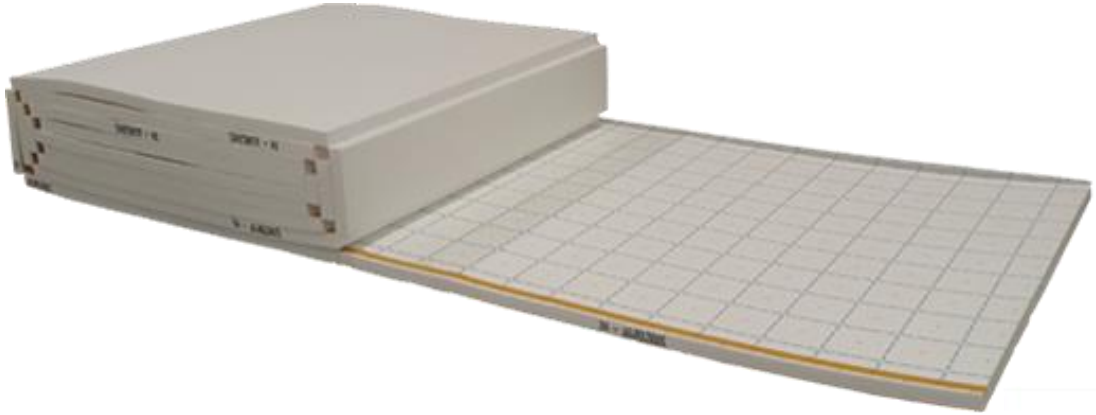
ENVIRONMENTAL PRODUCT DECLARATION

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

Uponor Klett panel roll extra
Uponor Corporation



EPD HUB, HUB-0825
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Created with One Click LCA

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Uponor Corporation
Address	Ilmalantori 4, 00240 Helsinki, Finland
Contact details	info@uponor.com
Website	www.uponor.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 options, A4-A5, and modules C1-C4, D
EPD author	Dr. Shima Holder, Uponor Corporation
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	Uponor Klett panel roll extra
Additional labels	-
Product reference	1063322,1063323, 1063324, 1063402
Place of production	Wołów, Poland
Period for data	2022
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3	1,73 %

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 m2
Declared unit mass	0,50 kg
GWP-fossil, A1-A3 (kgCO2e)	1,46E0
GWP-total, A1-A3 (kgCO2e)	1,49E0
Secondary material, inputs (%)	0.406
Secondary material, outputs (%)	100.0
Total energy use, A1-A3 (kWh)	6.66
Total water use, A1-A3 (m3e)	7,02E0

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Uponor is rethinking water for future generations. Our offering, including safe drinking water delivery, energy-efficient radiant heating and cooling and reliable infrastructure, enables a more sustainable living environment. We help our customers in residential and commercial construction, municipalities and utilities, as well as different industries to work faster and smarter. We employ about 3,800 professionals in 26 countries in Europe and North America. Over 100 years of expertise and trust form the basis of any successful partnership. This is the basis, on which they can build, in a literal and metaphorical sense. We create trust together with our partners: Customers, prospective customers and suppliers. We establish this with shared knowledge, quality and sustainable results.

PRODUCT DESCRIPTION

As one of the leading suppliers of plastic pipe systems, Uponor attaches great importance to product development. This innovative radiant floor heating and cooling system consists of tear-resistant fabric foil laminated onto expanded polystyrene (EPS) according to EN 13163 and DIN 4108-10. The EPS Panel is a white material (HBCD free) with and acoustic insulation. Uponor Klett is a panel used for heating / cooling applications as under floor heating systems. For use with cement and anhydrite-based screeds. The panel serves to fix the pipe and insulate thermally and acoustically.

Further information can be found at www.uponor.com.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals	-	-
Minerals	-	-
Fossil materials	100	EU
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	0,00094

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 m2
Mass per declared unit	0,50 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.

Uponor Klett panel is an underfloor heating panel manufactured with EPS. The raw EPS is processed to converted into panels and then foil is glued to them. The finished product (10 m2) is wrapped with plastic film. Ready and packed products are supplied to the construction site on pallets.

MANUFACTURING PROCESS

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 transportation distance is defined according to the standard. Average distance of transportation from production plant to building site is based on the actual sales average figures of the company in of the local markets and the transportation method is assumed to be lorry. Vehicle capacity utilization volume factor is assumed to be 100 (full load). It may vary but as the role of transportation emissions in the total results is small, the variety in load is assumed to be negligible. Empty returns are not considered as it is assumed that a return trip is used by the transportation company to serve the needs of other clients. Transportation does not cause losses as the products are packaged properly. Volume capacity utilisation factor is assumed to be <1 for the nested packaged products. Each wooden pallet is assumed to be re-used 120 times based on actual re-use scenarios.

Environmental impacts from installation into the building include waste packaging materials (A5) and release of biogenic carbon dioxide from wood pallets.

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 negligible for disassembling of the end-of-life product, the impacts of demolition are assumed zero (C1). The end-of-life product is assumed to be sent to the closest facilities by lorry and is assumed to be 50 km away (C2). 100% of the end-of-life product is collected separately from the demolition site and is sent for recycling. The benefits and loads of waste packaging materials in A5 are also considered in module D.

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	Allocated by mass or volume

AVERAGES AND VARIABILITY

Type of average	Multiple products
Averaging method	Allocated by shares of total mass
Variation in GWP-fossil for A1-A3	1,73 %

The average material use per 1 m2 of panel was determined by analysing the production data of panels between 25 to 35 mm thickness. The average panel weight was determined by the production share allocation and unit weight (kg/m2) of each panel thickness. This EPD is factory specific.

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_2e	1,32E0	4,6E-2	1,17E-1	1,49E0	9,07E-2	6,99E-3	MND	MND	MND	MND	MND	MND	MND	0E0	3,33E-3	1,41E0	0E0	2,46E-3
GWP – fossil	kg CO_2e	1,3E0	4,6E-2	1,21E-1	1,46E0	9,15E-2	3,57E-3	MND	MND	MND	MND	MND	MND	MND	0E0	3,33E-3	1,39E0	0E0	-1,02E-4
GWP – biogenic	kg CO_2e	2,43E-2	3,34E-5	-3,74E-3	2,06E-2	5,61E-5	3,43E-3	MND	MND	MND	MND	MND	MND	MND	0E0	1,51E-6	2,44E-2	0E0	2,56E-3
GWP – LULUC	kg CO_2e	2,63E-4	1,39E-5	4,27E-5	3,2E-4	3,23E-5	2,08E-6	MND	MND	MND	MND	MND	MND	MND	0E0	1,23E-6	4,08E-6	0E0	-1,44E-6
Ozone depletion pot.	kg $CFC_{-11}e$	2,71E-8	1,08E-8	1,41E-8	5,2E-8	2,1E-8	2,68E-10	MND	MND	MND	MND	MND	MND	MND	0E0	7,31E-10	1,73E-9	0E0	-3,53E-11
Acidification potential	mol H^+e	4,73E-3	1,93E-4	2,57E-4	5,18E-3	3,77E-4	1,03E-5	MND	MND	MND	MND	MND	MND	MND	0E0	1,39E-5	1,88E-4	0E0	-3,87E-6
EP-freshwater[2)]	kg Pe	1,84E-5	3,74E-7	2,32E-6	2,11E-5	7,91E-7	6,02E-8	MND	MND	MND	MND	MND	MND	MND	0E0	3,32E-8	1,77E-7	0E0	-7,34E-8
EP-marine	kg Ne	9,18E-4	5,82E-5	5,17E-5	1,03E-3	1,12E-4	2,85E-6	MND	MND	MND	MND	MND	MND	MND	0E0	4,04E-6	8,62E-5	0E0	-1,08E-6
EP-terrestrial	mol Ne	9,25E-3	6,43E-4	5,81E-4	1,05E-2	1,23E-3	3,12E-5	MND	MND	MND	MND	MND	MND	MND	0E0	4,47E-5	9,26E-4	0E0	-1,86E-5
POCP ("smog")[3)]	kg NMVOCe	3,84E-3	2,07E-4	2,19E-4	4,27E-3	3,87E-4	1,01E-5	MND	MND	MND	MND	MND	MND	MND	0E0	1,4E-5	2,26E-4	0E0	-3,15E-6
ADP-minerals & metals[4)]	kg Sbe	2,2E-5	7,87E-7	3,39E-7	2,31E-5	2,29E-6	4,39E-8	MND	MND	MND	MND	MND	MND	MND	0E0	8,1E-8	2,89E-7	0E0	-1,54E-9
ADP-fossil resources	MJ	3,98E1	7,15E-1	2,34E0	4,29E1	1,4E0	3,55E-2	MND	MND	MND	MND	MND	MND	MND	0E0	4,97E-2	1,56E-1	0E0	-1,31E-3
Water use[5)]	m^3e depr.	2E-1	2,66E-3	2,59E-2	2,28E-1	4,96E-3	7,44E-4	MND	MND	MND	MND	MND	MND	MND	0E0	2,06E-4	1,26E-2	0E0	-3,59E-5

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	3,69E-8	4,16E-9	1,41E-9	4,24E-8	7,07E-9	1,78E-10	MND	MND	MND	MND	MND	MND	MND	0E0	2,53E-10	9,89E-10	0E0	-5,34E-11
Ionizing radiation[6)]	kBq U235e	2,51E-1	3,13E-3	2,81E-3	2,57E-1	6,11E-3	1,1E-4	MND	MND	MND	MND	MND	MND	MND	0E0	2,07E-4	3,32E-4	0E0	-6,07E-6
Ecotoxicity (freshwater)	CTUe	2,41E1	5,47E-1	5,38E-1	2,52E1	1,09E0	3,7E-2	MND	MND	MND	MND	MND	MND	MND	0E0	4,25E-2	6,99E0	0E0	-3,99E-2
Human toxicity, cancer	CTUh	4,32E-10	1,4E-11	1,84E-11	4,64E-10	3,09E-11	3,71E-12	MND	MND	MND	MND	MND	MND	MND	0E0	1,11E-12	8,72E-11	0E0	-3,92E-13
Human tox. non-cancer	CTUh	7,07E-9	6,48E-10	4,18E-10	8,13E-9	1,25E-9	5,24E-11	MND	MND	MND	MND	MND	MND	MND	0E0	4,5E-11	3,47E-9	0E0	-1,5E-11
SQP[7)]	-	4,06E-1	1,08E0	4,48E-2	1,53E0	1,56E0	2,21E-2	MND	MND	MND	MND	MND	MND	MND	0E0	5,47E-2	7,2E-2	0E0	-8,1E-4

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	4,7E-1	9,01E-3	7,32E-2	5,53E-1	1,98E-2	1,76E-3	MND	MND	MND	MND	MND	MND	MND	0E0	5,71E-4	3,57E-3	0E0	-3,32E-2
Renew. PER as material	MJ	2,14E-1	0E0	3,29E-2	2,47E-1	0E0	-3,29E-2	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	-2,1E-1	0E0	0E0
Total use of renew. PER	MJ	6,84E-1	9,01E-3	1,06E-1	8E-1	1,98E-2	-3,11E-2	MND	MND	MND	MND	MND	MND	MND	0E0	5,71E-4	-2,06E-1	0E0	-3,32E-2
Non-re. PER as energy	MJ	2,08E1	7,15E-1	1,88E0	2,34E1	1,4E0	3,55E-2	MND	MND	MND	MND	MND	MND	MND	0E0	4,97E-2	1,56E-1	0E0	-1,31E-3
Non-re. PER as material	MJ	2,05E1	0E0	4,53E-1	2,1E1	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	-2,1E1	0E0	0E0
Total use of non-re. PER	MJ	4,13E1	7,15E-1	2,34E0	4,44E1	1,4E0	3,55E-2	MND	MND	MND	MND	MND	MND	MND	0E0	4,97E-2	-2,08E1	0E0	-1,31E-3
Secondary materials	kg	1,89E-3	0E0	1,49E-4	2,04E-3	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Renew. secondary fuels	MJ	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Non-ren. secondary fuels	MJ	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Use of net fresh water	m^3	7,02E0	1,49E-4	2,45E-4	7,02E0	2,65E-4	1,06E-5	MND	MND	MND	MND	MND	MND	MND	0E0	9,49E-6	6,12E-4	0E0	-2,02E-7

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	1,69E-2	6,95E-4	2,27E-3	1,99E-2	1,45E-3	1,9E-4	MND	MND	MND	MND	MND	MND	MND	0E0	6,55E-5	0E0	0E0	5,06E-6
Non-hazardous waste	kg	4,76E-1	7,68E-2	1,01E-1	6,53E-1	1,21E-1	4,9E-3	MND	MND	MND	MND	MND	MND	MND	0E0	4,43E-3	0E0	0E0	1,63E-3
Radioactive waste	kg	2,08E-5	4,91E-6	2,79E-6	2,85E-5	9,55E-6	1,37E-7	MND	MND	MND	MND	MND	MND	MND	0E0	3,29E-7	0E0	0E0	-9,41E-9

END OF LIFE – OUTPUT FLOWS

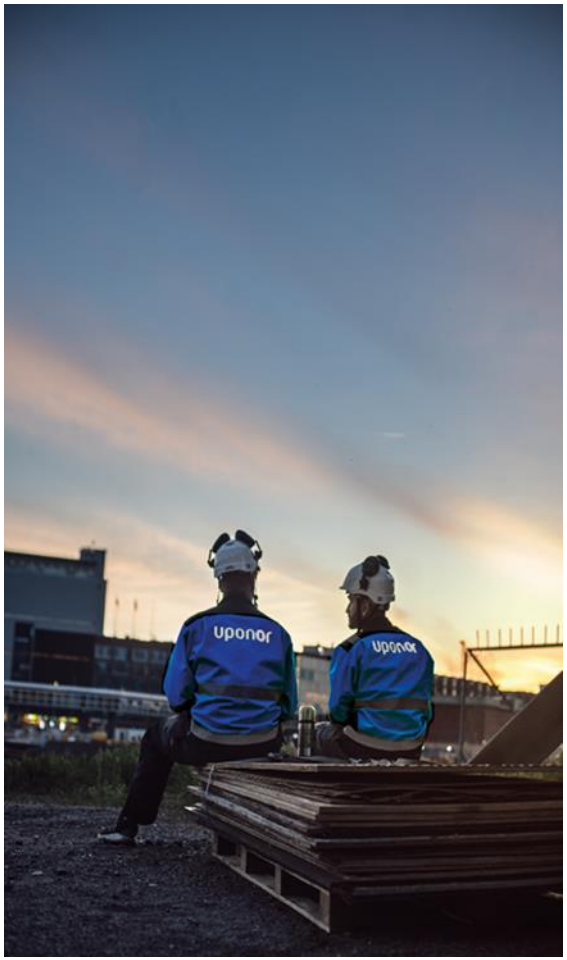
Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Materials for recycling	kg	0E0	0E0	0E0	0E0	0E0	9,48E-3	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	5,03E-1	0E0	0E0
Materials for energy rec	kg	0E0	0E0	0E0	0E0	0E0	1,28E-3	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Exported energy	MJ	0E0	0E0	0E0	0E0	0E0	2,41E-2	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0

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	1,26E0	4,56E-2	1,17E-1	1,42E0	9,07E-2	3,49E-3	MND	MND	MND	MND	MND	MND	MND	0E0	3,3E-3	1,39E0	0E0	-1,03E-4
Ozone depletion Pot.	kg $CFC_{-11}e$	2,38E-8	8,59E-9	1,11E-8	4,34E-8	1,67E-8	2,23E-10	MND	MND	MND	MND	MND	MND	MND	0E0	5,81E-10	1,57E-9	0E0	-3,3E-11
Acidification	kg SO_2e	3,98E-3	9,35E-5	2,15E-4	4,29E-3	1,87E-4	6,5E-6	MND	MND	MND	MND	MND	MND	MND	0E0	1,01E-5	1,31E-4	0E0	-2,33E-6
Eutrophication	kg $PO_4^{3}e$	6,59E-4	1,89E-5	8,45E-5	7,63E-4	3,88E-5	7,34E-6	MND	MND	MND	MND	MND	MND	MND	0E0	2,32E-6	1,1E-4	0E0	-6,36E-7
POCP (“smog”)	kg C_2H_4e	5,7E-4	5,93E-6	2,14E-5	5,97E-4	1,21E-5	6,07E-7	MND	MND	MND	MND	MND	MND	MND	0E0	4,38E-7	2,5E-6	0E0	-8,95E-8
ADP-elements	kg Sbe	2,2E-5	7,87E-7	3,39E-7	2,31E-5	2,29E-6	4,39E-8	MND	MND	MND	MND	MND	MND	MND	0E0	8,1E-8	2,89E-7	0E0	-1,54E-9
ADP-fossil	MJ	3,98E1	7,15E-1	2,34E0	4,29E1	1,4E0	3,55E-2	MND	MND	MND	MND	MND	MND	MND	0E0	4,97E-2	1,56E-1	0E0	-1,31E-3

ENVIRONMENTAL IMPACTS – TRACI 2.1. / 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	1,26E0	4,55E-2	1,18E-1	1,43E0	9,06E-2	3,49E-3	MND	MND	MND	MND	MND	MND	MND	0E0	3,29E-3	1,39E0	0E0	-1,02E-4
Ozone Depletion	kg $CFC_{-11}e$	3,04E-8	1,14E-8	1,52E-8	5,7E-8	2,22E-8	2,93E-10	MND	MND	MND	MND	MND	MND	MND	0E0	7,74E-10	1,83E-9	0E0	-4,03E-11
Acidification	kg SO_2e	3,95E-3	1,68E-4	2,2E-4	4,34E-3	3,28E-4	9,13E-6	MND	MND	MND	MND	MND	MND	MND	0E0	1,22E-5	1,74E-4	0E0	-3,08E-6
Eutrophication	kg Ne	3,71E-4	2,37E-5	2,57E-5	4,2E-4	4,63E-5	1,25E-6	MND	MND	MND	MND	MND	MND	MND	0E0	1,69E-6	5,87E-5	0E0	-2,27E-7
POCP (“smog”)	kg O_3e	5,14E-2	3,69E-3	3,32E-3	5,84E-2	7,07E-3	1,76E-4	MND	MND	MND	MND	MND	MND	MND	0E0	2,56E-4	5,32E-3	0E0	-6,61E-5
ADP-fossil	MJ	5,86E0	1,02E-1	3,3E-1	6,29E0	1,99E-1	4,37E-3	MND	MND	MND	MND	MND	MND	MND	0E0	6,99E-3	2,14E-2	0E0	-1,83E-4



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
07.11.2023

ANNEX 1: CONVERSION TABLE FOR PRODUCT STAGE (A1-A3) GWP – EN 15804+A2, PEF

Product Number	Product Description	Unit Product Weight (kg/m2 of panel)	GWP – total, Stages A1-A3 (kg CO2e/m2 of panel)	Product Area (m2)	GWP – total, Stages A1-A3 (kg CO2e)
1063322	UPONOR KLETT PANEL ROLL EXTRA EPS DES 30-2MM 10X1M	0,52	1,54	10,00	15,36
1063323	UPONOR KLETT PANEL ROLL EXTRA EPS DES 30-3MM 10X1M	0,45	1,33	10,00	13,28
1063324	UPONOR KLETT PANEL ROLL EXTRA EPS DES 35-3MM 10X1M	0,52	1,54	10,00	15,36
1063402	UPONOR KLETT PANEL ROLL EXTRA EPS DES 25-2MM 10X1M	0,49	1,45	10,00	14,47

ANNEX 2: CONVERSION TABLE FOR PRODUCT STAGE (A1-A3) GWP – EN 15804+A1, CML/ISO 21930

Product Number	Product Description	Unit Product Weight (kg/m2 of panel)	GWP – total, Stages A1-A3 (kg CO2e/m2 of panel)	Product Area (m2)	GWP – total, Stages A1-A3 (kg CO2e)
1063322	UPONOR KLETT PANEL ROLL EXTRA EPS DES 30-2MM 10X1M	0,52	1,47	10,00	14,67
1063323	UPONOR KLETT PANEL ROLL EXTRA EPS DES 30-3MM 10X1M	0,45	1,27	10,00	12,68
1063324	UPONOR KLETT PANEL ROLL EXTRA EPS DES 35-3MM 10X1M	0,52	1,47	10,00	14,67
1063402	UPONOR KLETT PANEL ROLL EXTRA EPS DES 25-2MM 10X1M	0,49	1,38	10,00	13,82