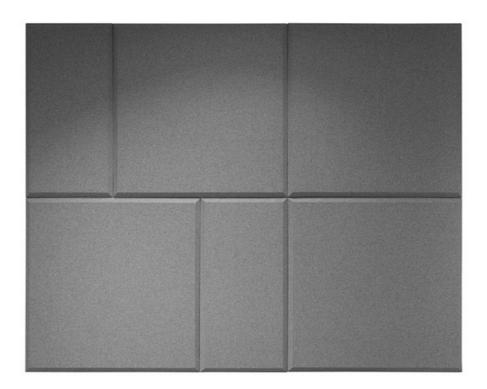




# Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

# Domo Wall Panel 1200x600





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Domo Wall Panel 1200x600

Owner of the declaration:

**Declared unit:** 

Abstracta AB

**Product:** 

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:** 

NEPD-8157-7825-EN

Registration number:

NEPD-8157-7825-EN

Issue date: 19.11.2024

**Valid to:** 19.11.2029

**EPD** software:

LCAno EPD generator ID: 570342

The Norwegian EPD Foundation



#### **General information**

#### Product

Domo Wall Panel 1200x600

# **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-8157-7825-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 Domo Wall Panel 1200x600

# Declared unit (cradle to gate) with option:

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

#### **Functional unit:**

This EPD considers one pcs of Domo Wall Panel with wool upholstery, including packaging. The product is a sound absorbing wall panel. At the end of its life 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:

19.11.2024

#### Valid to:

19.11.2029

#### 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: Tim Wisme

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

#### Approved:

Managing Director of EPD-Norway



#### **Product**

#### **Product description:**

The full elegance of Stefan Borselius's Domo concept is revealed when multiple panels are combined on one wall. A beautiful interplay of light and shadows then emerges from the meeting of their beveled edges. This dynamic is further enhanced by employing screens in different colours. The screens are available in a myriad of colours and fabrics.

The modules are available in rectangular and square-shaped performances and can be fitted horizontally or vertically, which means you can build symmetrical or asymmetrical pattern formations.

#### **Product specification**

The screen's sound-absorbent filling is mounted inside a solid wood frame, which is upholstered in fabric. The wall absorbent is mounted using concealed brackets. Choose your upholstery from a wide variety of options.

This EPD includes the following variants:

Domo Wall Panel 1200x600x34

Domo Wall Panel 600x600x34

Domo Wall Panel 1200x1200x34

It also includes the following options:

Domo Wall Panel 1200x600x34 with polyester upholstery

See the product sheet for more information: https://lammhults.sharepoint.com/:b:/s/abs-webpage/ERDRwLi5HIxDrtNAh5IfYKgBnKJ7jz0sFSp\_geAjfUjC-Q?e=oJ3xsF

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Filt	0,64	9,60	0,32	50,00
Glue for wood	0,02	0,30	0,00	0,00
Plastic - Polyurethane (PUR)	0,02	0,30	0,00	0,00
Textile - Wool	0,45	6,75	0,00	0,00
Metal - Stainless steel	0,13	1,95	0,03	21,83
Metal - Steel	1,44	21,59	0,00	0,00
Textile - Polyester	0,16	2,40	0,00	0,00
Wood	3,81	57,12	0,00	0,00
Total	6,67	100,00	0,35	

Packaging	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Packaging - Paper	0,01	0,90	0,00	0,00
Recycled cardboard	1,10	99,10	1,10	100,00
Total incl.	7,78	100,00	1,45	

#### Technical data:

The dimensions of Domo Wall Panel are 1200x600x34, but other sizes are also available. For more information on the technical data of Domo Wall Panel, see the technical data sheet: https://lammhults.sharepoint.com/:b:/s/abs-webpage/EYtFFtgWMU5Lgh8o\_6M5gRkBWNU1DwvQkOfx0gT108tuBg?e=B7uad4

#### Market:

The product is available worldwide. The distance to the market is based on shipping to Scandinavia or Western Europe.

#### Reference service life, product

Estimated to be 15 years, with a 5-year warranty and a 10-year spare part guarantee.

#### Reference service life, building

Assumed to be 60 years.

#### LCA: Calculation rules

#### **Declared unit:**

1 pcs Domo Wall Panel 1200x600

#### **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
Filt	S-P-04908	EPD	2020
Glue for wood	ecoinvent 3.6	Database	2019
Metal - Stainless steel	ecoinvent 3.6	Database	2019
Metal - Steel	ecoinvent 3.6	Database	2019
Packaging - Paper	ecoinvent 3.6	Database	2019
Plastic - Polyurethane (PUR)	ecoinvent 3.6	Database	2019
Recycled cardboard	Modified ecoinvent 3.6	Database	2019
Textile - Polyester	ecoinvent 3.6	Database	2019
Textile - Wool	Modified ecoinvent 3.6	Database	2019
Wood	ecoinvent 3.6	Database	2019

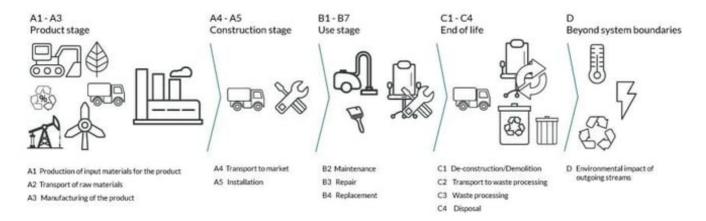
# System boundaries (X=included, MND=module not declared, MNR=module not relevant)

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	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	Χ	Χ	Χ	MNR	MNR	MNR	Χ	Χ	Χ	Χ	X

#### System boundary:

The EPD is a cradle-to-grave analysis (A1-D), excluding certain B-stages (use phase) assumed negligible.

- A1-A4 stages: These encompass 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 stage: This includes the waste generated from the product's packaging after customer assembly.
- B stage: Only B2 is considered relevant, involving assumptions on customer care based on Abstracta's care instructions.
- C and D stages: These cover the use of materials and energy for deconstruction, transportation to waste management, waste processing, disposal of non-processable materials, and the potential for reuse, recovery, and recycling of the product.



#### Additional technical information:

Care instructions

#### Fabric

To maintain the colour and appearance of the fabric, it should be vacuum cleaned regularly with a soft nozzle. Stain Removal for Polyester:

- Use colourless towel or a washcloth to absorb as much as possible of still-moist stain. Dried stains should be vacuumed.
- Wet the stain sparingly with a white pure cotton cloth, warm water and possibly a little pH-neutral cleaner.
- Dab the area with a dry cloth or colourless paper towel to absorb the moisture and stain.
- Repeat this process until the stain is gone.
- On the final repetition, use only clean water with no detergent added.
- Finish by dabbing up moisture with a dry cloth or paper towel.

Stain Removal for wool:

Dab or wipe gently with a damp cloth.

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.

Certain assumptions have been made regarding the product's lifetime after it leaves the factory.

- A4-stage: It is assumed that the product is transported to customers in Scandinavia, Germany, the UK, or France, which accounted for 88% of sales in 2023. An average distance to the customer has been calculated based on this data.
- A5-stage: The packaging of the product becomes waste, and the impacts are automatically added according to the EPD tool's assumptions on on-site waste handling.
- B-stage: It is assumed that the customer maintains the product by vacuuming it for 0.5 minutes/m2 with a 600 W vacuum cleaner each month.
- C-stage: It is assumed that there is a 50 km distance from the customer to a waste terminal. The remaining values for waste-handling are automatically filled in by the tool.
- 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 %	8	0,034	l/tkm	0,27
Truck, 16-32 tonnes, EURO 6 (km)	36,7 %	502	0,043	l/tkm	21,58
Assembly (A5)	Unit	Value			
Waste, packaging, cardboard, 100 % recycled, to average treatment (kg)	kg	1,10			
Waste, packaging, kraft paper, unbleached, to average treatment (kg)	kg	0,01			
Maintenance (B2)	Unit	Value			
Electricity, Nordic (kWh)	kWh/DU	0,65			
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			
Copper to recycling (kg)	kg	0,53			
Waste treatment per kg Scrap steel, incineration with fly ash extraction (kg)	kg	1,57			
Waste treatment per kg Textile, incineration with fly ash extraction (kg)	kg	0,61			
Waste treatment per kg Wood, incineration with fly ash extraction (kg)	kg	3,81			
Waste treatment per kg Polyethylene terephthalate, PET, incineration with fly ash extraction - C3 (kg)	kg	0,64			
Waste treatment per kg Polyurethane (PU), incineration (kg)	kg	0,02			
Waste treatment per kg Hazardous waste, incineration (kg)	kg	0,02			
Disposal (C4)	Unit	Value			
Landfilling of ashes and residues from incineration of Scrap steel (kg)	kg	1,04			
Landfilling of ashes from incineration of Textile, soiled, process per kg ashes and residues (kg)	kg	0,03			
Landfilling of ashes from incineration of Wood, process per kg ashes and residues (kg)	kg	0,04			
Landfilling of ashes from incineration of Polyethylene terephthalate, PET, process per kg ashes and residues - C4 (kg)	kg	0,01			
Landfilling of ashes from incineration of Polyurethane (PU), process per kg ashes and residues - C4 (kg)	kg	0,00			
Landfilling of ashes from incineration of Hazardous waste, from incineration (kg)	kg	0,00			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of primary steel with net scrap (kg)	kg	0,52			
Substitution of electricity, in Norway (MJ)	MJ	3,90			
Substitution of thermal energy, district heating, in Norway (MJ)	MJ	59,05			

**LCA: Results** 

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

Environm	ental impact							
	Indicator	Ur	it	A1-A3	A4	A5	B2	В3
	GWP-total	kg CC	<sub>2</sub> -eq	2,95E+01	6,45E-01	1,90E+00	9,47E-02	0
	GWP-fossil	kg CC	<sub>2</sub> -eq	2,19E+01	6,45E-01	1,80E-02	8,83E-02	0
	GWP-biogenic	kg CC	<sub>2</sub> -eq	5,55E+00	2,66E-04	1,88E+00	1,61E-03	0
	GWP-luluc	kg CC	<sub>2</sub> -eq	2,06E+00	2,31E-04	5,94E-06	4,83E-03	0
Ö	ODP	kg CFC	11 -eq	4,05E-06	1,46E-07	3,79E-09	9,55E-09	0
C.	AP	mol H	+ -eq	5,48E-01	2,06E-03	8,50E-05	4,07E-04	0
<del></del>	EP-FreshWater	kg P	-eq	5,84E-03	5,12E-06	1,47E-07	5,84E-06	0
<del>**</del>	EP-Marine	kg N	-eq	9,77E-02	4,19E-04	2,81E-05	6,43E-05	0
4	EP-Terrestial	mol N	I -eq	2,25E+00	4,68E-03	3,04E-04	8,63E-04	0
	POCP	kg NMV	OC -eq	8,47E-02	1,71E-03	8,75E-05	2,02E-04	0
£3	ADP-minerals&metals <sup>1</sup>	kg Sl	kg Sb-eq		1,77E-05	4,37E-07	1,37E-06	0
	ADP-fossil <sup>1</sup>	M	МЈ		9,73E+00	2,51E-01	2,38E+00	0
<u>^</u>	WDP <sup>1</sup>	m	m <sup>3</sup>		9,34E+00	3,18E-01	1,84E+02	0
$\circ$				1,62E+03	3,346100	3, 102 01	1,042102	ŭ
	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 6,36E-02	C3 8,72E+00	C4 1,56E-02	D -9,31E-01
	GWP-total GWP-fossil	Unit kg CO <sub>2</sub> -eq kg CO <sub>2</sub> -eq	0 0	C1 0	C2 6,36E-02 6,35E-02	C3 8,72E+00 1,48E+00	C4 1,56E-02 1,56E-02	D -9,31E-01 -9,18E-01
	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 0	C1 0 0	C2 6,36E-02 6,35E-02 2,63E-05	C3 8,72E+00 1,48E+00 7,24E+00	C4 1,56E-02 1,56E-02 1,44E-05	D -9,31E-01 -9,18E-01 -1,02E-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 6,36E-02 6,35E-02 2,63E-05 2,26E-05	C3 8,72E+00 1,48E+00 7,24E+00 2,37E-05	C4 1,56E-02 1,56E-02 1,44E-05 4,04E-06	D -9,31E-01 -9,18E-01 -1,02E-03 -1,21E-02
<b>P</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 6,36E-02 6,35E-02 2,63E-05 2,26E-05 1,44E-08	C3 8,72E+00 1,48E+00 7,24E+00 2,37E-05 1,19E-08	C4 1,56E-02 1,56E-02 1,44E-05 4,04E-06 3,95E-09	D -9,31E-01 -9,18E-01 -1,02E-03 -1,21E-02 -2,49E-02
	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 6,36E-02 6,35E-02 2,63E-05 2,26E-05 1,44E-08 1,83E-04	C3 8,72E+00 1,48E+00 7,24E+00 2,37E-05 1,19E-08 1,11E-03	C4 1,56E-02 1,56E-02 1,44E-05 4,04E-06 3,95E-09 9,41E-05	D -9,31E-01 -9,18E-01 -1,02E-03 -1,21E-02 -2,49E-02 -5,68E-03
	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 6,36E-02 6,35E-02 2,63E-05 2,26E-05 1,44E-08 1,83E-04 5,08E-07	C3 8,72E+00 1,48E+00 7,24E+00 2,37E-05 1,19E-08 1,11E-03 2,36E-06	C4 1,56E-02 1,56E-02 1,44E-05 4,04E-06 3,95E-09 9,41E-05 1,63E-07	D -9,31E-01 -9,18E-01 -1,02E-03 -1,21E-02 -2,49E-02 -5,68E-03 -6,58E-05
	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 0 0 0 0 0	0 0 0 0 0 0 0	C2 6,36E-02 6,35E-02 2,63E-05 2,26E-05 1,44E-08 1,83E-04 5,08E-07 3,61E-05	C3 8,72E+00 1,48E+00 7,24E+00 2,37E-05 1,19E-08 1,11E-03 2,36E-06 5,23E-04	C4 1,56E-02 1,56E-02 1,44E-05 4,04E-06 3,95E-09 9,41E-05 1,63E-07 3,29E-05	D -9,31E-01 -9,18E-01 -1,02E-03 -1,21E-02 -2,49E-02 -5,68E-03 -6,58E-05 -1,51E-03
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine EP-Terrestial	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 6,36E-02 6,35E-02 2,63E-05 2,26E-05 1,44E-08 1,83E-04 5,08E-07 3,61E-05 4,04E-04	C3 8,72E+00 1,48E+00 7,24E+00 2,37E-05 1,19E-08 1,11E-03 2,36E-06 5,23E-04 5,47E-03	C4 1,56E-02 1,56E-02 1,44E-05 4,04E-06 3,95E-09 9,41E-05 1,63E-07 3,29E-05 3,66E-04	D -9,31E-01 -9,18E-01 -1,02E-03 -1,21E-02 -2,49E-02 -5,68E-03 -6,58E-05 -1,51E-03 -1,60E-02
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine EP-Terrestial POCP	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 kg NMVOC -eq	B4 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	C2 6,36E-02 6,35E-02 2,63E-05 2,26E-05 1,44E-08 1,83E-04 5,08E-07 3,61E-05 4,04E-04 1,55E-04	C3 8,72E+00 1,48E+00 7,24E+00 2,37E-05 1,19E-08 1,11E-03 2,36E-06 5,23E-04 5,47E-03 1,35E-03	C4 1,56E-02 1,56E-02 1,44E-05 4,04E-06 3,95E-09 9,41E-05 1,63E-07 3,29E-05 3,66E-04 1,05E-04	D -9,31E-01 -9,18E-01 -1,02E-03 -1,21E-02 -2,49E-02 -5,68E-03 -6,58E-05 -1,51E-03 -1,60E-02 -5,63E-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

<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 e	dditional environmental impact indicators											
	Indicator	Unit		A1-A3	A4	A5	B2	В3				
	PM	Disease incidence		4,55E-06	3,92E-08	1,25E-09	2,16E-09	0				
	IRP <sup>2</sup>	kgBq U235 -eq		1,07E+00	4,25E-02	1,07E-03	5,44E-02	0				
	ETP-fw <sup>1</sup>	CTUe		9,20E+02	7,20E+00	3,35E-01	2,99E+00	0				
	HTP-c <sup>1</sup>	CTUh		6,36E-08	0,00E+00	1,00E-11	7,00E-11	0				
4° B	HTP-nc <sup>1</sup>	CTUh		5,28E-07	7,87E-09	4,21E-10	1,83E-09	0				
	SQP <sup>1</sup>	dimensionless		-1,80E+04	6,76E+00	1,69E-01	1,80E+00	0				
	ndicator	Unit	B4	C1	C2	C3	C4	D				
	PM	Disease incidence	0	0	3,89E-09	1,24E-08	1,64E-09	-2,19E-07				
	IRP <sup>2</sup>	kgBq U235 -eq	0	0	4,20E-03	2,13E-03	1,21E-03	-2,92E-02				
	ETP-fw <sup>1</sup>	CTUe	0	0	7,12E-01	2,74E+00	2,18E-01	-5,87E+01				
40.	HTP-c <sup>1</sup>	CTUh	0	0	0,00E+00	3,10E-10	9,00E-12	-3,26E-09				
4° <u>B</u>	HTP-nc <sup>1</sup>	CTUh	0	0	7,78E-10	1,04E-08	2,63E-10	3,46E-08				
A												

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)

0

6,72E-01

1,72E-01

6,70E-01

-3,31E+01

dimensionless

SQP<sup>1</sup>

<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									
W 5	Indicator		U	nit	A1-A3	A4	A5	B2	В3
(F)	PERE		MJ		1,51E+02	1,39E-01	4,14E-03	2,35E+00	0
	PERM		N	ΜJ	7,14E+01	0,00E+00	-6,58E+00	0,00E+00	0
₽ <b>.</b>	PERT		N	ΝJ	2,22E+02	1,39E-01	-6,57E+00	2,35E+00	0
	PENRE		N	N۱	2,37E+02	9,73E+00	2,51E-01	2,42E+00	0
Å	PENRM		N	MJ	1,73E+01	0,00E+00	0,00E+00	0,00E+00	0
IA	PENRT		N	N۱	2,54E+02	9,73E+00	2,51E-01	2,42E+00	0
	SM		k	кg	1,45E+00	0,00E+00	0,00E+00	0,00E+00	0
2	RSF		N	MJ	1,06E-01	4,95E-03	1,37E-04	2,37E-02	0
	NRSF		MJ		9,76E-02	1,77E-02	5,65E-04	0,00E+00	0
(%)	FW		m <sup>3</sup>		2,92E-01	1,04E-03	1,19E-04	1,07E-02	0
$\cup$			n	n	2,926-01	1,041-03	1,132 04	1,071-02	Ü
In	dicator	U	n <b>Jnit</b>	B4	2,92E-01	C2	C3	C4	D
In	dicator	N	Init	B4	C1	C2	C3	C4	D
In B	<b>dicator</b> PERE	1	<b>Init</b> MJ	B4 0	C1 0	C2 1,38E-02	C3 5,52E-02	C4 7,10E-03	D -3,06E+01
in S	dicator PERE PERM	N N	<b>Init</b> MJ	0 0	C1 0	C2 1,38E-02 0,00E+00	C3 5,52E-02 -6,32E+01	C4 7,10E-03 0,00E+00	D -3,06E+01 0,00E+00
In E	dicator PERE PERM PERT	N N	Jnit MJ MJ	B4 0 0	C1 0 0	C2 1,38E-02 0,00E+00 1,38E-02	C3 5,52E-02 -6,32E+01 -6,31E+01	C4 7,10E-03 0,00E+00 7,10E-03	D -3,06E+01 0,00E+00 -3,06E+01
In A	dicator  PERE  PERM  PERT  PENRE	n n n	MJ MJ MJ	0 0 0 0	C1 0 0 0	C2 1,38E-02 0,00E+00 1,38E-02 9,61E-01	C3 5,52E-02 -6,32E+01 -6,31E+01 8,49E-01	C4 7,10E-03 0,00E+00 7,10E-03 2,97E-01	D -3,06E+01 0,00E+00 -3,06E+01 -9,74E+00
	PERE PERM PERT PENRE PENRM	N N N N N N N N N N N N N N N N N N N	MJ MJ MJ MJ MJ	B4 0 0 0 0 0	C1 0 0 0 0	C2 1,38E-02 0,00E+00 1,38E-02 9,61E-01 0,00E+00	C3 5,52E-02 -6,32E+01 -6,31E+01 8,49E-01 -1,73E+01	C4 7,10E-03 0,00E+00 7,10E-03 2,97E-01 0,00E+00	D -3,06E+01 0,00E+00 -3,06E+01 -9,74E+00 0,00E+00
	PERE PERM PERT PENRE PENRM PENRM		MJ MJ MJ MJ MJ MJ	B4 0 0 0 0 0 0	C1 0 0 0 0 0	C2 1,38E-02 0,00E+00 1,38E-02 9,61E-01 0,00E+00 9,61E-01	C3 5,52E-02 -6,32E+01 -6,31E+01 8,49E-01 -1,73E+01 -1,65E+01	C4 7,10E-03 0,00E+00 7,10E-03 2,97E-01 0,00E+00 2,97E-01	D -3,06E+01 0,00E+00 -3,06E+01 -9,74E+00 0,00E+00 -9,74E+00
	DERE PERM PERT PENRE PENRM PENRT SM	h	MJ MJ MJ MJ MJ MJ kg	B4 0 0 0 0 0 0	C1 0 0 0 0 0 0	C2 1,38E-02 0,00E+00 1,38E-02 9,61E-01 0,00E+00 9,61E-01 0,00E+00	C3 5,52E-02 -6,32E+01 -6,31E+01 8,49E-01 -1,73E+01 -1,65E+01 0,00E+00	C4 7,10E-03 0,00E+00 7,10E-03 2,97E-01 0,00E+00 2,97E-01 0,00E+00	D -3,06E+01 0,00E+00 -3,06E+01 -9,74E+00 0,00E+00 -9,74E+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			nit	A1-A3	A4	A5	B2	В3
	HWD	HWD		kg		5,01E-04	0,00E+00	2,23E-04	0
Ī	NHWD		k	g	5,06E+00	4,69E-01	1,11E+00	1,48E-02	0
<u>.</u>	RWD		kg		7,39E-04	6,63E-05	0,00E+00	2,50E-05	0
In	dicator		Unit	B4	C1	C2	C3	C4	D
Ā	HWD		kg	0	0	4,95E-05	0,00E+00	1,08E+00	-3,22E-03
Ū	NHWD		kg	0	0	4,67E-02	2,00E-02	2,95E-02	-3,51E-01
<b>3</b>	RWD	RWD k		0	0	6,54E-06	0,00E+00	1,75E-06	-2,40E-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	Uni	Unit		A4	A5	B2	В3
<b>®▷</b>	CRU	kg	kg		0,00E+00	0,00E+00	0,00E+00	0
&>	MFR	kg		5,79E-02	0,00E+00	1,03E+00	0,00E+00	0
Þ₹	MER	kg		1,87E-01	0,00E+00	7,01E-04	0,00E+00	0
50	EEE	MJ		1,15E-01	0,00E+00	6,35E-02	0,00E+00	0
<b>D</b>	EET	MJ		1,74E+00	0,00E+00	9,61E-01	0,00E+00	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	5,33E-01	0,00E+00	0,00E+00
DF	MER	kg	0	0	0,00E+00	6,67E+00	0,00E+00	0,00E+00
<b>₹</b> D	EEE	MJ	0	0	0,00E+00	3,82E+00	0,00E+00	0,00E+00
DØ	EET	MJ	0	0	0,00E+00	5,78E+01	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								
Unit	At the factory gate							
kg C	1,73E+00							
kg C	5,52E-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, 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**

## **Additional Environmental Information**

## **Key Environmental Indicators**

Key environmental indicators	Unit	A1-A3	A4	A1-C4	A1-D
GWPtotal	kg CO <sub>2</sub> -eq	29,46	0,65	40,91	39,98
Total energy consumption	MJ	387,90	9,89	405,04	363,51
Amount of recycled materials	%	16.33			

Additional environmental impact indicators required in NPCR Part A for construction products							
Indicator	Unit		A1-A3	A4	A5	B2	В3
GWPIOBC	kg CO <sub>2</sub> -eq	kg CO <sub>2</sub> -eq		6,45E-01	1,80E-02	1,28E-01	0
Indicator	Unit	B4	C1	C2	C3	C4	D
GWPIOBC	kg CO <sub>2</sub> -eq	0	0	6,36E-02	2,48E+00	1,75E-02	-1,21E+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.

#### **Variants and Options**

Key environmental indicators (A1-A3) for variants of this EPD					
Variants	Weight (kg)	GWPtotal (kg CO <sub>2</sub> -eq)	Total energy consumption (MJ)	Amount of recycled materials (%)	
Domo Wall Panel 600x600	4,10	13,89	195,41	16,97	
Domo Wall Panel 1200x1200	11,32	48,36	571,51	22,37	

Key environmental indicators (A1-A3) for options for this EPD					
Options	Weight (kg)	GWPtotal (kg CO <sub>2</sub> -eq)	Total energy consumption (MJ)	Amount of recycled materials (%)	
Domo Wall Panel 1200x600 with polyester upholstery	7,55	5,43	268,28	19,18	

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