

EPD - ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14025 and EN 15804+A1



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MARKET BASED APPROACH

Name and description of product

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picture

To be accorded with
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Company logo
of declaration owner

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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 EPD Document(s): XX
Declaration data ☐ Specific data ☐ Average data	Range of validity The product, the sites and location (region, country) on which the data of the LCA study is based must be cited. In case of average EPD the calculation of the average must be described shortly. By doing so, the representativity of the declaration with regard to the product masses covered by the LCA and the used technologies must be described. .
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) 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
Author of the Life Cycle Assessment Name of the author Institution, Address website	The CEN standard EN 15804:2014+A1 serves as the core-PCR. Independent verification of the declaration according to ISO 14025:2010 ☐ internally ☒ externally Verifier 1: Name Verifier 2: Name
Owner of the Declaration Name of the manufacturer/owner Institution, Address website	Publisher and Programme Operator Bau EPD GmbH Seidengasse 13/3 1070 Vienna Austria

DI (FH) DI DI Sarah Richter
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Note: EPDs from similar product groups from different programmes 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.

2.4 Technical data

Content as defined in product specific PCR-B document.

Table 1: 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 2: Basic and auxiliary materials in mass percentage

Components	Function	Mass fraction in percent

2.6 Production

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

Content as defined in product specific PCR-B document.

2.10 Processing/ installation

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 3: Reference service life (RSL)

Characterization	value	unit
Mineral insulating slabs in EIFS		years
Other applications of mineral insulating products		years
Reference conditions on which the RSL is based (if relevant)		Individual units

2.13 Reuse and recycling

Content as defined in product specific PCR-B document.

2.14 Disposal

Content as defined in product specific PCR-B document.

2.15 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 4: Declared unit

Characterization	value	unit
Declared unit		
Other information		
Other information		
Other information		
Calculation factor for conversion into kg		-

Table 5: Functional unit

Characterization	value	unit
Functional unit		
Other information		
Other information		
Other information		
Calculation factor for conversion into kg		-

3.2 System boundary

Content as defined in product specific PCR-B document.

Table 6: 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; MND = Module 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 Data sources

Content as defined in product specific PCR-B document.

3.7 Data quality

Content as defined in product specific PCR-B document.

3.8 Reporting period

Content as defined in product specific PCR-B document.

3.9 Allocation

Content as defined in product specific PCR-B document.

3.10 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 7: 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 8: 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);		Meaningful unit
Water use		m ³
Other resource use		kg
Electricity demand		kWh or MJ
Other energy carrier(s):		kWh or other unit (e.g. litres)
Wastage of materials on the building site before waste processing, generated by the product's installation (specified by type)		kg
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
Direct emissions to ambient air, soil and water		kg

4.3 B1-B7 use stage

Content as defined in product specific PCR-B document.

Table 9: Description of the scenario „maintenance (B2)“

Parameters maintenance (B2)	Value	Unit
Maintenance process		Description or source where description can be found -
Maintenance cycle		Number per RSL or year (not applicable if only B2 is declared)
Net freshwater consumption during maintenance		[m ³]
Ancillary materials for maintenance, (e.g. cleaning agent, specify materials)		[kg, cycle]
Other resources		[kg]
Electricity consumption		[kWh]
Other energy carriers		[MJ]
Loss of material		[kg]
Wastage material during maintenance (specify materials)		[kg]

Table 10: 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
Net freshwater consumption during repair		[m ³]
Ancillary materials (e.g. lubricant, specify materials)		[kg]
Other resources		[kg]
Electricity consumption		[kWh]
Other energy carriers		[MJ]
Loss of material		[kg]
Wastage material during repair (specify materials)		[kg]

Table 11: Description of scenarios „replacement (B4)“ resp. „refurbishment (B5)“

Parameters replacement (B4) resp. refurbishment (B5)	value	unit
Replacement cycle		Number per RSL or year
Electricity consumption		[kWh]
Liters of fuel		[l/100 km]
Exchange of worn parts during the product's life Cycle, specify materials		[kg]

Table 12: Description of scenarios „energy (B6)“ resp. „Water (B7)“

Parameters energy (B6) and water (B7)	value	unit
Net fresh water consumption		[m³]
Electricity consumption		[kWh]
Other energy carriers		[MJ]
Power output of equipment		[kW]

4.4 C1-C4 End-of-Life stage

Content as defined in product specific PCR-B document.

Table 13: 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 m³ 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

4.5 D Potential of reuse and recycling

Content as defined in product specific PCR-B document.

Table 14: 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 LCA: results

Table 15: Parameters to describe the environmental impact

Parameter	Unit in equivalents	A1-A3	A4	A5	B1	B2	B5	B6	B7	C1	C2	C3	C4	D
GWP	kg CO ₂													
ODP	kg CFC-11													
AP	kg SO ₂													
EP	kg PO ₄ ³⁻													
POCP	kg C ₂ H ₄													
ADPE	kg Sb													
ADPF	MJ H _u													
Legend	GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; 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													

Table 16: Parameters to describe the use of resources

Parameter	unit	A1-A3	A4	A5	B1	B2	B5	B6	B7	C1	C2	C3	C4	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 17: Parameters describing LCA-output flows and waste categories

Parameter	unit	A1-A3	A4	A5	B1	B2	B5	B6	B7	C1	C2	C3	C4	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												

Note: Here is the place to declare optional indicators and results, impact and/or LCI (Waterscarcity, Humantox, Landuse, Biogenic Carbon...)

6 LCA: Interpretation

Content as defined in product specific PCR-B document.

7 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

8 Directory and Glossary

8.1 List of figures

Es konnten keine Einträge für ein Abbildungsverzeichnis gefunden werden.

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8.3 Abbreviations

8.3.1 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

8.3.2 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

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