



in accordance with ISO 14025 and EN 15804+A2

Four Seasons parasol





Owner of the declaration: Nola Industrier Aktiebolag

nola

Product: Four Seasons parasol

Declared unit: 1 pcs

The Norwegian EPD Foundation

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

Program operator: The Norwegian EPD Foundation

Declaration number:

Registration number:

Issue date:

Valid to:

EPD software: LCAno EPD generator ID: 224923

General information

Product Four Seasons parasol

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:

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 Four Seasons parasol

Declared unit (cradle to gate) with option:

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

Functional unit:

1 sun parasol with supporting post

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: Phone: e-mail: anders.akesson@nola.se

Manufacturer: Nola Industrier Aktiebolag

Place of production:

Nola Industrier Aktiebolag

, Sweden

Management system:

Organisation no:

Issue date:

Valid to:

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: Alex Vaivars

Reviewer of company-specific input data and EPD: Anders Åkesson

Approved:

Håkon Hauan, CEO EPD-Norge

Product

Product description:

The Four Seasons sun parasol is a sturdy year-round design that deflects the heat of the sun and provides shelter from the rain. Made from pieces of sheet steel circling around a steel post, the base bolts securely to the ground. The central support post can remain upright or be installed to tilt away from the base at an angle of up to 86°. Once the installation is complete, the support post will remain upright or permanently titled, as the angle cannot be adjusted afterwards. Four Seasons adds a contemporary element to city gardens, food courts and open courtyards, or any environment where shelter and shade are needed.

Product specification

Width: 238 cm Height: 255 cm Depth: 206,8 cm

Parasol: Weight: 65 kg

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Metal - Aluminium	18,10	31,74	0,00	0,00
Metal - Stainless steel	1,10	1,93	0,24	21,83
Metal - Steel	31,60	55,42	0,00	0,00
Powder coating	1,42	2,49	0,00	0,00
Rubber, synthetic	4,80	8,42	0,00	0,00
Total	57,02	100,00	0,24	

Packaging	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Packaging - Cardboard	3,64	15,40	0,00	0,00
Packaging - Pallet	20,00	84,60	0,00	0,00
Total incl. packaging	80,66	100,00	0,24	

Technical data:

Diameter of the support post: Ø 60 cm Angle of support post in angled version: up to 86° Sunshade in 1,5 mm aluminium sheet Stay and top cone in 5 mm sheet steel, foot plate in 10 mm sheet steel Edging in extruded coloured silicone

Market:

Sweden, Global

Reference service life, product

15 years

Reference service life, building

LCA: Calculation rules

Declared unit:

1 pcs Four Seasons parasol

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.

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. 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 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 the main product in which the material was used. The recycling process and transportation of the 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. 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. Stold 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
Metal - Aluminium	ecoinvent 3.6	Database	2019
Metal - Stainless steel	ecoinvent 3.6	Database	2019
Metal - Steel	ecoinvent 3.6	Database	2019
Packaging - Cardboard	Modified ecoinvent 3.6	Database	2019
Packaging - Pallet	ecoinvent 3.6	Database	2019
Powder coating	Ecoinvent 3.6	Database	2019
Rubber, synthetic	ecoinvent 3.6	Database	2019

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

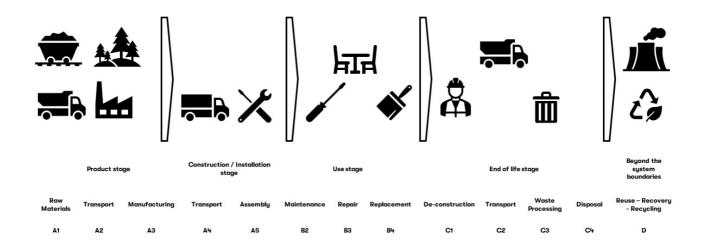
	Product st	age		uction ion stage	Use stage			age End of life stage			Beyond the system boundaries					
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Mainten an ce	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De- construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery- Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Х	Х	Х	Х	Х	MND	Х	Х	Х	MND	MND	MND	Х	Х	Х	Х	Х

System boundary:

Sweden, production at sub-suppliers, including maintenance but not repair or replacement under use phase.

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

Production of aluminium components uses data from surface treatment supplier which assumes European production.



Additional technical information:

LCA: Scenarios and additional technical information

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

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.

Transport from production place to user (A4)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, over 32 tonnes, EURO 5 (km)	53,3 %	400	0,023	l/tkm	9,20
Assembly (A5)	Unit	Value			
Waste, packaging, corrugated board box, 0 % recycled, to average treatment (kg)	kg	3,64			
Waste, packaging, Pallet, EUR wooden pallet, single use, average treatment (kg)	kg	20,00			
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 treatment per kg Non-hazardous waste, incineration with fly ash extraction - C3 (kg)	kg	1,42			
Waste treatment per kg Rubber, municipal incineration with fly ash extraction (kg)	kg	4,80			
Waste treatment per kg Scrap aluminium, incineration with fly ash extraction (kg)	kg	18,10			
Waste treatment per kg Scrap steel, incineration with fly ash extraction (kg)	kg	32,70			
Waste, materials to recycling (kg)	kg	12,97			
Disposal (C4)	Unit	Value			
Landfilling of ashes and residues from incineration of Scrap aluminium (kg)	kg	16,22			
Landfilling of ashes and residues from incineration of Scrap steel (kg)	kg	21,60			
Landfilling of ashes from incineration of Non- hazardous waste, process per kg ashes and residues - C4 (kg)	kg	0,34			
Landfilling of ashes from incineration of Rubber, process per kg ashes and residues - C4 (kg)	kg	0,25			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of electricity (MJ)	MJ	7,41			
Substitution of primary aluminium with net scrap (kg)	kg	1,88			
Substitution of primary steel with net scrap (kg)	kg	11,01			
Substitution of thermal energy, district heating (MJ)	MJ	112,16			

LCA: Results

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

Environm	ental impact							
	Indicator	Unit		A1-A3	A4	A5	B2	B3
F	GWP-total	kg CO ₂ -	eq	2,79E+02	4,41E+00	3,71E+01	0	0
P	GWP-fossil	kg CO ₂ -	kg CO ₂ -eq		4,41E+00	5,97E-01	0	0
P	GWP-biogenic	kg CO ₂ -	eq	-3,49E+01	1,81E-03	3,65E+01	0	0
P	GWP-luluc	kg CO ₂ -	eq	4,13E+00	1,29E-03	1,57E-04	0	0
Ò	ODP	kg CFC11	-eq	3,55E-05	1,02E-06	9,84E-08	0	0
Ê	АР	mol H+ -	eq	1,91E+00	1,85E-02	4,61E-03	0	0
æ	EP-FreshWater	kg P -eo	7	1,70E-02	3,36E-05	6,93E-06	0	0
÷	EP-Marine	kg N -e	q	2,70E-01	5,57E-03	1,95E-03	0	0
	EP-Terrestial	mol N -e	eq	3,05E+00	6,16E-02	2,09E-02	0	0
	РОСР	kg NMVOC	-eq	1,19E+00	1,98E-02	5,40E-03	0	0
B	ADP-minerals&metals ¹	kg Sb-e	q	8,46E-03	7,52E-05	1,02E-05	0	0
B	ADP-fossil ¹	MJ		5,10E+03	6,85E+01	7,15E+00	0	0
%	WDP ¹	m ³		1,43E+05	5,26E+01	1,08E+01	0	0
	Indicator	Unit	B4	C1	C2	C3	C4	D
P	GWP-total	kg CO ₂ -eq	0	0	1,01E+00	1,87E+01	4,33E-01	-2,99E+01
P	GWP-fossil	kg CO ₂ -eq	0	0	1,01E+00	1,87E+01	4,32E-01	-2,94E+01
P	GWP-biogenic	kg CO ₂ -eq	0	0	4,12E-04	5,11E-03	3,21E-04	-8,47E-02
P	GWP-luluc	kg CO ₂ -eq	0	0	3,53E-04	1,88E-04	1,29E-04	-3,45E-01
Ò	ODP	kg CFC11 -eq	0	0	2,30E-07	7,80E-08	1,32E-07	-4,74E-02
Ê	AP	mol H+ -eq	0	0	4,13E-03	5,59E-03	3,02E-03	-1,79E-01
	EP-FreshWater	kg P -eq	0	0	7,93E-06	1,29E-05	4,34E-06	-1,45E-03
	EP-Marine	kg N -eq	0	0	1,22E-03	2,27E-03	1,08E-03	-2,85E-02
	EP-Terrestial	mol N -eq	0	0	1,35E-02	2,48E-02	1,19E-02	-3,03E-01
	РОСР	kg NMVOC -eq	0	0	4,15E-03	6,43E-03	3,43E-03	-1,19E-01
			0	0	2,74E-05	4,14E-06	7,37E-06	-1,90E-04
.	ADP-minerals&metals ¹	kg Sb-eq						
s S	ADP-minerals&metals ¹ ADP-fossil ¹	kg Sb-eq MJ	0	0	1,52E+01	5,01E+00	9,77E+00	-3,23E+02

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

"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

Remarks to environmental impacts

Additiona <u>l</u> er	dditional environmental impact indicators									
	Indicator	Unit		A1-A3	A4	A5	B2	B3		
	PM	Disease incidence		2,29E-05	3,88E-07	5,70E-08	0	0		
	IRP ²	kgBq U235 -eq		4,60E+01	2,99E-01	2,64E-02	0	0		
	ETP-fw ¹	CTUe		9,35E+03	5,01E+01	8,30E+00	0	0		
44. * ****	HTP-c ¹	CTUh		1,41E-06	0,00E+00	8,33E-10	0	0		
4 <u>8</u>	HTP-nc ¹	CTUh		1,12E-05	4,85E-08	3,98E-08	0	0		
è	SQP ¹	dimensionless		4,97E+03	7,86E+01	4,10E+00	0	0		
l.	ndicator	Unit	B4	C1	C2	C3	C4	D		
	PM	Disease incidence	0	0	7,27E-08	9,90E-08	5,52E-08	-2,50E-06		
	IRP ²	kgBq U235 -eq	0	0	6,66E-02	1,43E-02	3,92E-02	-9,39E-01		
	ETP-fw ¹	CTUe	0	0	1,12E+01	1,39E+02	5,88E+00	-9,78E+02		
40.* ****	HTP-c ¹	CTUh	0	0	0,00E+00	2,30E-09	2,13E-10	-1,01E-07		
88 E	HTP-nc ¹	CTUh	0	0	1,21E-08	3,04E-08	5,75E-09	7,26E-07		
	SQP ¹	dimensionless	0	0	1,05E+01	1,08E+00	2,12E+01	-7,16E+01		

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)

"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	B3
i di seconda di second	PERE		Ν	LI L	1,73E+03	8,63E-01	1,44E-01	0	0
æ	PERM		N	٨J	3,36E+02	0,00E+00	-3,36E+02	0	0
° ⊼ ₂	PERT		Ν	٨J	2,06E+03	8,63E-01	-3,35E+02	0	0
B	PENRE		Ν	٨J	4,97E+03	6,85E+01	7,15E+00	0	0
.le	PENRM		Ν	٨J	1,31E+02	0,00E+00	0,00E+00	0	0
IA	PENRT		Ν	۱J	5,10E+03	6,85E+01	7,15E+00	0	0
	SM		k	g	2,40E-01	0,00E+00	0,00E+00	0	0
1	RSF		МЈ		7,84E+00	3,02E-02	4,24E-03	0	0
Ū.	NRSF		MJ		7,76E+01	1,01E-01	4,50E-02	0	0
96)	FW		m ³		9,16E+00	7,80E-03	4,99E-03	0	0
			11	1	5,102100	1,002 00	.,002 00	Ū	Ŭ
	dicator	Un		B4	C1	C2	C3	C4	D
ាក ្រុះ ្រូវ	dicator PERE								
		М	nit	B4	C1	C2	C3	C4	D
i di seconda di second	PERE	M	nit ЛЈ	B4 0	C1 0	C2 2,15E-01	C3 2,87E-01	C4 1,85E-01	D -1,43E+02
in the second se	PERE PERM	M M M	nit ЛЈ ЛЈ	B4 0 0	C1 0 0	C2 2,15E-01 0,00E+00	C3 2,87E-01 0,00E+00	C4 1,85E-01 0,00E+00	D -1,43E+02 0,00E+00
ू उ मि द	PERE PERM PERT	M M M	nit ЛЈ ЛЈ ЛЈ	B4 0 0 0	C1 0 0 0	C2 2,15E-01 0,00E+00 2,15E-01	C3 2,87E-01 0,00E+00 2,87E-01	C4 1,85E-01 0,00E+00 1,85E-01	D -1,43E+02 0,00E+00 -1,43E+02
	PERE PERM PERT PENRE	M M M M	nit ЛЈ ЛЈ ЛЈ	B4 0 0 0 0	C1 0 0 0 0	C2 2,15E-01 0,00E+00 2,15E-01 1,52E+01	C3 2,87E-01 0,00E+00 2,87E-01 5,16E+00	C4 1,85E-01 0,00E+00 1,85E-01 9,77E+00	D -1,43E+02 0,00E+00 -1,43E+02 -3,23E+02
	PERE PERM PERT PENRE PENRM	M M M M	nit ЛЈ ЛЈ ЛЈ ЛЈ	B4 0 0 0 0 0	C1 0 0 0 0 0 0	C2 2,15E-01 0,00E+00 2,15E-01 1,52E+01 0,00E+00	C3 2,87E-01 0,00E+00 2,87E-01 5,16E+00 -1,31E+02	C4 1,85E-01 0,00E+00 1,85E-01 9,77E+00 0,00E+00	D -1,43E+02 0,00E+00 -1,43E+02 -3,23E+02 0,00E+00
	PERE PERM PERT PENRE PENRM PENRT	M M M M	nit ЛЈ ЛЈ ЛЈ ЛЈ ДЈ Зд	B4 0 0 0 0 0 0	C1 0 0 0 0 0 0 0	C2 2,15E-01 0,00E+00 2,15E-01 1,52E+01 0,00E+00 1,52E+01	C3 2,87E-01 0,00E+00 2,87E-01 5,16E+00 -1,31E+02 -1,25E+02	C4 1,85E-01 0,00E+00 1,85E-01 9,77E+00 0,00E+00 9,77E+00	D -1,43E+02 0,00E+00 -1,43E+02 -3,23E+02 0,00E+00 -3,23E+02
	PERE PERM PERT PENRE PENRM PENRT SM	M M M M K K K	nit ЛЈ ЛЈ ЛЈ ЛЈ ДЈ Зд	B4 0 0 0 0 0 0 0 0	C1 0 0 0 0 0 0 0 0 0	C2 2,15E-01 0,00E+00 2,15E-01 1,52E+01 0,00E+00 1,52E+01 0,00E+00	C3 2,87E-01 0,00E+00 2,87E-01 5,16E+00 -1,31E+02 -1,25E+02 0,00E+00	C4 1,85E-01 0,00E+00 1,85E-01 9,77E+00 0,00E+00 9,77E+00 0,00E+00	D -1,43E+02 0,00E+00 -1,43E+02 -3,23E+02 0,00E+00 -3,23E+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 excluding non-renewable primary energy resources used as raw materials; PERT = Total use of non renewable primary energy resources; SENRE = Use of non renewable primary energy resources; SENRE = Use of non renewable primary energy resources; SM = Use of secondary materials; RESF = Use of renewable primary energy resources; SM = Use of secondary materials; RESF = 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			nit	A1-A3	A4	A5	B2	B3	
à	HWD		k	g	1,33E+00	3,75E-03	0,00E+00	0	0	
Ū	NHWD	kg		1,12E+02	5,96E+00	2,36E+01	0	0		
R	RWD		kg		3,19E-02	4,68E-04	0,00E+00	0	0	
In	dicator		Unit	B4	C1	C2	C3	C4	D	
à	HWD		kg	0	0	7,77E-04	0,00E+00	3,82E+01	6,90E-03	
Ū	NHWD		kg	0	0	7,28E-01	1,42E+00	4,97E-01	-1,00E+01	
8	RWD	RWD k		0	0	1,04E-04	0,00E+00	6,05E-05	-8,83E-04	

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								
Indi	cator	Ur	Unit		A4	A5	B2	B3
$\langle \hat{\omega} \rangle$	CRU	k	kg		0,00E+00	0,00E+00	0	0
\$\$ \	MFR	k	9	0,00E+00	0,00E+00	3,39E+00	0	0
DF3	MER	k	9	0,00E+00	0,00E+00	1,98E+01	0	0
50	EEE	N	МЈ		0,00E+00	1,40E+01	0	0
	EET	M	MJ		0,00E+00	2,12E+02	0	0
Indicato	r	Unit	B4	C1	C2	C3	C4	D
$\otimes \triangleright$	CRU	kg	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
\$}	MFR	kg	0	0	0,00E+00	1,30E+01	0,00E+00	0,00E+00
DF	MER	kg	0	0	0,00E+00	5,70E+01	0,00E+00	0,00E+00
50	EEE	MJ	0	0	0,00E+00	8,09E+00	0,00E+00	0,00E+00
DÐ	EET	MJ	0	0	0,00E+00	1,22E+02	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	0,00E+00							
Biogenic carbon content in accompanying packaging	kg C	9,95E+00							

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	g CO2-eq/kWh

Dangerous substances

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

Indoor environment

The product is not intended for indoor use but may be used in indoor settings without restrictions.

Additional Environmental Information

Key Environmental Indicators

Key environmental indicators	Unit	A1-A3	A4	A1-C4	A1-D
GWPtotal	kg CO ₂ -eq	278,63	4,41	340,27	310,39
Total energy consumption	MJ	6782,20	69,53	6890,17	6434,11
Amount of recycled materials	%	0,30			

Additional environmental impact indicators required in NPCR Part A for construction products							
Indicator	Unit		A1-A3	A4	A5	B2	B3
GWPIOBC	kg CO ₂ -eq		3,15E+02	4,41E+00	5,97E-01	0	0
Indicator	Unit	B4	C1	C2	C3	C4	D
GWPIOBC	kg CO ₂ -eq	0	0	1,01E+00	1,71E+01	4,37E-01	-3,51E+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.

Bibliography

ISO 14025:2010 Environmental labels and declarations - Type III environmental declarations - Principles and procedures. ISO 14044:2006 Environmental management - Life cycle assessment - Requirements and guidelines.

EN 15804:2012 + A2:2019 Environmental product declaration - Core rules for the product category of construction products.

ISO 21930:2017 Sustainability in buildings and civil engineering works - Core rules for environmental product declarations of construction products.

ecoinvent v3, Allocation, cut-off by classification, Swiss Centre of Life Cycle Inventories.

Iversen et al., (2021) eEPD v2021.09 Background information for EPD generator tool system verification, LCA.no Report number: 07.21 Ruud et al., (2023) EPD generator for NPCR026 Part B for Furniture - Background information for EPD generator application and LCA data, LCA.no report number 01.23

NPCR Part A: Construction products and services. Ver. 2.0. March 2021, EPD-Norge. NPCR 026 Part B for Furniture. Ver. 2.0 March 2022, EPD-Norge.

	Program operator and publisher	Phone: +47 977 22 020
	The Norwegian EPD Foundation	e-mail: post@epd-norge.no
	Post Box 5250 Majorstuen, 0303 Oslo, Norway	web: www.epd-norge.no
nola	Owner of the declaration:	Phone:
	Nola Industrier Aktiebolag	e-mail: anders.akesson@nola.se
	T	web: https://nola.se/
LCA,	Author of the Life Cycle Assessment	Phone: +47 916 50 916
	LCA.no AS	e-mail: post@lca.no
	Dokka 6A, 1671	web: www.lca.no
LCA	Developer of EPD generator	Phone: +47 916 50 916
	LCA.no AS	e-mail: post@lca.no
no	Dokka 6B,1671 Kråkerøy	web: www.lca.no
FCO PLATFORM	ECO Platform	web: www.eco-platform.org
	ECO Portal	web: ECO Portal