

ENVIRONMENTAL PRODUCT DECLARATION

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

LIGHTLY CUSTOMIZED FOR RUBBER HITS THE ROAD LIMITED USING CUSTOM WORD REPORT TEMPLATES

Perfil Madera Plástica

Timberecco SPA



EPD HUB, HUB-3345

Published on 23.05.2025, last updated on 23.05.2025, valid until 23.05.2030

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Timberecco SPA
Address	Las Dalias 3163, Macul, Región Metropolitana, Chile.
Contact details	sellena@timberecco.cl
Website	https://timberecco.cl/

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 options, A4-A5, and modules C1-C4, D
EPD author	Centro Tecnológico para la Innovación en la Construcción
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal certification ☑ External verification
EPD verifier	Imane Uald Lamkaddam as an authorized verifier for EPD Hub

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	Perfil Madera Plástica
Additional labels	T10 - R5
Product reference	
Place of production	Santiago, Chile
Period for data	01/06/2023 - 31/05/2024
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3	10 %

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg
Declared unit mass	1 kg
GWP-fossil, A1-A3 (kgCO2e)	9,28E+00
GWP-total, A1-A3 (kgCO2e)	9,05E+00
Secondary material, inputs (%)	31,3
Secondary material, outputs (%)	53,3
Total energy use, A1-A3 (kWh)	30
Total water use, A1-A3 (m3e)	0,07

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Timberecco is a company that recycles plastic waste and transforms it into a material that functionally resembles natural wood.

PRODUCT DESCRIPTION

Timberecco Boards and Slats can be used in architectural construction projects thanks to their lightweight nature. This allows for the creation of durable, resistant, and maintenance-free sunshades, louvers, and ventilated facades.

Further information can be found at https://timberecco.cl/.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals	0	
Minerals	0	
Fossil materials	100	Chile
Bio-based materials	0	

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	0,068

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	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.

The product is made from 100% recycled plastic, composed of Polypropylene (PP), High-Density Polyethylene (HDPE), and a small percentage of Low-Density Polyethylene (LDPE), which gives it high resistance to weathering, saline environments, and extreme conditions. This material is ideal for outdoor applications, as it does not rot, splinter, or rust like traditional materials. Additionally, it is completely immune to insect and rodent activity and requires minimal maintenance.

For the manufacture of the profiles, the pelletized, ground, or extruded material is fed into the extruder machine along with the desired color, which is then placed into specific molds that give it shape. The product is then cooled in a tank using water to ensure its dimensional stability and quality. The finished product is packaged using plastic straps and metal fasteners to ensure safe transport. Finally, the ready and packaged products are transported to the construction site, ensuring easy handling and perfect condition upon arrival.

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.

The transport distance is defined according to the applicable PCR and is estimated at an average of 100 km from the Timberecco plant to the construction site, using a truck as the mode of transport. A vehicle volume utilization factor of 1 is assumed, i.e., full load. Although this value may vary in practice, the variation is considered insignificant, as the impact of transport emissions on the overall LCA results is low.

Empty return trips are not considered, as it is assumed that return journeys are used by the transport company to serve other clients. No losses occur during transport, as Timberecco products are properly packaged and secured, minimizing the risk of damage.

For stage A5 (installation on site), the environmental impacts associated with discarded packaging materials are considered, including the release of biogenic CO_2 from wooden pallets. The impacts of the production of these materials, their processing, and the management of the waste generated during the installation process are also included.

During installation, the use of fastening elements is considered, typically including metal fasteners and support elements, depending on the

assembly system used. Water is also used for cleaning residues or installation debris, without the generation of significant hazardous waste.

PRODUCT USE AND MAINTENANCE (B1-B7)

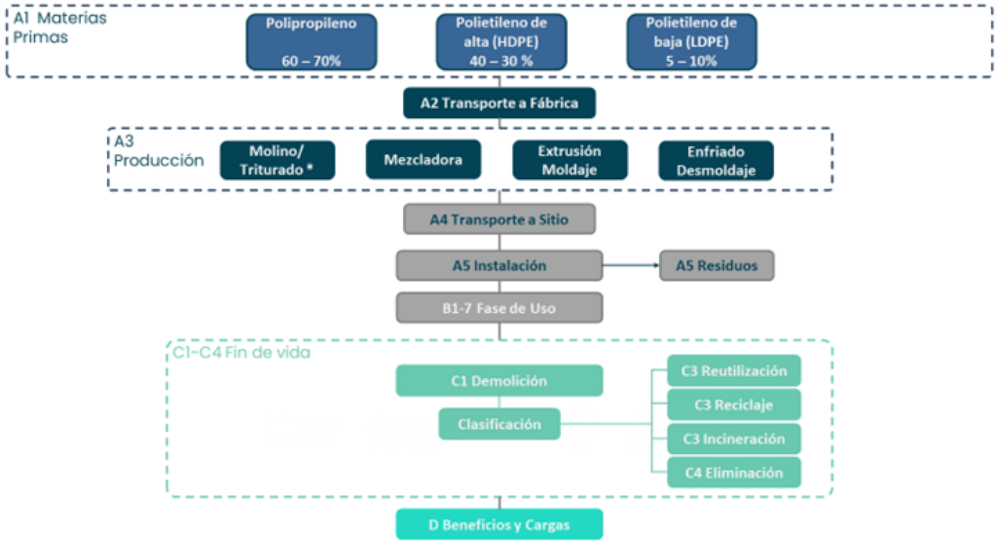
This EPD does not cover the use phase.
Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-c4, D)

Since the consumption of energy and natural resources is insignificant for the disassembly of end-of-life products, it is assumed that the demolition impacts are negligible (C1). It is considered that the product, at the end of its useful life, is transported to the nearest waste management facilities by truck, with an estimated distance of 100 km (C2). 100% of the product at the end of its life is collected separately at the demolition site; of this, 7% of the plastics are sent for recycling, and 0% is sent to incineration facilities (C3). 89% of the plastic materials of the product at the end of its life end up in landfills (C4), and 4% ends up dispersed in the ecosystem (ASIPLA, 2019).

Due to its recycling potential, the product at the end of its life becomes recycled TIMBERECCO PLASTIC COMPOSITE (Module D).

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

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	No allocation
Packaging materials	No allocation
Ancillary materials	No allocation
Manufacturing energy and waste	No allocation

AVERAGES AND VARIABILITY

Type of average	Multiple products
Averaging method	Averaged by shares of total mass
Variation in GWP-fossil for A1-A3	10 %

In this study, the results reflect the average of the two most representative products, the T10 and R5 boards, both manufactured by the same manufacturer and in the same production plant. This approach ensures that the life cycle assessment is consistent and accurate, capturing the characteristics and environmental impact of these specific Timberecco products.

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 v3.8 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_2e	8,07E+00	2,27E-02	9,61E-01	9,05E+00	1,20E-01	4,05E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,76E-02	8,03E-01	1,40E-01	-2,08E+00
GWP – fossil	kg CO_2e	8,05E+00	2,27E-02	1,21E+00	9,28E+00	1,19E-01	1,53E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,76E-02	8,03E-01	1,40E-01	-2,03E+00
GWP – biogenic	kg CO_2e	0,00E+00	2,63E-07	-2,52E-01	-2,52E-01	0,00E+00	2,52E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP – LULUC	kg CO_2e	1,82E-02	1,32E-05	8,02E-04	1,90E-02	4,87E-05	3,76E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,18E-06	7,10E-05	1,14E-05	-4,94E-02
Ozone depletion pot.	kg CFC_{-11}e	2,58E-07	4,65E-09	3,61E-08	2,99E-07	2,63E-08	2,66E-09	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,89E-09	2,95E-09	3,11E-09	-1,67E-07
Acidification potential	mol H^+e	4,82E-02	1,16E-04	8,81E-03	5,71E-02	4,94E-04	1,52E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,29E-05	3,23E-04	9,11E-05	-2,17E-02
EP-freshwater[2)]	kg Pe	2,37E-04	2,77E-07	8,88E-05	3,26E-04	1,01E-06	1,32E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,49E-07	1,53E-06	1,90E-07	-1,05E-04
EP-marine	kg Ne	7,61E-03	3,45E-05	1,90E-03	9,54E-03	1,44E-04	7,86E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,13E-05	1,11E-04	5,50E-05	-2,58E-03
EP-terrestrial	mol Ne	8,38E-02	3,83E-04	2,00E-02	1,04E-01	1,59E-03	4,42E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,35E-04	1,13E-03	3,32E-04	-3,07E-02
POCP ("smog")[3)]	kg NMVOCe	2,61E-02	1,23E-04	5,57E-03	3,18E-02	4,85E-04	1,45E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,16E-05	3,30E-04	1,26E-04	-8,51E-03
ADP-minerals & metals[4)]	kg Sbe	1,84E-05	2,49E-07	3,81E-06	2,25E-05	4,16E-07	1,81E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,12E-08	1,31E-06	3,61E-08	4,21E-07
ADP-fossil resources	MJ	1,11E+02	3,24E-01	1,86E+01	1,30E+02	1,73E+00	3,22E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,55E-01	3,71E-01	2,43E-01	4,08E+00
Water use[5)]	m^3e depr.	2,50E+00	2,03E-03	3,08E-01	2,81E+00	7,57E-03	1,10E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,12E-03	1,63E-02	1,53E-03	-7,80E-01

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	5,81E-07	2,35E-09	6,54E-08	6,49E-07	1,02E-08	2,36E-09	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,50E-09	2,15E-08	1,79E-09	-3,36E-07
Ionizing radiation[6)]	kBq U235e	2,00E-01	1,69E-03	3,18E-02	2,34E-01	8,03E-03	1,84E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,19E-03	2,54E-03	1,18E-03	-1,74E-01
Ecotoxicity (freshwater)	CTUe	1,92E+02	3,51E-01	2,89E+01	2,21E+02	1,59E+00	1,35E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,35E-01	2,40E+00	1,19E+01	-8,25E+01
Human toxicity, cancer	CTUh	8,54E-09	2,71E-11	5,34E-10	9,10E-09	4,47E-11	9,64E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,60E-12	3,08E-10	8,33E-12	-1,02E-09
Human tox. non-cancer	CTUh	1,60E-07	3,89E-10	1,37E-08	1,74E-07	1,48E-09	7,76E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,19E-10	2,40E-09	1,66E-10	-7,48E-08
SQP[7)]	-	1,47E+01	2,02E-01	3,69E+01	5,18E+01	1,20E+00	2,03E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,77E-01	6,81E-01	5,73E-01	-3,84E+02

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	7,20E+00	6,59E-03	5,47E+00	1,27E+01	2,03E-02	2,38E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,99E-03	4,21E-02	5,01E-03	-5,78E+01
Renew. PER as material	MJ	0,00E+00	0,00E+00	2,35E+00	2,35E+00	0,00E+00	-2,35E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of renew. PER	MJ	7,20E+00	6,59E-03	7,82E+00	1,50E+01	2,03E-02	-2,32E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,99E-03	4,21E-02	5,01E-03	-5,78E+01
Non-re. PER as energy	MJ	8,10E+01	3,24E-01	1,40E+01	9,53E+01	1,73E+00	3,22E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,55E-01	3,71E-01	2,43E-01	-1,42E+01
Non-re. PER as material	MJ	5,27E+01	0,00E+00	4,58E+00	5,73E+01	0,00E+00	-1,29E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-3,11E+01	-2,18E+01	0,00E+00
Total use of non-re. PER	MJ	1,34E+02	3,24E-01	1,86E+01	1,53E+02	1,73E+00	-9,64E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,55E-01	-3,07E+01	-2,16E+01	-1,42E+01
Secondary materials	kg	3,13E-01	1,49E-04	2,54E-03	3,15E-01	5,69E-04	1,47E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,39E-05	1,86E-03	8,54E-05	-1,46E-01
Renew. secondary fuels	MJ	2,43E-04	1,48E-06	5,40E-03	5,64E-03	7,37E-06	5,81E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,09E-06	1,89E-05	3,35E-06	7,14E-02
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	5,81E-02	5,27E-05	7,43E-03	6,56E-02	2,04E-04	2,33E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,02E-05	3,67E-04	2,57E-04	-2,27E-02

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	1,35E+00	7,00E-04	1,53E-01	1,50E+00	2,49E-03	4,07E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,67E-04	5,76E-03	0,00E+00	-7,21E-01
Non-hazardous waste	kg	9,73E+00	1,22E-02	3,28E+00	1,30E+01	3,98E-02	1,13E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,87E-03	3,21E-01	9,63E-01	-3,44E+00
Radioactive waste	kg	1,09E-04	2,10E-06	1,46E-05	1,26E-04	1,14E-05	1,20E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,69E-06	1,29E-06	0,00E+00	-9,16E-05

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	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
Materials for recycling	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,74E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	7,37E-01	0,00E+00	0,00E+00
Materials for energy rec	kg	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
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,12E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	7,79E+00	0,00E+00	0,00E+00

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930

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_2e	7,78E+00	2,24E-02	1,19E+00	8,99E+00	1,18E-01	1,67E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,74E-02	8,07E-01	1,14E-01	-2,03E+00
Ozone depletion Pot.	kg CFC_{-11}e	2,20E-07	3,69E-09	3,00E-08	2,54E-07	2,09E-08	2,36E-09	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,08E-09	2,54E-09	2,47E-09	-1,38E-07
Acidification	kg SO_2e	4,05E-02	9,03E-05	7,17E-03	4,78E-02	3,85E-04	1,14E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,69E-05	2,45E-04	6,94E-05	-1,86E-02
Eutrophication	kg PO_4^3e	1,06E-02	2,27E-05	3,99E-03	1,46E-02	8,84E-05	3,61E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,30E-05	7,19E-04	5,27E-03	-4,31E-03
POCP (“smog”)	kg C_2H_4e	2,61E-03	6,62E-06	3,26E-04	2,94E-03	1,56E-05	1,30E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,31E-06	2,15E-05	2,08E-05	-1,10E-03
ADP-elements	kg Sbe	5,83E-05	2,47E-07	3,73E-06	6,22E-05	4,06E-07	1,65E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,97E-08	1,30E-06	3,48E-08	8,99E-07
ADP-fossil	MJ	1,11E+02	3,24E-01	1,86E+01	1,30E+02	1,73E+00	3,22E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,55E-01	3,71E-01	2,43E-01	4,07E+00

ENVIRONMENTAL IMPACTS – GWP-GHG - THE INTERNATIONAL EPD SYSTEM

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_2e	8,07E+00	2,27E-02	1,21E+00	9,30E+00	1,20E-01	1,53E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-2,08E+00

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product as defined by IPCC AR 5 (IPCC 2013). In addition, the characterisation factors for the flows - CH4 fossil, CH4 biogenic and Dinitrogen monoxide - were updated in line with the guidance of IES PCR 1.2.5 Annex 1. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterization factor for biogenic CO2 is set to zero.

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.

Imane Uald Lamkaddam as an authorized verifier for EPD Hub Limited
23.05.2025

