preparing the General Principles and Programme Rules, their maintenance and communication;

b) publishing the names of organisations and persons participating in the program development (publication of names of individual persons and logos of institutions only with permission of the persons concerned);

c) ensure that requirements on Type III Declarations according to ISO 14025, clause 7, are met;

d) establish a procedure to ensure consistency of data within the programme;

e) keep lists and documentations of PCR documents and EPD and offer access to these lists to the public

f) publish PCR documents and EPD of the programme

g) follow changes in procedures and Type III environmental product declarations in other programmes and, if necessary, adapt own procedures and documents;

h) ensure the selection of competent and independent verifiers as well as members of the PCR review panel;

i) establish a transparent procedure for the verification of PCR, in which the scope of the verification and the rules of assembling the team of verifiers is shown;

j) Develop a procedure to avoid misuse of these international standards as a reference to the Type III EPD programme or its logo

In addition to the tasks mentioned in ISO 14025, clause 6.3, the Bau EPD GmbH is also responsible for a transparent procedure of verification of EPD and choice of verifiers. In addition to clause 6.3 c the Bau EPD GmbH must ensure, that general principles and guidance documents are followed.

## Producers

The producer or association of producers is the single owner of an environmental product declaration. The producer is responsible and liable for the content (see EN 15804, clause 5.5).

It is the producers task to provide an LCA that was prepared in compliance with the document „General Principles and Rules for LCA – PCR Part A“, a backround report as well as additional data and information required in particular PCR B documents under the condition of confidentiality. The draft of the EPD is to be delivered to the programme operator.

The producer has the duty to inform the programme operator, if changes in technology or other aspects occur that have an impact on the content or representativity of an existing EPD and with that require revision or adaptation.

## PCR review panel (advisory board)

The PCR review panel, in Austria called PCR-Gremium, is an independent, competent third party presenting the chief and at least two members (see ISO 14025, clause 8.1.2). It benefits from instruction-freedom and organises itself independently from the programme operator. It chooses its members, chief and other entities independently. The chief of the PCR-Gremium and his or her deputy chief are elected by the PCR-Gremium. The tasks of the chief can generally also be executed by his deputies, if needed.

Within the Austrian EPD Platform the PCR review panel is formed by employees of universities, research institutions and accredited bodies or employees of companies specialized on preparation of LCA or verification of EPD. The Bau EPD GmbH keeps a list of all persons sent by these organisations.

In compliance with ISO 14025, clause 8.2.3, the qualification of the verifiers shall comprehend:

* General knowledge of industry and product-related environmental matters.
* Good process and product knowledge within the relevant product or service.
* In-depth knowledge of the principal LCA methodology (at least five 5 years of experience).
* In-depth knowledge of the relevant standards in the field of environmental labelling and declarations, and life cycle assessment.
* Knowledge in the overall regulatory framework in which the concept of EPD has been introduced and the scope of the PCR documents 6.
* In-depth knowledge of the international EPD system, especially in construction industry
* Experience in critical review of LCA and/or verification of environmental declarations.
* Knowledge of the Type III EPD programmes

The PCR review panel decides about the recruitment of new members resp. member organisations under consideration of the qualifications mentioned above. Precondition for the admission of organisations into the PCR review panel is the affiliation to a university, research institute or inspecting authority or company. Precondition for the admission of individual persons is the employment in one of the member organisations.

Tasks of the PCR review panel:

⎯ Workout of product category rules (Summarization of products with similar or equal function and application into groups of equal functional units).

⎯ Election of experts into product group panels where product category rules (PCRs) are worked out.

⎯ Verification of the PCR. This is carried out by those members of the PCR review panel who are not involved in the process of working out the PCR. For the verification of PCRs the chief of the PCR review panel and at minimum one other member are required.

⎯ The individual and independent verification of the environmental product declaration. This is in any case done by a member of the PCR review panel who is neither involved in the preparation of the LCA nor in the process of developing the EPD and who is not confronted with conflicts of interest. The person must have in-depth knowledge of process and product characteristics of the product category in question.

 To guarantee the independence and to avoid any conflict of interest Austria has settled the following rule until recalled:

The system is carried out by individual persons that can be registered as individual external verifiers and/or registered LCA-practitioners at the Bau-EPD GmbH. To guarantee the independence of the verifiers, an LCA-practitioner must not be linked to or working for the same institution or company as the verifiers. The verification is carried out under the principle of dual control. The verifiers must not belong to the same organisation.Persons who want to act as external verifiers or registered LCA practitioners can apply any time and have to undergo a certain procedure of quality assurance.

The procedure for approval and supervision of the verifiers are carried out under the auspices of the programme operator.

## LCA Practitioners

The LCA practitioners must fulfil the profile stated in the application forms of the Bau EPD GmbH. The PCR review panel decides whether the requirements have been fulfilled and makes a suggestion to the managing director of the Bau EPD GmbH about calling a person into the team of registered LCA practitioners.

Tasks of the LCA practitioner

1. ⎯ Elicitation of the inventory analysis (The LCA practitioner has to check the data presented concerning plausibility and correctness.)
2. ⎯ Preparation of the LCA following the instructions in the document „General Principles for LCA – PCR Part A“ and specific PCR Part B
3. Preparation of the project report (backround report) following the instructions in the document „General Principles for LCA – PCR Part A“
4. Preparation of the EPD document

## Product Group Panel (Product Group Forum)

The product group panel is in charge of the preparation of PCRs for the Programme Operator. The panel is constituted on recall of the Bau EPD GmbH and the chief of the PCR review panel suggests the experts. The panel obtains a chairman who is supported by at minimum one other member as well as experts from interested parties and/or industry.

Tasks of the product group panel:

1. ⎯ exact definition of a product group;
2. ⎯ identification of the characteristic impact on the environment;
3. ⎯ determination what documents for evidence must be provided;
4. ⎯ preparation of the draft of the PCR;
5. ⎯ presentation of the draft in front of the PCR review panel;
6. ⎯ adaptation of the PCR according to the comments received.

## Interested parties

As interested parties for Type III EPD-programmes the following groups can be considered according to ISO 14025, clause 5.5 (raising no claim to completeness): producers, suppliers, associations, purchasers, users, consumers, non-governmental organisations, public institutions and, if relevant, independent parties and certification bodies.

Involving the interested parties in the process of developing the programme according to ISO 14025, clause 6, ranges from the workout of the PCR to conclusion following the rules set in the General Principles for PCR preparation. The General Principles have to be published on the internet for 4 weeks to give interested parties the chance and possibility to transmit written comments. In the process of preparation of the PCR-B parts support of members of interested parties is designated. In addition to that here also a 4 week period of publication on the internet gives all stakeholders the possibility of written remarks. The eventually necessary compromise shall be achieved in extra set meetings where interested parties, the product group panel and representatives of the PCR review panel come together.

# Procedures for preparation, verification and maintenance of Product Category Rules (PCR)

The Product Category Rules (PCR) give the basis for the environmental product declarations. They define all information that has to be declared in accordance to the specific PCR and are developed in Product Group Panel under involvement of interested parties.

* Following ISO 14025, clause 6.7.1, the possibility of adopting readily available PCR documents for equal product categories from appropriate market regions shall be checked. The product group panel will therefore make an appropriate research and adopt existing PCR documents if possible. Especially standards from the CEN- und ISO committees (CEN/TC and ISO/TC) shall be considered. **CEN TC c-PCR overrule programme operator related PCR documents**.

PCR according to EN 15804 published as EN standards by CEN for a product family shall have prevalence over any other PCR, unless technically justified.

The content of a national and/or programme operator related PCR should refer to the corresponding CEN TC c-PCR.

Regarding the procedure of preparing PCR documents ISO 14025 recommends in clause 6.7.1 to prepare the PCR after the definition of the product category by reference to a fitting LCA.

## Content of PCR documents

### General Rules

General instructions for all product categories will be dealt with in clause 9.1: Content of environmental product declarations. This refers to ISO 14025, clause 6.7.1 d: impact categories calculation rules for LCA and clause 6.7.1 e: reporting of LCA data.

In compliance with ISO 14025 clause 6.7.1 i instructions on the content and format of the Type III environmental declaration will be fulfilled with a template of an EPD provided by Bau EPD GmbH. Declarations concerning period of validity (see ISO 14025, 6.7.1 k) can be found in clause 6.3 maintenance of PCR documents.

### Definition of the Product Category

⎯ definition and description of the product (see ISO 14025, clause 6.7.1 a)

⎯ description of function and application of the products (see ISO 14025, clause 6.7.1 a)

⎯ List of standards applicable for the product (harmonised EN standards, European technical approvals/admission/valuations or the standard made mandatory in the ÜA (Übereinstimmung Austria) list of products. Declaration of product features to be declared according to these standard as well as self-declarations and third party verifications.

⎯ Listing of additional product features that have to be declared (see ISO 14025, clause 6.7.1 a)

e.g.:

dimensions,

bulk density,

[equilibrium](http://www.dict.cc/englisch-deutsch/equilibrium.html) [moisture](http://www.dict.cc/englisch-deutsch/moisture.html) [content](http://www.dict.cc/englisch-deutsch/content.html) (EMC),

mechanical characteristics (compressive strength, tensile strength, bending tensile strength, E-modulus),

fire protection: inflammableness, generation of smoke, burning dripping / fire resistance

acoustic protection: sound reduction index

thermal protection: thermal conductivity, heat transfer coefficient

protection against moisture: water vapour diffusion resistance factor

(This information can also be stated in the Austrian national Annex to the EPD. It is allowed to reference to technical product data sheets. Especially with average EPDs such a reference is useful, if not all products of a product range can be described in detail).

⎯ List of materials and substances that can affect human health and/or the environment through all stages of the product life cycle, if not declared within LCA and clause 6.1.4 (see ISO 14025, clause 6.7.1 g) and if true, requirement of further proof. (see ISO 4025, clause 7.1 f) (e.g. concerning radioactivity, way of gaining raw materials etc.)

### Requirements on the LCA

General rules for LCA applicable on all product categories following ISO 14025, clause 6.7.1 b ,c und h are summarized in the document „General Principles for LCA – PCR Part A“.

In the PKR Part B the functional unit resp. the declared unit must be defined and it is to declare, which modules of EN 15804 are unimplemented, if the EPD does not cover the whole life cycle. (see ISO 14025, clause 6.7.1 j). If necessary other specification, e.g. requirements on data quality, cut-off criteria or allocations can be stated.

### Additional information about emissions of dangerous substances into (indoor) air, soil and water during use stage

If relevant for the product category, the PCR makes it compulsory to declare emissions of regulated substances into indoor air, if the products are in contact with indoor air during use stage. (see EN 15804, clause 7.4.1). The check must be fulfilled with reference to the document „Guidelines for emissions into indoor air and environment“.

If relevant for the product category, the PCR makes it compulsory to declare emissions of regulated substances into water and soil, if the products are in contact with water and soil during use stage (see EN 15804, clause 7.4.2). The check must be fulfilled with reference to the document „Guidelines for emissions into indoor air and environment“.

This requirement of EN 15804 can also be applied on non-regulated substances, if they are relevant.

The required testing for that must be executed by accredited bodies or institutions of equal character and qualification.

## PCR-Verification and involvement of interested parties

The verification of PCR is done by a member of the PCR review panel who is neither involved in the preparation of the PCR.

Following ISO 14025, clause 8.1.2 the chief and at minimum one other member of the PCR review panel have fulfil this task together. If the chief is involved in the Product Group Panel, the PCR-review can also be lead by the deputy chief.

The verification of the PCR has to show in compliance to ISO 14025, clause°8.1.2, that the PCR developed is in accordance with the range of standards ISO 14040 and ÖNORM EN ISO 14025 the General Principles for Type III environmental product declarations were followed and that the information made compulsory in the PCR give a description of all essential environmental aspects of the product. In addition to that the PCR must be compliant to EN 15804 Sustainability of construction works - environmental product declarations. Core rules for the product category of construction products.

After the first check on the PCR by the PCR review panel the documents will be presented for 4 weeks on the internet homepage of the Bau EPD GmbH to gather comments of interested parties. Comments shall be directed to Bau EPD GmbH in a written way. After respective corrections and/or improving adaptations with reference to the comments received the approval of the PCR by the PCR review panel will follow. The publication is done on the homepage of Bau EPD GmbH.

## Maintenance of PCR Documents

The validity of a PCR document is 5 years. After 5 years the Bau EPD GmbH induces either an extension or revision through the PCR review panel. Changes of the standards underlying the PCR or new research results concerning environmental features of materials, substances or processes can make a revision necessary at a sooner date.

# Procedure of application of the LCA method

See document „General Principles for LCA - PCR Part A“.

# Backround report to the EPD

## General rules

According to EN 15804 clause°8.1 the backround report is the systematic and detailed summary of the project documentation, a support for the verification of the EPD. It must show, that the information based on the LCA as well as additional information are in compliance with EN 15804. It must be accessible to the verifier under conditions of confidentiality. It is not part of the public communication.

## Backround report according to EN 15804, clause 8.2 Part 1: LCA

The backround report must contain the elements listed in the „General Principles for LCA - PCR Part A“.

## Backround report according to EN 15804, clause 8.3 Part 2: Additional information

The backround report must contain all documentation about further environmental impact that has to be declared in the EPD. These documents (verification reports, test reports and additional technical information about each stage in the life cycle that were not considered in the LCA) can be added in form of a copy. Verifiers must check on additional information whether it has been 3rd party verified and confirmed by recognized, independent testing centers.

# Environmental Product Declaration

According to ISO 14025 clause°7.2.1 all Type III environmental product declarations of a product category must have the same format and contain the same data with reference of the PCR.

## Contents of the Environmental Product Declaration

### General Information

⎯ Name of the programme, name and address of the programme operator, logo, web address (ISO 14025, clause°7.2.1 d; EN 15804, clause°7.1 e; EN 15942, table A.1 e)

⎯ Number of the declaration, the date of publication and the 5 year period of validity (ISO 14025, clause°7.2.1 f; EN 15804, clause 7.1 f; EN 15942, table A.1 f)

⎯ Name and address of the owner of the environmental product declaration, declaration of the producer and the production sites in question for which the EPD is representative (ISO 14025, clause 7.2.1 a; EN 15804, clause°7.1 a, j; EN 15942, table A.1 a, j)

### Product information

⎯ identification of the construction product (name and identification of the construction product including any product codes or model numbers, if existing) and the functional/declared unit (see ISO 14025, clause°7.2.1 c; EN 15804, clause°7.1 b, c; EN 15942, table A.1 b, c)

⎯ description of the application and use of the construction product (see ISO 14025, clause 7.2.1.b; EN 15804, clause°7.1 b; EN 15942, table A.1 b)

⎯ a simple visual representation of the construction product to which the data relates (EN 15804, clause 7.1 c; EN 15942, table A.1 c)

⎯ detailed product description

Including technical data required in the PCR and also declaring the standards mentioned in the PCR.

⎯ a description of the main product components and or materials in mass-% as required in the PCR. In addition information on [excipient](http://www.dict.cc/englisch-deutsch/excipient.html)s, additives and accessory agents including their function in the product have to be declared.

⎯ Information, where explaining data can be obtained (e.g. safety data sheets on the website or contact address for product related substances, considered by REACH) (see ISO 14025, clause 7.2.1 l; EN 15804, clause 7.1 l; EN 15942, table A.1 l)

### Information about Life Cycle

#### Type of EPD according to the included stages of life cycle compliant with EN 15804, image 1 (ISO 14025, clause 7.2.1 j; EN 15804, clause 7.1 g; EN 15942, table A.1 g)

According to EN 15804, clause°7.2.2 it must be clearly stated, which type of EPD is declared:

⎯ „cradle to gate“-EPD

⎯ „cradle to gate with options“-EPD

⎯ „cradle to grave“-EPD

Declaration of the considered modules with coloured marking:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PRODUCT STAGE | CON-STRUCTION PROCESS STAGE | USE STAGE | END OF LIFE STAGE | BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARY |
| A1 | A2 | A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | D |
| Raw material supply | Transport | Manufacturing | Transport | Construction-installation process | use | maintenance | repair | replacement | refurbishment | Operational energy use | Operational water use | De-construction, demolition | Transport | Waste processing | disposal | Reuse, recovery, recycling potential |

Note: Covering of product stage (Modules A1 to A3) is compulsory (see EN 15804, clause 6.2.1). The cut-off of other stages must be justified (see ISO 14025, clause 5.3)

#### Scenarios and additional technical information

**Product stage:** compulsory for each included production site

⎯ description of raw material supply, raw material processing and geographic origin of raw materials and transport (A1 and A2)

⎯ detailed description of production process (A3)

**Construction process stage:** description of scenarios for declared modules compulsory, else optional

⎯ transport to site (A4): table 7 in EN 15804

⎯ installation into the building (A5): table 8 in EN 15804

**Use stage:** description of scenarios for declared modules compulsory, else optional

⎯ use of the product (B1 to B5): table 9 in EN 15804

⎯ declaration of reference service life: (compulsory for „cradle to grave“-EPD): table 10 in EN 15804

⎯ for building integrated technical systems that need energy (B6) and/or water (B7): table 11 in EN 15804

**End of life stage:** description of scenarios for declared modules compulsory, else optional

⎯ end of life of product (C1 to C4): table 12 in EN 15804

**Benefits and loads beyond the system boundary:** optional

⎯ Reuse, recovery, recycling potential

### Declaration of environmental parameters from the LCA (ISO 14025, clause°7.2.1 g)

Basis on which the declared environmental indicators are set, title of LCA, creator of the LCA, date

* functional resp. declared unit
* system boundaries: declaration of considered modules by coloured marking of life cycle stages in question (see clause 9.1.3.1)
* flow chart of processes dealt with in the LCA (EN 15804, clause 7.2.1)
* used backround data sets
* cut-off criteria
* quality and representativity of data
* allocations
* results of the LCA according information transfer matrix (EN 15942):
* Parameters to describe environmental impact according table A.2 in EN 15942
* parameters to describe use of resources: primary energy according to table A.3 in EN 15942
* parameters to describe use of resources: secondary material and fuels as well as water use according to EN 15942
* waste categories according to table A.5 in EN 15942
* other output according to table A.6 in EN 15942

Note in EN 15804, clause7.5: The indicators declared in the individual information modules of a product life cycle A1 to A5, B1 to B7, C1 to C4 and module D as described in figure 1 shall not be added up in any combination of the individual information modules into a total or sub-total of the life cycle stages A, B, C or D. As an exception information modules A1, A2, and A3 may be aggregated.

⎯ in the case where an EPD is declared as an average environmental performance for a number of products a statement to that effect shall be included in the declaration together with a description of the range/ variability of the LCIA results if significant (EN 15804 clause°7.1 i, EN 15942, table A.1, i).

### Interpretation of LCA results

The LCA results must be described with reference to the declared modules. Products must be described with reference to their origin and reference service life. If additional information is required for the interpretation, this information must be stated in this chapter.

For the correct understanding of the LCA the aggregated indicators of the inventory analysis as well as the impact assessment (LCIA) must be interpreted following the outcome of a dominance analysis. The interpretation must also contain a description of the span resp. variance of the LCIA results, if the EPD is valid for several products. It is recommended to illustrate the results in figures, i.e. showing a dominance analysis, environmental impact spread over the modules declared, CO2-bilance etc.

As for module D, it must be stated in the interpretation, that benefits and loads are beyond the system boundary. Figures for life cycle interpretation are therefore to be created in a way that gives separate figures for modules A1-C4 and module D. Alternative: results can be interpreted without figures (verbal description).

### Additional information about the emission of dangerous substances into (indoor) air, soil and water during use stage compliant to EN 15804, clause 4 (ISO 14025, clause 7.2.1 h, i)

The declaration must be prepared according to the requirements in the PCR.

### Further requisite evidence

If other documents are required in the PCR, their data information is also to be declared (see ISO 14025, clause
 7.2.1 h, i).

### Evidence of independent third party verification (ISO 14025 image 3; EN 15804 table 2; EN 15942 table A.1)

|  |
| --- |
| The European Standard EN 15804 served as a Core PCR. |
| Third party verification of the declaration according to ISO 14025:2010

|  |  |
| --- | --- |
| □ intern | ☒ extern |

 |
| Verifier 1:Verifier 2: |

### Comparability (ISO 14025, clause 7.2.1 k; EN 15804, clause 7.1 h; EN 15942, Table A.1, h)

Statement: EPD of different programme might not be comparable, even if they follow EN 15804.

## Procedure of verification of the environmental product declaration

### General Rules

The third party verification of the environmental product declaration and the independent verification of the data are completed by members of the PCR-Panel who are, in compliance with ISO 14025, clause°8.2.1 neither involved in the process of developing the declaration nor do they belong to the same organisation as the LCA-Practitioner.

The system is carried out by individual persons that can be registered as individual external verifiers and/or registered LCA-practitioners at the Bau-EPD GmbH. To guarantee the independence of the verifiers, an LCA-practitioner must not be linked to or working for the same institution or company as the verifiers. The verification is carried out under the principle of dual control. The verifiers must not belong to the same organisation. Persons who want to act as external verifiers or registered LCA practitioners can apply any time and have to undergo a certain procedure of quality assurance.

The procedure for approval and supervision of the verifiers are carried out under the auspices of the programme operator.

The procedure of the verification must be transparent.

The qualification of the verifiers must include the following points (see ISO 14025, clause 8.2.2):

⎯ knowledge of relevant sector, product and product-related environmental aspects;

⎯ process and product knowledge of the product category;

⎯ expertise in LCA and methodology for LCA work;

⎯ knowledge of relevant standards in the fields of environmental labelling and declarations and LCA;

⎯ knowledge of the regulatory framework within which requirements for Type III environmental declarations have been prepared;

⎯ knowledge of the Type III environmental declarations programme.

The verifier resp. the team of verifiers is suggested by the Bau EPD GmbH, the manufacturer and/or LCA-practitioner is entitled to reject the first suggestion. The second suggestion must be accepted. The independent verification of the backround data and the verification of the EPD are carried out by the same persons. Especially in the early phases of the programme operation it is possible, that verifications are done under a 4-eye-principle (two man rule).

### External third party verification of data

Independent verification of data from LCA, LCI and information modules, and of additional environmental information shall as a minimum confirm the following requirements (see ISO 14025, clause 8.1.3):

⎯ conformance with the PCR, with the ISO 14040 series of standards and conformance with general programme instructions for the Type III environmental declaration.

⎯ that data evaluation includes coverage, precision, completeness, representativeness, consistency, reproducibility, sources and uncertainty,

⎯ the plausibility, quality and accuracy of the LCA-based data,

⎯ the quality and accuracy of additional environmental information and

⎯ the quality and accuracy of the supporting information.

### External third party verification of the EPD

The independent verification procedure shall as a minimum be appropriate to determine whether the Type III environmental declaration is in conformance with ISO°14020 and the relevant requirements of this International Standard, the general programme instructions and the current and relevant PCR (see ISO 14025, clause 8.1.4). The verification procedure shall confirm whether the information given in the Type III environmental declaration accurately reflects the information in the documents on which the declaration is based. The verification procedure shall also confirm whether this information is valid and scientifically sound.

The verification report shall document the verification process, while adhering to the obligations of covering rules for data confidentiality. This report shall be available to any person upon request. It must be communicated to the die Bau EPD GmbH.

If the Bau EPD GmbH determines, based on the verification report, that the data supporting the Type III environmental declaration are inadequate, incorrect or incomplete the declaration shall not be published

## Validity of the environmental product declaration

According to EN 15804, clause 9, an EPD is valid for a 5 year period from the date of issue, after which it shall be reviewed and verified. An EPD shall only be reassessed and updated as necessary to reflect changes in technology or other circumstances that could alter the content and accuracy of the declaration. An EPD does not have to be recalculated after 5 years, if the underlying data has not changed significantly. After a maximum period of 10 years a review and new issue of the EPD is necessary.

Note in EN 15804, clause°9: A reasonable change in the environmental performance of a product to be reported to the verifier is +/- 10°% on any one of the declared parameters of the EPD. Such a change may require an update of the EPD.

# Management of confidential information

The backround report is given only to the verifiers. The verifiers are obliged to keep the information confidential. Precondition to act as a verifier is the signing of a confidentiality statement. In the verification report, that shall be available to any person upon request, no confidential data shall be made public.

# Periodical check and maintenance of General Programme Principles and Guidelines

The period of validity of the basis document on hand and the documents “General Principles and Rules for LCA- PCR Part A“ and „Guidelines for emissions into indoor air and environment” is 5 years. After 5 years the Bau EPD GmbH reminds the PCR review panel to decide about extension of the validity period or revision and adaption. Changes of the standards underlying the documents in question or new research results concerning environmental features of materials, substances or processes can make a revision necessary at a sooner date.

# Fees for Producers

The list of fees of the Bau EPD GmbH is published on the website [www.bau-epd.at](http://www.bau-epd.at) and can be downloaded.

# Relevant Standards

This document was created in compliance with the following standards:

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

ÖNORM EN 15804, Sustainability of construction works - environmental product declarations. Core rules for the product category of construction products

ÖNORM EN 15942, Sustainability of construction works - environmental product declarations. Communication format business-to-business

The following standards have to be considered in their latest version:

ÖNORM EN ISO 14020 - Environmental labels and declarations. General principles

ÖNORM EN ISO 14021 - Environmental labels and declarations – Self-declared environmental claims (Type II environmental labelling)

ÖNORM EN ISO 14024 - Environmental labels and declarations - Type I environmental labelling - Principles and procedures

ÖNORM EN ISO 14040 - Environmental management -- Life cycle assessment -- Principles and framework

ÖNORM EN ISO 14044 Environmental management -- Life cycle assessment -- Requirements and guidelines

ISO 21930 Building Construction - Sustainability in building construction – Environmental declaration of building products

CEN/TR 15941 Sustainability of construction works – Environmental product declarations – Methodology and Data for Generic Data