

Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

Stitch Floor Screen 810x1540x85



abstracta

Owner of the declaration:

Abstracta AB

Product:

Stitch Floor Screen 810x1540x85

Declared unit:

1 pcs

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:

LCA.no EPD generator ID: 178525

The Norwegian EPD Foundation

General information

Product

Stitch Floor Screen 810x1540x85

Program operator:

Post Box 5250 Majorstuen, 0303 Oslo, Norway The Norwegian EPD Foundation Phone: +47 23 08 80 00 web: post@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 Stitch Floor Screen 810x1540x85

Declared unit (cradle to gate) with option:

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

Functional unit:

The product stands on the floor until its end-of-life, after which it can be dismantled and recycled or returned to Abstracta for reuse or recycling.

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:

Abstracta AB

Contact person: Tim Wisme

Phone:

e-mail: tim.wisme@abstracta.se

Manufacturer:

Abstracta AB

Place of production:

Abstracta AB Lammengatan 2 363 45 Lammhult, Sweden

Management system:

ISO 9001, 14001 och 45001

Organisation no:

556046-3852

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: Tim Wisme

Reviewer of company-specific input data and EPD: Erik Graesen

Approved:

Håkon Hauan, CEO EPD-Norge

Product

Product description:

Stitch is a soft and cosy-looking, sound-absorbent screen upholstered in thick, padded fabric with grid-patterned stitching, and mounted on finely made ash wood legs. Inspired by sofas, cushions and down-filled jackets, Stefan Borselius's aim in designing Stitch was to make often hard and angular public spaces more welcoming by adding an element of human warmth. For the same reason, Stitch is equally suited to home environments. Needless to say, its design language also delivers excellent acoustic properties.

For more information about the product, visit the product page https://abstracta.se/product/stitch-floor/.

Product specification

The screen consists of a wooden frame, with a cover made of sound absorbing fibre filling upholstered with thick lined fabric with embroidered check patterns. The product is sold without a leg set, but a standard choice for the leg set is included in the EPD.

For more information about the product, see the product brochure https://lammhults.sharepoint.com/:b:/s/abs-webpage/EYUOEyX4MgNGi0saeUjO8o4BKvFVjdfbSG3Wzza0WPn7Ng?e=rT9Rz0.

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Glue for wood	0,11	0,79	0,00	0,00
Insulation - stone wool	4,17	30,09	0,67	16,15
Metal - Aluminium	0,48	3,43	0,48	100,00
Powder coating	0,00	0,03	0,00	0,00
Tape	0,01	0,10	0,00	1,07
Textile - Polyester (PE)	2,49	17,93	0,00	0,00
Wood	5,96	42,99	0,00	0,00
Wood - Solid ash	0,64	4,64	0,00	0,00
Total	13,87		1,15	

Packaging	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Packaging - Plastic	0,01	0,25	0,00	0,00
Recycled cardboard	1,96	99,75	1,96	100,00
Total incl. packaging	15,84		3,11	

Technical data:

The dimensions of Stitch Floor Screen are 810x1540x85, but other sizes are available. This EPD is made for Stitch Floor Screen, including a standard choice for the leg set. Note that the leg set is not included in the product.

For more information on the technical data of Stitch Floor Screen, see the technical data sheet https://lammhults.sharepoint.com/:b:/s/abs-webpage/EULE6naQ60RGrBSBYbHArssBAYlcG2DrBh4QqDMi32_x0g?e=H4K29n.

Market:

Available worldwide

Reference service life, product

10 years

Reference service life, building

60 years

LCA: Calculation rules

Declared unit:

1 pcs Stitch Floor Screen 810x1540x85

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.

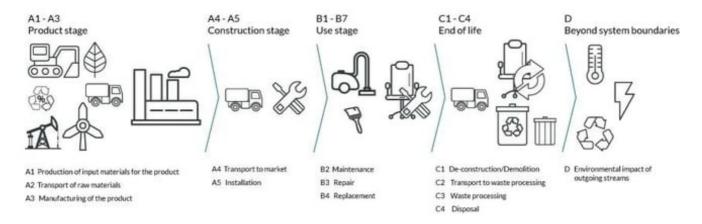
Materials	Source	Data quality	Year
Glue for wood	ecoinvent 3.6	Database	2019
Metal - Aluminium	ecoinvent 3.6	Database	2019
Packaging - Plastic	ecoinvent 3.6	Database	2019
Powder coating	Ecoinvent 3.6	Database	2019
Таре	ecoinvent 3.6	Database	2019
Textile - Polyester (PE)	ecoinvent 3.6	Database	2019
Wood	ecoinvent 3.6	Database	2019
Recycled cardboard	Modified ecoinvent 3.6	Database	2019
Wood - Solid ash	modified ecoinvent 3.6	Database	2019
Insulation - stone wool	NEPD-4117-3336-EN	EPD	2021

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	Refurb ishment	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	MNR	X	Χ	Χ	MNR	MNR	MNR	Χ	Χ	X	Χ	X

System boundary:

The analysis is a cradle-to-cradle, A1-D, where some B-stages that were assumed to be neglectable are not included. The A1-A4 stages includes the extraction and production of raw materials, transportation to the production site, the production process itself, and an estimated transport distance to the market. A5 includes the generated waste from the packaging of the product after the assembly at the customer. The only B-stage that is assumed to be relevant is B2, which includes assumptions on how the customer takes care of the product according to Abstracta's care instructions. The C- and D-stages includes the use of materials and energy for deconstruction, the transport to waste management, the waste processes, disposal of materials that cannot be processed, and the potential of reuse, recovery, and recycling of the product.



Additional technical information:

To preserve the fabric colour and the appearance of the fabric, Stitch should be vacuumed regularly with a soft nozzle.

Polyester Stain Removal: Use uncoloured paper towels or cloth to soak up as much as possible of the stain. Dried stains should be vacuumed. Moisten the stain lightly with a clean white cotton cloth, lukewarm water and possibly a small amount of pH-neutral detergent. Press a dry cloth or uncoloured paper towel against the fabric so that the moisture and dirt are absorbed. Repeat moistening and soaking until the stain is gone. Use clean water without detergent at the last moistening. Finish with soaking.

Abstracta offers a reuse service for our clients. This involves us collecting worn-out products to facilitate reuse, renovation, or recycling. In order to make circularity easier, most of our products feature replaceable parts, simplifying repair. We do this in the hope that we can help contribute in the transition to a more sustainable future. Read more about the service here: https://abstracta.se/story/abstracta-is-introducing-a-new-recycling-service-for-used-products-abstracta/ or contact our Sales Support for more information. Otherwise, try to ensure that the product can be reused when possible, or else, dismantle it so that as much of the materials can be recycled as possible.

LCA: Scenarios and additional technical information

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

Some assumptions have been made regarding the products lifetime after leaving the factory gates. The product is assumed to be transported to a customer in Scandinavia, the UK, or France (85% of sales in 2022). An average distance to the customer has been calculated through this data. In the A5 phase, the packaging of the product becomes waste, and the impacts are added automatically according to assumptions made in the EPD tool on waste handling on-site. In the use stage, the assumption is that the customer takes care of the product by vacuuming it on a yearly basis. For the end-of-life stage of the product, it has been assumed that there is a 50 km distance from the customer to a waste terminal. The rest of the values are automatically filled in by the tool. For the D-stage, automatic values are filled in, according to generic data.

Transport from production place to user (A4)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Ship, Ferry, Sea (km)	50,0 %	7	0,034	l/tkm	0,24
Truck, 16-32 tonnes, EURO 6 (km)	36,7 %	511	0,043	l/tkm	21,96
Assembly (A5)	Unit	Value			
Waste, packaging, cardboard, 100 % recycled, to average treatment (kg)	kg	1,96			
Waste, packaging, plastic film (LDPE), to average treatment - A5 (kg)	kg	0,01			
Maintenance (B2)	Unit	Value			
Electricity, Nordic (kWh)	kWh/DU	0,25			
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 Hazardous waste, incineration (kg)	kg	0,11			
Waste treatment per kg Non-hazardous waste, incineration with fly ash extraction - C3 (kg)	kg	0,00			
Waste treatment per kg Paperboard, incineration with fly ash extraction - C3 (kg)	kg	0,01			
Waste treatment per kg Scrap aluminium, incineration with fly ash extraction (kg)	kg	0,48			
Waste treatment per kg Textile, incineration with fly ash extraction (kg)	kg	2,49			
Waste treatment per kg Wood, incineration with fly ash extraction (kg)	kg	6,61			
Waste, materials to recycling (kg)	kg	0,05			
Disposal (C4)	Unit	Value			
Landfilling of ashes and residues from incineration of Scrap aluminium (kg)	kg	0,43			
Landfilling of ashes from incineration of Hazardous waste, from incineration (kg)	kg	0,02			
Landfilling of ashes from incineration of Non- hazardous waste, process per kg ashes and residues - C4 (kg)	kg	0,00			
Landfilling of ashes from incineration of Paperboard, 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	0,12			
Landfilling of ashes from incineration of Wood, process per kg ashes and residues (kg)	kg	0,08			
Waste, Stone wool, to landfil (kg)	kg	4,17			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of electricity, in Norway (MJ)	MJ	6,86			
Substitution of thermal energy, district heating, in Norway (MJ)	МЈ	103,85			

LCA: Results

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

Environme	ental impact							
	Indicator	Uı	it	A1-A3	A4	A5	B2	В3
	GWP-total	kg CC	₂ -eq	4,38E+01	1,34E+00	3,37E+00	3,64E-02	0
	GWP-fossil	kg CC	kg CO ₂ -eq		1,33E+00	3,22E-02	3,39E-02	0
	GWP-biogenic	kg CC	₂ -eq	-1,70E+01	5,50E-04	3,33E+00	6,20E-04	0
	GWP-luluc	kg CC	₂ -eq	9,34E-02	4,78E-04	1,05E-05	1,86E-03	0
0	ODP	kg CFC	11 -eq	1,79E-06	3,02E-07	6,73E-09	3,67E-09	0
CE CE	AP	mol H	+ -eq	5,30E-01	4,21E-03	1,51E-04	1,57E-04	0
	EP-FreshWater	kg P	-eq	1,37E-03	1,06E-05	2,62E-07	2,25E-06	0
	EP-Marine	kg N	-eq	7,41E-02	8,54E-04	5,02E-05	2,47E-05	0
	EP-Terrestial	mol I	I -eq	1,76E+00	9,54E-03	5,40E-04	3,32E-04	0
	POCP	kg NM\	OC -eq	2,06E-01	3,51E-03	1,55E-04	7,78E-05	0
	ADP-minerals&metals ¹	kg Sl	kg Sb -eq		3,66E-05	7,75E-07	5,28E-07	0
	ADP-fossil ¹	N	МЈ		2,01E+01	4,46E-01	9,17E-01	0
<u>@</u>	WDP ¹	m	m ³		1,94E+01	5,69E-01	7,09E+01	0
	Indicator	Unit	B4	C1	C2	C3	C4	D
	Indicator GWP-total	Unit kg CO ₂ -eq	B4 0	C1 0	C2 1,29E-01	C3 1,50E+01	C4 3,94E-02	D -6,24E-01
_	GWP-total	kg CO ₂ -eq	0	0	1,29E-01	1,50E+01	3,94E-02	-6,24E-01
	GWP-total GWP-fossil	kg CO ₂ -eq	0	0	1,29E-01 1,29E-01	1,50E+01 3,68E-01	3,94E-02 3,93E-02	-6,24E-01 -6,02E-01
•	GWP-total GWP-fossil GWP-biogenic	kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq	0 0 0	0 0	1,29E-01 1,29E-01 5,36E-05	1,50E+01 3,68E-01 1,47E+01	3,94E-02 3,93E-02 3,90E-05	-6,24E-01 -6,02E-01 -1,24E-03
P	GWP-total GWP-fossil GWP-biogenic GWP-luluc	kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq	0 0 0 0	0 0 0	1,29E-01 1,29E-01 5,36E-05 4,61E-05	1,50E+01 3,68E-01 1,47E+01 7,95E-05	3,94E-02 3,93E-02 3,90E-05 9,00E-06	-6,24E-01 -6,02E-01 -1,24E-03 -2,07E-02
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP	kg CO ₂ -eq	0 0 0 0	0 0 0 0	1,29E-01 1,29E-01 5,36E-05 4,61E-05 2,93E-08	1,50E+01 3,68E-01 1,47E+01 7,95E-05 3,77E-08	3,94E-02 3,93E-02 3,90E-05 9,00E-06 1,14E-08	-6,24E-01 -6,02E-01 -1,24E-03 -2,07E-02 -4,39E-02
(P)	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP	kg CO ₂ -eq mol H+ -eq	0 0 0 0 0	0 0 0 0 0	1,29E-01 1,29E-01 5,36E-05 4,61E-05 2,93E-08 3,72E-04	1,50E+01 3,68E-01 1,47E+01 7,95E-05 3,77E-08 1,84E-03	3,94E-02 3,93E-02 3,90E-05 9,00E-06 1,14E-08 2,73E-04	-6,24E-01 -6,02E-01 -1,24E-03 -2,07E-02 -4,39E-02 -4,96E-03
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater	kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CFC11 -eq mol H+ -eq kg P -eq	0 0 0 0 0 0	0 0 0 0 0 0	1,29E-01 1,29E-01 5,36E-05 4,61E-05 2,93E-08 3,72E-04 1,03E-06	1,50E+01 3,68E-01 1,47E+01 7,95E-05 3,77E-08 1,84E-03 7,80E-06	3,94E-02 3,93E-02 3,90E-05 9,00E-06 1,14E-08 2,73E-04 4,28E-07	-6,24E-01 -6,02E-01 -1,24E-03 -2,07E-02 -4,39E-02 -4,96E-03 -5,35E-05
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine	kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CFC11 -eq mol H+ -eq kg P -eq kg N -eq	0 0 0 0 0 0 0	0 0 0 0 0 0	1,29E-01 1,29E-01 5,36E-05 4,61E-05 2,93E-08 3,72E-04 1,03E-06 7,36E-05	1,50E+01 3,68E-01 1,47E+01 7,95E-05 3,77E-08 1,84E-03 7,80E-06 7,82E-04	3,94E-02 3,93E-02 3,90E-05 9,00E-06 1,14E-08 2,73E-04 4,28E-07 9,25E-05	-6,24E-01 -6,02E-01 -1,24E-03 -2,07E-02 -4,39E-02 -4,96E-03 -5,35E-05 -1,62E-03
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine EP-Terrestial	kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CFC11 -eq mol H+ -eq kg P -eq kg N -eq mol N -eq	0 0 0 0 0 0 0	0 0 0 0 0 0 0	1,29E-01 1,29E-01 5,36E-05 4,61E-05 2,93E-08 3,72E-04 1,03E-06 7,36E-05 8,23E-04	1,50E+01 3,68E-01 1,47E+01 7,95E-05 3,77E-08 1,84E-03 7,80E-06 7,82E-04 8,37E-03	3,94E-02 3,93E-02 3,90E-05 9,00E-06 1,14E-08 2,73E-04 4,28E-07 9,25E-05 1,03E-03	-6,24E-01 -6,02E-01 -1,24E-03 -2,07E-02 -4,39E-02 -4,96E-03 -5,35E-05 -1,62E-03 -1,75E-02
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine EP-Terrestial POCP	kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CFC11 -eq mol H+ -eq kg P -eq kg N -eq mol N -eq kg NMVOC -eq	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	1,29E-01 1,29E-01 5,36E-05 4,61E-05 2,93E-08 3,72E-04 1,03E-06 7,36E-05 8,23E-04 3,15E-04	1,50E+01 3,68E-01 1,47E+01 7,95E-05 3,77E-08 1,84E-03 7,80E-06 7,82E-04 8,37E-03 2,08E-03	3,94E-02 3,93E-02 3,90E-05 9,00E-06 1,14E-08 2,73E-04 4,28E-07 9,25E-05 1,03E-03 2,96E-04	-6,24E-01 -6,02E-01 -1,24E-03 -2,07E-02 -4,39E-02 -4,96E-03 -5,35E-05 -1,62E-03 -1,75E-02 -4,84E-03

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 er	nvironmental impac	t indicators			_	_	_	
	Indicator	Unit		A1-A3	A4	A5	B2	В3
	PM	Disease incidence		5,27E-06	8,13E-08	2,23E-09	8,30E-10	0
(10) E	IRP ²	kgBq U235 -eq		2,56E+00	8,80E-02	1,91E-03	2,09E-02	0
4	ETP-fw ¹	CTUe		6,98E+02	1,49E+01	5,94E-01	1,15E+00	0
46. *** <u>\$</u>	HTP-c ¹	CTUh		5,94E-08	0,00E+00	1,80E-11	2,70E-11	0
48° E	HTP-nc ¹	CTUh		5,59E-07	1,63E-08	7,46E-10	7,05E-10	0
	SQP ¹	dimensionless		1,32E+03	1,40E+01	3,01E-01	6,91E-01	0
Į.	ndicator	Unit	B4	C1	C2	C3	C4	D
	PM	Disease incidence	0	0	7,92E-09	2,12E-08	4,96E-09	-3,01E-07
	IRP ²	kgBq U235 -eq	0	0	8,55E-03	6,47E-03	3,35E-03	-5,50E-02
	ETP-fw ¹	CTUe	0	0	1,45E+00	9,19E+00	6,08E-01	-4,68E+01
44. ** <u>E</u>	HTP-c ¹	CTUh	0	0	0,00E+00	5,62E-10	1,90E-11	-8,58E-10
₩ <u>.</u>	HTP-nc ¹	CTUh	0	0	1,58E-09	1,74E-08	6,82E-10	-4,49E-08
	SQP ¹	dimensionless	0	0	1,37E+00	5,43E-01	1,72E+00	-5,76E+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)

[&]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	B3
Ç.	PERE		N	۷۱	6,87E+02	2,87E-01	7,36E-03	9,02E-01	0
	PERM		N	MJ	1,36E+02	0,00E+00	-1,15E+01	0,00E+00	0
₩,	PERT		N	MJ	8,23E+02	2,87E-01	-1,15E+01	9,02E-01	0
4	PENRE		N	MJ	7,10E+02	2,01E+01	4,46E-01	9,32E-01	0
. La	PENRM		N	MJ	8,60E+01	0,00E+00	-2,12E-01	0,00E+00	0
IA	PENRT		N	MJ	7,96E+02	2,01E+01	2,34E-01	9,32E-01	0
<u></u>	SM		k	кg	3,11E+00	0,00E+00	0,00E+00	0,00E+00	0
2	RSF		N	MJ	4,93E-01	1,03E-02	2,44E-04	9,11E-03	0
	NRSF		N	MJ	5,55E-01	3,66E-02	1,00E-03	0,00E+00	0
9 6	FW		n	n ³	4,14E-01	2,14E-03	2,11E-04	4,10E-03	0
				•					
	ndicator	U	Jnit	B4	C1	C2	C3	C4	D
्र <i>उ</i> ट	Indicator PERE				C1 0	C2 2,80E-02	C3 2,16E-01	C4 1,40E-02	D -5,32E+01
			Jnit	B4					
i di	PERE		Jnit MJ	B4 0	0	2,80E-02	2,16E-01	1,40E-02	-5,32E+01
E	PERE PERM		Jnit MJ	0 0	0	2,80E-02 0,00E+00	2,16E-01 -9,24E+01	1,40E-02 0,00E+00	-5,32E+01 0,00E+00
्रह ** ***	PERE PERM PERT		Jnit MJ MJ	B4 0 0	0 0	2,80E-02 0,00E+00 2,80E-02	2,16E-01 -9,24E+01 -9,22E+01	1,40E-02 0,00E+00 1,40E-02	-5,32E+01 0,00E+00 -5,32E+01
 ₽ 	PERE PERM PERT PENRE		Jnit MJ MJ MJ	B4 0 0 0 0	0 0 0 0	2,80E-02 0,00E+00 2,80E-02 1,96E+00	2,16E-01 -9,24E+01 -9,22E+01 1,99E+00	1,40E-02 0,00E+00 1,40E-02 8,01E-01	-5,32E+01 0,00E+00 -5,32E+01 -8,61E+00
	PERE PERM PERT PENRE PENRM		MJ MJ MJ MJ MJ	B4 0 0 0 0 0	0 0 0 0	2,80E-02 0,00E+00 2,80E-02 1,96E+00 0,00E+00	2,16E-01 -9,24E+01 -9,22E+01 1,99E+00 -6,48E+01	1,40E-02 0,00E+00 1,40E-02 8,01E-01 0,00E+00	-5,32E+01 0,00E+00 -5,32E+01 -8,61E+00 0,00E+00
	PERE PERM PERT PENRE PENRM PENRT		MJ MJ MJ MJ MJ MJ MJ	B4 0 0 0 0 0 0	0 0 0 0 0	2,80E-02 0,00E+00 2,80E-02 1,96E+00 0,00E+00 1,96E+00	2,16E-01 -9,24E+01 -9,22E+01 1,99E+00 -6,48E+01 -6,28E+01	1,40E-02 0,00E+00 1,40E-02 8,01E-01 0,00E+00 8,01E-01	-5,32E+01 0,00E+00 -5,32E+01 -8,61E+00 0,00E+00 -8,61E+00
	PERE PERM PERT PENRE PENRM PENRT SM		MJ MJ MJ MJ MJ MJ kg	B4 0 0 0 0 0 0	0 0 0 0 0 0	2,80E-02 0,00E+00 2,80E-02 1,96E+00 0,00E+00 1,96E+00 0,00E+00	2,16E-01 -9,24E+01 -9,22E+01 1,99E+00 -6,48E+01 -6,28E+01 0,00E+00	1,40E-02 0,00E+00 1,40E-02 8,01E-01 0,00E+00 8,01E-01 1,67E-04	-5,32E+01 0,00E+00 -5,32E+01 -8,61E+00 0,00E+00 -8,61E+00 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		Uı	nit	A1-A3	A4	A5	B2	В3
	HWD			g	3,03E-01	1,04E-03	0,00E+00	8,59E-05	0
Ū	NHWD	kg		9,76E+00	9,72E-01	1,97E+00	5,69E-03	0	
<u>\$</u>	RWD		kg		3,07E-03	1,37E-04	0,00E+00	9,61E-06	0
In	dicator		Unit	B4	C1	C2	C3	C4	D
Ā	HWD		kg	0	0	1,01E-04	0,00E+00	4,88E-01	-4,05E-04
Ū	NHWD		kg	0	0	9,51E-02	1,14E-01	4,22E+00	-2,03E-01
<u> </u>	RWD		kg	0	0	1,33E-05	0,00E+00	4,88E-06	-4,51E-05

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	Unit		A1-A3	A4	A5	B2	В3
@>	CRU	kg	kg		0,00E+00	0,00E+00	0,00E+00	0
&▷	MFR	kg		2,03E-01	0,00E+00	1,83E+00	0,00E+00	0
DF	MER	kg		6,53E-01	0,00E+00	2,92E-06	0,00E+00	0
7 >	EEE	МЛ		4,01E-01	0,00E+00	1,12E-01	0,00E+00	0
DØ.	EET	МЈ		6,07E+00	0,00E+00	1,70E+00	0,00E+00	0
Indicato	r	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	4,94E-02	1,56E-04	0,00E+00
DØ	MER	kg	0	0	0,00E+00	9,70E+00	1,26E-06	0,00E+00
₹ D	EEE	MJ	0	0	0,00E+00	6,35E+00	1,09E-05	0,00E+00
D	EET	MJ	0	0	0,00E+00	9,61E+01	1,65E-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	3,01E+00							
kg C	1,77E+00							
	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	Data source	Amount	Unit
Electricity, Sweden (kWh)	ecoinvent 3.6	54,94	g CO2-eg/kWh

Dangerous substances

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

Indoor environment

A test report for the indoor emissions is available here: https://lammhults.sharepoint.com/:b:/s/abs-webpage/Ef9pCjA4yZJPkPpEgaFEpHwBTotERJRbpkit-HpbwrjmgQ?e=3xlAm2

Additional Environmental Information

Key Environmental Indicators

Key environmental indicators	Unit	A1-A3	A4	A1-C4	A1-D
GWPtotal	kg CO ₂ -eq	43,81	1,34	63,74	63,12
Total energy consumption	MJ	1398,23	20,48	1426,05	1361,10
Amount of recycled materials	%	16,08			

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		6,11E+01	1,34E+00	3,22E-02	4,94E-02	0
Indicator	Unit	B4	C1	C2	C3	C4	D
GWPIOBC	kg CO ₂ -eq	0	0	1,29E-01	4,46E+00	4,70E-02	-6,15E-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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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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