

ENVIRONMENTAL PRODUCT DECLARATION

In accordance with ISO 14025 and EN 15804:2012+A2:2019 for
PORCELAIN (15mm) from **SILKARSTONE**



Programme:	EPD Turkey, a fully aligned regional programme www.epdturkey.org	The International EPD® System www.environdec.com
Programme operator:	EPD Turkey: SÜRATAM – Turkish Centre for Sustainable Production Research & Design Nef 09 B Blok No:7/15 34415 Kagithane/Istanbul, TURKEY	EPD International AB
EPD registration number:	S-P-01977	
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Revision version:	1.1	
Geographical scope:	Global	

Owner of the EPD :

Silkar Madencilik San. ve Tic. A.S.
Silkar Plaza
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Bayrampaşa/Istanbul, Turkey

LSP - PR

PORCELAIN



Laminated Stone Panels

WHEN WEIGHT MATTERS

Programme Information

Programme	EPD Turkey, a fully aligned regional programme	The International EPD® System
	SÜRATAM – Turkish Centre for Sustainable Production Research & Design Nef 09 B Blok No:7/15 34415 Kağıthane/Istanbul, TURKEY www.epdturkey.org info@epdturkey.org	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden www.environdec.com info@environdec.com

Product Category Rules (PCR): 2019:14 Version 1.0, 2019-12-20, Construction Products and CPC 54 Construction Services, EN 15804:2012 + A2:2019 Sustainability of Construction Works

Independent third-party verification of the declaration and data, according to ISO 14025:2006:

EPD process certification

EPD verification ☒

Third party verifier: Vladimír Kočí, PhD

Approved by: The International EPD® System

Procedure for follow-up of data during EPD validity involves third party verifier:

Yes

No ☒

The EPD owner has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programmes may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804.

About Company

At SilkarStone, we are proud to be a leading stone manufacturer, producing a variety of natural stone, mosaics, slabs, and tiles, and exporting product to over 35 countries across the globe.

Our company was established over thirty years ago, owns multiple quarries in Turkey and Greece, and two factories in Turkey. This vertical integration allows product quality to be controlled from start to finish while providing unparalleled service to clients planning complex architectural projects. With showrooms in London and Istanbul, as well as a joint venture in Qatar, China and the United States, we are able to assist with projects all over the world, providing quality custom products for large-scale bespoke projects.

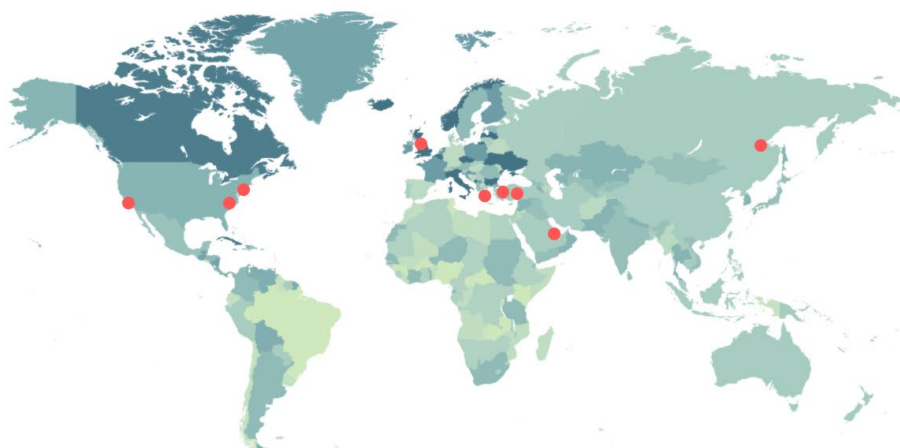
Through our sister company AKDO Intertrade, exclusive products are distributed to more than 350 dealers under the “AKDO” brand in the luxury tile and stone market of the United States.

Silkar is one of the largest mosaic manufacturers in the world, with exclusive designs and an impressive palette of natural stone colors. Our ability to produce incredible details custom mosaics and exclusive mosaic tiles make Silkar a unique

company in the design world.

In addition to offering slabs, mosaics, and cut-to-size tile, we continually invest in innovation beyond traditional stone product. Because of investments in new technologies such as lightweight laminated stone panels, Silkar has experienced great success within industries such as luxury yachting, furniture, interior, and exterior wall cladding, and more.

After working with mother nature’s product for so long, we respect the earth and green movements. To date, Silkar continues to set standards in the natural stone industry with sustainable manufacturing. As a result of EPD (environmental product deceleration) studies, we have calculated our environmental impact within the complete life cycle for nine products according to ISO 14044 standard and published third-party approved statements. Silkar has EN ISO 9001 Quality Management System, EN ISO 14001 Environmental Management System and ISO 45001 Occupational Health & Safety Management System Certifications. We hope to be your solution partner in the natural stone business. Allow us to show you why SilkarStone has become an international leader in the natural stone industry.



Product Information

Laminated Stone Panel w/Porcelain (LSP - PR) is an innovative solution for creating dramatic, large format natural stone installations in an efficient manner. Using advanced technology, stone slabs are cut into incredibly thin sheets and laminated onto lightweight materials. The resulting product offers a more sustainable, custom approach to design, while maintaining a lower price point.

LSP - PR is made from natural stone with a density of 2.7 tonne/m³. Weighing in 39 kg in 15 mm (5 mm natural stone + 10 mm porcelain) thickness. LSP - PR is supported by 2-3% epoxy based glue by weight.

The UN CPC code of the product is 3761.

Weight



39 kg/m²

Installation



Adhesion;
Cement, Epoxy,
Silicone

Thickness



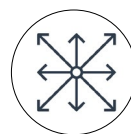
15 mm

Finish



Polished, Honed,
Brushed

Dimensions



MAX,
Standard Slab Size
1200x 2400 mm

Technical Properties

	Value	Test Standards
Reaction to Fire	B-s1, d0	EN 13501
Impact Resistance	Class 1 – No Damage	ISO 7892
Determination of Tensile Adhesion Strength for Adhesives (N/mm ²)	1.5	EN 12004

COLOR OPTIONS

Customize your Laminated Stone Panels with our large selection of premium natural stones.

Astra White
Astra White Venato
Athens Gray
Brown Queen
Café Latte Dark
Calacatta
Calacatta Helena
Carrara
Castano Brown
Coastal Gray
Crema Alexandra
Crema Cornucopia
Dark Olive
Emperador Dark
Ephesus Dune
Granville Beige
Lilac
Maya White
Nero Marquina
New Luget
Oro Gray
Oro White
Savana Gray
Silver Gray
Silver Stone
Silver Wood
Terra Gray
Vega Light
Waving Wood

LCA Information

Declared Unit

1 m² of LSP - PR with 15 mm in thickness (5 mm natural stone and 10 mm porcelain) and a weight of 39 kg.

Time Representativeness

2019

Database(s) and LCA Software Used

TLCID ver. 1.0 (Turkish Lifecycle Inventory Database), Ecoinvent 3.6, SimaPro 9.1

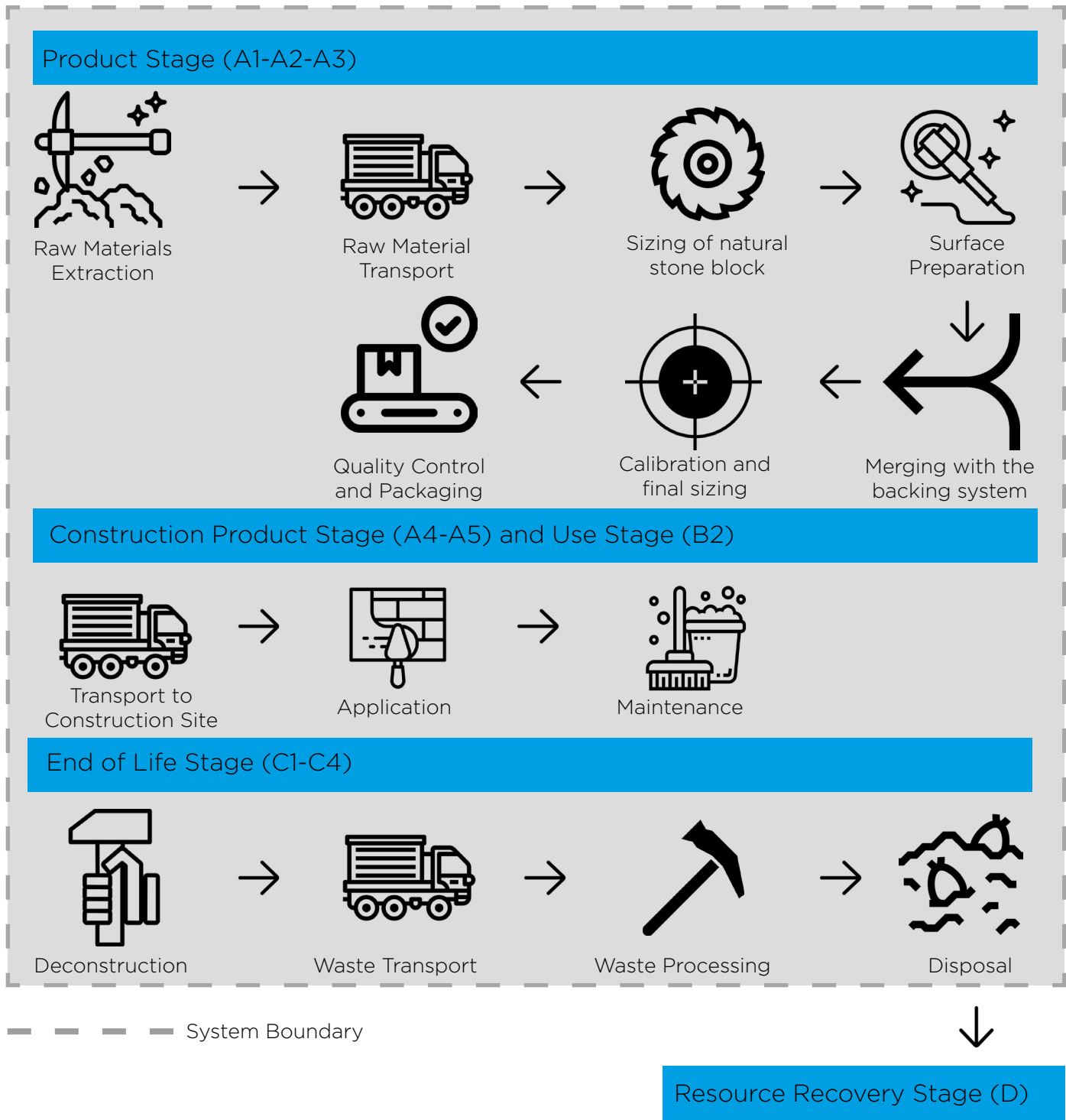
The inventory for the LCA study is based on the 2019 production figures for LSP - PR by SILKARSTONE plants in Bilecik, Turkey.

This EPD's system boundary is cradle to grave. The system boundary covers A1 - A3 product stages, A4 - A5 construction, B1 - B7 use and C1 - C4 end of life and D stages.

Upstream	Core		Downstream													Other Environmental Information
Raw Material Supply	Transport	Manufacturing	Transport	Construction Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational Energy Use	Operational Water Use	Deconstruction, demolition	Transport	Waste Processing	Disposal	Future reuse, recycling or energy recovery potentials
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

X = Included in LCA

Description of System Boundary



Excluded Lifecycle Stages: Travel to and from work by personnel, business travel, etc. are excluded life cycle stages.

A1: Raw Material Supply

SILKARSTONE's productions start from mining. The company supplies its raw materials necessary from its mine sites or other mines. Raw material supply includes raw material extraction/preparation and pre-treatment processes before production.

A2: Transportation

Transport is relevant for delivery of raw materials and other materials to the plant and the transport of materials within the plant. Transport of raw materials to production site is taken as the weight average values for transport from raw materials supplier in 2019.

A3: Manufacturing

Manufacturing starts with the selection of the blocks suitable for the products. After reinforcing the block, the block is sliced and dried. Production continues with the slab epoxy process for adding more durability. After surface preparation, a structure backing system is mounted on a natural stone slab. Finally, the product is calibrated and prepare the surface and now it is ready as slabs or cut to final size. Final products are quality checked and package to delivery.

A4: Transport From the Gate to the Site

Transport of final product to construction site is taken as the weight average values for transport to customers in 2019.

Scenario Information	Value (expressed per functional/declared unit)
Vehicle Type	Road, Lorry, >32 metric ton, Euro 5 Motor Sea, Container Ship
Data Type	Related transport data from Ecoivent 3.6
Distance to Construction Site	941 km weighted average by lorry to all markets 3698 km weighted average by ship to all markets
Bulk Density of Transported Products	2700 kg/m ³

A5: Assembly

This stage includes the LSP - PR application on the construction site. There is no energy use during installation, manpower is sufficient. For the installation of LSP - PR to the surface, 6-7 kg/m² cement-based adhesive is used according to the product technical datasheet.

Scenario Information	Value (expressed per functional/declared unit)
Ancillary Materials for Installation	6 - 7 kg/m ² cement based mortar
Water Use	included in the mortar 0.00065 m ³ water
Other Resource Use	Not necessary
Quantitative description of energy type (regional mix) and consumption during the installation process	Not necessary

B1 : Use Stage is related to any impacts done during use of the product.

B2 : Maintenance

This stage is related to any activities to maintain the function of the product in its life time. It includes cleaning with water and detergent. SILKARSTONE recommends using detergent containing stain remover or neutral low-sulphate and rinse with tap water after cleaning.

Monthly for about 50 years, 5 gr detergent and 0.1 L water use are assumed to clean the surfaces of natural stone products.

Scenario Information	Value (expressed per functional/declared unit)
Maintenance Process	Cleaning the surface of product
Maintenance Cycle	Monthly during 50 years (600 times)
Ancillary Materials for Maintenance	3 kg during whole cycle
Net Fresh Water Consumption	0.012 m ³
Energy Input During Maintenance	Not necessary

B3 : Repair is not necessary in use.

B4 : Replacement is not necessary in use.

B5 : Refurbishment is not necessary in use

B6 : Operational Energy Use

No energy is used in operation.

B7 : Operational Water Use

No water is used in operation.

C1 : Deconstruction and Demolition

There is no energy use during uninstallation, manpower and some tools are sufficient.

C2 : Transport

This stage includes the transportation of the discarded conductors to final disposal. Average distance from demolition site to waste processing site for final disposal is assumed to be 100 km.

C3 : Waste Processing

If the wastes are going to landfill or to be inert filler, there is no need for any waste process.

C4 : Disposal

Disposal is the final stage of product life. LSP – PR may dispose with any disposal scenario after construction and demolition as their final fate and modelled as such for this EPD. It is assumed that 25% of the wastes used as inert filler, 75% of the wastes send to the inert landfill site.

D : Benefits and Loads

In this stage, inert filler benefits were calculated specified in the disposal stage.

More Information

The results of the LCA with the indicators as per EPD requirement are given in the LCA result tables. All energy calculations were obtained using Cumulative Energy Demand (LHV) methodology, while fresh water use is calculated with selected inventory flows in SimaPro according to the PCR.

There are no co-products in the production. Hence, there is no need for co-product allocation.

Energy consumptions and transports datasets were allocated based on the production figures in 2019 and the weighted averaged of environmental impacts for the SILKARSTONE's products was presented.

Accordingly, hazardous and non-hazardous waste amounts were also allocated from 2019 total waste arisings. The natural stone sector has a high amount of production wastage due to its nature. All production wastage is included in the LCA model. Wastes arising from production are disposed in accordance with regional legal regulations and sent to inert waste sites.

No substances included in the Candidate List of Substances of Very High Concern for authorization under the REACH regulations are present in SILKARSTONE's products, either above the threshold for registration with the European Chemicals Agency or above 0.1% (wt/wt).

The background of the slide is a light-colored, marbled pattern with grey and white veins. A large, solid dark blue circle is positioned on the left side, partially overlapping the text.

LCA Results

Environmental Impacts for 1 m² of LSP - PR

Impact Category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP - Fossil	kg CO ₂ eq	21.7	2.73	9.13	33.6	2.84	1.68	0	2.98	0	0	0	0	0	0	0.354	0	0.205	-0.366
GWP - Biogenic	kg CO ₂ eq	-0.236	0.001	-4.97	-5.20	0.00	0.029	0	-6.946	0	0	0	0	0	0	257E-6	0	407E-6	-291E-6
GWP - Luluc	kg CO ₂ eq	0.023	0.001	0.066	0.090	0.001	0.001	0	4.285	0	0	0	0	0	0	103E-6	0	57.2E-6	-210E-6
GWP - Total	kg CO ₂ eq	21.5	2.74	4.23	28.4	2.84	1.71	0	0.322	0	0	0	0	0	0	0.355	0	0.206	-0.367
ODP	kg CFC-11 eq	2.40E-6	616E-9	454E-9	3.47E-6	621E-9	105E-9	0	496E-9	0	0	0	0	0	0	83.3E-9	0	84.6E-9	-71.0E-9
AP	mol H+ eq	0.124	0.031	0.049	0.205	0.050	0.007	0	0.041	0	0	0	0	0	0	0.001	0	0.002	-0.004
EP - Freshwater	kg PO ₄ eq	0.025	0.001	0.021	0.046	484E-6	798E-6	0	0.004	0	0	0	0	0	0	76.8E-6	0	64.5E-6	-16E-6
EP - Marine	kg N eq	0.022	0.009	0.009	0.039	0.013	0.002	0	0.040	0	0	0	0	0	0	453E-6	0	0.001	-1.08E-3
EP - Terrestrial	mol N eq	0.249	0.095	0.084	0.428	0.141	0.020	0	0.147	0	0	0	0	0	0	0.005	0	0.007	-0.012
POCP	kg NMVOC	0.068	0.026	0.026	0.120	0.038	0.005	0	0.019	0	0	0	0	0	0	0.002	0	0.002	-0.003
ADPE	kg Sb eq	0.014	36.7E-6	24.7E-6	0.014	35.4E-6	109E-6	0	204E-6	0	0	0	0	0	0	6.05E-6	0	1.88E-6	-8.84E-6
ADPF	MJ	288	40.3	114	443	40.4	11.6	0	31.4	0	0	0	0	0	0	5.51	0	5.74	-5.21
WDP	m³ depriv.	715	0.110	8.24	15.5	0.100	0.175	0	11.6	0	0	0	0	0	0	0.018	0	0.257	-0.454
PM	disease inc.	53.0E-6	255E-9	286E-9	53.5E-6	176E-9	75.6E-9	0	606E-9	0	0	0	0	0	0	32.1E-9	0	37.9E-9	-34.8E-9
IR	kBq U-235 eq	1.52	0.199	0.158	1.88	0.196	0.064	0	0.195	0	0	0	0	0	0	0.028	0	0.026	-0.027
ETP - FW	CTUe	585	30.2	74.7	690	29.6	31.0	0	368	0	0	0	0	0	0	4.39	0	3.72	-5.43
HTTP - C	CTUh	19.3E-9	998E-12	3.34E-9	23.7E-9	1.22E-9	520E-12	0	10.2E-9	0	0	0	0	0	0	108E-12	0	86.1E-12	-266E-12
HTTP - NC	CTUh	687E-9	32.1E-9	71.9E-9	791E-9	29.9E-9	15.6E-9	0	249E-9	0	0	0	0	0	0	5.01E-9	0	2.70E-9	-5.57E-9
SQP	Pt	197	34.5	437	669	28.8	19.2	0	321	0	0	0	0	0	0	6.31	0	12.0	-11.0
Acronyms	GWP-total: Climate change- fossil, GWP-biogenic: Climate change - biogenic, GWP-luluc: Climate change - land use and transformation, ODP: Ozone layer depletion, AP: Acidification terrestrial and freshwater, EP-freshwater: Eutrophication freshwater, EP-marine: Eutrophication marine, EP-terrestrial: Eutrophication terrestrial, POCP: Photochemical oxidation, ADPE: Abiotic depletion - elements, ADPF: Abiotic depletion - fossil resources, WDP: Water scarcity, PM: Respiratory inorganics - particulate matter, IR: Ionising radiation, ETP-FW: Ecotoxicity freshwater, HTP-c: Cancer human health effects, HTP-nc: Non-cancer human health effects, SQP: Land use related impacts, soil quality.																		
Legend	A1: Raw Material Supply, A2: Transport, A3: Manufacturing, A1-A3: Sum of A1, A2, and A3, A4: Transport to Site, A5: Installation, C1: De-Construction, C2: Waste Transport, C3: Waste Processing, C4: Disposal, D: Benefits and Loads Beyond the System Boundary.																		
Disclaimer 1	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.																		
Disclaimer 2	The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.																		

Resource Use for 1 m² of LSP - PR																			
Impact Category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	23.5	0.436	75.6	99.5	0.407	1.25	0	61.2	0	0	0	0	0	0	0.069	0	0.047	-0.106
PERM	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PERT	MJ	23.5	0.436	75.6	99.5	0.407	1.25	0	61.2	0	0	0	0	0	0	0.069	0	0.047	-0.106
PENRE	MJ	288	40.3	114	443	40.4	11.6	0	37.4	0	0	0	0	0	0	5.51	0	5.76	5.21
PENRM	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PENRT	MJ	288	40.3	114	443	40.4	11.6	0	37.4	0	0	0	0	0	0	5.51	0	5.76	5.21
SM	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FW	m³	0.367	0.007	0.132	0.506	0.006	0.034	0	0.881	0	0	0	0	0	0	0.001	0	0.006	-0.034

Waste & Output Flows for 1 m² of LSP - PR

Impact Category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
HWD	kg	0	0	0.008	0.008	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NHWD	kg	0	0	19.2	19.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RWD	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRU	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MFR	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MER	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EE (Electrical)	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EE (Thermal)	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Acronyms

PERE: Use of renewable primary energy excluding resources used as raw materials, PERM: Use of renewable primary energy resources used as raw materials, PERT: Total use of renewable primary energy, PENRE: Use of non-renewable primary energy excluding resources used as raw materials, PENRM: Use of non-renewable primary energy resources used as raw materials, PENRT: Total use of non-renewable primary energy, SM: Secondary material, RSF: Renewable secondary fuels, NRSF: Non-renewable secondary fuels, FW: Net use of fresh water, HWD: Hazardous waste disposed, NHWD: Non-hazardous waste disposed, RWD: Radioactive waste disposed, CRU: Components for reuse, MFR: Material for recycling, MER: Materials for energy recovery, EE (Electrical): Exported energy electrical, EE (Thermal): Exported energy, Thermal.

Result per functional declared unit		
Biogenic Carbon Content		A1-A3
Biogenic carbon content in product		0
Biogenic carbon content in packaging		0.6
Note: It was assumed 50% of the wood packaging material is biogenic carbon.		

0.044	0.464	0.003	0.001	0.006	246E-6	230E-6	-344E-6
64.5	819	16.3	9.39	136	2.71	1.18	-4.69
11.0	47.8	5.86	1.13	3.16	0.790	0.834	-0.688

zone Layer Depletion, AP: Acidification Potential, EP: Eutrophication Potential, RE: Respiratory Effects,

g, C4: Disposal, D: Benefits and Loads Beyond the System Boundary.

Environmental Impacts for 1 m² of LSP - PR											
Impact Category	Unit	A1	A2	A3	A1-A3	A4	A5	B2	C2	C4	D
ODP	kg CFC-11 eq	2.62E-6	652E-9	521E-9	3.79E-6	657E-9	114E-9	526E-9	88.3E-9	89.6E-9	-75.5E-9
GWP	kg CO₂ eq	21.0	2.71	8.97	32.7	2.82	1.68	7.17	0.351	0.201	-0.360
Smog	kg O₃ eq	1.25	0.545	0.481	2.28	0.809	0.111	0.274	0.028	0.043	-0.068
AP	kg SO₂ eq	0.104	0.027	0.041	0.172	0.043	0.006	0.029	0.001	0.002	-0.003
EP	kg N eq	0.075	0.003	0.052	0.130	0.004	0.003	0.051	358E-6	356E-6	-0.001
Carcinogenics	CTUh	1.94E-6	76.0E-9	635E-9	2.66E-6	83.5E-9	40.6E-9	246E-9	9.32E-9	780E-9	-18.3E-9
No Carcinogenics	CTUh	12.4E-6	491E-9	2.07E-6	14.9E-6	437E-9	257E-9	2.63E-6	84.2E-9	24.1E-9	-91.4E-9
RE	kg PM2.5 eq	0.418	0.003	0.044	0.464	0.003	0.001	0.006	246E-6	230E-6	-344E-6
Ecotoxicity	CTUe	737	17.0	64.5	819	16.3	9.39	136	2.71	1.18	-4.69
FFD	MJ surplus	30.9	5.82	11.0	47.8	5.86	1.13	3.16	0.790	0.834	-0.688
Acronyms	GWP: Global Warming Potential, ODP: Ozone Layer Depletion, AP: Acidification Potential, EP: Eutrophication Potential, RE: Respiratory Effects, FFD: Fossil fuel Depletion.										
Legend	A1: Raw Material Supply, A2: Transport, A3: Manufacturing, A1-A3: Sum of A1, A2, and A3, A4: Transport to Site, A5: Installation, C1: De-Construction, C2: Waste Transport, C3: Waste Processing, C4: Disposal, D: Benefits and Loads Beyond the System Boundary.										

Environmental Impacts for 1 m² of LSP - PR											
Impact Category	Unit	A1	A2	A3	A1-A3	A4	A5	B2	C2	C4	D
ODP	kg CFC-11 eq	2.62E-6	652E-9	521E-9	3.79E-6	657E-9	114E-9	526E-9	88.3E-9	89.6E-9	-75.5E-9
GWP	kg CO ₂ eq	21.0	2.71	8.97	32.7	2.82	1.68	7.17	0.351	0.201	-0.360
Smog	kg O ₃ eq	1.25	0.545	0.481	2.28	0.809	0.111	0.274	0.028	0.043	-0.068
AP	kg SO ₂ eq	0.104	0.027	0.041	0.172	0.043	0.006	0.029	0.001	0.002	-0.003
EP	kg N eq	0.075	0.003	0.052	0.130	0.004	0.003	0.051	358E-6	356E-6	-0.001
Carcinogenics	CTUh	1.94E-6	76.0E-9	635E-9	2.66E-6	83.5E-9	40.6E-9	246E-9	9.32E-9	7.80E-9	-18.3E-9
No Carcinogenics	CTUh	12.4E-6	491E-9	2.07E-6	14.9E-6	437E-9	257E-9	2.63E-6	84.2E-9	241E-9	-91.4E-9
RE	kg PM2.5 eq	0.418	0.003	0.044	0.464	0.003	0.001	0.006	246E-6	230E-6	-344E-6
Ecotoxicity	CTUe	737	17.0	64.5	819	16.3	9.39	136	2.71	1.18	-4.69
FFD	MJ surplus	30.9	5.82	11.0	47.8	5.86	1.13	3.16	0.790	0.834	-0.688
Acronyms	GWP: Global Warming Potential, ODP: Ozone Layer Depletion, AP: Acidification Potential, EP: Eutrophication Potential, RE: Respiratory Effects, FFD: Fossil fuel Depletion.										
Legend	A1: Raw Material Supply, A2: Transport, A3: Manufacturing, A1-A3: Sum of A1, A2, and A3, A4: Transport to Site, A5: Installation, C1: De-Construction, C2: Waste Transport, C3: Waste Processing, C4: Disposal, D: Benefits and Loads Beyond the System Boundary.										



References

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- /The International EPD® System/ The International EPD® System is a programme for type III environmental declarations, maintaining a system to verify and register EPD®s as well as keeping a library of EPD®s and PCRs in accordance with ISO 14025. www.environdec.com
- /Ecoinvent / Ecoinvent Centre, www.ecoinvent.org
- /SimaPro/ SimaPro LCA Software, Pré Consultants, the Netherlands, www.pre-sustainability.com
- /TLCID/ Turkish Life Cycle Inventory Database, Turkish Center for Sustainable Production Research and Design (SURATAM), www.suratam.org

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