ENVIRONMENTAL PRODUCT DECLARATION

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

Multiroof Roof Hatch
VILPE Oy

EPD HUB, HUB-3107
Published on 28.03.2025, last updated on 28.03.2030

Created with One Click LCA

GENERAL INFORMATION

MANUFACTURER

Manufacturer	VILPE Oy
Address	Kauppatie 9, FI-65610 Mustasaari
Contact details	sales@vilpe.com
Website	https://www.vilpe.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 1.1, 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	Milja Sarapaa, VILPE Oy
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ 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	Multiroof Roof Hatch
Additional labels	
Product reference	
Place of production	Mustasaari, Finland
Period for data	2024 (Calendar year)
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3	-11% +0,1%

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg
Declared unit mass	1 kg
GWP-fossil, A1-A3 ($kgCO_2e$)	2,35E+00
GWP-total, A1-A3 ($kgCO_2e$)	9,03E-01
Secondary material, inputs (%)	7.4
Secondary material, outputs (%)	52.2
Total energy use, A1-A3 (kWh)	22
Net freshwater use, A1-A3 (m^3)	0.03

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

VILPE Oy is a Finnish family-owned company that develops and manufactures ventilation and roofing solutions for the construction industry. The company's operations are based on customer-oriented and innovative product development. Our high quality VILPE® products bring better indoor air quality, energy efficiency and longevity of structures to all spaces and thus improve people's quality of life. VILPE represents safe construction and living, which reinforces the company's commitment to quality and reliability.

PRODUCT DESCRIPTION

VILPE's roof hatches are designed to be both resilient and user-friendly, and can be used as a fire and service hatch as well as for access between the roof and attic space.

Multiroof 200 Felt/Inclined: For bituminous roofs with a roof pitch of 11.5° or steeper. Used as a fire and maintenance hatch and as a passage between the roof and attic space. Opening size 610 x 610 mm. Frame height 200 mm. Pre-assembled roof hatch with insulated lid made of polyethylene and a frame made of glued laminated timber with a triangular strip. Screws for the hold-open latch and installation instructions included. Flashing set sold separately.

Multiroof 200 Flashing Set: Flashing set for bituminous roofing for the Multiroof 200 roof hatch.

Multiroof 200 Standing Seam: For mechanically seamed metal or other metal roofing where the installer manages the flashing. Used as a fire and maintenance hatch and as a passage between the roof and attic space. Maximum and minimum slope according to the roofing material. Opening size 610 x 610 mm. Frame height 200 mm. Pre-assembled roof hatch with insulated lid made of polyethylene and a frame made of glued laminated timber. Screws for the hold-open latch and installation instructions included. Flashing set ordered separately.

Multiroof 300 Felt/Low-pitched: For low-slope roofs with bituminous membrane or other sealed roofing material. Used as a fire and maintenance hatch and as a passage between the roof and attic space. Maximum and minimum slope according to the roofing material. Opening size 610 x 610 mm. Frame height 300 mm. Pre-assembled roof hatch with insulated lid made of polyethylene and a frame made of glued laminated timber with a triangular strip. Screws for the hold-open latch and installation instructions included. Flashing set sold separately.

Multiroof 300 Flashing Set: Flashing set for bituminous roofing for the Multiroof 300 roof hatch.

Further information can be found at https://www.vilpe.com/.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	22,64 %	Finland, EU, China
Minerals		
Fossil materials	48,25 %	Finland
Bio-based materials	29,10 %	Finland

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0,25145
Biogenic carbon content in packaging, kg C	0,14345

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	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.

VILPE Oy's Multiroof Roof Hatches are manufactured in Mustasaari, Finland. The production process includes the receipt of purchased components, assembly of the product, and packaging. The timber used is domestically sourced, and the cover is also manufactured by a domestic supplier. The cover is produced using rotational molding and is insulated and sealed by the supplier. The timber is partially cut to size during production and partially delivered pre-cut to the required dimensions. The product's production in Mustasaari involves energy consumption by the facility and the machinery used. Approximately 10% of the total energy consumption is generated by the site's own solar power plant, while the remainder is purchased electricity produced by nuclear power. During manufacturing, wood waste is generated and delivered to appropriate waste management facilities.

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 average distribution distance is calculated as a weighted average of the significant sales volumes. Products are transported in full pallets. During installation, the disposal of packaging material is included in the estimate. Multiroof Roof Hatches are packed in cardboard boxes. The amount of packaging material varies slightly depending on the type and size of the roof hatch. After installation, the packaging material is transported by truck to a recycling facility. The average distance to a recycling facility in Finland has been used. Scenario estimates have employed average recycling methods and practices. There is no material waste during installation. The energy consumption during installation, mainly consisting of the use of a drill, has been excluded from the calculations as it is assumed to be insignificant per examined product unit.

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 end-of-life stage consists of the following modules:

C1: Deconstruction of the product

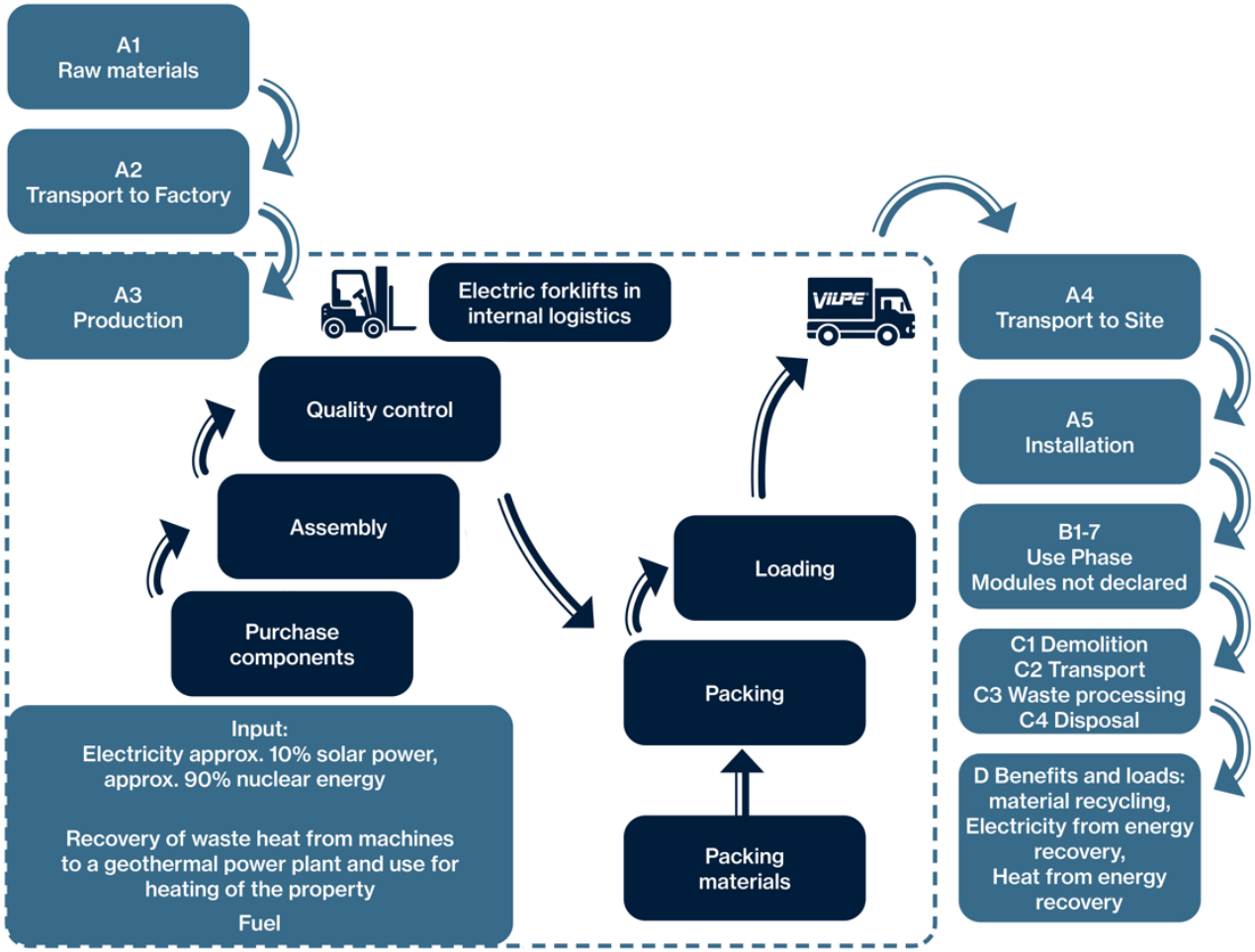
C2: Transportation of the discarded product

C3: Waste processing

C4: Disposal

The end-of-life scenario represents the most likely option in Finland. The average distance to waste treatment facilities in Finland has been used for waste transportation distance. The end-of-life scenario is based on the recycling practices available in Finland. After disposal, it is assumed that the polypropylene of the exhaust ventilation will be incinerated and metal parts are recycled. Due to the energy usage possibilities of the product and packaging, recycled raw material leads to the avoidance of virgin material while energy recovery at the incineration plant displaces electricity and heat production.

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	Allocated by mass or volume
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	Representative product
Variation in GWP-fossil for A1-A3	-11% +0,1%

The average has been calculated for three distinct product sets, all of which have been included in the assessment. The intended use of the products is similar, with the primary differences arising from variations in product size and the components included within each set. The primary material is comparable across the products, with the most significant distinction being its quantity per kilogram of product. Similarly, the packaging material is comparable, though its quantity per kilogram varies. Differences in the transportable mass between the products are attributable to variations in product size. The end-of-life stages are considered comparable. Furthermore, it has been ensured that the variability within phases A1-A3 remains within acceptable limits as part of the assessment.

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	1,15E+00	6,76E-02	-3,19E-01	9,03E-01	6,10E-02	5,36E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,76E-03	1,56E+00	0,00E+00	-4,82E-01
GWP – fossil	kg CO_2e	2,07E+00	6,76E-02	2,06E-01	2,35E+00	6,09E-02	9,49E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,76E-03	6,39E-01	0,00E+00	-3,95E-01
GWP – biogenic	kg CO_2e	-9,22E-01	0,00E+00	-5,26E-01	-1,45E+00	0,00E+00	5,26E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	9,22E-01	0,00E+00	-8,61E-02
GWP – LULUC	kg CO_2e	4,63E-03	2,88E-05	1,09E-03	5,74E-03	2,49E-05	5,49E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,22E-06	8,46E-06	0,00E+00	-2,63E-04
Ozone depletion pot.	kg $CFC\text{-}_{11}$e	1,13E-07	1,49E-08	2,60E-08	1,54E-07	1,34E-08	1,29E-09	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,30E-09	1,81E-09	0,00E+00	-4,29E-08
Acidification potential	mol H^+e	8,69E-03	4,58E-04	1,07E-03	1,02E-02	2,54E-04	5,10E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,42E-05	2,23E-04	0,00E+00	-6,21E-03
EP-freshwater[2)]	kg Pe	9,13E-05	5,35E-07	1,12E-05	1,03E-04	5,14E-07	1,71E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,77E-08	3,13E-07	0,00E+00	-4,81E-05
EP-marine	kg Ne	1,52E-03	1,25E-04	4,30E-04	2,08E-03	7,41E-05	3,77E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,13E-06	1,04E-04	0,00E+00	-7,36E-04
EP-terrestrial	mol Ne	1,65E-02	1,38E-03	3,08E-03	2,10E-02	8,17E-04	1,87E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,86E-05	1,08E-03	0,00E+00	-1,02E-02
POCP ("smog")[3)]	kg NMVOCe	7,30E-03	3,99E-04	8,63E-04	8,57E-03	2,49E-04	5,87E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,47E-05	2,65E-04	0,00E+00	-3,30E-03
ADP-minerals & metals[4)]	kg Sbe	1,18E-05	2,00E-07	2,00E-06	1,40E-05	2,12E-07	5,84E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,62E-08	2,72E-07	0,00E+00	-5,51E-06
ADP-fossil resources	MJ	3,41E+01	9,76E-01	1,13E+01	4,64E+01	8,82E-01	1,09E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,52E-02	1,80E-01	0,00E+00	-1,11E+01
Water use[5)]	m^3e depr.	6,28E-01	4,19E-03	1,98E-01	8,30E-01	3,86E-03	6,96E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,78E-04	5,32E-02	0,00E+00	1,49E-03

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	1,92E-07	6,00E-09	1,91E-08	2,17E-07	5,18E-09	7,33E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,93E-10	1,81E-09	0,00E+00	-5,44E-08
Ionizing radiation[6]	kBq U235e	1,93E-01	4,57E-03	4,73E-01	6,71E-01	4,10E-03	9,57E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,02E-04	9,60E-04	0,00E+00	-8,89E-02
Ecotoxicity (freshwater)	CTUe	5,75E+01	8,71E-01	8,65E+00	6,70E+01	8,12E-01	2,09E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,74E-02	6,97E-01	0,00E+00	-2,12E+01
Human toxicity, cancer	CTUh	4,90E-09	2,59E-11	5,21E-10	5,45E-09	2,28E-11	1,39E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,01E-12	6,30E-11	0,00E+00	1,42E-09
Human tox. non-cancer	CTUh	2,89E-08	8,12E-10	3,48E-09	3,32E-08	7,56E-10	3,32E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,47E-11	2,79E-09	0,00E+00	3,61E-09
SQP[7]	-	2,71E+02	7,67E-01	3,26E+01	3,05E+02	6,10E-01	1,11E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,25E-02	2,32E-01	0,00E+00	-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	3,26E+01	1,09E-02	3,25E+00	3,58E+01	1,03E-02	8,24E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,75E-04	1,45E-02	0,00E+00	-2,82E+00
Renew. PER as material	MJ	7,37E+00	0,00E+00	4,61E+00	1,20E+01	0,00E+00	-4,61E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-7,37E+00	0,00E+00	-1,02E+00
Total use of renew. PER	MJ	3,99E+01	1,09E-02	7,86E+00	4,78E+01	1,03E-02	-4,60E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,75E-04	-7,36E+00	0,00E+00	-3,84E+00
Non-re. PER as energy	MJ	3,13E+01	9,76E-01	1,11E+01	4,34E+01	8,82E-01	1,09E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,52E-02	1,80E-01	0,00E+00	-1,11E+01
Non-re. PER as material	MJ	1,18E+01	0,00E+00	2,14E-01	1,20E+01	0,00E+00	-2,14E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-1,18E+01	0,00E+00	-2,05E-04
Total use of non-re. PER	MJ	4,31E+01	9,76E-01	1,13E+01	5,54E+01	8,82E-01	-1,05E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,52E-02	-1,16E+01	0,00E+00	-1,11E+01
Secondary materials	kg	7,40E-02	3,16E-04	1,33E-01	2,08E-01	2,90E-04	1,09E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,54E-05	9,18E-04	0,00E+00	1,09E-01
Renew. secondary fuels	MJ	4,28E-03	3,50E-06	1,11E-01	1,16E-01	3,76E-06	8,68E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,88E-07	7,88E-06	0,00E+00	-1,69E-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	2,35E-02	1,14E-04	4,51E-03	2,81E-02	1,04E-04	5,55E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,06E-05	5,39E-05	0,00E+00	-9,55E-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	3,54E-01	1,37E-03	1,33E-02	3,69E-01	1,27E-03	3,54E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,17E-04	6,08E-04	0,00E+00	-1,83E-01
Non-hazardous waste	kg	3,23E+00	2,12E-02	2,36E-01	3,49E+00	2,03E-02	1,97E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,90E-03	7,82E-01	0,00E+00	-2,81E+00
Radioactive waste	kg	8,78E-05	6,51E-06	1,19E-04	2,13E-04	5,83E-06	4,63E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,67E-07	1,92E-07	0,00E+00	-3,56E-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	1,75E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	2,30E-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	2,91E-01	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,13E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	1,39E+01	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	2,05E+00	6,69E-02	2,11E-01	2,33E+00	6,03E-02	3,20E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,70E-03	6,37E-01	0,00E+00	-3,71E-01
Ozone depletion Pot.	kg CFC_{-11}e	1,00E-07	1,18E-08	2,15E-08	1,33E-07	1,06E-08	1,05E-09	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,03E-09	1,62E-09	0,00E+00	-3,74E-08
Acidification	kg SO_2e	7,22E-03	3,61E-04	7,94E-04	8,37E-03	1,98E-04	3,84E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,88E-05	1,58E-04	0,00E+00	-5,22E-03
Eutrophication	kg PO_4^3e	3,41E-03	6,36E-05	5,13E-04	3,99E-03	4,52E-05	3,17E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,29E-06	1,49E-04	0,00E+00	-1,69E-03
POCP (“smog”)	kg C_2H_4e	1,07E-03	1,21E-05	6,73E-05	1,15E-03	8,02E-06	6,47E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,45E-07	4,31E-06	0,00E+00	-3,27E-04
ADP-elements	kg Sbe	1,17E-05	1,95E-07	1,89E-06	1,38E-05	2,07E-07	5,62E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,57E-08	2,58E-07	0,00E+00	-5,51E-06
ADP-fossil	MJ	4,30E+01	9,76E-01	1,13E+01	5,53E+01	8,82E-01	1,09E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,52E-02	1,79E-01	0,00E+00	-1,10E+01

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	2,08E+00	6,76E-02	2,07E-01	2,35E+00	6,10E-02	9,49E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,76E-03	6,39E-01	0,00E+00	-3,96E-01

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
28.03.2025

APPENDIX

PRODUCT PORTFOLIO INCLUDED IN SCOPE

The following list of products are included in the scope of declaration.

Product number	Product name
739012, 739017	Multiroof 200 Felt/Inclined
739002, 739007	Multiroof 200 Standing Seam
739022, 739027	Multiroof 300 Felt/Low-pitched