

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025 / ISO 21930

Glidevale Protect TF200 Thermo
Building Product Design Ltd



EPD HUB, HUB-0657

Publishing date 25 August 2023, last updated on 26 October 2023, valid until 15 August 2028.

GENERAL INFORMATION

MANUFACTURER

| | |
|-----------------|---|
| Manufacturer | Building Product Design Ltd |
| Address | Building Product Design Ltd, 2 Brooklands Road, Sale, Cheshire, M33 3SS |
| Contact details | technical@glidevaleprotect.com |
| Website | www.glidevaleprotect.com |

EPD STANDARDS, SCOPE AND VERIFICATION

| | |
|--------------------|--|
| Program operator | EPD Hub, hub@epdhub.com |
| Reference standard | EN 15804+A2:2019 and ISO 14025 |
| PCR | EPD Hub Core PCR version 1.0, 1 Feb 2022 |
| Sector | Construction product |
| Category of EPD | Third party verified EPD |
| Scope of the EPD | Cradle to gate with modules C1-C4, D |
| EPD author | Neena Chandramathy |
| EPD verification | Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal certification <input type="checkbox"/> External verification |
| EPD verifier | Elma Avdyli, as an authorized verifier acting for EPD Hub Limited |

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 | Glidevale Protect TF200 Thermo |
| Additional labels | |
| Product reference | |
| Place of production | Merthyr Tydfil and Pinxton, UK |
| Period for data | 2021 |
| Averaging in EPD | Multiple factories |
| Variation in GWP-fossil for A1-A3 | 2 % |

ENVIRONMENTAL DATA SUMMARY

| | |
|---|-----------------|
| Declared unit | 1m ² |
| Declared unit mass | 0.148 kg |
| GWP-fossil, A1-A3 (kgCO ₂ e) | 6.35E-1 |
| GWP-total, A1-A3 (kgCO ₂ e) | 6.21E-1 |
| Secondary material, inputs (%) | 0.57 |
| Secondary material, outputs (%) | 5.53 |
| Total energy use, A1-A3 (kWh) | 3.13 |
| Total water use, A1-A3 (m ³ e) | 1.8E0 |

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Building Product Design is a leading building materials specialist, offering a comprehensive range of products for new build and refurbishment schemes across a variety of sectors including private residential, social housing, commercial and education sectors. Our products are tried, trusted and tested for both traditional build and offsite construction to deliver benefits including condensation control, thermal efficiency, airtightness, damp proofing, improved air quality, natural daylight and removal of moisture. A UK producer operating from two manufacturing facilities in Nottinghamshire and South Wales, Building Product Design offers superior performance and product innovation at the very heart of our business. With almost 40 years of experience and technical expertise, all our ranges supplied by our Glidevale Protect, Passivent and Kingfisher brands are designed and developed specifically for the UK and Irish market requirements under the ISO 9001 quality standard, with the company also accredited to the international health and safety standard ISO 45001 and the environmental standard ISO 14001. Our quality hallmarks, management systems and external product performance certification are complemented by the achievement of STA Assure Gold Level status to ensure complete customer assurance.

PRODUCT DESCRIPTION

Protect TF200 Thermo is a robust, highly reflective, insulating breather membrane, developed to deliver a low emissivity reflective surface that enhances the thermal performance of an external wall. Fully independently certified by BM TRADA, the product is used on timber frame walls, Structural Insulated Panels (SIPs), Cross Laminated Timber (CLT) panels and steel frame construction. Protect TF200 Thermo provides a primary line of protection to the whole of the external wall, including joints, sole plate and intermediate floor zones during the construction process and a second line of protection against rainwater penetration during the life of the building after the external masonry is built. The

membrane is positioned on the cold side of the insulated panel to minimise the risk of condensation within the structure and to allow water vapour to escape into the vented cavity. Produced in the UK of triple ply construction, Protect TF200 Thermo features a highly reflective, yet vapour permeable low emissivity outer layer which delivers an aged thermal resistance of 0.77m²K/W (to BS EN ISO 8990 & BS EN 15976) when used in a still airspace, which is based on using typical 600mm stud centres and incorporates print onto the membrane. Protect TF200 Thermo is supplied with blue branding to aid ease of installation on the cold side of the insulation. It can be paired with the Protect VC Foil Ultra air and vapour control layer on the warm side of the insulation to deliver optimum cost savings and the ultimate in thermal efficiency. Protect TF200 Thermo is a flexible micro-perforated, multi-layer laminated, low emissivity breather membrane sheet comprising of a white non-woven Polypropylene (PP) spun-bound fibre core, co-extruded low density polyethylene (LDPE) layer and a reflective aluminium foil surface that is thermally bonded together. The product has a weight of 150g/m² and has the following characteristics: Resistance to water penetration to BS EN 13111 - Class W2 (no leakage – aged), water vapour resistance 0.36 MNs/g / 0.071 Sd to BS EN ISO 12572. Product is available in a selection of widths: 0.3, 0.6, 2.7, 3.0m x 100m and 1.5m x 50m.

Further information can be found at:

<http://www.glidevaleprotect.com/tf200thermo>

PRODUCT RAW MATERIAL MAIN COMPOSITION

| Raw material category | Amount, mass- % | Material origin |
|-----------------------|-----------------|-----------------|
| Metals | - | - |
| Minerals | - | - |
| Fossil materials | 100 | Africa |
| Bio-based materials | - | - |

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 | 0.0038 |

FUNCTIONAL UNIT AND SERVICE LIFE

| | |
|------------------------|----------|
| Declared unit | 1m2 |
| Mass per declared unit | 0.148 kg |

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 | MND | MND | 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 | Deconstr./demol. | Transport | Waste processing | Disposal | Reuse | Recovery | 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. Manufacturing waste is externally recycled and the residues are landfilled.

Protect TF200 Thermo Breather Membrane is a flexible micro-perforated, multi layer laminated, low emissivity breather membrane sheet comprising of a non-woven polypropylene (PP) spun-bound fibre core , co-extruded low density polyethylene (LDPE) tie layer and a reflective aluminium foil surface that is laminated together. The PP spunbond and aluminium foil surface is purchased from supplier located in Africa as jumbo rolls. At the manufacturing facility, the rolls of PP spunbond are

printed, perforated and converted into different rolls sizes and packed. Individual rolls are packed in 17” lay flat tubes. Cardboard and Timber pallets are used to support the product while transporting. The packed rolls are sold to the market.

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.

As per the PCR the impacts from A4 & A5 are considered optional, hence it has been excluded in this LCA.

PRODUCT USE AND MAINTENANCE (B1-B7)

This EPD does not cover the use phase.

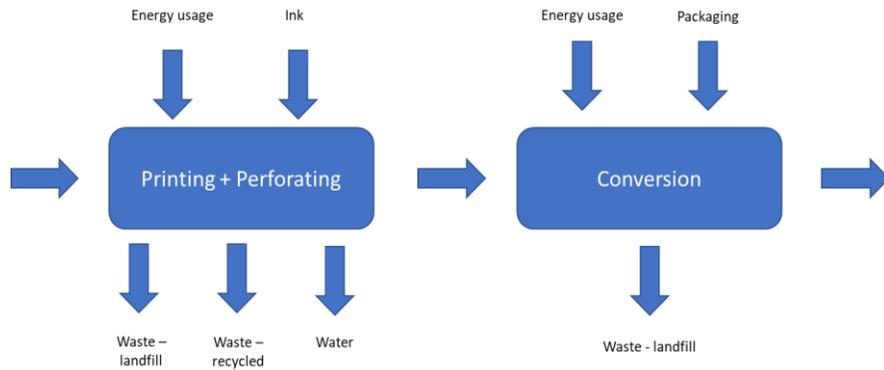
Air, soil, and water impacts during the use phase have not been studied.

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

PRODUCT END OF LIFE (C1-c4, D)

Breather membranes are typically not separated from construction waste and 100% product is assumed to be sent to landfill. Since A5 is excluded , all the packaging materials end of life is considered in C3 & C4.The packaging waste scenario is assumed based on the UK Post-consumer plastics PACKAGING waste treatment trend {PLASTICS - THE FACTS 2022}.

MANUFACTURING PROCESS



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.

ALLOCATION, ESTIMATES AND ASSUMPTIONS

Production and sales information for relevant years collected for all Protect TF200 Thermo product widths manufactured. Standard material basis weight of 0.148kg/sqm applied to achieve tonnages. Basis weights for all other products used to calculate factory annual tonnage. Assumed 3% production waste above produced rolls. Final packaging calculated from material weights and finished rolls produced. Packaging of raw materials has been calculated based on jumbo width used for conversion and a standard roll length of 2000lm. 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 materials | Allocated by mass or volume |

| | |
|--------------------------------|-----------------------------|
| Ancillary materials | Not applicable |
| Manufacturing energy and waste | Allocated by mass or volume |

AVERAGES AND VARIABILITY

| | |
|-----------------------------------|------------------------------------|
| Type of average | Multiple factories |
| Averaging method | Averaged by shares of total volume |
| Variation in GWP-fossil for A1-A3 | 2 % |

This EPD is product and factory specific and does not contain average calculations.

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. Ecoinvent and One Click LCA databases were used as sources of environmental data.

ENVIRONMENTAL IMPACT DATA

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

| 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 | 5.87E-1 | 3.37E-2 | -6.37E-5 | 6.21E-1 | 0E0 | 0E0 | MND | 0E0 | 7.33E-4 | 1.38E-2 | 1.86E-2 | -2.05E-1 |
| GWP – fossil | kg CO ₂ e | 5.88E-1 | 3.36E-2 | 1.36E-2 | 6.35E-1 | 0E0 | 0E0 | MND | 0E0 | 7.33E-4 | 1.43E-4 | 1.73E-2 | -4.78E-2 |
| GWP – biogenic | kg CO ₂ e | -1.12E-3 | 0E0 | -1.37E-2 | -1.48E-2 | 0E0 | 0E0 | MND | 0E0 | 0E0 | 1.36E-2 | 1.22E-3 | -1.57E-1 |
| GWP – LULUC | kg CO ₂ e | 1.01E-3 | 2.25E-5 | 3.72E-5 | 1.07E-3 | 0E0 | 0E0 | MND | 0E0 | 2.7E-7 | 2.24E-7 | 1.78E-6 | -4.36E-6 |
| Ozone depletion pot. | kg CFC ₁₁ e | 3.75E-8 | 6.85E-9 | 1.95E-9 | 4.63E-8 | 0E0 | 0E0 | MND | 0E0 | 1.69E-10 | 6.34E-12 | 4.77E-10 | -5.05E-9 |
| Acidification potential | mol H ⁺ e | 2.26E-3 | 9.36E-4 | 8.05E-5 | 3.28E-3 | 0E0 | 0E0 | MND | 0E0 | 3.1E-6 | 7.48E-7 | 1.42E-5 | -6.57E-5 |
| EP-freshwater ²⁾ | kg Pe | 1.16E-5 | 1.46E-7 | 5.58E-7 | 1.23E-5 | 0E0 | 0E0 | MND | 0E0 | 6E-9 | 7.41E-9 | 2.9E-8 | -9.98E-8 |
| EP-marine | kg Ne | 4.19E-4 | 2.31E-4 | 1.97E-5 | 6.7E-4 | 0E0 | 0E0 | MND | 0E0 | 9.23E-7 | 2.18E-7 | 2.25E-5 | -9.84E-6 |
| EP-terrestrial | mol Ne | 4.58E-3 | 2.57E-3 | 1.55E-4 | 7.3E-3 | 0E0 | 0E0 | MND | 0E0 | 1.02E-5 | 1.75E-6 | 5.15E-5 | -1.09E-4 |
| POCP (“smog”) ³⁾ | kg NMVOCe | 1.7E-3 | 6.7E-4 | 4.54E-5 | 2.41E-3 | 0E0 | 0E0 | MND | 0E0 | 3.26E-6 | 5.65E-7 | 1.84E-5 | -4.89E-5 |
| ADP-minerals & metals ⁴⁾ | kg Sbe | 1.97E-6 | 5.18E-8 | 5.09E-8 | 2.07E-6 | 0E0 | 0E0 | MND | 0E0 | 1.72E-9 | 2.02E-9 | 5.66E-9 | -1.83E-8 |
| ADP-fossil resources | MJ | 8.95E0 | 4.36E-1 | 2.29E-1 | 9.61E0 | 0E0 | 0E0 | MND | 0E0 | 1.1E-2 | 1.61E-3 | 3.72E-2 | -7.56E-1 |
| Water use ⁵⁾ | m ³ e depr. | 2.34E-1 | 1.42E-3 | 7.13E-3 | 2.43E-1 | 0E0 | 0E0 | MND | 0E0 | 4.93E-5 | 4.36E-5 | 2.39E-4 | 1.86E-3 |

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, PEF

| 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 | 1.36E-8 | 1.51E-9 | 9.84E-10 | 1.61E-8 | 0E0 | 0E0 | MND | 0E0 | 8.45E-11 | 3.7E-11 | 2.69E-10 | -1.86E-10 |
| Ionizing radiation ⁶⁾ | kBq U235e | 7.65E-2 | 2.02E-3 | 5.32E-3 | 8.39E-2 | 0E0 | 0E0 | MND | 0E0 | 5.24E-5 | 2.32E-5 | 1.84E-4 | -1.08E-3 |
| Ecotoxicity (freshwater) | CTUe | 3.94E0 | 2.98E-1 | 2.28E-1 | 4.47E0 | 0E0 | 0E0 | MND | 0E0 | 9.91E-3 | 1.97E-2 | 7.98E-2 | -1.68E-1 |
| Human toxicity, cancer | CTUh | 8.68E-10 | 1.87E-11 | 3.01E-11 | 9.17E-10 | 0E0 | 0E0 | MND | 0E0 | 2.43E-13 | 4.8E-13 | 1.28E-12 | -1.66E-11 |
| Human tox. non-cancer | CTUh | 2.86E-9 | 2.17E-10 | 1.55E-10 | 3.23E-9 | 0E0 | 0E0 | MND | 0E0 | 9.81E-12 | 4.09E-12 | 3.4E-11 | 1.21E-10 |
| SQP ⁷⁾ | - | 7.33E-1 | 1.45E-1 | 8.84E-1 | 1.76E0 | 0E0 | 0E0 | MND | 0E0 | 1.27E-2 | 1.15E-3 | 8.79E-2 | -3.42E-2 |

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 | 1.27E0 | 3.37E-3 | 1.09E-1 | 1.38E+0 | 0E0 | 0E0 | MND | 0E0 | 1.24E-4 | 2.11E-4 | 7.76E-4 | -2.02E-3 |
| Renew. PER as material | MJ | 2.39E-3 | 0.00E+0 | 1.19E-1 | 1.22E-1 | 0E0 | 0E0 | MND | 0E0 | 0E0 | -1.18E-1 | -3.05E-3 | 0E0 |
| Total use of renew. PER | MJ | 1.27E0 | 3.37E-3 | 2.28E-1 | 1.50E+0 | 0E0 | 0E0 | MND | 0E0 | 1.24E-4 | -1.18E-1 | -2.27E-3 | -2.02E-3 |
| Non-re. PER as energy | MJ | 9.22E0 | 4.32E-1 | 2.31E-1 | 9.88E+0 | 0E0 | 0E0 | MND | 0E0 | 1.1E-2 | 1.61E-3 | 3.72E-2 | -7.73E-1 |
| Non-re. PER as material | MJ | 5.01E0 | 0.00E+0 | -1.09E-1 | 4.90E+0 | 0E0 | 0E0 | MND | 0E0 | 0E0 | -3.47E-2 | -4.86E0 | -2.98E-2 |
| Total use of non-re. PER | MJ | 1.42E1 | 4.32E-1 | 1.22E-1 | 1.48E+1 | 0E0 | 0E0 | MND | 0E0 | 1.1E-2 | -3.31E-2 | -4.83E0 | -8.03E-1 |
| Secondary materials | kg | 8.42E-4 | 1.85E-4 | 4E-3 | 5.02E-3 | 0E0 | 0E0 | MND | 0E0 | 3.06E-6 | 4.24E-6 | 1.31E-5 | -3.79E-5 |
| Renew. secondary fuels | MJ | 1.11E-3 | 6.65E-7 | 2.66E-3 | 3.80E-3 | 0E0 | 0E0 | MND | 0E0 | 3.09E-8 | 2.47E-8 | 5.01E-7 | -1.82E-8 |
| Non-ren. secondary fuels | MJ | 0E0 | 0.00E+0 | 0E0 | 0.00E+0 | 0E0 | 0E0 | MND | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 |
| Use of net fresh water | m ³ | 1.76E0 | 3.34E-5 | 3.59E-2 | 1.80E+0 | 0E0 | 0E0 | MND | 0E0 | 1.43E-6 | 1.15E-6 | 3.95E-5 | -3.43E-2 |

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 | 1.46E-2 | 6.37E-4 | 6.02E-4 | 1.58E-2 | 0E0 | 0E0 | MND | 0E0 | 1.46E-5 | 1.79E-5 | 0E0 | -3.53E-4 |
| Non-hazardous waste | kg | 4.35E-1 | 6.11E-3 | 1.43E-2 | 4.56E-1 | 0E0 | 0E0 | MND | 0E0 | 2.4E-4 | 3.45E-4 | 1.48E-1 | 1.07E-1 |
| Radioactive waste | kg | 2.16E-4 | 3.29E-6 | 1.37E-6 | 2.21E-4 | 0E0 | 0E0 | MND | 0E0 | 7.37E-8 | 7.3E-9 | 0E0 | -1.03E-7 |

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 | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | MND | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 |
| Materials for recycling | kg | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | MND | 0E0 | 0E0 | 6.26E-4 | 0E0 | 0E0 |
| Materials for energy rec | kg | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | MND | 0E0 | 0E0 | 7.56E-3 | 0E0 | 0E0 |
| Exported energy | MJ | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | MND | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 |

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.

Elma Avdyli, as an authorized verifier acting for EPD Hub Limited

Updated 26.10.2023

