

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

ElaProof + SAND
Build Care Oy



EPD HUB, HUB- 3792

Publishing date 10 August 2025, last updated on 10 August 2025, valid until 09 August 2030.

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.1 (5 Dec 2023) and JRC characterization factors EF 3.1.

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Build Care Oy
Address	Kelatie 6, 01450 Vantaa, Finland
Contact details	info@buildcare.fi
Website	https://www.elaproof.com/

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804:2012+A2:2019/AC:2021 and ISO 14025
PCR	EPD Hub Core PCR Version 1.1, 5 Dec 2023
Sector	Construction product
Category of EPD	Third party verified EPD
Parent EPD number	-
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Virpi Rahikkala Build Care Oy
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal verification <input checked="" type="checkbox"/> External verification
EPD verifier	Magaly González Vázquez, as an authorized verifier acting for EPD Hub Limited

This EPD is intended for business-to-business and/or business-to-consumer communication. The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

PRODUCT

Product name	ElaProof + SAND
Additional labels	ElaProof + SAND Sokkelirouhe, ElaProof + SAND Seinäpinnoite, ElaProof + SAND Lattiapinnoite
Product reference	1200PB, 1200PDG, 1200PG, 1200PW, 3200WBF, 3200WDGF, 3200WGF, 3200WWF, 3200WBM, 3200WDGM, 3200WGM, 3200WWM, 3200WBR, 3200WDGR, 3200WGR, 3200WWR, 3200FBF, 3200FDGF, 3200FGF, 3200FWF, 3200FBM, 3200FDGM, 3200FGM, 3200FWM, 3200FBR, 3200FDGR, 3200FGR, 3200FWR
Place(s) of raw material origin	Europa
Place of production	Lohja, Finland
Place(s) of installation and use	Europa
Period for data	Jan2024- Dec2024
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	4,5
GTIN (Global Trade Item Number)	6430068690990; 6430068691003; 6430068691010; 6430068691027; 6430068691034; 6430068691041; 6430068691058; 6430068691065; 6430068691072; 6430068691089; 6430068691096; 6430068691102; 6430068690839; 6430068690846; 6430068690853; 6430068690860;

	6430068690877; 6430068690884; 6430068690891; 6430068690907; 6430068690914; 6430068690921; 6430068690938; 6430068690945; 6430068690952; 6430068690969; 6430068690976; 6430068690983
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	4,36

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg
Declared unit mass	1 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	0,838
GWP-total, A1-A3 (kgCO ₂ e)	0,772
Secondary material, inputs (%)	1,07
Secondary material, outputs (%)	55,8
Total energy use, A1-A3 (kWh)	3,25
Net freshwater use, A1-A3 (m ³)	0,21

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Build Care Ltd. manufactures patented ElaProof products from REACH-certified raw materials for professional and consumer use. Our highest quality environmentally friendly products are designed for protection and coating of structures and different building materials both indoor and outdoor. Our product portfolio includes, among others, radon and indoor air leak protection, coating of roofs, terraces, balconies, concrete structures and protecting various materials e.g., bitumen, brick, concrete, metal, and wood. Build Care Oy was established in 1990 in Turku, Finland, and we are based in Vantaa (Helsinki area), Finland. Our quality products are made in Finland.

PRODUCT DESCRIPTION

This EPD in an updated version of the ElaProof + SAND previous EPD due updated software with more accurate datapoints, and it covers ElaProof + SAND range of coatings both outdoor and indoor use for professionals and DIY types, e.g. terraces, stairs, balconies, and bathrooms. This EPD of multiple products, and its calculations are based on a representative product; ElaProof + SAND, color: gray, roughness: medium with packaging size of 20kg (15L). The center deviation between raw materials within different colors is below 2,5% of the total. The product consists of the ElaProof Pro/Indoor S coating and the sand in a ready-to-use mixture. ElaProof + SAND comes with three sand sizes to choose from: fine (0,05-0,2 mm), medium rough (0,1-0,6 mm), and rough (0,7-1,2 mm), and with four different colors: white, black, light grey, and dark grey. The same roughness or color and can be used to both floor and wall depending, which visual effect the customer wants. ElaProof + SAND for plinth comes only with one sand size: rough. ElaProof + SAND all grades come only in one packaging size. The calculations of this EPD have been made for the color light gray as with the base product always is ElaProof Indoor S.

ElaProof + SAND is based on the original ElaProof Indoor S product and therefore has the same basic properties; it is water-based polyacrylic emulsion. ElaProof + SAND is an economical one-component product even though it consists of two components: ElaProof Indoor S and sand. ElaProof Indoor S is produced at production line, packed as half of the 15L bucket and sand is added afterwards with only by mixing them manually. The density of the ready mixed product is around 1,3 g/cm³ and is packed as 20kg/15L bucket. The product is iso-cyanate- and solvent free, with viscosity level around 25t mPaS depending on the roughness of the sand and is ready to use.

ElaProof + SAND has pH around 8 so it is neutral with very low odor. ElaProof + SAND can be spread with hands using spatula, the finest roughness can also be sprayed. The product can be diluted, if needed, as well as tools cleaned only with water. ElaProof + SAND with all grades is M1 approved. The base product, ElaProof Indoor S, has EMICODE EC 1+. It is also CE marked construction product based to EN 13813 and EN 1504-2 and is listed in the Nordic Ecolabelling construction product database and can be used in Swan-labelled buildings. ElaProof + SAND has classified with reaction to fire as A2 FL. For the GWP value the service life is not included because the service life depends on the surface product on which ElaProof + SAND is outspread.

Even though ElaProof Pro/Indoor S is very elastic, the added sand lowers the ability of the bridging or the use as a water insulation. The reason the product has solid contain around 85 v/v% added the fact it is air drying with water evaporation, is then recommended to spread wet layer as 2 to 3 mm thickness (around 2 kg/m²) to get at least 1,0 mm thick dry layer (walls with 2,0 mm thick dry layer). The needed thickness must be spread at least with 2 layers. ElaProof + SAND with two different roughness can be used together.

Further information can be found at:
<https://www.elaproof.com/>

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	0	-
Minerals	62	Europa
Fossil materials	17	Europa
Bio-based materials	0	-
Water	21	Europa

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	0,0191

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 kg
Mass per declared unit	1 kg
Functional unit	-
Reference service life	-

SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

PRODUCT LIFE-CYCLE

SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries	
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
x	x	x	x	x	MND	MND	MND	MND	MND	MND	MND	x	x	x	x	x	
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/ demolition	Transport	Waste processing	Disposal	Reuse	Recycling

Modules not declared = MND. Modules not relevant = MNR

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

A market-based approach is used in modelling the electricity mix utilized in the factory.

The raw materials are delivered to the Build Care factory in Finland. Depending on the binder, content of water varies 56-44%. The raw materials are then mixed for roughly 3 hours at room temperature. Subsequently, ElaProof Indoor S is batched and packaged. After manufacturing and packaging the equipment's are cleaned by washing with water and after treated as municipal wastewater waste.

The packaging materials used consist of PP buckets (100% recycled (25/75% PIR/PCR) of buckets, lids, and handles) on a wooden pallet. The end ElaProof + SAND product is produced by manually mixing ElaProof Pro/Indoor S original product with silica sand by 50:50 with about 0,1% of water depending on the viscosity.

The energy consumption during manual mixing is assumed to be negligible. The use of green energy in manufacturing is demonstrated through contractual instruments (GOs, RECs, etc.), and its use is ensured throughout the validity period of this EPD.

TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurred from final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

After producing ElaProof Indoor S product, it is transported to the main warehouse, at 70 km distance from manufacturing site, where the finishing mixing is made. The finishing mixing is done only by customer orders, and picks it up from the warehouse or it is sent to the retailer. The transportation is handed by the customer when picking up the order (various vehicles, mostly vans) from the company's warehouse or it is sent from the warehouse with the customer's order (most commonly by lorry). The average transportation distance per product kg is around 225 km from which 65% is placed under 100km. There is no loss in transportation as the products are properly packaged (A4).

ElaProof + SAND is always installed on the original surface for prolonging its lifetime. Before installation the coated area should be cleaned off from dust and external items, mainly only with water or dry brushing/vacuuming. The ElaProof + SAND product can be installed by professionals or DIY using spatula for spreading (the finest roughness can be sprayed) 2 layers approximately 1,5 - 2,0 mm each to produce minimum 1,0 mm (2,0 mm on plinths) dry-film thickness (ds-% of the product is around 73). The product can be diluted, when needed, as well as equipment's can be cleaned only with water. After installation the product dries out via water evaporation losing its thickness around 30% depending on its water content.

The installation scenario consists of floorings and walls on to gypsum/pvc boards, and brick/concrete surfaces for both indoor and outdoor use.

After installation the equipment's are recommended to clean by washing only with water and after treated as municipal wastewater waste. The installation material loss is calculated of the amount, which is left on a bucket or on other installation equipment, from installation itself in total the material loss is negligible.

PRODUCT USE AND MAINTENANCE (B1-B7)

This EPD does not cover the use phase.

Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-C4, D)

At the end-of-life, in the demolition phase 100% of the waste is assumed to be collected as separate construction waste from which the product itself may not be separated (bricks/concrete, pvc) and may be removed (gypsum boards). The product undergoes the same after treatment as the surface, which it is spread on, if cannot be separated from it. The unused ElaProof + SAND can be, when dried out, disposed like buckets, as a household waste. The consumption of energy, and natural resources varies depending on the

demolition type; for this it is assumed to be the same as what the gypsum/pvc or brick/concrete floorings/walls would take, and then for the product itself the impacts of demolition are assumed zero (C1).

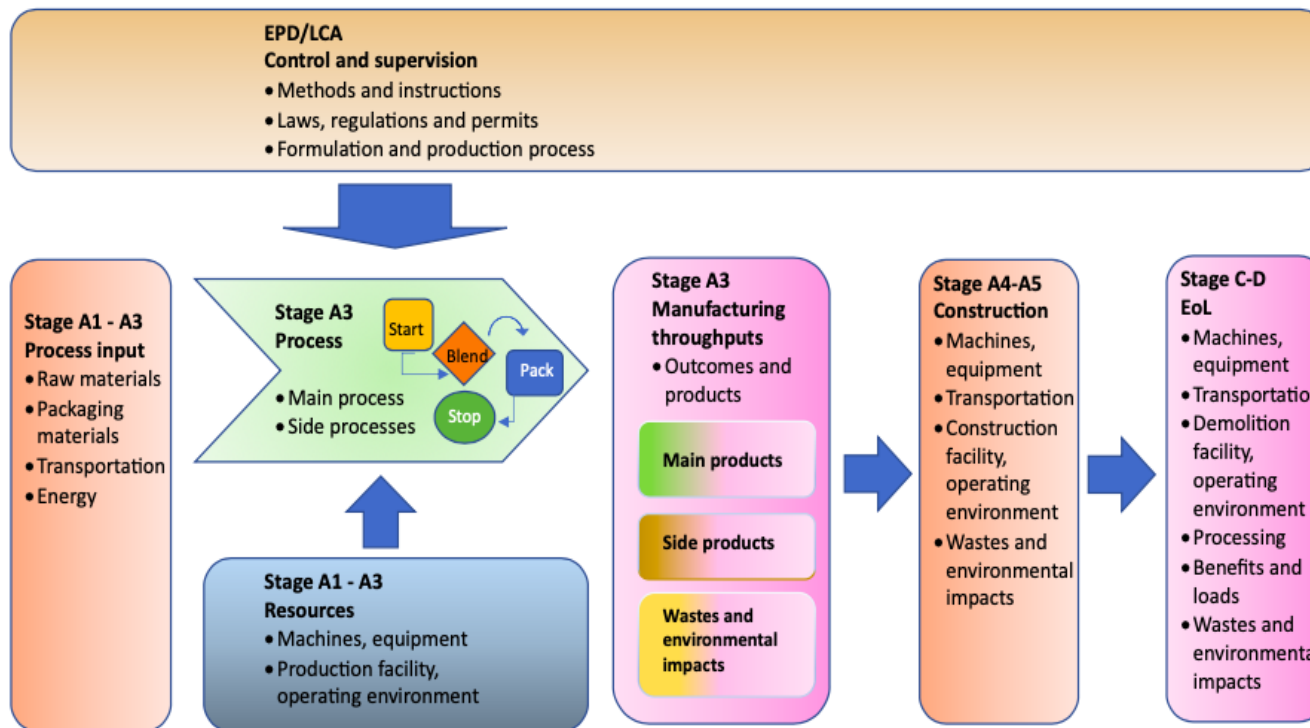
The average transportation distance has been calculated of the percentage of the surface waste material with the used datapoints waste treatment transportation distances. All end-of-life product is assumed to be sent to the closest facilities and is assumed to be in average of 120km distance from the demolition site (C2).

ElaProof + SAND end-of-life treatment was modeled based on the building material it would be applied to, considering brick/concrete, pvc and gypsum surfaces in Finland with supplied datapoints. The percentage of surfaces in the calculations has been made of the sales info and assumptions of the average coverage on the building surfaces mainly in Finland. This considered a mix of recycling, incineration, and landfill, for example gypsum recycling rate could be higher in real life (52% recycling, 48% landfill), pvc goes to the incineration or is re-used depending on the type, and brick/concrete are recyclable/-usable (C3-C4). In this EPD we use incineration for pvc's after treatment.

Benefits and loads for the system is calculated as EU scenarios for plastic and wood packaging as well as surface treatments. Heat recovered from the combustion of coating replaces the use of fossil fuels in energy production. The energy generated by burning coating replaces fossil fuel, which is assumed to be oil. The calculation assumes that the waste incineration plant has co-generation for electricity and heat. The buckets and other plastic packaging materials are re-used or collected for recycling separately as plastic waste. Return rate of the pallets from the customer is around 50%. The load and benefit of the ElaProof + SAND on brick substrate recycled to be used as aggregates; and ElaProof + SAND on gypsum substrate recycled to substitute the use of virgin material. The calculation assumes that the waste incineration plant has co-generation of electricity and heat (Finland)(D).

MANUFACTURING PROCESS

Description of the EPD process of the production:



LIFE-CYCLE ASSESSMENT

CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

The production of capital equipment, construction activities, and infrastructure, maintenance and operation of capital equipment, personnel-related activities, energy and water use related to company management and sales activities are excluded.

The water in raw materials is included and at the End of Life calculated as dry solids. The water content included as binders which evaporates at the End of Life (by drying); we add water only if needed to adjust the viscosity of the ready-to-use product.

The energy consumption difference between ElaProof Indoor S and ElaProof + SAND is estimated to be nearly the same even though ElaProof + SAND is partly manually mixed. This assumption made assumes of the energy used when manufactured sand finessing at that production line from which we cannot be accurate.

VALIDATION OF DATA

Data collection for production, transport, and packaging was conducted using time and site-specific information, as defined in the general information section on page 1 and 2. Upstream process calculations rely on generic data as defined in the Bibliography section. Manufacturer-provided specific and

generic data were used for the product's manufacturing stage. The analysis was performed in One Click LCA EPD Generator, with the 'Cut-Off, EN 15804+A2' allocation method, and characterization factors according to EN 15804:2012+A2:2019/AC:2021 and JRC EF 3.1.

ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	Partly allocated by mass or volume
Packaging material	Allocated by mass or volume
Ancillary materials	No allocation
Manufacturing energy and waste	Allocated by mass or volume

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	Multiple products
Grouping method	Based on a representative product
Variation in GWP-fossil for A1-A3, %	4,5

Covers all different colors and sand roughness of an indoor and an outdoor ElaProof + SAND products. The ElaProof + SAND product is available only in one package size.

Calculation has been made for the most sold color light grey with roughness of medium, as ElaProof Indoor S being the base product. Slight differences between colors are negligible included the fact that changes in regulations the recipe undergoes variations on for example biocides and additives. The standard deviation between raw materials within different colors is below 2,5% of the total.

In calculation the difference between silica sand roughness: fine (0,05-0,2 mm), medium rough (0,1-0,6 mm), and rough (0,7-1,2 mm) is negligible as all sand grades are the same chemical base.

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1 environmental data sources follow the methodology 'allocation, Cut-off, EN 15804+A2'.

ENVIRONMENTAL IMPACT DATA

The estimated impact results are only relative statements which do not indicate the end points of the impact categories, exceeding threshold values, safety margins or risks.

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total ¹⁾	kg CO ₂ e	7,57E-01	2,02E-02	-5,37E-03	7,72E-01	2,14E-02	1,36E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,51E-03	7,28E-02	4,40E-03	-4,32E-02
GWP – fossil	kg CO ₂ e	7,55E-01	2,02E-02	6,26E-02	8,38E-01	2,14E-02	5,37E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,51E-03	7,29E-02	4,40E-03	-4,33E-02
GWP – biogenic	kg CO ₂ e	1,28E-03	4,57E-06	-6,81E-02	-6,68E-02	4,85E-06	8,25E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,52E-06	-1,09E-04	-2,61E-06	1,80E-04
GWP – LULUC	kg CO ₂ e	2,59E-04	9,04E-06	1,04E-04	3,72E-04	9,57E-06	7,44E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,77E-06	2,26E-05	3,28E-06	-5,31E-05
Ozone depletion pot.	kg CFC ₋₁₁ e	9,96E-09	2,98E-10	1,74E-09	1,20E-08	3,16E-10	1,61E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,43E-10	4,06E-10	5,07E-11	-1,90E-08
Acidification potential	mol H ⁺ e	6,73E-03	6,89E-05	2,42E-04	7,04E-03	7,30E-05	8,90E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,38E-05	1,01E-04	6,62E-04	-1,74E-04
EP-freshwater ²⁾	kg Pe	1,43E-04	1,57E-06	9,09E-06	1,54E-04	1,67E-06	2,56E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,12E-07	5,33E-06	2,39E-07	-2,16E-05
EP-marine	kg Ne	7,21E-04	2,26E-05	5,51E-05	7,99E-04	2,40E-05	2,79E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,99E-06	3,56E-05	1,09E-05	-3,35E-05
EP-terrestrial	mol Ne	6,33E-03	2,46E-04	5,82E-04	7,16E-03	2,61E-04	1,48E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,70E-05	3,40E-04	6,18E-05	-3,23E-04
POCP (“smog”) ³⁾	kg NMVOCe	3,28E-03	1,02E-04	2,19E-04	3,60E-03	1,08E-04	5,92E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,69E-05	1,08E-04	6,05E-05	-1,54E-04
ADP-minerals & metals ⁴⁾	kg Sbe	2,91E-06	5,64E-08	1,39E-07	3,10E-06	5,97E-08	4,54E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,40E-08	1,06E-07	6,24E-09	-7,72E-07
ADP-fossil resources	MJ	1,27E+01	2,93E-01	1,30E+00	1,42E+01	3,11E-01	1,81E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,06E-01	2,15E-01	4,24E-02	-1,03E+00
Water use ⁵⁾	m ³ e depr.	4,75E-01	1,45E-03	2,02E-02	4,97E-01	1,53E-03	6,79E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,21E-04	7,79E-02	4,16E-04	-2,33E-02

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO₄e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	4,64E-08	2,02E-09	7,01E-09	5,54E-08	2,14E-09	8,32E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,16E-10	5,54E-09	1,31E-09	-6,15E-10
Ionizing radiation ⁶⁾	kBq U235e	2,65E-02	2,55E-04	1,41E-02	4,09E-02	2,70E-04	5,45E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,28E-04	7,45E-04	5,67E-05	-1,26E-02
Ecotoxicity (freshwater)	CTUe	3,48E+00	4,15E-02	6,64E-01	4,19E+00	4,39E-02	7,93E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,41E-02	3,29E+00	4,98E-02	-2,52E-01
Human toxicity, cancer	CTUh	1,78E-10	3,34E-12	9,98E-11	2,81E-10	3,53E-12	5,90E-12	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,27E-12	2,21E-11	1,51E-12	-8,35E-11
Human tox. non-cancer	CTUh	6,40E-08	1,90E-10	5,98E-10	6,48E-08	2,01E-10	7,89E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,69E-11	3,89E-10	1,16E-10	-5,22E-10
SQP ⁷⁾	-	2,14E+00	2,95E-01	5,58E+00	8,01E+00	3,13E-01	1,27E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,03E-02	1,51E-01	5,79E-02	-2,00E-01

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. 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; 7) SQP = Land use related impacts/soil quality.

USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy ⁸⁾	MJ	4,80E-01	4,02E-03	4,93E-01	9,77E-01	4,26E-03	-5,32E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,77E-03	1,48E-02	7,81E-04	-1,33E-01
Renew. PER as material	MJ	0,00E+00	0,00E+00	5,97E-01	5,97E-01	0,00E+00	-5,97E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-5,02E-03
Total use of renew. PER	MJ	4,80E-01	4,02E-03	1,09E+00	1,57E+00	4,26E-03	-1,13E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,77E-03	1,48E-02	7,81E-04	-1,38E-01
Non-re. PER as energy	MJ	9,71E+00	2,93E-01	7,10E-01	1,07E+01	3,11E-01	-1,36E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,06E-01	-1,43E+00	-6,63E-01	-1,53E+00
Non-re. PER as material	MJ	2,95E+00	0,00E+00	7,98E-01	3,75E+00	0,00E+00	-7,98E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-2,89E+00	-5,31E-02	7,81E-01
Total use of non-re. PER	MJ	1,27E+01	2,93E-01	1,51E+00	1,45E+01	3,11E-01	-2,16E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,06E-01	-4,32E+00	-7,16E-01	-7,53E-01
Secondary materials	kg	1,07E-02	1,25E-04	2,36E-03	1,32E-02	1,32E-04	2,00E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,80E-05	1,55E-04	1,48E-05	1,91E-02
Renew. secondary fuels	MJ	7,34E-05	1,59E-06	2,02E-02	2,02E-02	1,68E-06	2,03E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,06E-07	1,07E-05	2,14E-07	-2,45E-06
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m ³	1,50E-02	4,34E-05	1,94E-01	2,09E-01	4,59E-05	1,76E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,45E-05	1,56E-03	-1,13E-04	-6,36E-04

8) PER = Primary energy resources.

END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	7,78E-02	4,97E-04	3,27E-03	8,16E-02	5,26E-04	1,43E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,57E-04	1,85E-02	1,34E-04	-2,72E-03
Non-hazardous waste	kg	2,31E+00	9,19E-03	2,18E-01	2,54E+00	9,74E-03	4,38E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,23E-03	4,17E-01	1,90E-01	-1,55E+00
Radioactive waste	kg	2,13E-04	6,25E-08	3,68E-06	2,17E-04	6,62E-08	2,20E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,18E-08	1,88E-07	1,41E-08	-3,25E-06

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	5,70E-03	5,70E-03	0,00E+00	1,57E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,60E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	5,58E-01	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	2,00E-02	2,00E-02	0,00E+00	9,90E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,70E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	2,40E-01	0,00E+00	0,00E+00
Exported energy – Electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,15E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	1,00E-01	0,00E+00	0,00E+00
Exported energy – Heat	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,55E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	1,40E-01	0,00E+00	0,00E+00

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO ₂ e	7,49E-01	2,01E-02	6,15E-02	8,31E-01	2,13E-02	5,44E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,46E-03	7,29E-02	4,29E-03	-4,19E-02
Ozone depletion Pot.	kg CFC ₁₁ e	8,27E-09	2,38E-10	1,50E-09	1,00E-08	2,52E-10	1,33E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,14E-10	3,70E-10	4,05E-11	-1,90E-08
Acidification	kg SO ₂ e	5,89E-03	5,26E-05	1,96E-04	6,14E-03	5,57E-05	7,51E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,81E-05	7,74E-05	6,04E-04	-1,44E-04
Eutrophication	kg PO ₄ ³ e	1,88E-03	1,28E-05	7,85E-04	2,68E-03	1,36E-05	3,46E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,57E-06	1,68E-05	6,05E-06	-3,49E-05
POCP (“smog”)	kg C ₂ H ₄ e	4,86E-04	4,69E-06	1,96E-05	5,10E-04	4,97E-06	6,53E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,71E-06	6,47E-06	2,49E-05	-1,11E-05
ADP-elements	kg Sbe	2,81E-06	5,50E-08	1,37E-07	3,00E-06	5,82E-08	4,38E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,34E-08	7,84E-08	6,02E-09	-5,91E-07
ADP-fossil	MJ	1,19E+01	2,89E-01	1,25E+00	1,34E+01	3,06E-01	1,71E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,04E-01	2,03E-01	4,15E-02	-8,09E-01

ADDITIONAL INDICATOR – GWP-GHG

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG ⁹⁾	kg CO ₂ e	7,55E-01	2,02E-02	6,28E-02	8,38E-01	2,14E-02	5,38E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,51E-03	7,29E-02	4,40E-03	-4,34E-02

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. In addition, the characterisation factors for the flows – CH₄ fossil, CH₄ biogenic and Dinitrogen monoxide – were updated. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterisation factor for biogenic CO₂ is set to zero.

SCENARIO DOCUMENTATION

Manufacturing energy scenario documentation

Scenario parameter	Value
Electricity data source and quality	Electricity, medium voltage, residual mix (Reference product: electricity, medium voltage)
Electricity CO2e / kWh	0,66
District heating data source and quality	Electricity, medium voltage, residual mix (Reference product: electricity, medium voltage)
District heating CO2e / kWh	0,66

Transport scenario documentation A4

Scenario parameter	Value
Fuel and vehicle type. Eg, electric truck, diesel powered truck	Market for transport, freight, lorry >32 metric ton, EURO5
Average transport distance, km	225
Capacity utilization (including empty return) %	50
Bulk density of transported products	-
Volume capacity utilization factor	1

Installation scenario documentation A5

Scenario information	Value
Ancillary materials for installation (specified by material) / kg or other units as appropriate	0,0001
Water use / m ³	0,0000001
Other resource use / kg	0
Quantitative description of energy type (regional mix) and consumption during the installation process / kWh or MJ	0
Waste materials on the building site before waste processing, generated by the product's installation (specified by type) / kg	0,0765 (pallet + bucket) 0,038 (pallet, 50% is recycled of original pallet -> 32% is recycled as waste) 0,0385 (bucket; 50% is recycled of original bucket -> 40% is recycled as waste)
Output materials (specified by type) as result of waste processing at the building site e.g. collection for recycling, for energy recovery, disposal (specified by route) / kg	0,709 (dry coating on surface) 0,567 (80% brick surface; 93,6% recycling, 6,4% landfill) 0,071 (10% gypsum; 5% recycling, 95% landfill) 0,071 (10% PVC; 34% recycled, 41% incinerated, 25% landfill)
Direct emissions to ambient air, soil and water / kg	0

End of life scenario documentation

Scenario information	Value
Collection process – kg collected separately	0,0765
Collection process – kg collected with mixed waste	0,709
Recovery process – kg for re-use	0,019
Recovery process – kg for recycling	0,592
Recovery process – kg for energy recovery	0,052
Disposal (total) – kg for final deposition	0,121
Scenario assumptions e.g. transportation	120 km by lorry

VERIFICATION STATEMENT

VERIFICATION PROCESS FOR THIS EPD

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliancy with reference standard, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The digital background data for this EPD

Why does verification transparency matter? [Read more online](#)

This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried out, the presentation of environmental data in the EPD, and other additional environmental information, as present with respect to the procedural and methodological requirements in ISO 14025:2010 and reference standard.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

Magaly González Vázquez, as an authorized verifier acting for EPD Hub Limited
10.08.2025

