



# Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

# Zorla 1200\*1200



# Zilenzio

The Norwegian EPD Foundation

# Owner of the declaration:

ZilenZio AB

#### **Product:**

Zorla 1200\*1200

#### **Declared unit:**

1 pcs

# This declaration is based on Product Category

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:**

NEPD-8392-8055-EN

# Registration number:

NEPD-8392-8055-EN

Issue date: 06.12.2024

Valid to: 06.12.2029

#### **EPD** software:

LCAno EPD generator ID: 314070

#### **General information**

#### **Product**

Zorla 1200\*1200

#### **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-8392-8055-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 Zorla 1200\*1200

#### Declared unit (cradle to gate) with option:

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

#### **Functional unit:**

This product is a part of the Zilenzio Pro family. Zilenzio Pro brings together the best in function, design and durability. For more information: https://zilenzio.com/product/zorla/

#### 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:

ZilenZio AB

Contact person: Hanna Loodin-Ek

Phone:

e-mail: hanna.loodin-ek@zilenzio.se

#### Manufacturer:

ZilenZio AB

#### Place of production:

ZilenZio AB Boställsvägen 6 702 27 Örebro, Sweden

#### Management system:

#### Organisation no:

556651-5689

#### Issue date:

06.12.2024

#### Valid to:

06.12.2029

#### Year of study:

2023

#### **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: Hanna Loodin-Ek

Reviewer of company-specific input data and EPD: Jenny Helldén

#### Approved:

Håkon Hauan

Managing Director of EPD-Norway

#### **Product**

# **Product description:**

Zorla is a mobile floor screen with sound absorbing effects, perfect for reducing noise in open room constellations. The top wooden box can be filled with natural or artificial plants to make it a decorative piece of furniture.

#### **Product specification**

Body made of wood, panels filled with stone wool. Exterior surface in fabric. Base with locking wheels.

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Insulation - stone wool	3,96	9,26	0,03	0,83
Plastic - Nylon (PA)	0,04	0,09	0,00	0,00
Wood - Chipboard	28,53	66,71	0,00	0,00
Wood - Medium Density Fibreboard (MDF)	6,69	15,64	0,00	0,00
Metal - Stainless steel	0,17	0,40	0,04	21,83
Textile - Polyester	0,94	2,20	0,00	0,00
Wood - Laminated wood	2,44	5,70	0,00	0,00
Total	42,77	100,00	0,07	

Packaging	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Packaging - Cardboard	1,24	93,94	0,00	0,00
Packaging - Plastic	0,08	6,06	0,00	0,00
Total incl. packaging	44,09	100,00	0,07	

#### **Technical data:**

The dimensions of Zorla are 1200x1200x225, other sizes are available. The product is certified according to Möbelfakta.

#### Market:

Global.

#### Reference service life, product

Zilenzio offers a warranty of 20 years: https://zilenzio.com/sustainability/

#### Reference service life, building

#### LCA: Calculation rules

#### **Declared unit:**

1 pcs Zorla 1200\*1200

#### **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.

#### **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.

#### 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.

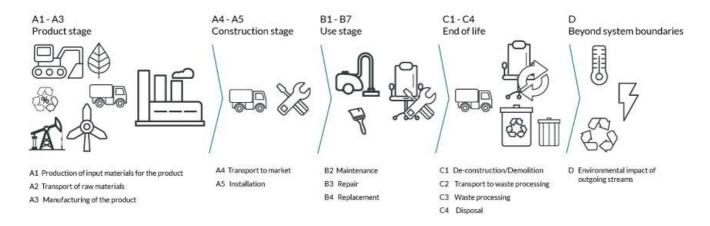
# zilenzio

Materials	Source	Data quality	Year
Insulation - stone wool	ecoinvent 3.6	Database	2019
Metal - Stainless steel	ecoinvent 3.6	Database	2019
Packaging - Cardboard	Modified ecoinvent 3.6	Database	2019
Packaging - Plastic	ecoinvent 3.6	Database	2019
Plastic - Nylon (PA)	ecoinvent 3.6	Database	2019
Textile - Polyester	ecoinvent 3.6	Database	2019
Wood - Chipboard	ecoinvent 3.6	Database	2019
Wood - Laminated wood	ecoinvent 3.6	Database	2019
Wood - Medium Density Fibreboard (MDF)	ecoinvent 3.6	Database	2019

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

Р	roduct stag	ge		uction on stage		Use stage 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 processing	Disposal	Reuse-Recovery- Recycling-potential
A1	A2	A3	A4	A5	B1	B2	В3	B4	B5	В6	В7	C1	C2	C3	C4	D
Χ	Χ	Χ	Χ	Χ	MND	X	Χ	Χ	MND	MND	MND	Χ	Χ	X	Χ	X

#### System boundary:



#### Additional technical information:

#### LCA: Scenarios and additional technical information

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

The product is assumed to be transported to a customer in Europe where the majority of our market is. An average distance to the customer has been calculated to 1000 Km. We also assume that the nearest waste terminal is 50 km from the customer. The product will not need any special reparation or treatment during its lifetime, it can be included in your cleaning routines.

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 6 (km)	36,7 %	1000	0,043	l/tkm	43,00
Assembly (A5)	Unit	Value			
Waste, packaging, plastic film (LDPE), to average treatment - A5 (kg)	kg	0,08			
Waste, packaging, corrugated board box, 0 % recycled, to average treatment (kg)	kg	1,24			
Transport to waste processing (C2)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, 16-32 tonnes, EURO 6 (km)	36,7 %	50	0,043	l/tkm	2,15
Waste processing (C3)	Unit	Value			
Waste treatment per kg Wood, incineration with fly ash extraction (kg)	kg	37,66			
Waste, materials to recycling (kg)	kg	0,06			
Waste treatment per kg Scrap steel, incineration with fly ash extraction (kg)	kg	0,17			
Waste treatment per kg Plastics, Mixture, municipal incineration with fly ash extraction (kg)	kg	0,04			
Waste treatment per kg Textile, incineration with fly ash extraction (kg)	kg	0,94			
Disposal (C4)	Unit	Value			
Landfilling of ashes from incineration of Wood, process per kg ashes and residues (kg)	kg	0,43			
Waste, Stone wool, to landfil (kg)	kg	3,96			
Landfilling of ashes and residues from incineration of Scrap steel (kg)	kg	0,11			
Landfilling of ashes from incineration of Plastics, Mixture, municipal incineration with fly ash extraction, process per kg ashes and residues - C4 (kg)	kg	0,00			
Landfilling of ashes from incineration of Textile, soiled, process per kg ashes and residues (kg)	kg	0,05			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of thermal energy, district heating, in Norway (MJ)	МЈ	410,05			
Substitution of electricity, in Norway (MJ)	MJ	27,10			
Substitution of primary steel with net scrap (kg)	kg	0,05			

**LCA: Results** 

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

Environm	ental impact							
	Indicator	Un	it	A1-A3	A4	A5	B2	В3
	GWP-total	kg CO	<sub>2</sub> -eq	-1,88E+01	7,19E+00	2,13E+00	0	0
	GWP-fossil	kg CO	kg CO <sub>2</sub> -eq		7,19E+00	2,64E-02	0	0
•	GWP-biogenic	kg CO	2 -eq	-6,45E+01	2,97E-03	2,10E+00	0	0
	GWP-luluc	kg CO	2 -eq	5,76E-01	2,56E-03	7,12E-06	0	0
Ö	ODP	kg CFC	I1 -eq	4,94E-06	1,63E-06	4,62E-09	0	0
	AP	mol H	eq	2,83E-01	2,07E-02	1,03E-04	0	0
<del>**</del>	EP-FreshWater	kg P	-eq	2,14E-03	5,74E-05	1,78E-07	0	0
	EP-Marine	kg N	-eq	5,05E-02	4,09E-03	3,86E-05	0	0
	EP-Terrestial	mol N	-eq	7,17E-01	4,57E-02	3,68E-04	0	0
	POCP	kg NMV	OC -eq	2,21E-01	1,75E-02	1,07E-04	0	0
	ADP-minerals&metals <sup>1</sup>	kg St	-eq	1,49E-03	1,99E-04	5,22E-07	0	0
<b>3</b>	ADP-fossil <sup>1</sup>	М	ĺ	8,40E+02	1,09E+02	3,07E-01	0	0
<u>%</u>	WDP <sup>1</sup>	m	m <sup>3</sup>		1,05E+02	4,48E-01	0	0
				2,20E+04	.,	.,		
	Indicator	Unit	B4	C1	C2	C3	C4	D
	<b>Indicator</b> GWP-total							
		Unit	B4	C1	C2	C3	C4	D
	GWP-total	<b>Unit</b> kg CO <sub>2</sub> -eq	B4 0	C1 0	C2 3,60E-01	C3 6,52E+01	C4 4,08E-02	D -2,51E+00
	GWP-total GWP-fossil	Unit kg CO <sub>2</sub> -eq kg CO <sub>2</sub> -eq	B4 0 0	C1 0	C2 3,60E-01 3,59E-01	C3 6,52E+01 5,68E-01	C4 4,08E-02 4,08E-02	D -2,51E+00 -2,43E+00
	GWP-total GWP-fossil GWP-biogenic	Unit  kg CO <sub>2</sub> -eq  kg CO <sub>2</sub> -eq  kg CO <sub>2</sub> -eq	B4 0 0	C1 0 0	C2 3,60E-01 3,59E-01 1,49E-04	C3 6,52E+01 5,68E-01 6,47E+01	C4 4,08E-02 4,08E-02 3,08E-05	D -2,51E+00 -2,43E+00 -4,94E-03
<b>P</b>	GWP-total GWP-fossil GWP-biogenic GWP-luluc	Unit  kg CO <sub>2</sub> -eq  kg CO <sub>2</sub> -eq  kg CO <sub>2</sub> -eq	B4 0 0 0 0	0 0 0 0	C2 3,60E-01 3,59E-01 1,49E-04 1,28E-04	C3 6,52E+01 5,68E-01 6,47E+01 7,28E-05	C4 4,08E-02 4,08E-02 3,08E-05 9,21E-06	D -2,51E+00 -2,43E+00 -4,94E-03 -8,19E-02
<b>P P O</b>	GWP-total  GWP-fossil  GWP-biogenic  GWP-luluc  ODP	kg CO <sub>2</sub> -eq	B4 0 0 0 0 0	0 0 0 0 0	C2 3,60E-01 3,59E-01 1,49E-04 1,28E-04 8,14E-08	C3 6,52E+01 5,68E-01 6,47E+01 7,28E-05 3,97E-08	C4 4,08E-02 4,08E-02 3,08E-05 9,21E-06 1,12E-08	D -2,51E+00 -2,43E+00 -4,94E-03 -8,19E-02 -1,73E-01
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP	kg CO <sub>2</sub> -eq mol H+ -eq	B4 0 0 0 0 0 0	0 0 0 0 0	C2 3,60E-01 3,59E-01 1,49E-04 1,28E-04 8,14E-08 1,03E-03	C3 6,52E+01 5,68E-01 6,47E+01 7,28E-05 3,97E-08 6,07E-03	C4 4,08E-02 4,08E-02 3,08E-05 9,21E-06 1,12E-08 2,76E-04	D -2,51E+00 -2,43E+00 -4,94E-03 -8,19E-02 -1,73E-01 -1,98E-02
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater	kg CO <sub>2</sub> -eq kg CFC11 -eq mol H+ -eq kg P -eq	B4 0 0 0 0 0 0 0	0 0 0 0 0 0	C2 3,60E-01 3,59E-01 1,49E-04 1,28E-04 8,14E-08 1,03E-03 2,87E-06	C3 6,52E+01 5,68E-01 6,47E+01 7,28E-05 3,97E-08 6,07E-03 7,95E-06	C4 4,08E-02 4,08E-02 3,08E-05 9,21E-06 1,12E-08 2,76E-04 4,95E-07	D -2,51E+00 -2,43E+00 -4,94E-03 -8,19E-02 -1,73E-01 -1,98E-02 -2,14E-04
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine	kg CO <sub>2</sub> -eq kg CFC11 -eq mol H+ -eq kg P -eq kg N -eq	B4 0 0 0 0 0 0 0	0 0 0 0 0 0 0	C2 3,60E-01 3,59E-01 1,49E-04 1,28E-04 8,14E-08 1,03E-03 2,87E-06 2,04E-04	C3 6,52E+01 5,68E-01 6,47E+01 7,28E-05 3,97E-08 6,07E-03 7,95E-06 2,91E-03	C4 4,08E-02 4,08E-02 3,08E-05 9,21E-06 1,12E-08 2,76E-04 4,95E-07 9,33E-05	D -2,51E+00 -2,43E+00 -4,94E-03 -8,19E-02 -1,73E-01 -1,98E-02 -2,14E-04 -6,45E-03
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine EP-Terrestial	Unit  kg CO <sub>2</sub> -eq  kg CO <sub>2</sub> -eq  kg CO <sub>2</sub> -eq  kg CO <sub>2</sub> -eq  kg CFC11 -eq  mol H+ -eq  kg P -eq  kg N -eq  mol N -eq	B4 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	C2 3,60E-01 3,59E-01 1,49E-04 1,28E-04 8,14E-08 1,03E-03 2,87E-06 2,04E-04 2,29E-03	C3 6,52E+01 5,68E-01 6,47E+01 7,28E-05 3,97E-08 6,07E-03 7,95E-06 2,91E-03 3,09E-02	C4 4,08E-02 4,08E-02 3,08E-05 9,21E-06 1,12E-08 2,76E-04 4,95E-07 9,33E-05 1,04E-03	D -2,51E+00 -2,43E+00 -4,94E-03 -8,19E-02 -1,73E-01 -1,98E-02 -2,14E-04 -6,45E-03 -6,97E-02
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine EP-Terrestial POCP	Wnit  kg CO <sub>2</sub> -eq  kg CO <sub>2</sub> -eq  kg CO <sub>2</sub> -eq  kg CO <sub>2</sub> -eq  kg CFC11 -eq  mol H+ -eq  kg P -eq  kg N -eq  mol N -eq	B4 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	C2 3,60E-01 3,59E-01 1,49E-04 1,28E-04 8,14E-08 1,03E-03 2,87E-06 2,04E-04 2,29E-03 8,76E-04	C3 6,52E+01 5,68E-01 6,47E+01 7,28E-05 3,97E-08 6,07E-03 7,95E-06 2,91E-03 3,09E-02 7,58E-03	C4 4,08E-02 4,08E-02 3,08E-05 9,21E-06 1,12E-08 2,76E-04 4,95E-07 9,33E-05 1,04E-03 2,97E-04	D -2,51E+00 -2,43E+00 -4,94E-03 -8,19E-02 -1,73E-01 -1,98E-02 -2,14E-04 -6,45E-03 -6,97E-02 -1,93E-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

#### Remarks to environmental impacts

<sup>&</sup>quot;Reading example: 9,0 E-03 = 9,0\*10-3 = 0,009"

<sup>\*</sup>INA Indicator Not Assessed

<sup>1.</sup> 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 ind	licators					
	Indicator	Unit	A1-A3	A4	A5	B2	В3
	PM	Disease incidence	5,37E-06	4,40E-07	1,54E-09	0	0
(m) Q	IRP <sup>2</sup>	kgBq U235 -eq	7,45E+00	4,75E-01	1,32E-03	0	0
42	ETP-fw <sup>1</sup>	CTUe	1,22E+03	8,06E+01	3,99E-01	0	0
40.* *** <b>Q</b>	HTP-c <sup>1</sup>	CTUh	1,89E-07	0,00E+00	1,20E-11	0	0
48° B	HTP-nc <sup>1</sup>	CTUh	7,78E-07	8,80E-08	4,94E-10	0	0
	SQP <sup>1</sup>	dimensionless	3,68E+03	7,60E+01	2,34E-01	0	0

li li	ndicator	Unit	B4	C1	C2	C3	C4	D
	PM	Disease incidence	0	0	2,20E-08	6,35E-08	4,91E-09	-1,19E-06
	IRP <sup>2</sup>	kgBq U235 -eq	0	0	2,37E-02	7,38E-03	3,36E-03	-2,17E-01
<i>(2)</i>	ETP-fw <sup>1</sup>	CTUe	0	0	4,03E+00	7,77E+00	6,71E-01	-1,88E+02
44. *** <u>\$</u>	HTP-c <sup>1</sup>	CTUh	0	0	0,00E+00	1,36E-09	2,40E-11	-3,62E-09
<del>28</del>	HTP-nc <sup>1</sup>	CTUh	0	0	4,40E-09	6,69E-08	8,36E-10	-1,72E-07
	SQP <sup>1</sup>	dimensionless	0	0	3,80E+00	5,64E-01	1,83E+00	-2,27E+02

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)

<sup>&</sup>quot;Reading example: 9,0 E-03 = 9,0\*10-3 = 0,009"

<sup>\*</sup>INA Indicator Not Assessed

<sup>1.</sup> 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

<sup>2.</sup> 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
Ē	PERE	МЈ		5,45E+02	1,56E+00	5,28E-03	0	0	
	PERM		N	۷J	3,51E+02	0,00E+00	-1,97E+01	0	0
i,	PERT		Ν	۷J	8,95E+02	1,56E+00	-1,97E+01	0	0
	PENRE		N	NJ	8,12E+02	1,09E+02	3,07E-01	0	0
42	PENRM		N	NJ	2,75E+01	0,00E+00	-3,40E+00	0	0
<b>IA</b>	PENRT		N	۷J	8,39E+02	1,09E+02	-3,09E+00	0	0
<u>.</u>	SM		k	¢g	7,21E-02	0,00E+00	0,00E+00	0	0
	RSF		N	۷J	4,01E+00	5,57E-02	1,71E-04	0	0
	NRSF		N	۷J	3,46E-01	1,99E-01	6,77E-04	0	0
(%)	FW		n	n <sup>3</sup>	1,82E+00	1,16E-02	1,46E-04	0	0
	ndicator	Un	nit	B4	C1	C2	C3	C4	D
i i	ndicator PERE	Un M		B4 0	C1 0	C2 7,78E-02	C3 1,26E-01	C4 1,51E-02	D -2,10E+02
			1)						
Ö	PERE	М	را را	0	0	7,78E-02	1,26E-01	1,51E-02	-2,10E+02
<u>.</u> 2	PERE PERM	M	1J	0	0	7,78E-02 0,00E+00	1,26E-01 -3,31E+02	1,51E-02 0,00E+00	-2,10E+02 0,00E+00
€ <b>1</b> 	PERE PERM PERT	M M	n n	0 0	0 0	7,78E-02 0,00E+00 7,78E-02	1,26E-01 -3,31E+02 -3,31E+02	1,51E-02 0,00E+00 1,51E-02	-2,10E+02 0,00E+00 -2,10E+02
€ <b>3</b> ~£.	PERE PERM PERT PENRE	M M M	ก ก ก	0 0 0	0 0 0 0	7,78E-02 0,00E+00 7,78E-02 5,43E+00	1,26E-01 -3,31E+02 -3,31E+02 3,81E+00	1,51E-02 0,00E+00 1,51E-02 7,96E-01	-2,10E+02 0,00E+00 -2,10E+02 -3,44E+01
	PERE PERM PERT PENRE PENRM	M M M	ภ ภ ภ ภ	0 0 0 0	0 0 0 0	7,78E-02 0,00E+00 7,78E-02 5,43E+00 0,00E+00	1,26E-01 -3,31E+02 -3,31E+02 3,81E+00 -2,41E+01	1,51E-02 0,00E+00 1,51E-02 7,96E-01 0,00E+00	-2,10E+02 0,00E+00 -2,10E+02 -3,44E+01 0,00E+00
	PERE PERM PERT PENRE PENRM PENRT	M M M M	อ เก เก เก	0 0 0 0 0	0 0 0 0 0	7,78E-02 0,00E+00 7,78E-02 5,43E+00 0,00E+00 5,43E+00	1,26E-01 -3,31E+02 -3,31E+02 3,81E+00 -2,41E+01 -2,03E+01	1,51E-02 0,00E+00 1,51E-02 7,96E-01 0,00E+00 7,96E-01	-2,10E+02 0,00E+00 -2,10E+02 -3,44E+01 0,00E+00 -3,44E+01
	PERE PERM PERT PENRE PENRM PENRT SM	M M M M M	บ บ บ บ บ บ	0 0 0 0 0 0	0 0 0 0 0 0	7,78E-02 0,00E+00 7,78E-02 5,43E+00 0,00E+00 5,43E+00 0,00E+00	1,26E-01 -3,31E+02 -3,31E+02 3,81E+00 -2,41E+01 -2,03E+01 0,00E+00	1,51E-02 0,00E+00 1,51E-02 7,96E-01 0,00E+00 7,96E-01 0,00E+00	-2,10E+02 0,00E+00 -2,10E+02 -3,44E+01 0,00E+00 -3,44E+01 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; 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		Uı	nit	A1-A3	A4	A5	B2	В3
	HWD	kg		g	8,92E-01	5,60E-03	0,00E+00	0	0
Ū	NHWD		k	g	1,00E+01	5,28E+00	1,32E+00	0	0
<u>\$</u>	RWD		k	g	4,42E-03	7,40E-04	0,00E+00	0	0
In	dicator		Unit	B4	C1	C2	C3	C4	D
Ā	HWD		kg	0	0	2,80E-04	0,00E+00	4,28E-01	-1,86E-03
Ū	NHWD		kg	0	0	2,64E-01	0,00E+00	4,08E+00	-8,23E-01
<b>3</b>	RWD		kg	0	0	3,70E-05	0,00E+00	4,92E-06	-1,78E-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	nd of life - Output flow							
Ind	icator	Unit	Unit		A4	A5	B2	В3
<b>@▷</b>	CRU	kg		0,00E+00	0,00E+00	0,00E+00	0	0
&>	MFR	kg	kg		0,00E+00	1,19E+00	0	0
DF	MER	kg		1,50E+01	0,00E+00	5,69E-06	0	0
<b>5</b> D	EEE	MJ		1,02E+01	0,00E+00	7,09E-02	0	0
DB	EET	MJ		1,54E+02	0,00E+00	1,07E+00	0	0
Indicato	or	Unit	B4	C1	C2	C3	C4	D
<b>@</b> >	CRU	kg	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
&>	MFR	kg	0	0	0,00E+00	5,77E-02	1,48E-04	0,00E+00
D₽	MER	kg	0	0	0,00E+00	3,88E+01	1,20E-06	0,00E+00
50	EEE	МЈ	0	0	0,00E+00	2,69E+01	1,04E-05	0,00E+00
D	EET	МЈ	0	0	0,00E+00	4,07E+02	1,57E-04	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							
Unit	At the factory gate						
kg C	1,87E+01						
kg C	5,74E-01						
	kg C						

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, Nordic (kWh)	ecoinvent 3.6	145,70	g CO2-eg/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 <sub>2</sub> -eq	-18,83	7,19	56,15	53,63
Total energy consumption	MJ	1360,75	110,48	1481,96	1225,11
Amount of recycled materials	%	0.16			

Additional environmental impact indicators required in NPCR Part A for construction products							
Indicator	Unit	Unit		A4	A5	B2	В3
GWPIOBC	kg CO <sub>2</sub> -eq	kg CO <sub>2</sub> -eq		7,19E+00	2,64E-02	0	0
Indicator	Unit	B4	C1	C2	C3	C4	D
GWPIOBC	kg CO <sub>2</sub> -eq	0	0	3,60E-01	2,11E+00	4,44E-02	-2,50E+00

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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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.

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