

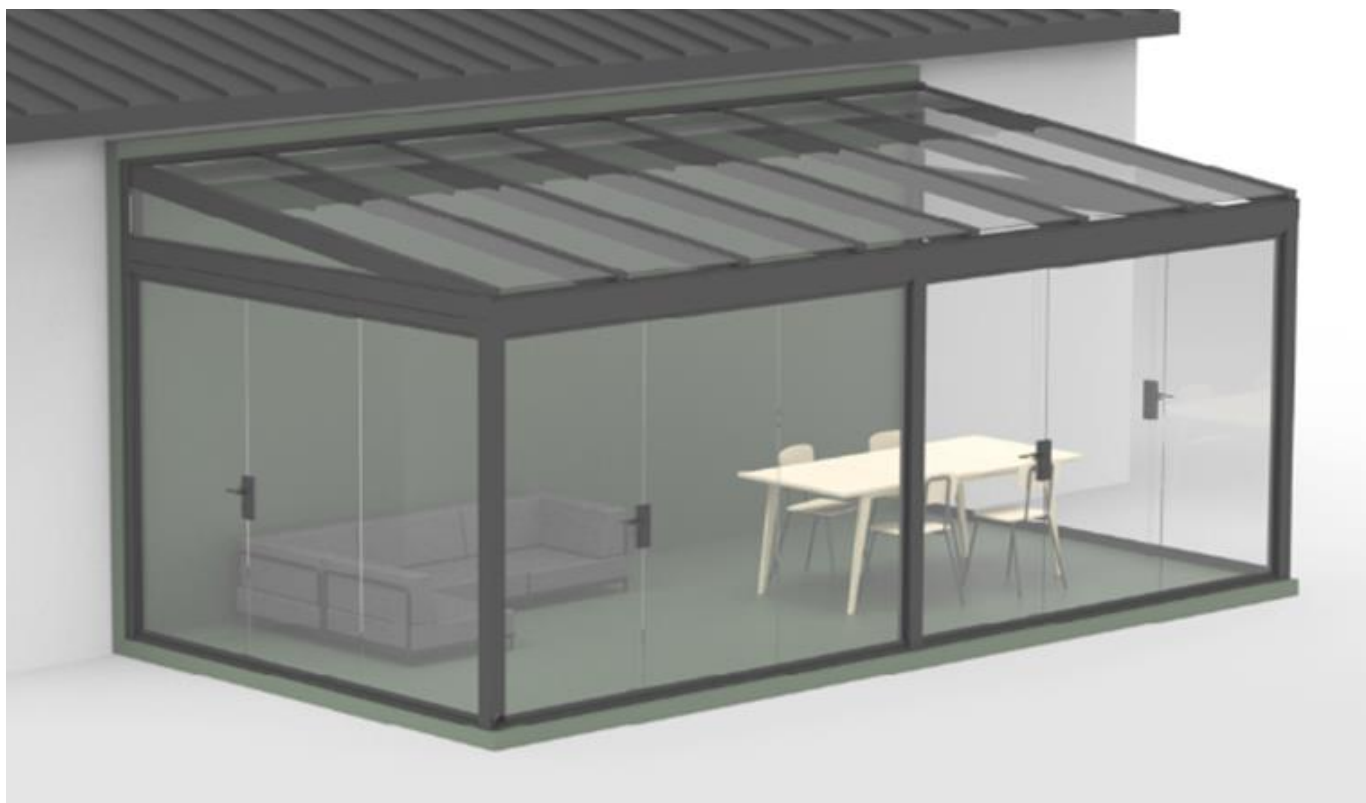
Environmental Product Declaration

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025



PRODUCT EPD

Lumon Roof Siro



Registration number in RTS

EPD: RTS EPD RTS_257.1_25

Handwritten signature of Jukka Seppänen in blue ink.

Jukka Seppänen
RTS EPD Committee Secretary

Handwritten signature of Laura Apilo in blue ink.

Laura Apilo
Managing Director



GENERAL INFORMATION

MANUFACTURER INFORMATION

Manufacturer	Lumon Oy, a member of the Lumon Group
Address	Kaitilankatu 11, FI-45130 Kouvola, Finland
Website	https://lumon.com/fi/

PRODUCT IDENTIFICATION


Component EPD product group	Balcony, Façade and terrace products
Product name	Lumon Roof, Roof type Siro, Measurements: Depth 4000 – Width 5000 – Height 2200/3000, 5 roof glass panes
Additional label(s)	
Product number / reference	90830001
Place(s) of production	Kouvola, Finland

EPD INFORMATION

Construction products EPDs may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

EPD program operator	Rakennustieto EPD, RTS, Malminkatu 16 A, 00100 Helsinki, Finland
EPD standards	This EPD is in accordance with EN 15804+A2 and ISO 14025 standards.
Product category rules	The CEN standard EN 15804 serves as the core PCR. RTS PCR 2020
Component EPD number	RTS_257_23
Product EPD number	RTS_257.1_25
Product EPD verifier	Anni Viitala, Granlund Oy
Product EPD Publishing date	30.6.2025
Product EPD valid until	30.6.2030

EPD VERIFICATION REPORT

Verified according to the requirements of EN 15804+A2 (product category rules)	
Independent verification of the declaration, according to EN ISO 14025:	
<input checked="" type="checkbox"/> External	<input type="checkbox"/> Internal
<p>Third party verifier:</p>  <p>Anni Viitala, Granlund</p>	

PRODUCT INFORMATION

PRODUCT DESCRIPTION

The Lumon Roof product family consists of three roof models: Siro, Klassinen, and Tasa. The Lumon roof is attached to the building's wall.

PRODUCT APPLICATION

Frame: The posts of the frame system are placed in the corners of the terrace. As the loads increase, the profiles automatically change to stronger ones. Side or center posts can also be added. Side posts can be selected both inside and outside the horizontal beams. Posts supporting the rear beam are placed next to the wall. The front and rear beams support the roof beams to which tempered glass panels are attached. The aluminum profiles are powder-coated.

Roof: The glass panels of the roof can be divided if needed. The glass joint consists of two profiles glued to the glass and a seal. The maximum dimensions of the glass panel are 4500x1000mm. The roof glass consists of at least 8 mm tempered glass. If necessary, 6 mm thick tempered glass is installed in the gable triangles. EPDM rubber seals are installed between the glass roof and the wall.

Eaves: For a sloping roof, side and front eaves can be selected. Side eaves can be attached as an overhang to the outermost roof beams. The width of the side eaves is 250 mm. The glass is attached to the side eaves piece from the outer edges. When selected, the front eaves measure 320mm.

Accessories: Sun protection blinds are available for the roof. The blinds come in two colors: white and gray, both completely opaque. Aluminum L-angle is used as snow guard. Rainwater is directed to the desired edge with integrated gutters and downpipes. LED lights including power supply and LED strips. Sheet metal coated with plastic in RR shade is used for flashing and water management.

PRODUCT RAW MATERIAL COMPOSITION AND TECHNICAL INFORMATION

Main substances of the product are presented in the table below

MAIN MATERIALS OF 1 UNIT OF LUMON ROOF SIRO, MEASUREMENTS: DEPTH 4000 – WIDTH 5000 – HEIGHT 2200/3000, 5 ROOF GLASS PANES

Component	Mass (kg)
Laminated Glass	0
Tempered Glass	409
Aluminium	106
Other materials component	5.75
Total mass of materials	521 kg

PACKAGING MATERIAL COMPOSITION AND TECHNICAL INFORMATION

MAIN PACKAGING MATERIALS

Packaging material	% of weight
Cardboard	5,4 %
Wood	83,7 %
Plastic	5,3 %
Polystyrene	0,05 %
Paper	5,5 %

SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

LIFE-CYCLE ASSESSMENT

LIFE-CYCLE ASSESSMENT INFORMATION

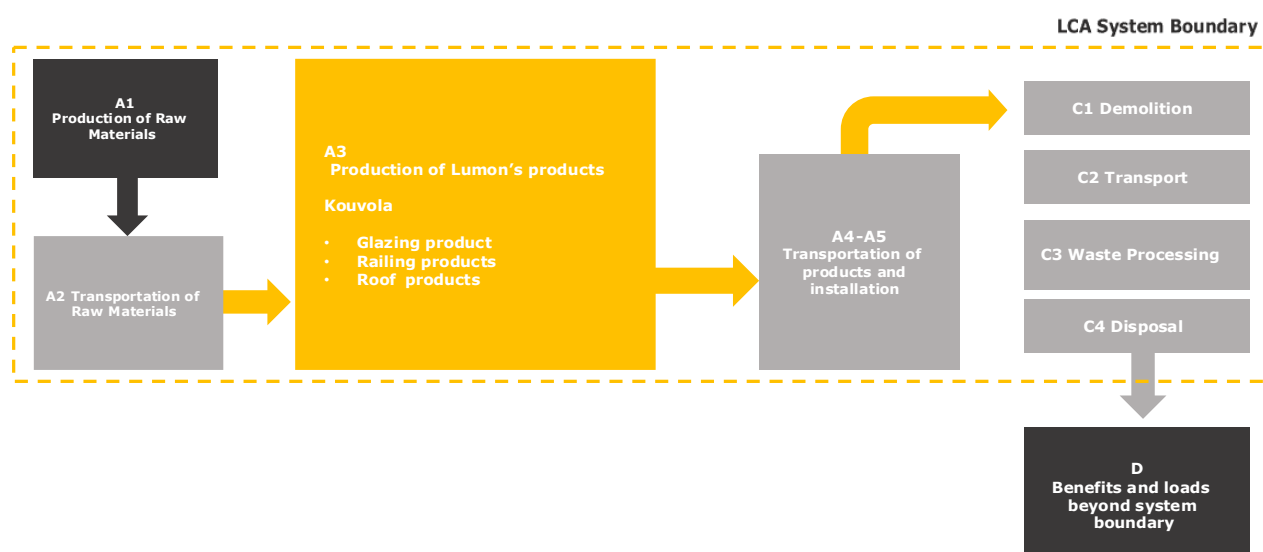
Period for data	1 year, 2022
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DECLARED UNIT

Declared unit	1 unit of finished product
Mass per declared unit	521 kg
Declaration covers	This declaration covers the life cycle stages from cradle to gate with options (A4 and A5), components C1–C4, and component D

SYSTEM BOUNDARY

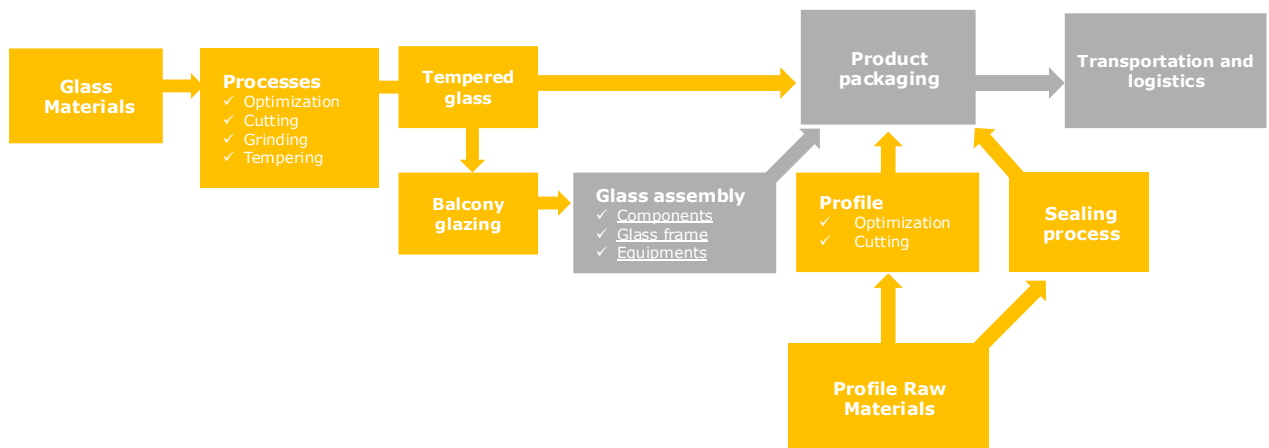
Studied system covers the following steps of life cycle according to EN 15804: **A1** Raw material supply, **A2** Transport, **A3** Manufacturing, **A4** Transportation of the product to construction site, **A5** Installation to building, **C1** Deconstruction, **C2** Transportation of end-of-life **C3** Waste processing and **C4** Disposal. In addition, the benefits and loads beyond the system boundary of stage **D** consist of product reuse, recovery and recycling. System boundary describing the system boundary and the input and output flows is shown below:



LCA System Boundary of studied products

End of waste point of the studied product is the step when material is used as fuel in an incineration plant or recycled material is handled in the collection and sorting plant. **End of waste point of the waste flows** in A3 component is the step when materials are collected and handled in the sorting plant. **End of waste point of the packaging materials** collected for recycling in A5 component is the point when materials are collected and handled in the sorting plant. **The end of waste point of the recycled steel and aluminium** raw material that is used in the product was assumed to be after scrap collection, sorting and preparation. Processing of scrap in production was considered to be part of next life cycle and included to the system boundaries of the studied product.

Production stage (A3) on the Lumon's production site cover following manufacturing processes; raw material supply (Glass, aluminium, other metals, rubber and plastics), glass processing, assembly components and framing, profile processing: cutting and optimization, packaging the final product. After that, products will be transported to the client. The production processes of studied products are presented in following Figure.



The production processes of studied products.

Studied system covers the following steps of life cycle according to EN 1580

Product Stage			Construction Process Stage		Use Stage							End-of-Life Stage				Benefits and loads beyond the system boundary		
Raw material supply	Transport	Manufacturing	Transport to building	Installation to building	Use/applications	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/demoli	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	D	D
Included	X	X	X	x								X	X	X	X	X	X	X
Relevancy	R	R	R	R	NR	NR	NR	NR	NR	NR	NR	R	R	R	R	R	R	R

	Mandatory
	Mandatory as per the RTS PCR section 6.2.1 rules and terms
	Optional components based on scenarios

The study does not omit any life cycle stages, processes or data needs that are mandatory according to EN 15804 and RTS PCR. The study excludes following life cycle stages which are optional according to EN 15804 and RTS PCR.

- B1 Use
- B2 Maintenance
- B3 Repairs
- B4 Replacement
- B5 Refurbishment
- B6 Operational energy use
- B7 Operational water use

CUT-OFF CRITERIA

This study follows the cut-off criteria stated in RTS PCR and EN 15804 -standard. This study does not exclude any components or processes which represent more than 1 % of the emissions of studied life cycle stage. The study does not exclude any hazardous materials or substances.

Excluded processes and the criteria for exclusion are given in following table. Machines and facilities (capital goods) required for and during production are excluded, as is transportation of employees.

Process excluded from study	Cut-off criteria	Quantified contribution from process
B1-B7, use stage	Not mandatory according to the RTS instructions	-

ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation rules used are made according to the ISO14044:2006. Allocation is avoided when possible and when necessary, allocation is made based on physical shares and also avoiding double calculations. Allocation is required if the production process produces more than one product and the flows of materials, energy and waste cannot be separately measured for the studied product. Allocation used in generic data sources follow the requirements of the EN 15804 -standard. It should be noticed that the allocation method 'allocation, cut-off by classification' has been used for Ecoinvent 3.8 data, which complies with EN 15804. Avoiding allocation could not be avoided for following inputs as the information was only measured on factory process level.

- Electricity consumption, heat production, transport fuels: only measured on factory level.
- Energy-, mixed-, bio-, wood-, aluminium-, mixed metal-, cardboard-, plastic-, glass-, hazardous-, construction waste: only measured on factory level.
- Water use: only measured on factory level.
- Ancillary materials; fluids, sandblasting sand and nitrogen: only measured on factory level.
- Packaging materials: only measured on factory level.

The inputs were allocated to studied product based on production volume (mass in kilograms).

According to EN 15804, flows leaving the system at the end-of-waste boundary of the product stage (A1-A3) are allocated as co-products. According to EN 15804, process that has a very low contribution to the overall revenue may be neglected in co-product allocation. Materials sent for recycling or energy recovery from manufacturing were not allocated, as it was estimated that their contribution to the overall revenue is very marginal. No other allocations were made in this assessment.

KEY ASSUMPTIONS

The scenarios included are currently in use and are representative for one of the most likely scenario alternatives.

A1 Raw Materials: It is assumed that aluminium contains 25 % recycled aluminium raw material. Recycled content of steel raw material was assumed to be 35% for stainless steel and 20 % for other steel products. (SYKE 2023)

A5 Installation to building: It can be assumed that there are no significant environmental impacts (energy or water use) caused by installation phase.

C1-4 End of life scenario: was assumed based on the common practises of construction products (SYKE 2023). The material flows at the end of life were assumed to be following:

- C1: Deconstruction/demolition: It was assumed that materials are collected separately for recycling in the end-of-life stage. It can be assumed that there are no significant environmental impacts caused by demolition phase and hence it is not declared.
- C2: Transportation distance 75 km road driving by lorry (SYKE 2023).
- C3-4: It was assumed that products are collected, and the materials are separated.
 - Metals waste to material recycling
 - Glass to material recycling (30 %) and to final disposal (70 %)
 - Plastics and rubber components to energy recovery
 - Silicone and hazardous waste to final disposal.

It was assumed that 5 % of recyclable or recoverable materials end up as material loss.

Component D: covers the net benefits and loads arising from the reuse of products or the recycling or recovery of energy from end-of-waste state materials.

- Recovery: when a product is incinerated at its end-of-life and the produced heat is recovered, the benefits can include avoiding the production of energy.
 - Net calorific value as received of the construction waste was assumed to be 1,59 kWh/kg and efficiency of heat and power co-generation was 90 %.
- Recycling: Benefits from the recycling of metal materials were included to the assessment. Only share of virgin raw materials in the product composition were included to the component D.
 - Glass: Benefits from avoided primary glass in foam glass production due to the recycling of glass at end of life was included.
 - Metal: Benefits from avoided primary metal production due to the recycling of materials end of life was included.

VALIDATION OF DATA

The quality requirements for the life cycle assessment were set according to the EN ISO 14044 standard (4.2.3.6) and EN 15804 standard (6.3.7).

This LCA study follows the standard EN 15804:2012+A2:2019 and RTS PCR and no decisions are made based on the values.

PROCEDURED FOR COLLECTION PROCESS SPECIFIC DATA

Production specific data was collected directly from manufacturer's production plant. The data represents the production of the studied product at the plant from the materials transported to the facility and represents 1 year average. The data represents year 2021, which was the latest year with full year data. All gathered data was used without excluding categories in advance following the system boundaries set in earlier chapters.

CRITERIA FOR CHOOSING THE GENERIC DATA

Generic data that was used for upstream and downstream processes represents complementary data from Ecoinvent 3.8 database.

The datasets were chosen to represent the studied system as closely as possible. When available supplier specific information was used for instance in form of EN 15804 EPDs or emissions profile of local energy supplier. When supplier specific information was not available the information sources were chosen based on their technical and geographical representativeness. Only when country specific or European data has not been available has global level data been used (concerns mainly data from ecoinvent 3.8)

As up-to-date data as possible was chosen and no more than five-year-old for producer specific data and ten years for generic data was used.

ENVIRONMENTAL IMPACT DATA

LUMON ROOF, ROOF TYPE SIRO, MEASUREMENTS: DEPTH 4000 – WIDTH 5000 – HEIGHT 2200/3000, 5 ROOF GLASS PANES

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP – total	kg CO ₂ e	1.43E+03	9.30E+00	2.07E+02	0.00E+00	3.67E+00	7.30E+00	1.67E+00	-5.36E+02
GWP – fossil	kg CO ₂ e	1.62E+03	9.30E+00	3.32E+00	0.00E+00	3.67E+00	7.29E+00	1.67E+00	-5.21E+02
GWP – biogenic	kg CO ₂ e	-2.04E+02	0.00E+00	2.04E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-2.77E+00
GWP – LULUC	kg CO ₂ e	9.81E+00	3.47E-03	2.96E-03	0.00E+00	1.36E-03	3.74E-03	1.49E-03	-1.20E+01
Ozone depletion pot.	kg CFC ₁₁ e	1.39E-04	2.17E-06	2.91E-07	0.00E+00	8.44E-07	4.07E-07	6.31E-07	-5.10E-05
Acidification potential	mol H ⁺ e	9.36E+00	3.88E-02	1.33E-02	0.00E+00	1.55E-02	3.36E-02	1.48E-02	-3.40E+00
EP-freshwater ³⁾	kg Pe	4.89E-01	6.77E-05	1.08E-04	0.00E+00	3.00E-05	1.47E-04	1.69E-05	-2.71E-02
EP-marine	kg Ne	1.47E+00	1.16E-02	3.87E-03	0.00E+00	4.62E-03	7.69E-03	5.13E-03	-3.71E-01
EP-terrestrial	mol Ne	1.69E+01	1.28E-01	4.13E-02	0.00E+00	5.09E-02	8.77E-02	5.64E-02	-4.25E+00
POCP (“smog”)	kg NMVOCe	5.18E+00	4.06E-02	1.15E-02	0.00E+00	1.63E-02	2.43E-02	1.64E-02	-1.51E+00
ADP-minerals & metals	kg Sbe	1.36E-02	2.48E-05	1.17E-05	0.00E+00	8.60E-06	3.07E-04	3.71E-06	-1.67E-03
ADP-fossil resources	MJ	2.21E+04	1.40E+02	3.57E+01	0.00E+00	5.53E+01	4.33E+01	4.29E+01	-7.66E+03
Water use ²⁾	m ³ e depr.	1.46E+08	6.36E-01	1.55E+00	0.00E+00	2.47E-01	8.67E-01	1.52E-01	-1.00E+03

1)GWP = Global Warming Potential; EP = Eutrophication potential; POCP = Photochemical ozone formation; ADP = Abiotic depletion potential. 2) 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 experienced with the indicator. 3) Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO₄e.

USE OF NATURAL RESOURCES

Impact category	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
Renew. PER as energy	MJ	7.35E+03	1.77E+00	3.44E+00	0.00E+00	6.21E-01	6.36E+00	3.88E-01	-3.13E+03
Renew. PER as material	MJ	1.05E+03	0.00E+00	-1.05E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total use of renew. PER	MJ	8.41E+03	1.77E+00	-1.05E+03	0.00E+00	6.21E-01	6.36E+00	3.88E-01	-3.13E+03
Non-re. PER as energy	MJ	2.53E+04	1.40E+02	2.34E+01	0.00E+00	5.53E+01	4.33E+01	4.29E+01	-7.68E+03
Non-re. PER as material	MJ	3.07E+02	0.00E+00	-2.20E+02	0.00E+00	0.00E+00	-7.19E+01	-1.47E+01	0.00E+00
Total use of non-ren. PER	MJ	2.55E+04	1.40E+02	-1.97E+02	0.00E+00	5.53E+01	-2.84E+01	2.82E+01	-7.68E+03
Secondary materials	kg	5.13E+01	4.12E-02	3.50E-02	0.00E+00	1.53E-02	3.88E-02	9.29E-03	1.47E+02
Renew. secondary fuels	MJ	2.72E+00	4.15E-04	2.65E-04	0.00E+00	1.54E-04	1.86E-03	2.50E-04	-3.35E-02
Non-ren. secondary fuels	MJ	2.35E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of net fresh water	m³	1.55E+02	1.81E-02	2.88E-02	0.00E+00	7.14E-03	2.78E-02	4.73E-02	-2.23E+01

1)PER = primary energy resources; Non-ren = Non renewable

END OF LIFE – WASTE

Impact category	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
Hazardous waste	kg	2.07E+02	1.64E-01	1.51E-01	0.00E+00	7.30E-02	0.00E+00	0.00E+00	-1.26E+02
Non-hazardous waste	kg	8.34E+02	2.78E+00	1.81E+01	0.00E+00	1.20E+00	0.00E+00	2.93E+02	-1.21E+03
Radioactive waste	kg	2.63E-01	9.54E-04	2.22E-04	0.00E+00	3.69E-04	0.00E+00	0.00E+00	-4.79E-02

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
Components for re-use	kg	2.65E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	kg	1.01E+02	0.00E+00	1.19E+02	0.00E+00	0.00E+00	2.26E+02	0.00E+00	0.00E+00
Materials for energy recycling	kg	8.97E+00	0.00E+00	5.21E-02	0.00E+00	0.00E+00	2.53E+00	0.00E+00	0.00E+00
Exported energy	MJ	1.45E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content	Unit (expressed per functional unit or per declared unit)
Biogenic carbon content in product	0 kg
Biogenic carbon content in accompanying packaging	34,4 kg

NOTE 1 kg biogenic carbon is equivalent to 44/12 kg of CO₂.

SCENARIO DOCUMENTATION

MANUFACTURING ENERGY SCENARIO DOCUMENTATION

Energy type	Object	GWP value	Data quality	Representativeness
Electricity	Electricity data quality and CO ₂ emission kg CO ₂ eq. / kWh	0.26 kg CO ₂ e / kWh	Market for electricity, medium voltage (Reference product: electricity, medium voltage) EN15804+A1, EN15804+A2, Finland, 2021. Ecoinvent 3.8.	The processes included in the data set are well representative for the geography (Finland)
District heat	District heating data quality and CO ₂ emissions kg CO ₂ eq. / kWh	0.196 kg CO ₂ e / kWh	<p>Heat production, natural gas, at industrial furnace</p> <p>Heat production, light fuel oil, at industrial furnace 1MW</p> <p>Heat production, softwood chips from forest.</p> <p>Heat production, untreated waste wood, at furnace 1000-5000 kW</p> <p>EN15804+A1, EN15804+A2, Europe.2021. Ecoinvent 3.8.</p>	The processes included in the data set are representative for the geography (Finland / Europe)

TRANSPORTATION SCENARIO

Parameter	Value
Fuel type and consumption of vehicle used for transport	Truck: diesel, maximum load capacity 34 t. Specific transport emissions 0,064 kg CO ₂ equiv. / tn x km
Distance (km)	Average transport distance 139 km
Capacity utilization (%)	100 % for truck
Density of transported products (kg/m ³)	Density varies depending on the mass and size of the product type
Volume capacity utilization factor	1

INSTALLATION OF THE PRODUCT IN THE BUILDING

Parameter	Unit
Ancillary materials for installation (specified by material)	Disposable gloves, (not included in the analysis because of their insignificant usage amount)
Water use	0 m3
Other resource use	0 kWh (energy use is insignificant)
Quantitative description of energy type (regional mix) and consumption during the installation process	
Waste materials generated by product installation	Packaging materials per 1 kg of product Polystyrene 0,00048 kg Plastic 0,06 kg Cardboard 0,06 kg Wood 0,89 kg Paper 0,00026 kg

END-OF-LIFE SCENARIO

End-of-life description for Tempered glass component

Tempered glass component			
Process flow		Material	Mass
Collection process specified by type	kg collected separately		1 kg
	kg collected with mixed construction waste		
Recovery system specified by type	kg for reuse		
	kg for recycling	Glass products	0,3 kg
	kg for energy recovery		
Disposal specified by type	kg material for final deposition	Glass product	0,7 kg
Assumptions for scenario development	units as appropriate	Waste materials are transported 75 km by truck to recycling facility with a truck capacity utilization of 45%	

End-of-life description for Laminated glass component

Laminated glass component			
Process flow		Material	Mass
Collection process specified by type	kg collected separately		1 kg
	kg collected with mixed construction waste		
	kg for reuse		

Recovery system specified by type	kg for recycling	Laminated glass	0,3 kg
	kg for energy recovery		-
Disposal specified by type	kg material for final deposition	Laminated glass	0,7 kg
Assumptions for scenario development	units as appropriate	Waste materials are transported 75 km by truck to recycling facility with a truck capacity utilization of 45%	

End-of-life description for Aluminium component

Aluminium component			
Process flow		Material	Mass
Collection process specified by type	kg collected separately		1 kg
	kg collected with mixed construction waste		
Recovery system specified by type	kg for reuse		
	kg for recycling		0,95 kg
	kg for energy recovery		-
Disposal specified by type	kg material for final deposition		0,05 kg
Assumptions for scenario development	units as appropriate	Waste materials are transported 75 km by truck to recycling facility with a truck capacity utilization of 45%	

End-of-life description for other materials component

Other materials component			
Process flow		Material	Mass
Collection process specified by type	kg collected separately		1 kg
	kg collected with mixed construction waste		
Recovery system specified by type	kg for reuse		
	kg for recycling	Brass	0,002 kg
		Steel	0,34 kg
		Copper	0,000043 kg
	kg for energy recovery	Mixed metal	0,00062 kg
		Plastic	0,44 kg
Disposal specified by type	kg material for final deposition	Silicone Rubber	0,18 kg 0,03 kg
Assumptions for scenario development	units as appropriate	Waste materials are transported 75 km by truck to recycling facility with a truck capacity utilization of 45%	

BIBLIOGRAPHY

- 1 ISO 14025:2010 Environmental labels and declarations – Type III environmental declarations. Principles and procedures.
- 2 ISO 14040:2006 Environmental management. Life cycle assessment. Principles and frameworks.
- 3 ISO 14044:2006 Environmental management. Life cycle assessment. Requirements and guidelines.
- 4 Ecoinvent database v3.8 (2021)
- 5 EN 15804:2012+A2:2019 Sustainability in construction works – Environmental product declarations – Core rules for the product category of construction products.
- 6 EPD Background Report
- 7 Emissions database for construction, Finnish Environmental Institute, 2023. Available at: <https://co2data.fi/>
- 8 The Building Information Foundation RTS (RTS EPD Product Category Rules). Rakennustietosäätiö RTS sr (RTS EPD PCR menetelmäohje 15804:2019, 26.8.2020)

ANNEX 1: EPD RESULTS BY RTS PCR REQUIREMENTS

LUMON ROOF SIRO

Impact category	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
Global Warming Potential total	kg CO2e /kg	2.75E+00	1.78E-02	3.97E-01	0.00E+00	7.04E-03	1.40E-02	3.20E-03	-1.03E+00
Abiotic depletion potential (ADP-elements) for non fossil resources	kg Sbe / kg	2.61E-05	4.75E-08	2.24E-08	0.00E+00	1.65E-08	5.89E-07	7.12E-09	-3.21E-06
Abiotic depletion potential (ADP-fossil fuels) for fossil resources (+A2)	MJ / kg	4.23E+01	2.69E-01	6.85E-02	0.00E+00	1.06E-01	8.30E-02	8.23E-02	-1.47E+01
Water use	m3e depr. / kg	2.80E+05	1.22E-03	2.97E-03	0.00E+00	4.73E-04	1.66E-03	2.92E-04	-1.93E+00
Use of secondary materials	kg / kg	9.85E-02	7.91E-05	6.72E-05	0.00E+00	2.94E-05	7.45E-05	1.78E-05	2.82E-01
Biogenic carbon content in product	kg C / kg	0,00E+00	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Lumon – Creating more room for life since 1978

We help our customers get more space for life by converting unused terraces and balconies into inspiring and versatile glazed living spaces. Lumon has over one million satisfied customers across the globe.

Our product selection covers balcony glass, glass terraces, various balcony facade solutions, Lumon glazing maintenance services and Visor blinds. Lumon Group's turnover in 2022 was EUR 193 million, and we employ more than 1,300 people.



Lumon Group

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