



Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

Akalla pergola



nola

The Norwegian EPD Foundation

Owner of the declaration:

Nola Industrier Aktiebolag

Product:

Akalla pergola

Declared unit:

1 pc

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core

NPCR 026:2022 Part B for Furniture

Program operator:

The Norwegian EPD Foundation

Declaration number:

NEPD-7514-6905-EN

Registration number:

NEPD-7514-6905-EN

Issue date: 11.09.2024

Valid to: 11.09.2029

ver-031024

EPD software:

LCAno EPD generator ID: 519412



General information

Product

Akalla pergola

Program operator:

The Norwegian EPD Foundation
Post Box 5250 Majorstuen, 0303 Oslo, Norway

Phone: +47 977 22 020 web: www.epd-norge.no

Declaration number:

NEPD-7514-6905-EN

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core PCR NPCR 026:2022 Part B for Furniture

Statement of liability:

The owner of the declaration shall be liable for the underlying information and evidence. EPD Norway shall not be liable with respect to manufacturer information, life cycle assessment data and

evidences.

Declared unit:

1 pcs Akalla pergola

Declared unit (cradle to gate) with option:

A1-A3,A4,A5,B2,B3,B4,C1,C2,C3,C4,D

Functional unit:

General information on verification of EPD from EPD tools:

Independent verification of data, other environmental information and the declaration according to ISO 14025:2010, § 8.1.3 and § 8.1.4. Verification of each EPD is made according to EPD-Norway's guidelines for verification and approval requiring that tools are i) integrated into the company's environmental management system, ii) the procedures for use of the EPD tool are approved by EPD-Norway, and iii) the process is reviewed annually by an independent third party verifier. See Appendix G of EPD-Norway's General Programme Instructions for further information on EPD tools

Verification of EPD tool:

Independent third party verification of the EPD tool, background data and test-EPD in accordance with EPDNorway's procedures and guidelines for verification and approval of EPD tools.

Third party verifier:

Elisabet Amat, GREENIZE projects

(no signature required)

Owner of the declaration:

Nola Industrier Aktiebolag Contact person: Anders Åkesson Phone: 08-702 19 60

e-mail: anders.akesson@nola.se

Manufacturer:

Nola Industrier Aktiebolag

Place of production:

Nola Industrier Aktiebolag Blekingegatan 26 118 56 Stockholm, Sweden

Management system:

Organisation no:

556207-4442

Issue date:

11.09.2024

Valid to:

11.09.2029

Year of study:

2022

Comparability:

EPD of construction products may not be comparable if they not comply with EN 15804 and seen in a building context.

Development and verification of EPD:

The declaration is created using EPD tool lca.tools ver EPD2022.03, developed by LCA.no. The EPD tool is integrated in the company's management system, and has been approved by EPD Norway.

Developer of EPD: Anders Åkesson

Reviewer of company-specific input data and EPD: Joachim Henriksson

Approved:

Håkon Hauan, CEO EPD-Norge



Product

Product description:

Akalla is a shading structure with oiled oak beams supported by black powder coated steel posts. The system can easily be expanded and supplemented with additional sections. While Akalla provides an ideal spot for enjoying a garden or outdoor courtyard, it can also be used for storing bicycles and recycling bins. For Akalla with a flat pergola roof, there are both straight and angled start and extension sections

Product specification

Ö80-10 Akalla Straight Start section Angled roof

Length: 508 cm Width: 274 cm

Height: Front: 271 cm. Back: 244 cm

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Chemical	0,60	0,16	0,00	0,00
Powder coating	0,76	0,21	0,00	0,00
Wood - Solid oak	242,61	65,88	0,00	0,00
Metal - Stainless steel	1,70	0,46	0,37	21,83
Metal - Steel	122,57	33,28	7,24	5,91
Metal - Zinc	0,01	0,00	0,00	0,00
Total	368,25	100,00	7,61	

Packaging	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Packaging - Cardboard	0,30	0,40	0,00	0,00
Packaging - Pallet	75,00	99,21	0,00	0,00
Packaging - Plastic	0,30	0,40	0,00	0,00
Total incl. packaging	443,85	100,00	7,61	

Technical data:

Market:

Global

Reference service life, product

15 years

Reference service life, building

LCA: Calculation rules

Declared unit:

1 pcs Akalla pergola

Cut-off criteria:

All major raw materials and all the essential energy is included. The production processes for raw materials and energy flows with very small amounts (less than 1%) are not included. These cut-off criteria do not apply for hazardous materials and substances.

Energy flows and materials representing less than 1% of the total are excluded. Cut-off does not apply for REACH materials.

Allocation:



The allocation is made in accordance with the provisions of EN 15804. Incoming energy and water and waste production in-house is allocated equally among all products through mass allocation. Effects of primary production of recycled materials is allocated to the main product in which the material was used. The recycling process and transportation of the material is allocated to this analysis. Allocation as per EN 15804.

Impacts from primary production of virgin material are assigned to respective component production and includes transportation.

Impacts from repair and replacement are not included in the use stage, as the materials used in the product are designed to last longer than the stated lifespan

Impacts from primary production of recycled materials are assigned to respective component production, and includes recycling and transportation processes.

Emissions from disposal of the product are included and allocated per material. Energy recovery from incineration of relevant materials is included and allocated on a national level.

Data quality:

Specific data for the product composition are provided by the manufacturer. They represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on registered EPDs according to EN 15804, Ostfold Research databases, ecoinvent and other LCA databases. The data quality of the raw materials in A1 is presented in the table below. Data has been gathered from sub suppliers and public, current, published EPDs or ecoinvent 3.6 database.

Materials	Source	Data quality	Year
Chemical	ecoinvent 3.6	Database	2019
Metal - Stainless steel	ecoinvent 3.6	Database	2019
Metal - Steel	ecoinvent 3.6	Database	2019
Metal - Steel	EPD	S-P-01918	2020
Metal - Steel	S-P-02242	EPD	2020
Metal - Zinc	ecoinvent 3.6	Database	2019
Packaging - Cardboard	Modified ecoinvent 3.6	Database	2019
Packaging - Pallet	ecoinvent 3.6	Database	2019
Packaging - Plastic	ecoinvent 3.6	Database	2019
Powder coating	Ecoinvent 3.6	Database	2019
Wood - Solid oak	modified ecoinvent 3.6	Database	2019

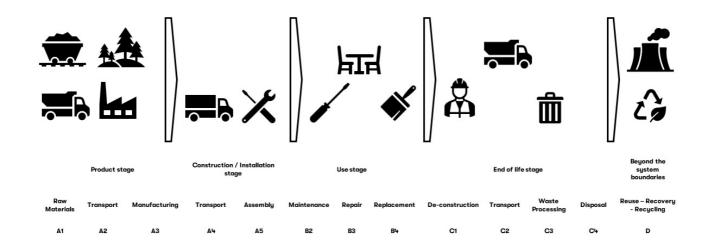


System boundaries (X=included, MND=module not declared, MNR=module not relevant)

P	roduct stag	ge		uction on stage		Use stage End of life stage Beyond the syste boundaries			End of life stage			Beyond the system boundaries				
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De- construction demolition	Transport	Waste	Disposal	Reuse-Recovery- Recycling-potential
A1	A2	A3	A4	A5	B1	B2	В3	B4	B5	В6	В7	C1	C2	C3	C4	D
Х	X	X	X	X	MND	Χ	Χ	X	MND	MND	MND	X	X	X	X	X

System boundary:

Sweden



Additional technical information:

https://nola.se/en/products/akalla-pergolasystem/



LCA: Scenarios and additional technical information

The following information describe the scenarios in the different modules of the EPD.

Production scenario assumes production in Sweden at sub-suppliers with transport of materials and components between certain production steps.

Usage scenario assumes no repair or replacement and minimal maintenance during the 15 year lifespan of the product, as materials and surface treatments are selected to require servicing during lifetime of product. The installation location is assumed to be within Sweden.

	Compaignment libration				Valera
Transport from production place to user (A4)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, 16-32 tonnes, EURO 5 (km)	36,7 %	400	0,044	l/tkm	17,60
Assembly (A5)	Unit	Value			
Waste, packaging, plastic film (LDPE), to average treatment - A5 (kg)	kg	0,30			
Waste, packaging, Pallet, EUR wooden pallet, single use, average treatment (kg)	kg	75,00			
Waste, packaging, corrugated board box, 0 % recycled, to average treatment (kg)	kg	0,30			
Transport to waste processing (C2)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, 16-32 tonnes, EURO 5 (km)	36,7 %	50	0,044	l/tkm	2,20
Waste processing (C3)	Unit	Value			
Waste, materials to recycling (kg)	kg	42,16			
Waste treatment per kg Scrap steel, incineration with fly ash extraction (kg)	kg	124,27			
Waste treatment per kg Wood, incineration with fly ash extraction (kg)	kg	242,61			
Waste treatment per kg Non-hazardous waste, incineration with fly ash extraction - C3 (kg)	kg	1,36			
Disposal (C4)	Unit	Value			
Landfilling of ashes and residues from incineration of Scrap steel (kg)	kg	82,11			
Landfilling of ashes from incineration of Wood, process per kg ashes and residues (kg)	kg	2,79			
Landfilling of ashes from incineration of Non- hazardous waste, process per kg ashes and residues - C4 (kg)	kg	0,32			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of primary steel with net scrap (kg)	kg	33,88			
Substitution of thermal energy, district heating (MJ)	МЈ	2564,79			
Substitution of electricity (MJ)	MJ	169,53			



LCA: Results

The LCA results are presented below for the declared unit defined on page 2 of the EPD document.

Environme	ental impact								
EIIVII OIIIII	Indicator		Unit	_	A1-A3	A4	A5	B2	В3
	GWP-total		kg CO ₂ -e	eq	-1,74E+02	2,96E+01	1,16E+02	0	0
	GWP-fossil		kg CO ₂ -e	eq	4,53E+02	2,96E+01	2,05E+00	0	0
	GWP-biogenic	GWP-biogenic		kg CO ₂ -eq		1,21E-02	1,14E+02	0	0
	GWP-luluc		kg CO ₂ -e	eq	1,81E+00	1,03E-02	5,21E-04	0	0
٥	ODP		kg CFC11	-eq	2,63E-05	6,75E-06	3,25E-07	0	0
CAT .	АР		mol H+ -	eq	2,09E+00	1,21E-01	1,63E-02	0	0
	EP-FreshWater		kg P -ec	1	8,28E-03	2,32E-04	2,43E-05	0	0
	EP-Marine		kg N -ed	7	5,37E-01	3,59E-02	7,00E-03	0	0
	EP-Terrestial		mol N -e	q	5,99E+00	3,97E-01	7,48E-02	0	0
	POCP		kg NMVOC	-eq	1,82E+00	1,21E-01	1,92E-02	0	0
	ADP-minerals&metals ¹		kg Sb-ed	7	5,60E-03	8,02E-04	3,30E-05	0	0
	ADP-fossil ¹		МЈ		6,89E+03	4,46E+02	2,39E+01	0	0
<u></u>	WDP ¹		2		1 455 . 05	4,26E+02	3,69E+01	0	0
(%)	WDP.		m^3		1,45E+05	4,200+02	3,09E+01	U	U
(%)	Indicator		Unit	B4	1,45E+05	4,20E+02	C3	C4	D
				B4 0					
	Indicator		Unit		C1	C2	C3	C4	D
	Indicator GWP-total		Unit kg CO ₂ -eq	0	C1 0	C2 3,70E+00	C3 4,11E+02	C4 1,00E+00	D -5,27E+01
	Indicator GWP-total GWP-fossil		Unit kg CO ₂ -eq kg CO ₂ -eq	0	C1 0	C2 3,70E+00 3,70E+00	C3 4,11E+02 6,74E+00	C4 1,00E+00 1,00E+00	D -5,27E+01 -5,21E+01
	Indicator GWP-total GWP-fossil GWP-biogenic		Unit kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq	0 0 0	C1 0 0	C2 3,70E+00 3,70E+00 1,51E-03	C3 4,11E+02 6,74E+00 4,04E+02	C4 1,00E+00 1,00E+00 7,34E-04	D -5,27E+01 -5,21E+01 -5,13E-02
	Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc	k	Unit kg CO_2 -eq kg CO_2 -eq kg CO_2 -eq kg CO_2 -eq	0 0 0	0 0 0 0	C2 3,70E+00 3,70E+00 1,51E-03 1,29E-03	C3 4,11E+02 6,74E+00 4,04E+02 6,76E-04	C4 1,00E+00 1,00E+00 7,34E-04 2,92E-04	D -5,27E+01 -5,21E+01 -5,13E-02 -5,29E-01
	Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP	k	Unit kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq	0 0 0 0	C1 0 0 0 0	C2 3,70E+00 3,70E+00 1,51E-03 1,29E-03 8,43E-07	C3 4,11E+02 6,74E+00 4,04E+02 6,76E-04 3,24E-07	C4 1,00E+00 1,00E+00 7,34E-04 2,92E-04 2,96E-07	D -5,27E+01 -5,21E+01 -5,13E-02 -5,29E-01 -1,08E+00
	Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP	k	Unit $kg CO_2$ -eq	0 0 0 0 0	C1 0 0 0 0 0	C2 3,70E+00 3,70E+00 1,51E-03 1,29E-03 8,43E-07 1,51E-02	C3 4,11E+02 6,74E+00 4,04E+02 6,76E-04 3,24E-07 4,27E-02	C4 1,00E+00 1,00E+00 7,34E-04 2,92E-04 2,96E-07 6,83E-03	D -5,27E+01 -5,21E+01 -5,13E-02 -5,29E-01 -1,08E+00 -3,08E-01
	Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater	k	Wnit kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq g CFC11 -eq mol H+ -eq kg P -eq	0 0 0 0 0 0	C1 0 0 0 0 0 0	C2 3,70E+00 3,70E+00 1,51E-03 1,29E-03 8,43E-07 1,51E-02 2,90E-05	C3 4,11E+02 6,74E+00 4,04E+02 6,76E-04 3,24E-07 4,27E-02 7,13E-05	C4 1,00E+00 1,00E+00 7,34E-04 2,92E-04 2,96E-07 6,83E-03 1,02E-05	D -5,27E+01 -5,21E+01 -5,13E-02 -5,29E-01 -1,08E+00 -3,08E-01 -3,62E-03
	Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine	k	kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq g CFC11 -eq mol H+ -eq kg P -eq kg N -eq	0 0 0 0 0 0 0	C1 0 0 0 0 0 0 0	C2 3,70E+00 3,70E+00 1,51E-03 1,29E-03 8,43E-07 1,51E-02 2,90E-05 4,48E-03	C3 4,11E+02 6,74E+00 4,04E+02 6,76E-04 3,24E-07 4,27E-02 7,13E-05 2,00E-02	C4 1,00E+00 1,00E+00 7,34E-04 2,92E-04 2,96E-07 6,83E-03 1,02E-05 2,42E-03	D -5,27E+01 -5,21E+01 -5,13E-02 -5,29E-01 -1,08E+00 -3,08E-01 -3,62E-03 -7,84E-02
	Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine EP-Terrestial	k	Wnit kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq g CFC11 -eq mol H+ -eq kg P -eq kg N -eq mol N -eq	0 0 0 0 0 0 0	C1 0 0 0 0 0 0 0 0	C2 3,70E+00 3,70E+00 1,51E-03 1,29E-03 8,43E-07 1,51E-02 2,90E-05 4,48E-03 4,96E-02	C3 4,11E+02 6,74E+00 4,04E+02 6,76E-04 3,24E-07 4,27E-02 7,13E-05 2,00E-02 2,13E-01	C4 1,00E+00 1,00E+00 7,34E-04 2,92E-04 2,96E-07 6,83E-03 1,02E-05 2,42E-03 2,69E-02	D -5,27E+01 -5,21E+01 -5,13E-02 -5,29E-01 -1,08E+00 -3,08E-01 -3,62E-03 -7,84E-02 -8,25E-01
	Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine EP-Terrestial POCP	k	Wnit kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq g CFC11 -eq mol H+ -eq kg P -eq kg N -eq mol N -eq	0 0 0 0 0 0 0 0	C1 0 0 0 0 0 0 0 0	C2 3,70E+00 3,70E+00 1,51E-03 1,29E-03 8,43E-07 1,51E-02 2,90E-05 4,48E-03 4,96E-02 1,52E-02	C3 4,11E+02 6,74E+00 4,04E+02 6,76E-04 3,24E-07 4,27E-02 7,13E-05 2,00E-02 2,13E-01 5,32E-02	C4 1,00E+00 1,00E+00 7,34E-04 2,92E-04 2,96E-07 6,83E-03 1,02E-05 2,42E-03 2,69E-02 7,72E-03	D -5,27E+01 -5,21E+01 -5,13E-02 -5,29E-01 -1,08E+00 -3,08E-01 -3,62E-03 -7,84E-02 -8,25E-01 -3,06E-01

GWP-total = Global Warming Potential total; GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment: EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

Remarks to environmental impacts

[&]quot;Reading example: 9,0 E-03 = 9,0*10-3 = 0,009"

^{*}INA Indicator Not Assessed

^{1.} 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



Additional env	ironmental impact i	ndicators						
	Indicator	Unit	A1-A3	A4	A5	B2	В3	
	PM	Disease incidence	Disease incidence		2,13E-06	1,99E-07	0	0
	IRP ²	kgBq U235 -eq	kgBq U235 -eq		1,95E+00	8,67E-02	0	0
4	ETP-fw ¹	CTUe		3,91E+03	3,29E+02	2,72E+01	0	0
44.* *** <u>\$</u>	HTP-c ¹	CTUh		3,78E-07	0,00E+00	3,01E-09	0	0
4° <u>B</u>	HTP-nc ¹	CTUh		3,53E-06	3,55E-07	1,44E-07	0	0
	SQP ¹	dimensionless		5,88E+04	3,08E+02	1,35E+01	0	0
Ind	licator	Unit	D./I	C1	C2	C	CA	D

I	ndicator	Unit	B4	C1	C2	C3	C4	D
	PM	Disease incidence	0	0	2,66E-07	6,14E-07	1,24E-07	-1,05E-05
	IRP ²	kgBq U235 -eq	0	0	2,44E-01	6,55E-02	8,83E-02	-1,22E+00
3	ETP-fw ¹	CTUe	0	0	4,11E+01	1,03E+02	1,37E+01	-3,23E+03
40.* *** <u>\$</u>	HTP-c ¹	CTUh	0	0	0,00E+00	1,46E-08	5,11E-10	-2,00E-07
₩ <u></u>	HTP-nc ¹	CTUh	0	0	4,44E-08	4,53E-07	1,41E-08	2,79E-06
	SQP ¹	dimensionless	0	0	3,85E+01	5,12E+00	4,86E+01	-1,45E+03

PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)

[&]quot;Reading example: 9,0 E-03 = 9,0*10-3 = 0,009"

^{*}INA Indicator Not Assessed

^{1.} 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

^{2.} 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.



Resource use									
	Indicator		U	nit	A1-A3	A4	A5	B2	В3
5	PERE		N	۷J	6,32E+03	6,30E+00	4,91E-01	0	0
	PERM		N	NJ	5,48E+03	0,00E+00	-1,05E+03	0	0
Ç.	PERT		N	NJ	1,18E+04	6,30E+00	-1,05E+03	0	0
	PENRE		N	۷J	6,91E+03	4,46E+02	2,39E+01	0	0
42	PENRM		N	NJ	3,58E+01	0,00E+00	-1,27E+01	0	0
IA	PENRT		N	NJ	6,95E+03	4,46E+02	1,11E+01	0	0
<u></u>	SM		k	κg	7,61E+00	0,00E+00	0,00E+00	0	0
	RSF		N	NJ	4,66E+00	2,25E-01	1,43E-02	0	0
	NRSF		N	NJ	1,23E+01	8,05E-01	1,62E-01	0	0
%	FW		n	n ³	4,04E+00	4,70E-02	1,74E-02	0	0
	icator	U	Jnit	B4	C1	C2	C3	C4	D
্ব উ	icator PERE		Jnit MJ	B4 0	C1 0	C2 7,87E-01	C3 1,13E+00	C4 4,33E-01	D -1,34E+03
Ö	PERE		МЈ	0	0	7,87E-01	1,13E+00	4,33E-01	-1,34E+03
i e	PERE PERM		M1 M1	0	0	7,87E-01 0,00E+00	1,13E+00 -3,39E+03	4,33E-01 0,00E+00	-1,34E+03 0,00E+00
्र (हें) 1 ्राह्य	PERE PERM PERT		MJ MJ	0 0	0 0	7,87E-01 0,00E+00 7,87E-01	1,13E+00 -3,39E+03 -3,39E+03	4,33E-01 0,00E+00 4,33E-01	-1,34E+03 0,00E+00 -1,34E+03
	PERE PERM PERT PENRE		MJ MJ	0 0 0	0 0 0 0	7,87E-01 0,00E+00 7,87E-01 5,58E+01	1,13E+00 -3,39E+03 -3,39E+03 3,03E+01	4,33E-01 0,00E+00 4,33E-01 2,19E+01	-1,34E+03 0,00E+00 -1,34E+03 -5,26E+02
	PERE PERM PERT PENRE PENRM		мл мл мл	0 0 0 0	0 0 0 0	7,87E-01 0,00E+00 7,87E-01 5,58E+01 0,00E+00	1,13E+00 -3,39E+03 -3,39E+03 3,03E+01 -2,30E+01	4,33E-01 0,00E+00 4,33E-01 2,19E+01 0,00E+00	-1,34E+03 0,00E+00 -1,34E+03 -5,26E+02 0,00E+00
	PERE PERM PERT PENRE PENRM PENRT		мл мл мл мл	0 0 0 0 0	0 0 0 0 0	7,87E-01 0,00E+00 7,87E-01 5,58E+01 0,00E+00 5,58E+01	1,13E+00 -3,39E+03 -3,39E+03 3,03E+01 -2,30E+01 7,29E+00	4,33E-01 0,00E+00 4,33E-01 2,19E+01 0,00E+00 2,19E+01	-1,34E+03 0,00E+00 -1,34E+03 -5,26E+02 0,00E+00 -5,26E+02
	PERE PERM PERT PENRE PENRM PENRT SM		MJ MJ MJ MJ MJ MJ kg	0 0 0 0 0 0	0 0 0 0 0 0	7,87E-01 0,00E+00 7,87E-01 5,58E+01 0,00E+00 5,58E+01 0,00E+00	1,13E+00 -3,39E+03 -3,39E+03 3,03E+01 -2,30E+01 7,29E+00 0,00E+00	4,33E-01 0,00E+00 4,33E-01 2,19E+01 0,00E+00 2,19E+01 0,00E+00	-1,34E+03 0,00E+00 -1,34E+03 -5,26E+02 0,00E+00 -5,26E+02 0,00E+00

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary materials; PENRM = Use of non renewable primary energy resources; SM = Use of secondary materials; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water

"Reading example: 9,0 E-03 = 9,0*10-3 = 0,009" *INA Indicator Not Assessed



End of life - Waste									
Indicator			U	nit	A1-A3	A4	A5	B2	В3
	HWD	HWD		kg		2,28E-02	0,00E+00	0	0
Ī	NHWD		k	g	9,37E+01	2,13E+01	7,56E+01	0	0
₩	RWD		k	g	8,12E-02	3,04E-03	0,00E+00	0	0
In	dicator		Unit	B4	C1	C2	C3	C4	D
ā	HWD		kg	0	0	2,84E-03	0,00E+00	8,40E+01	-2,04E-01
Ū	NHWD		kg	0	0	2,67E+00	1,36E+00	1,27E+00	-2,03E+01
₽	RWD		kg	0	0	3,80E-04	0,00E+00	1,34E-04	-1,01E-03

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed

"Reading example: 9,0 E-03 = 9,0*10-3 = 0,009" *INA Indicator Not Assessed

End of life - Output flow								
Ind	icator	Uni	t	A1-A3	A4	A5	B2	В3
@▷			kg		0,00E+00	0,00E+00	0	0
&>	©▷ MFR			4,24E+01	0,00E+00	4,34E-01	0	0
Þ₹	MER	kg		2,99E+01	0,00E+00	7,44E+01	0	0
50	EEE	MJ		2,08E+01	0,00E+00	5,18E+01	0	0
▶	EET	MJ		3,15E+02	0,00E+00	7,83E+02	0	0
Indicato	or	Unit	B4	C1	C2	C3	C4	D
∅ >	CRU	kg	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
&▷	MFR	kg	0	0	0,00E+00	4,22E+01	0,00E+00	0,00E+00
DF	MER	kg	0	0	0,00E+00	3,68E+02	0,00E+00	0,00E+00
₹ D	EEE	MJ	0	0	0,00E+00	1,72E+02	0,00E+00	0,00E+00
D	EET	MJ	0	0	0,00E+00	2,60E+03	0,00E+00	0,00E+00

CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported energy electrical; EET = Exported energy thermal

"Reading example: 9,0 E-03 = 9,0*10-3 = 0,009" *INA Indicator Not Assessed

Biogenic Carbon Content								
Indicator	Unit	At the factory gate						
Biogenic carbon content in product	kg C	1,10E+02						
Biogenic carbon content in accompanying packaging	kg C	6,22E+01						

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO2



Additional requirements

Greenhouse gas emissions from the use of electricity in the manufacturing phase

National production mix from import, low voltage (production of transmission lines, in addition to direct emissions and losses in grid) of applied electricity for the manufacturing process (A3).

Electricity mix	Source	Amount	Unit
Electricity, Sweden (kWh)	ecoinvent 3.6	54.94	a CO2-ea/kWh

Dangerous substances

The product contains no substances given by the REACH Candidate list.

Indoor environment

Additional Environmental Information

Key Environmental Indicators

Key environmental indicators	Unit	A1-A3	A4	A1-C4	A1-D
GWPtotal	kg CO ₂ -eq	-174,32	29,62	387,39	334,67
Total energy consumption	MJ	13248,54	453,59	13838,59	11936,00
Amount of recycled materials	%	1.71			

Additional environmental impact indicators required in NPCR Part A for construction products							
Indicator	Unit		A1-A3	A4	A5	B2	В3
GWPIOBC	kg CO ₂ -eq		4,58E+02	2,96E+01	2,05E+00	0	0
Indicator	Unit	B4	C1	C2	C3	C4	D
GWPIOBC	kg CO ₂ -eq	0	0	3,70E+00	5,30E+00	1,01E+00	-7,10E+01

GWP-IOBC: Global warming potential calculated according to the principle of instantaneous oxidation. In order to increase the transparency of biogenic carbon contribution to climate impact, the indicator GWP-IOBC is required as it declares climate impacts calculated according to the principle of instantaneous oxidation. GWP-IOBC is also referred to as GWP-GHG in context to Swedish public procurement legislation.



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