

PRELIMINARY LCA STUDY for a following **EPD - ENVIRONMENTAL PRODUCT DECLARATION**

as per ISO 14025 and EN 15804+A2



OWNER AND PUBLISHER

Bau EPD GmbH, A-1070 Wien, Seidengasse 13/3, www.bau-epd.at

PROGRAMME OPERATOR

Bau EPD GmbH, A-1070 Wien, Seidengasse 13/3, www.bau-epd.at

HOLDER OF THE DECLARATION

Name of declaration holder

DECLARATION NUMBER

To be accorded with Bau EPD GmbH

ISSUE DATE

Date

VALID TO

Date

NUMBER OF DATASETS

Number

ENERGY MIX APPROACH

MARKET BASED APPROACH

Name and description of product

Name of declaration owner

picture

**To be accorded with declaration
owner and Bau EPD GmbH**

**Company logo
of declaration owner**

Content of the preliminary study for an EPD

| | | |
|-------|--|----|
| 1 | General information | 3 |
| 2 | Product | 4 |
| 2.1 | General product description | 4 |
| 2.2 | Application field | 4 |
| 2.3 | Standards, guidelines and regulations relevant for the product | 4 |
| 2.4 | Technical data | 4 |
| 2.5 | Basic/auxiliary materials | 4 |
| 2.6 | Production stage | 5 |
| 2.7 | Packaging | 5 |
| 2.8 | Conditions of delivery | 5 |
| 2.9 | Transport to site | 5 |
| 2.10 | Construction product stage | 5 |
| 2.11 | Use stage | 5 |
| 2.12 | Reference service life (RSL) | 5 |
| 2.13 | End of life stage | 5 |
| 2.14 | Further information | 5 |
| 3 | LCA: Calculation rules | 6 |
| 3.1 | Declared unit/ Functional unit | 6 |
| 3.2 | System boundary | 7 |
| 3.3 | Flow chart of processes/stages in the life cycle | 7 |
| 3.4 | Estimations and assumptions | 7 |
| 3.5 | Cut-off criteria | 7 |
| 3.6 | Allocation | 7 |
| 3.7 | Comparability | 7 |
| 4 | LCA: Scenarios and additional technical information | 7 |
| 4.1 | A1-A3 product stage | 7 |
| 4.2 | A4-A5 Construction process stage | 8 |
| 4.3 | B1-B7 use stage | 8 |
| 4.4 | C1-C4 End-of-Life stage | 10 |
| 4.5 | D Potential of reuse and recycling | 10 |
| 5 | Information on data quality and data selection in accordance with EN 15941 | 10 |
| 5.1 | Principles for the description of data quality | 10 |
| 5.2 | Description of the temporal, geographical and technological representativeness of the product data | 10 |
| 5.3 | Explanation of the averaging process | 10 |
| 5.4 | Assessment of the data quality of the Life Cycle Inventory data | 10 |
| 6 | LCA: results | 11 |
| 7 | LCA: Interpretation | 15 |
| 8 | Literature | 15 |
| 9 | Directory and Glossary | 15 |
| 9.1 | List of figures | 15 |
| 9.2 | List of tables | 15 |
| 9.3 | Abbreviations | 16 |
| 9.3.1 | Abbreviations as per EN 15804 | 16 |
| 9.3.2 | Abbreviations as per corresponding PCR | 16 |

1 General information

| | |
|--|---|
| Product name Name and description of product | Declared Product / Declared Unit Description of the declared product and declared unit/functional unit |
| Declaration number To be accorded with Bau EPD GmbH | Number of datasets in pre-study Document(s): XX |
| Declaration data <input type="checkbox"/> Specific data <input type="checkbox"/> Average data | Range of validity The product, the sites/distribution locations and sales location (region, country) on which the data of the LCA study is based must be cited. In the case of average data sets for preliminary studies on EPDs, reference must be made to this type of data set. The representativeness of the declaration with regard to the production volume covered by the LCA and the technology used must be presented. If no plants exist as part of the preliminary study or production has not yet started, a brief description of the data basis and calculation used for the assessment must be provided. Points from EN 15804 that cannot be complied with must be quoted and justified. Points from c-PCR and PCR-B that cannot be complied with must be cited and justified. |
| Declaration based on: MS-HB Version XX dated TT.MM.YYYY: Name of PCR PCR-Code Version XX dated TT.MM.YYYY (PCR tested and approved by the independent expert committee = PKR-Gremium) Version of EPD-Format-Template M-Dok 14aA2 The owner of the declaration is liable for the underlying information and evidence; Bau EPD GmbH is not liable with respect to manufacturer information, life cycle assessment data and evidence. | |
| Type of Declaration as per EN 15804 From cradle to LCA-method: (i.e. cut-off by classification) | Database, Software, Version Declaration of background database, Software used and both its versions Version Characterisation Factors: Quelle, Version |
| Author of the Life Cycle Assessment Name of the author Institution, Address COUNTRY | The CEN standard EN 15804:2019+A2 serves as the core-PCR. The c-PCR of CEN xxxxxx has been applied. Independent verification of the declaration according to ISO 14025:2010 <input type="checkbox"/> internally <input checked="" type="checkbox"/> externally Verifier 1: Name Verifier 2: Name |
| Holder of the Declaration Name of the manufacturer/owner Institution Address COUNTRY | Owner, Publisher and Programme Operator Bau EPD GmbH Seidengasse 13/3 1070 Vienna Austria |

DI (FH) DI DI Sarah Richter
 Head of Conformity Assessment Body

Academic Title Name
 Verifier

Academic Title Name,
 Verifier

Note: EPDs from similar product groups from different programme operators might not be comparable.

2 Product

2.1 General product description

Content as defined in product specific PCR-B document.

2.2 Application field

Content as defined in product specific PCR-B document.

2.3 Standards, guidelines and regulations relevant for the product

Content as defined in product specific PCR-B document.

Table 1: Product specific standards

| Standard | Title |
|----------|-------|
| | |
| | |
| | |

2.4 Technical data

Content as defined in product specific PCR-B document.

Table 2: technical data of the declared construction product(s)

| Characterization | Value | Unit |
|------------------|-------|------|
| | | |
| | | |
| | | |
| | | |
| | | |

2.5 Basic/auxiliary materials

Content as defined in product specific PCR-B document.

Table 3: Basic and auxiliary materials in mass percentage

| Components | Function | Mass fraction in percent |
|------------|----------|--------------------------|
| | | |
| | | |
| | | |
| | | |

2.6 Production stage

Content as defined in product specific PCR-B document.

2.7 Packaging

Content as defined in product specific PCR-B document.

2.8 Conditions of delivery

Content as defined in product specific PCR-B document.

2.9 Transport to site

Content as defined in product specific PCR-B document.

2.10 Construction product stage

Content as defined in product specific PCR-B document.

2.11 Use stage

Content as defined in product specific PCR-B document.

2.12 Reference service life (RSL)

Content as defined in product specific PCR-B document.

Table 4: Reference service life (RSL)

| Characterization | value | unit |
|--|-------|------------------|
| Product name | | years |
| Differentiation indoor and outdoor etc. so relevant | | years |
| Reference conditions on which the RSL is based (if relevant) | | Individual units |

2.13 End of life stage

Content as defined in product specific PCR-B document.

2.14 Further information

Content as defined in product specific PCR-B document.

3 LCA: Calculation rules

3.1 Declared unit/ Functional unit

Content as defined in product specific PCR-B document.

Table 5: Declared unit

| characterization | value | unit |
|-------------------------------|-------|-------------------|
| declared unit | 1 | m ³ |
| Bulk density ¹⁾ | | kg/m ² |
| Weight for conversion into kg | | kg |

¹⁾ If the gross density corresponds to the conversion factor to 1 kg, the last line is omitted. In the last line, instead of 'weight', the usual term for the weight in question can be stated (e.g. weight per unit area, weight per piece, etc.).

Table 6: Functional unit

| characterization | value | unit |
|-------------------------------|-------|-------------------|
| functional unit | 1 | m ³ |
| Bulk density ¹⁾ | | kg/m ² |
| Weight for conversion into kg | | kg |

¹⁾ If the gross density corresponds to the conversion factor to 1 kg, the last line is omitted. In the last line, instead of 'weight', the usual term for the weight in question can be stated (e.g. weight per unit area, weight per piece, etc.).

3.2 System boundary

Content as defined in product specific PCR-B document.

Table 7: Declared life cycle stages

| PRODUCT STAGE | | | CON- STRUCTION PROCESS STAGE | | USE STAGE | | | | | | | END-OF-LIFE STAGE | | | | BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES |
|---------------------|-----------|---------------|---------------------------------------|----------------------------|-----------|-------------|--------|-------------|---------------|------------------------|-----------------------|-----------------------------|-----------|------------------|----------|---|
| A1 | A2 | A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | D |
| Raw material supply | Transport | Manufacturing | Transport from the gate to the site | Construction, installation | Use | Maintenance | Repair | Replacement | Refurbishment | Operational energy use | Operational water use | De-construction, demolition | Transport | Waste processing | Disposal | Reuse- Recovery- Recycling- potential |
| x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |

X = included in LCA; ND = Not declared

3.3 Flow chart of processes/stages in the life cycle

Content as defined in product specific PCR-B document.

3.4 Estimations and assumptions

Content as defined in product specific PCR-B document.

3.5 Cut-off criteria

Content as defined in product specific PCR-B document.

3.6 Allocation

Content as defined in product specific PCR-B document.

3.7 Comparability

Content as defined in product specific PCR-B document.

4 LCA: Scenarios and additional technical information

Content as defined in product specific PCR-B document.

4.1 A1-A3 product stage

Content as defined in product specific PCR-B document.

4.2 A4-A5 Construction process stage

Content as defined in product specific PCR-B document.

Table 8: Description of the scenario „Transport to building site (A4)“^{x)}

| Parameters to describe the transport to the building site (A4) | Value | Unit |
|---|-------|-------------------|
| Average transport distance | | km |
| vehicle type, Commission Directive 2007/37/EC (European Emission Standard) | | - |
| Fuel type and average consumption of vehicle | | l/100 km |
| Maximum transport mass | | tons |
| Capacity utilisation (including empty returns) | | % |
| Bulk density of transported products | | kg/m ³ |
| Volume capacity utilisation factor (factor: =1 or <1 or ≥ 1 for compressed or nested packaged products) | | - |

^{x)} The table must be filled with available information from chosen datasets resp. must be adapted (e.g. transport by ship). The used datasets must be indicated in a footnote.

Table 9: Description of the scenario „Installation of the product in the building (A5)“

| Parameters to describe the installation of the product in the building (A5) | Value | Unit |
|--|-------|--------------------------|
| Ancillary materials for installation (specified by material); | | kg/t t/t l/t |
| Ancillary materials for installation (specified by type); | | - |
| Water use | | m ³ /t l/t |
| Other resource use | | kg/t t/t l/t |
| Electricity demand | | kWh or MJ/t |
| Other energy carrier(s): | | kWh or MJ/t |
| Wastage of materials on the building site before waste processing, generated by the product's installation (specified by type) | | kg/t |
| Output materials (specified by type) as result of waste processing at the building site e.g. of collection for recycling, for energy recovery, disposal (specified by route) | | kg/t |
| Direct emissions to ambient air (such as dust, VOC), soil and water | | tg/t |

4.3 B1-B7 use stage

B1: Content as defined in product specific PCR-B document.

Table 10: Description of the scenario „maintenance (B2)“ based on table 9 in EN 15804

| Parameters maintenance (B2) | value | unit |
|---|-------|--|
| Maintenance process | | Description or source where description can be found |
| Maintenance cycle | | Number per RSL or year ^a |
| Ancillary materials for maintenance, e.g. cleaning agent, specify materials | | Kg/cycle |
| Waste material resulting from maintenance (specify materials) | | kg |
| Net freshwater consumption during maintenance | | m ³ |

| | | |
|--|--|-----|
| Energy input during maintenance, e.g. vacuum cleaning, energy carrier type, e.g. electricity, and amount, if applicable and relevant | | kWh |
|--|--|-----|

Table 11: Description of the scenario „repair (B3)“

| Parameters repair (B3) | value | unit |
|--|-------|--|
| Repair process | | Description or source where description can be found |
| Inspection process | | Description or source where description can be found |
| Repair cycle | | Number per RSL or year |
| Ancillary materials, e.g. lubricant, specify materials | | Kg or kg/cycle |
| Waste material resulting from repair, (specify materials) | | kg |
| Net freshwater consumption during repair | | m ³ |
| Energy input during repair, e.g. crane activity, energy carrier type, e.g. electricity, and amount | | kWh |

Table 12: Description of scenario „replacement (B4)“

| Parameters replacement (B4) | value | unit |
|--|-------|------------------------|
| Replacement cycle | | Number per RSL or year |
| Energy input during replacement e.g. crane activity, energy carrier type, e.g. electricity and amount if applicable and relevant | | kWh |
| Exchange of worn parts during the product's life cycle, e.g. zinc galvanised steel sheet, specify materials | | kg |

Table 13: Description of scenario „refurbishment (B5)“

| Parameters refurbishment (B5) | value | unit |
|--|-------|--|
| Refurbishment process | | Description or source where description can be found |
| Refurbishment cycle | | Number per RSL or year |
| Energy input during refurbishment e.g. crane activity, energy carrier type, e.g. electricity, and amount if applicable and relevant | | kWh |
| Material input for refurbishment, e.g. bricks, including ancillary materials for the refurbishment process e.g. lubricant, (specify materials) | | kg or kg / cycle |
| Waste material resulting from refurbishment (specify materials) | | kg |
| Further assumptions for scenario development, e.g. frequency and time period of use, number of occupants | | Units as appropriate |

Table 14: Description of scenarios „energy (B6)“ resp. „Water (B7)“

| Parameters energy (B6) and water (B7) | value | unit |
|---|-------|-----------------------|
| Ancillary materials, e.g. lubricant, specify materials | | Kg or kg/cycle |
| Net fresh water consumption | | m ³ |
| Type of energy carrier, e.g. electricity, natural gas, district heating | | kWh or m ³ |
| Power output of equipment | | kW |

Declaration number of the EPD document

| | | |
|--|--|----------------------|
| Characteristic performance, e.g. energy efficiency, emissions, variation of performance with capacity utilisation etc. | | units as appropriate |
| Further assumptions for scenario development, e.g. frequency and period of use, number of occupants | | units as appropriate |

4.4 C1-C4 End-of-Life stage

Content as defined in product specific PCR-B document.

Table 15: Description of the scenario „Disposal of the product (C1 to C4)“

(Procedures of collection and recovery must be described in a footnote (including technical features)).

| Parameters for End-of-Life stage (C1-C4) | value | Quantity per m ³ insulation material |
|---|-------|---|
| Collection process specified by type | | kg collected separately |
| | | kg collected with mixed construction waste |
| Recovery system specified by type | | kg for re-use |
| | | kg for recycling |
| | | kg for energy recovery |
| Disposal specified by type | | kg product or material for final deposition |
| Assumptions for scenario development, e.g. transportation | | Appropriate units |

4.5 D Potential of reuse and recycling

Content as defined in product specific PCR-B document.

Table 16: Description of the scenario „re-use, recovery and recycling potential (module D)“

(Substituted primary materials resp. technologies must be declared in a separate footnote (including technical information)).

| Parameters for module D | value | unit |
|---|-------|-----------------|
| Materials for reuse, recovery or recycling from A4-A5 | | % |
| Energy recovery or secondary fuels from A4-A5 | | MJ/t resp. kg/t |
| Materials for reuse, recovery or recycling from B2-B5 | | % |
| Energy recovery or secondary fuels from B2-B5 | | MJ/t resp. kg/t |
| Materials for reuse, recovery or recycling from C1-C4 | | % |
| Energy recovery or secondary fuels from C1-C4 | | MJ/t resp. kg/t |

5 Information on data quality and data selection in accordance with EN 15941

5.1 Principles for the description of data quality

Content as defined in product specific PCR-B document.

5.2 Description of the temporal, geographical and technological representativeness of the product data

Content as defined in product specific PCR-B document.

5.3 Explanation of the averaging process

Content as defined in product specific PCR-B document.

5.4 Assessment of the data quality of the Life Cycle Inventory data

Content as defined in product specific PCR-B document.

6 LCA: results

Table 17: Parameters to describe the environmental impact

| Parameter | unit | A1-A3 | A4 | A5 | B1 | B2 | B5 | B6 | B7 | B1-B7 | C1 | C2 | C3 | C4 | C1-C4 | A-C | D |
|------------------|---|-------|----|----|----|----|----|----|----|-------|----|----|----|----|-------|-----|---|
| GWP total | kg CO ₂ eq. | | | | | | | | | | | | | | | | |
| GWP fossil fuels | kg CO ₂ eq. | | | | | | | | | | | | | | | | |
| GWP biogenic | kg CO ₂ eq. | | | | | | | | | | | | | | | | |
| GWP luluc | kg CO ₂ eq. | | | | | | | | | | | | | | | | |
| ODP | kg CFC-11 eq. | | | | | | | | | | | | | | | | |
| AP | mol H ⁺ eq. | | | | | | | | | | | | | | | | |
| EP freshwater | kg P eq. | | | | | | | | | | | | | | | | |
| EP marine | kg N eq. | | | | | | | | | | | | | | | | |
| EP terrestrial | mol N eq. | | | | | | | | | | | | | | | | |
| POCP | kg NMVOC eq. | | | | | | | | | | | | | | | | |
| ADPE | kg Sb eq. | | | | | | | | | | | | | | | | |
| ADPF | MJ H _u | | | | | | | | | | | | | | | | |
| WDP | m ³ Welt eq. entz. | | | | | | | | | | | | | | | | |
| Legende | GWP = Global warming potential; luluc = land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources WDP = Water (user) deprivation potential, deprivation-weighted water consumption | | | | | | | | | | | | | | | | |

Table 18: Additional environmental impact indicators

| Parameter | Einheit | A1-A3 | A4 | A5 | B1 | B2 | B5 | B6 | B7 | B1-B7 | C1 | C2 | C3 | C4 | C1-C4 | A-C | D |
|-----------|--|-------|----|----|----|----|----|----|----|-------|----|----|----|----|-------|-----|---|
| PM | Auftreten von Krankheiten | | | | | | | | | | | | | | | | |
| IRP | kBq U235 äquiv | | | | | | | | | | | | | | | | |
| ETP-fw | CTUe | | | | | | | | | | | | | | | | |
| HTP-c | CTUh | | | | | | | | | | | | | | | | |
| HTP-nc | CTUh | | | | | | | | | | | | | | | | |
| SQP | dimensionslos | | | | | | | | | | | | | | | | |
| Legend | PM = Potential incidence of disease due to Particulate Matter emissions; IRP = Potential Human exposure efficiency relative to U235; ETP-fw = Potential Comparative Toxic Unit for ecosystems; HTP-c = Potential Comparative Toxic Unit for humans – cancer effect; HTP-nc = Potential Comparative Toxic Unit for humans – non-cancer effect; SQP = Potential soil quality index | | | | | | | | | | | | | | | | |

Declaration number of the EPD document

Table 19 presents disclaimers which shall be declared in the project report and in the EPD with regard to the declaration of relevant core and additional environmental impact indicators according to the following classification. That can be declared in a footnote in the EPD.

Table 19: Classification of disclaimers to the declaration of core and additional environmental impact indicators

| ILCD-classification | Indicator | disclaimer |
|--|---|------------|
| ILCD-Type 1 | Global warming potential (GWP) | none |
| | Depletion potential of the stratospheric ozone layer (ODP) | none |
| | Potential incidence of disease due to PM emissions (PM) | none |
| ILCD-Type 2 | Acidification potential, Accumulated Exceedance (AP) | none |
| | Eutrophication potential, Fraction of nutrients reaching freshwater end compartment (EP-freshwater) | none |
| | Eutrophication potential, Fraction of nutrients reaching marine end compartment (EP-marine) | none |
| | Eutrophication potential, Accumulated Exceedance (EP-terrestrial) | none |
| | Formation potential of tropospheric ozone (POCP) | none |
| | Potential Human exposure efficiency relative to U235 (IRP) | 1 |
| ILCD-Type 3 | Abiotic depletion potential for non-fossil resources (ADP-minerals&metals) | 2 |
| | Abiotic depletion potential for fossil resources (ADP-fossil) | 2 |
| | Water (user) deprivation potential, deprivation-weighted water consumption (WDP) | 2 |
| | Potential Comparative Toxic Unit for ecosystems (ETP-fw) | 2 |
| | Potential Comparative Toxic Unit for humans (HTP-c) | 2 |
| | Potential Comparative Toxic Unit for humans (HTP-nc) | 2 |
| | Potential Soil quality index (SQP) | 2 |
| Disclaimer 1 – This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator. | | |
| Disclaimer 2 – The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator. | | |

Table 20: Parameters to describe the use of resources

| Parameter | Einheit | A1- A3 | A4 | A5 | B1 | B2 | B5 | B6 | B7 | B1- B7 | C1 | C2 | C3 | C4 | C1- C4 | A-C | D |
|-----------|---|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|-----------|-----|---|
| PERE | MJ H _u | | | | | | | | | | | | | | | | |
| PERM | MJ H _u | | | | | | | | | | | | | | | | |
| PERT | MJ H _u | | | | | | | | | | | | | | | | |
| PENRE | MJ H _u | | | | | | | | | | | | | | | | |
| PENRM | MJ H _u | | | | | | | | | | | | | | | | |
| PENRT | MJ H _u | | | | | | | | | | | | | | | | |
| SM | kg | | | | | | | | | | | | | | | | |
| RSF | MJ H _u | | | | | | | | | | | | | | | | |
| NRSF | MJ H _u | | | | | | | | | | | | | | | | |
| FW | m ³ | | | | | | | | | | | | | | | | |
| Legend | PERE = Renewable primary energy as energy carrier; PERM = Renewable primary energy resources as material utilization; PERT = Total use of renewable primary energy resources; PENRE = Non-renewable primary energy as energy carrier; PENRM = Non-renewable primary energy as material utilization; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of fresh water | | | | | | | | | | | | | | | | |

Table 21: Parameters describing LCA-output flows and waste categories

| Parameter | Einheit | A1- A3 | A4 | A5 | B1 | B2 | B5 | B6 | B7 | B1- B7 | C1 | C2 | C3 | C4 | C1- C4 | A-C | D |
|-----------|---|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|-----------|-----|---|
| HWD | kg | | | | | | | | | | | | | | | | |
| NHWD | kg | | | | | | | | | | | | | | | | |
| RWD | kg | | | | | | | | | | | | | | | | |
| CRU | kg | | | | | | | | | | | | | | | | |
| MFR | kg | | | | | | | | | | | | | | | | |
| MER | kg | | | | | | | | | | | | | | | | |
| EEE | MJ | | | | | | | | | | | | | | | | |
| EET | MJ | | | | | | | | | | | | | | | | |
| Legend | HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electric energy; EET = Exported thermal energy | | | | | | | | | | | | | | | | |

Table 22: Information describing the biogenic carbon content at the factory gate

| Biogenic carbon content | Unit |
|--|------|
| Biogenic carbon content in product | kg C |
| Biogenic carbon content in accompanying packaging | kg C |
| NOTE 1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂ | |

7 LCA: Interpretation

Content as defined in product specific PCR-B document.

8 Literature

Content as defined in product specific PCR-B document.

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

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

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

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

General Principles and Guidelines Part A: Calculation Rules for the Life Cycle Assessment and Requirements on the Background Report. Bau-EPD GmbH, in current version

9 Directory and Glossary

9.1 List of figures

none

9.2 List of tables

| | |
|---|----|
| Table 1: Product specific standards | 4 |
| Table 2: technical data of the declared construction product(s) | 4 |
| Table 3: Basic and auxiliary materials in mass percentage | 4 |
| Table 4: Reference service life (RSL) | 5 |
| Table 5: Declared unit..... | 6 |
| Table 6: Functional unit | 6 |
| Table 7: Declared life cycle stages | 7 |
| Table 8: Description of the scenario „Transport to building site (A4)“ ^x | 8 |
| Table 9: Description of the scenario „Installation of the product in the building (A5)“ | 8 |
| Table 10: Description of the scenario „maintenance (B2)“ based on table 9 in EN 15804 | 8 |
| Table 11: Description of the scenario „repair (B3)“ | 9 |
| Table 12: Description of scenario „replacement (B4)“ | 9 |
| Table 13: Description of scenario „refurbishment (B5)“ | 9 |
| Table 14: Description of scenarios „energy (B6)“ resp. „Water (B7)“ | 9 |
| Table 15: Description of the scenario „Disposal of the product (C1 to C4)“ | 10 |
| Table 16: Description of the scenario „re-use, recovery and recycling potential (module D)“ | 10 |
| Table 17: Parameters to describe the environmental impact | 11 |
| Table 18: Additional environmental impact indicators..... | 11 |
| Table 19: Classification of disclaimers to the declaration of core and additional environmental impact indicators | 13 |
| Table 20: Parameters to describe the use of resources | 14 |
| Table 21: Parameters describing LCA-output flows and waste categories | 14 |
| Table 22: Information describing the biogenic carbon content at the factory gate | 14 |

9.3 Abbreviations

9.3.1 Abbreviations as per EN 15804

| | |
|------|--|
| EPD | environmental product declaration |
| PCR | product category rules |
| LCA | life cycle assessment |
| LCI | life cycle inventory analysis |
| LCIA | life cycle impact assessment |
| RSL | reference service life |
| ESL | estimated service life |
| EPBD | Energy Performance of Buildings Directive |
| GWP | global warming potential |
| ODP | depletion potential of the stratospheric ozone layer |
| AP | acidification potential of soil and water |
| EP | eutrophication potential |
| POCP | formation potential of tropospheric ozone |
| ADP | abiotic depletion potential |

9.3.2 Abbreviations as per corresponding PCR

| | |
|---------|---|
| CE-mark | french: Communauté Européenne or Conformité Européenne = EC certificate of conformity |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |



Owner and Publisher

Bau EPD GmbH
Seidengasse 13/3
1070 Wien
Österreich

Tel +43 664 2427429
Mail office@bau-epd.at
Web www.bau-epd.at



Programme Operator

Bau EPD GmbH
Seidengasse 13/3
1070 Wien
Österreich

Tel +43 664 2427429
Mail office@bau-epd.at
Web www.bau-epd.at

Logo

Author of the Life Cycle Assessment

Name of creator in person
Name of Institution (if rel.)
Address
Postcode, Location
COUNTRY

Mail Person creator
Tel
Fax
Mail
Web

Logo

Holder of the declaration

Name of creator in person
Name of Institution (if rel.)
Address
Postcode, Location
COUNTRY

Tel
Fax
Mail
Web