ENVIRONMENTAL PRODUCT DECLARATION

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

Inspection Hatch | PTL, PTLS, PTLMS
Kiilax Oy

EPD HUB, HUB-2239

Publishing date 10 January 2025, last updated on 10 January 2025, valid until 9 January 2030.

Created with One Click LCA

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Kiilax Oy
Address	Levytie 1 | 80100 Joensuu | Finland
Contact details	info@kiilax.fi
Website	www.kiilax.fi

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804+A2:2019 und 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, and modules C1-C4, D
EPD author	Saku Ruusila, Kiilax Oy
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal certification ☑ External verification
EPD verifier	Magaly González Vázquez, 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	Inspection Hatch: PTL, PTLS, PTLMS
Additional labels	-
Product reference	-
Place of production	Joensuu, Finland
Period for data	1.1.2022 – 31.12.2022
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3	7% / 3%

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg of Inspection Hatch
Declared unit mass	1 kg
GWP-fossil, A1-A3 ($kgCO_2e$)	2,48E+00
GWP-total, A1-A3 ($kgCO_2e$)	2,11E+00
Secondary material, inputs (%)	86.3
Secondary material, outputs (%)	84.7
Total energy use, A1-A3 (kWh)	11.2
Net freshwater use, A1-A3 (m^3)	0.03

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Kiilax products are high-quality and user-friendly components designed for construction companies, hardware stores, and private builders. The most well-known products are inspection hatches, building wedges, plywood stair protectors, air heat pump casings, and fixed furniture. Kiilax also specializes in precision board products Kiilax Oy was founded in 1993 and is located in Joensuu, Eastern Finland (Further information: www.kiilax.fi).

Kiilax Oy is part of Bergman & Beving AB, a Swedish-listed company group founded in 1906. The group's independent companies operate in their own specialized areas, providing value-added solutions to industrial and construction customers. Bergman & Beving is listed on the Stockholm Nasdaq Stock Exchange, and the group comprises around 20 companies that operate in more than 25 countries.

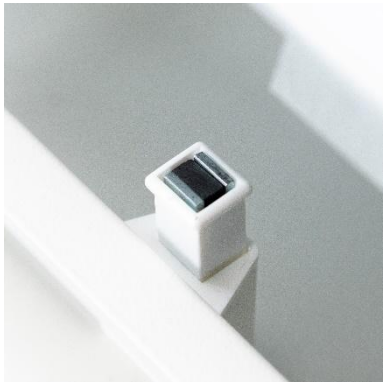
PTL3030S – Inspection hatch with triangle lock.

PRODUCT DESCRIPTION

The maintenance hatch ensures easy access to an object requiring inspection or maintenance inside the wall or ceiling structure. The structures of Kiilax hatches vary from a simple cover plate to fire-protected (EI30 or EI60) and sound-proof hatches. The size of the standard stock panels varies from 150×150 mm to 600×600 mm and can be equipped with a latch or lock structure. The patented quick fastening system ensures quick installation.

This EPD applies average calculation of three inspection hatch models:

- **PTL** | Conventional inspection hatch 300×300 mm
- **PTLS** | Conventional inspection hatch, lockable 300×300 mm
- **PTLMS** | Conventional inspection hatch with magnetic push-up lock 300×300 mm



PTL3030MS - Inspection hatch with magnetic push-up lock.

PRODUCT RAW MATERIAL MAIN COMPOSITION

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

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	-
Biogenic carbon content in packaging, kg C	0.1

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 kg of Inspection Hatch
Mass per declared unit	1 kg
Functional unit	-
Reference service life	N/A

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	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	Deconstruction/ demolition	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.

Inspection hatches are designed for the maintenance of HVAC objects behind wall or ceiling structures. Kiilax inspection hatches are installed with bendable quick fasteners on a wall or ceiling (1-26 mm), or with screw fastening, e.g. on a wooden or stone wall. Installation does not require any separate support structure or frame behind the wall. The most common sizes are 300×300 mm, 400×400 mm and 500×500 mm.

- **Conventional inspection hatch (PTL)** stock sizes range from 150–600 mm. When closed, the lid locks into the body's knobs – opening is done with a screwdriver, for example.
- **The push-up hatch (PTLMS)** is particularly practical in places where the hatch is used frequently. The door opens and closes by pressing the magnetic lock on the cover.
- **The lockable model (PTLS)** is similarly aimed at public spaces where locking with a triangular key or standard lock is required.

Kiilax hatches are made of 1 mm thick hot dip galvanized steel sheet, powder-coated on one side. The most important raw material is steel, along with the energy used for its processing and transportation. Manufacturing consists of several different stages of steel processing, such as rollforming, cutting, punching, and welding. During manufacturing, 1.2% of scrap is considered as production loss. Hatches are packaged in corrugated boxes and on wooden pallets.

This average EPD calculation has been made for the most common hatch, size 300×300 mm.

- The material transport distances have been collected from suppliers. If the distances were not known, Material for -datasets have been uploaded.
- The electricity used in Kiilax's production is certified as green electricity, provided with Guarantee of Origin.
- Energy consumption data was collected at the factory level and allocated based on product mass.
- Transport distances for waste were determined based on the quantities and distances reported by the waste handler

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 manufacturing plant and warehouse are located in Joensuu, Eastern Finland. The average transportation distance from the manufacturing site to the construction site is estimated at 410 km, with lorry transportation assumed. Empty returns are not considered, as it is assumed that the return trips are utilized by the transportation company to serve other clients. Transportation does not result in losses, as the products are properly packaged and easy to deliver.

Installation is performed manually and does not require additional energy or materials. Packaging waste primarily consists of cardboard boxes, wooden pallets, and polyethylene wraps.

For this calculation, a European packaging material scenario was applied. The assumed transportation distances for waste management are as follows: 50 kilometres to landfill, 100 kilometres to energy incineration, or 150 kilometres to recycling facilities.

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)

The information related to dismantling is based on the assumption of medium-sized plants in the EU. During the recycling process, the end-of-life product is converted into recycled steel, while the wooden pallet is burned to energy (D). Inspection hatches are easy to remove and sort during building dismantling. It is assumed that 100% of the waste is collected and transported to a waste treatment centre.

C1: The energy source for unloading is the electricity used by the machinery. Unloading is estimated to consume 0.01 kWh per kilogram of product.

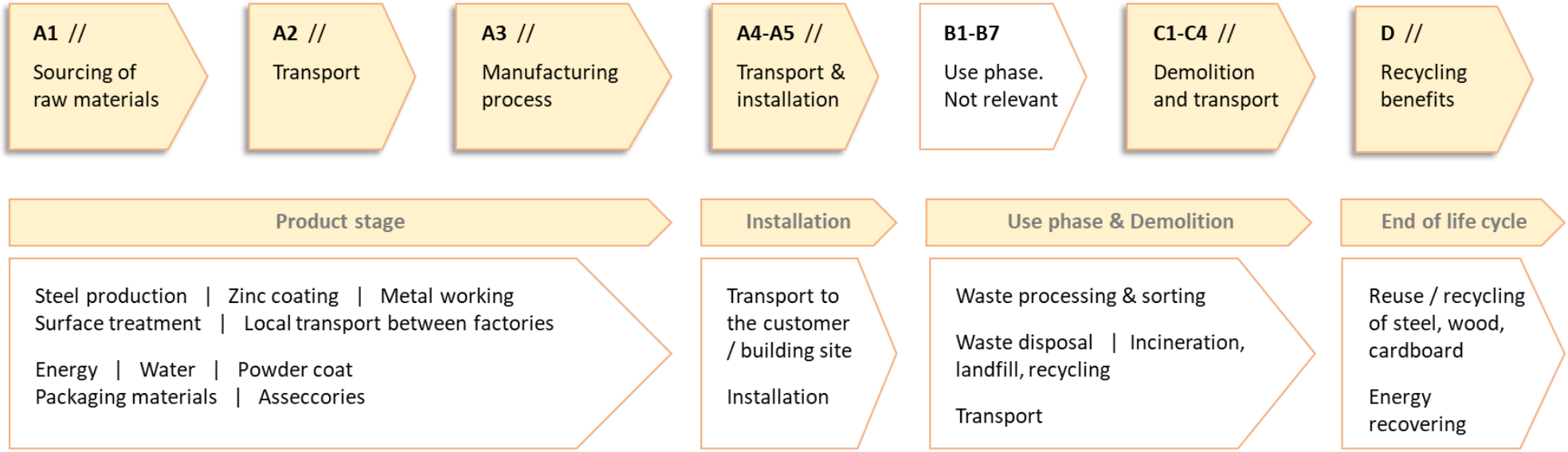
C2: The average transport distance to the waste treatment centre is assumed to be 50 km, with transportation carried out by truck.

C3–C4: According to the World Steel Association (2020), approximately 85% of the steel is assumed to be recyclable, while the remaining 15% is sent to landfill. As a conservative approach, it is assumed that all plastic components from the product are disposed of in landfill.

D: The benefits of recycling or incinerating packaging materials are accounted for in Module D. Additionally, the benefits of product steel recycling are included, but only primary steel is considered in the calculations.

MANUFACTURING PROCESS

The Kiilax manufacturing process is described in the flow chart below.



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 material	Allocated by mass or volume
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

AVERAGES AND VARIABILITY

Type of average	Multiple products
Averaging method	Averaged by shares of total mass
Variation in GWP-fossil for A1-A3	7 % / 3 %

This averaged EPD includes three different models of inspection hatches. Those main difference lies in the locking mechanism. All models are manufactured in the same factory and they have the same basic purpose.

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 v3.8, Plastics Europe, Federal LCA Commons and One Click LCA databases 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	2,06E+00	2,81E-01	-2,31E-01	2,11E+00	8,52E-02	3,82E-01	MND	MND	MND	MND	MND	MND	MND	4,02E-03	4,68E-03	1,86E-02	8,01E-04	-4,78E-01
GWP – fossil	kg CO_2e	2,05E+00	2,81E-01	1,44E-01	2,48E+00	8,52E-02	6,40E-03	MND	MND	MND	MND	MND	MND	MND	4,01E-03	4,67E-03	1,85E-02	8,00E-04	-4,85E-01
GWP – biogenic	kg CO_2e	5,99E-04	0,00E+00	-3,76E-01	-3,75E-01	0,00E+00	3,76E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,30E-03
GWP – LULUC	kg CO_2e	3,02E-03	1,05E-04	9,43E-04	4,06E-03	3,34E-05	4,16E-06	MND	MND	MND	MND	MND	MND	MND	9,39E-06	1,72E-06	2,43E-05	7,43E-07	-2,50E-04
Ozone depletion pot.	kg $CFC\text{-}_{11}$e	1,48E-07	6,47E-08	1,80E-08	2,31E-07	1,97E-08	6,29E-10	MND	MND	MND	MND	MND	MND	MND	2,03E-10	1,08E-09	2,29E-09	3,18E-10	-2,05E-08
Acidification potential	mol H^+e	3,07E-02	1,24E-03	8,15E-04	3,27E-02	3,46E-04	3,23E-05	MND	MND	MND	MND	MND	MND	MND	2,29E-05	1,98E-05	2,36E-04	7,39E-06	-2,32E-03
EP-freshwater[2)]	kg Pe	1,10E-04	2,27E-06	1,18E-05	1,24E-04	5,98E-07	1,61E-07	MND	MND	MND	MND	MND	MND	MND	4,26E-07	3,83E-08	9,95E-07	8,25E-09	-2,36E-05
EP-marine	kg Ne	2,39E-03	3,67E-04	3,77E-04	3,13E-03	1,03E-04	3,81E-05	MND	MND	MND	MND	MND	MND	MND	3,04E-06	5,88E-06	4,98E-05	2,57E-06	-4,89E-04
EP-terrestrial	mol Ne	1,14E-01	4,05E-03	2,51E-03	1,21E-01	1,14E-03	1,07E-04	MND	MND	MND	MND	MND	MND	MND	3,45E-05	6,49E-05	5,75E-04	2,81E-05	-5,61E-03
POCP ("smog")[3)]	kg NMVOCe	7,41E-03	1,28E-03	5,94E-04	9,28E-03	3,49E-04	3,53E-05	MND	MND	MND	MND	MND	MND	MND	9,46E-06	2,08E-05	1,58E-04	8,19E-06	-2,51E-03
ADP-minerals & metals[4)]	kg Sbe	8,34E-05	6,71E-07	1,02E-06	8,51E-05	3,02E-07	4,80E-08	MND	MND	MND	MND	MND	MND	MND	3,69E-08	1,10E-08	2,50E-06	1,81E-09	-3,77E-05
ADP-fossil resources	MJ	2,86E+01	4,22E+00	2,19E+00	3,50E+01	1,26E+00	6,66E-02	MND	MND	MND	MND	MND	MND	MND	8,50E-02	7,02E-02	2,51E-01	2,15E-02	-4,57E+00
Water use[5)]	m^3e depr.	1,19E+00	1,89E-02	1,02E-01	1,31E+00	5,85E-03	4,25E-03	MND	MND	MND	MND	MND	MND	MND	2,26E-03	3,14E-04	4,88E-03	6,85E-05	-1,41E-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	3,28E-07	3,19E-08	1,23E-08	3,73E-07	7,35E-09	4,84E-10	MND	MND	MND	MND	MND	MND	MND	7,49E-11	5,39E-10	3,08E-09	1,49E-10	-3,16E-08
Ionizing radiation[6)]	kBq U235e	3,54E-01	2,02E-02	1,69E-02	3,91E-01	6,62E-03	6,31E-04	MND	MND	MND	MND	MND	MND	MND	2,28E-03	3,34E-04	2,80E-03	9,75E-05	1,71E-03
Ecotoxicity (freshwater)	CTUe	7,92E+01	3,77E+00	3,21E+00	8,62E+01	1,05E+00	2,55E-01	MND	MND	MND	MND	MND	MND	MND	5,78E-02	6,31E-02	1,14E+00	1,41E-02	-3,11E+01
Human toxicity, cancer	CTUh	2,47E-08	9,44E-11	2,75E-10	2,51E-08	3,25E-11	1,01E-11	MND	MND	MND	MND	MND	MND	MND	1,89E-12	1,55E-12	3,49E-11	3,52E-13	4,21E-09
Human tox. non-cancer	CTUh	6,53E-08	3,73E-09	2,26E-09	7,12E-08	1,07E-09	2,62E-10	MND	MND	MND	MND	MND	MND	MND	6,22E-11	6,25E-11	1,56E-09	9,21E-12	-1,88E-08
SQP[7)]	-	6,83E+00	4,76E+00	2,00E+01	3,16E+01	8,85E-01	7,24E-02	MND	MND	MND	MND	MND	MND	MND	1,54E-02	8,09E-02	5,06E-01	4,61E-02	-1,82E+00

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	3,07E+00	4,81E-02	2,45E+00	5,57E+00	1,81E-02	4,33E-03	MND	MND	MND	MND	MND	MND	MND	1,69E-02	7,91E-04	4,46E-02	1,88E-04	-5,18E-01
Renew. PER as material	MJ	0,00E+00	0,00E+00	3,27E+00	3,27E+00	0,00E+00	-3,27E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,49E-01
Total use of renew. PER	MJ	3,07E+00	4,81E-02	5,72E+00	8,83E+00	1,81E-02	-3,26E+00	MND	MND	MND	MND	MND	MND	MND	1,69E-02	7,91E-04	4,46E-02	1,88E-04	-3,69E-01
Non-re. PER as energy	MJ	2,85E+01	4,22E+00	2,06E+00	3,48E+01	1,26E+00	6,66E-02	MND	MND	MND	MND	MND	MND	MND	8,48E-02	7,02E-02	2,52E-01	2,16E-02	-4,58E+00
Non-re. PER as material	MJ	0,00E+00	0,00E+00	1,26E-01	1,26E-01	0,00E+00	-1,26E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,32E-02
Total use of non-re. PER	MJ	2,85E+01	4,22E+00	2,19E+00	3,49E+01	1,26E+00	-5,94E-02	MND	MND	MND	MND	MND	MND	MND	8,48E-02	7,02E-02	2,52E-01	2,16E-02	-4,54E+00
Secondary materials	kg	8,63E-01	1,18E-03	1,37E-01	1,00E+00	4,24E-04	8,62E-05	MND	MND	MND	MND	MND	MND	MND	8,66E-06	1,95E-05	2,80E-04	4,53E-06	2,84E-01
Renew. secondary fuels	MJ	2,87E-04	1,19E-05	6,24E-02	6,27E-02	4,67E-06	5,42E-07	MND	MND	MND	MND	MND	MND	MND	7,07E-08	1,97E-07	1,46E-05	1,19E-07	-1,87E-04
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	3,10E-02	5,44E-04	2,29E-03	3,38E-02	1,59E-04	3,51E-05	MND	MND	MND	MND	MND	MND	MND	7,17E-05	9,09E-06	1,47E-04	2,36E-05	-2,39E-03

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	6,86E-01	5,53E-03	8,12E-03	7,00E-01	1,42E-03	7,69E-04	MND	MND	MND	MND	MND	MND	MND	3,05E-04	9,31E-05	1,71E-03	0,00E+00	-1,41E-01
Non-hazardous waste	kg	4,75E+00	9,10E-02	2,22E-01	5,06E+00	2,52E-02	9,26E-02	MND	MND	MND	MND	MND	MND	MND	1,94E-02	1,53E-03	5,45E-02	1,49E-01	-9,05E-01
Radioactive waste	kg	1,11E-04	2,83E-05	7,00E-06	1,47E-04	8,71E-06	2,84E-07	MND	MND	MND	MND	MND	MND	MND	6,15E-07	4,70E-07	1,47E-06	0,00E+00	-3,08E-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	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	1,25E-02	1,25E-02	0,00E+00	1,47E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	8,47E-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	1,21E-02	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	2,58E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+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	2,00E+00	2,78E-01	1,50E-01	2,43E+00	8,44E-02	2,26E-02	MND	MND	MND	MND	MND	MND	MND	3,97E-03	4,63E-03	1,83E-02	7,81E-04	-4,62E-01
Ozone depletion Pot.	kg CFC_{-11}e	1,36E-07	5,12E-08	1,53E-08	2,02E-07	1,56E-08	5,12E-10	MND	MND	MND	MND	MND	MND	MND	1,76E-10	8,52E-10	1,85E-09	2,52E-10	-2,19E-08
Acidification	kg SO_2e	1,90E-02	9,68E-04	5,77E-04	2,06E-02	2,68E-04	2,47E-05	MND	MND	MND	MND	MND	MND	MND	1,94E-05	1,54E-05	1,90E-04	5,59E-06	-1,87E-03
Eutrophication	kg PO_4^3e	7,13E-03	2,14E-04	4,46E-04	7,79E-03	6,09E-05	2,58E-04	MND	MND	MND	MND	MND	MND	MND	1,49E-05	3,50E-06	6,28E-05	2,04E-06	-9,92E-04
POCP (“smog”)	kg C_2H_4e	6,38E-04	3,72E-05	4,59E-05	7,21E-04	1,10E-05	4,99E-06	MND	MND	MND	MND	MND	MND	MND	7,95E-07	6,00E-07	7,20E-06	2,36E-07	-2,62E-04
ADP-elements	kg Sbe	8,28E-05	6,50E-07	8,91E-07	8,43E-05	2,95E-07	4,71E-08	MND	MND	MND	MND	MND	MND	MND	3,69E-08	1,06E-08	2,50E-06	1,78E-09	-3,77E-05
ADP-fossil	MJ	2,85E+01	4,22E+00	2,17E+00	3,49E+01	1,26E+00	6,66E-02	MND	MND	MND	MND	MND	MND	MND	8,48E-02	7,02E-02	2,51E-01	2,15E-02	-4,57E+00

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
10.01.2025