



# Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

# **Escape Sofa**



# **EDSBYN**

Owner of the declaration:

AB Edsbyverken

Product:

Escape Sofa

**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:** 

NEPD-9548-9168

**Registration number:** NEPD-9548-9168

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Issue date: 31.03.2025

Valid to:

31.03.2030

**EPD** software:

LCAno EPD generator ID: 786560

The Norwegian EPD Foundation

## **General information**

#### Product

**Escape Sofa** 

## **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-9548-9168

## 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 Escape Sofa

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

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

#### **Functional unit:**

A universal seating furniture that allows you to create big or small islands

This EPD is based on the Escape Sofa 1600x800 mm. For the purpose of these EPD calculations, Grain by Gabriel has been selected as the upholstery for all applicable variants and options. Consequently, the LCA results may differ slightly depending on your chosen upholstery. Other sizes of the sofa are calculated as variants. Backrests and table tops are calculated as options.

#### 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:**

#### Owner of the declaration:

AB Edsbyverken

Contact person: Maria Olsson

Phone:

e-mail: maria.olsson@edsbyn.com

#### Manufacturer:

AB Edsbyverken

#### Place of production:

AB Edsbyverken Karlsvägen 2 828 32 Edsbyn, Sweden

#### Management system:

ISO 14001, ISO 9001

## Organisation no:

556040-0755

#### Issue date:

31.03.2025

#### Valid to:

31.03.2030

## Year of study:

2024

## 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: Jonathan Liverstad

Reviewer of company-specific input data and EPD: Maria Olsson

## Approved:



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:

Håkon Hauan, CEO EPD-Norge

Elisabet Amat, GREENIZE projects

(no signature required)



## **Product**

## **Product description:**

Escape is a system of different modules that allows you to create big or small islands. They are designed to offer a retreat for people that want to relax, to contemplate away from the stress and movements in a busy environment. What might look like simple shapes are in fact the hardest to achieve so that they work both technically and aesthetically. These modules are square and rectangular with soft, round curves, almost like stones or pebbles found in a river and the combinations you can create are countless. From basic to extensive, Escape can stretch out into a corridor and fill up a great hall or be scaled down into a small waiting area, connecting different interior zones in a work or meeting space.

The Escape Sofa is offered in dimensions of 1200x1200, 1600x800 or 2400x800 mm, with a wide variety of colors and upholstery options. Additionally, backrests and table tops with bracket mounts are available as optional features.

More information about Escape can be found here: https://www.edsbyn.com/products/escape/sofa/

## **Product specification**

Universal seating furniture: Escape sofa 1600x800 mm.

Frame: Constructed from MDF, chipboard and plywood.

Padding: High-quality cold foam, Standard 100 by OEKO-TEX®.

Stands: Plastic legs with leveling feet.

Upholstery: Grain 61247 by Gabriel (100% recyclable Polyester).

Dimensions: Length 1600 mm, Depth 800 mm, Height 455 mm.

Other sizes of the Sofa are calculated as variants.

Backrests and table are calculated separately as options.

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Linoleum	1,11	2,64	0.00	0.00
Metal - Stainless steel	0,072	0,17	0,015	21,83
Plastic - Polypropylene (PP)	1,58	3,76	0.00	0.00
Plastic - Polyurethane (PUR)	7,10	16,84	0.00	0.00
Textile - Polyester	1,73	4,12	0,011	0,64
Wood - Chipboard	21,96	52,062	9,016	41,054
Wood - Medium Density Fibreboard (MDF)	1,38	3,29	0.00	0.00
Wood - Plywood	7,21	17,098	0.00	0.00
Total	42,18	100,00	9,04	

Packaging	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Recycled cardboard	3,48	100,00	3,48	100,00
Total incl. packaging	45,66	100,00	12,52	

## Technical data:

Möbelfakta certified product.

## Market:

Europe.

## Reference service life, product

5 years warranty. Depending on chosen surface material and maintenance of the product the RSL varies from 5 to 10+ years.

#### Reference service life, building

## LCA: Calculation rules

#### **Declared unit:**

1 pcs Escape Sofa

## **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:

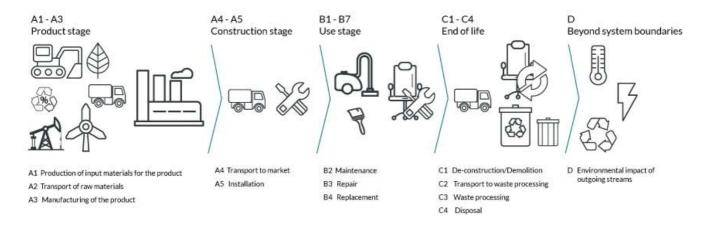
Specific data for the product composition are provided by the manufacturer. They represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on registered EPDs according to EN 15804, Ostfold Research databases, ecoinvent and other LCA databases. The data quality of the raw materials in A1 is presented in the table below.

Materials	Source	Data quality	Year
Linoleum	Modified ecoinvent 3.6	Database	2019
Metal - Stainless steel	ecoinvent 3.6	Database	2019
Plastic - Polypropylene (PP)	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
Wood - Chipboard	EPD-EGG-20200251-IBC1-EN	EPD	2018
Wood - Medium Density Fibreboard (MDF)	EPD-NIBE-20210326-18330	EPD	2019
Wood - Plywood	modified 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.

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 %	300	0,043	l/tkm	12,90
Assembly (A5)	Unit	Value			
Waste, packaging, cardboard, 100 % recycled, to average treatment (kg)	kg	3,47			
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 Scrap steel, incineration with fly ash extraction (kg)	kg	0,072			
Waste treatment per kg Non-hazardous waste, incineration with fly ash extraction - C3 (kg)	kg	23,078			
Waste treatment per kg Textile, incineration with fly ash extraction (kg)	kg	1,73			
Waste treatment per kg Polyurethane (PU), incineration (kg)	kg	7,10			
Waste, materials to recycling (kg)	kg	0,024			
Waste treatment per kg Wood, incineration with fly ash extraction (kg)	kg	8,60			
Waste treatment per kg Polypropylene (PP), incineration with fly ash extraction - C3 (kg)	kg	1,58			
Disposal (C4)	Unit	Value			
Landfilling of ashes from incineration of Non- hazardous waste, process per kg ashes and residues - C4 (kg)	kg	5,47			
Landfilling of ashes from incineration of Polyurethane (PU), process per kg ashes and residues - C4 (kg)	kg	0,26			
Landfilling of ashes from incineration of Polypropylene, PP, process per kg ashes and residues - C4 (kg)	kg	0,047			
Landfilling of ashes from incineration of Textile, soiled, process per kg ashes and residues (kg)	kg	0,087			
Landfilling of ashes and residues from incineration of Scrap steel (kg)	kg	0,047			
Landfilling of ashes from incineration of Wood, process per kg ashes and residues (kg)	kg	0,098			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of electricity, in Norway (MJ)	MJ	33,84			
Substitution of primary steel with net scrap (kg)	kg	0,019			
Substitution of thermal energy, district heating, in Norway (MJ)	МЈ	512,025			



**LCA: Results** 

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

Environme	ental impact								
	Indicator		Unit		A1-A3	A4	A5	B2	В3
	GWP-total		kg CO <sub>2</sub> -e	eq	3,65E+01	2,24E+00	5,96E+00	0	0
	GWP-fossil		kg CO <sub>2</sub> -eq		9,05E+01	2,24E+00	5,63E-02	0	0
	GWP-biogenic		kg CO <sub>2</sub> -eq		-5,43E+01	9,26E-04	5,91E+00	0	0
	GWP-luluc		kg CO <sub>2</sub> -e	eq	2,93E-01	7,96E-04	1,86E-05	0	0
٨	ODP		kg CFC11	-eq	6,52E-06	5,07E-07	1,19E-08	0	0
Œ	AP		mol H+ -	eq	4,42E-01	6,43E-03	2,67E-04	0	0
<del></del>	EP-FreshWater		kg P -ec	1	4,07E-03	1,79E-05	4,62E-07	0	0
<del></del>	EP-Marine		kg N -ed	7	1,12E-01	1,27E-03	8,81E-05	0	0
<del></del>	EP-Terrestial		mol N -e	eq	1,04E+00	1,42E-02	9,54E-04	0	0
	POCP		kg NMVOC	-eq	3,04E-01	5,45E-03	2,74E-04	0	0
<b>3</b> 53	ADP-minerals&metals <sup>1</sup>		kg Sb-ed	9	1,99E-03	6,18E-05	1,37E-06	0	0
	ADP-fossil <sup>1</sup>		MJ		1,96E+03	3,38E+01	7,87E-01	0	0
<u></u>	WDP <sup>1</sup>	$m^3$			3,78E+04	3,27E+01	9,98E-01	0	0
(50)	WDP		m <sup>3</sup>		3,70E+U4	3,276+01	9,90L-01	U	U
70	Indicator		m³ U <b>nit</b>	B4	5,76E+04	C2	C3	C4	D
				B4 0					
	Indicator	kg (	Unit		C1	C2	C3	C4	D
	<b>Indicator</b> GWP-total	kg (	<b>Unit</b> CO <sub>2</sub> -eq	0	C1 0	C2 3,73E-01	C3 1,29E+02	C4 4,57E-02	D -3,10E+00
	Indicator  GWP-total  GWP-fossil	kg ( kg ( kg (	<b>Unit</b> CO <sub>2</sub> -eq CO <sub>2</sub> -eq	0	C1 0	C2 3,73E-01 3,73E-01	C3 1,29E+02 7,73E+01	C4 4,57E-02 4,57E-02	D -3,10E+00 -2,99E+00
	Indicator  GWP-total  GWP-fossil  GWP-biogenic	kg ( kg ( kg (	Unit CO <sub>2</sub> -eq CO <sub>2</sub> -eq	0 0	C1 0 0	C2 3,73E-01 3,73E-01 1,54E-04	C3 1,29E+02 7,73E+01 5,18E+01	C4 4,57E-02 4,57E-02 2,64E-05	D -3,10E+00 -2,99E+00 -6,14E-03
	Indicator  GWP-total  GWP-fossil  GWP-biogenic  GWP-luluc	kg C kg C kg C kg C	Unit  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq	0 0 0	0 0 0 0	C2 3,73E-01 3,73E-01 1,54E-04 1,33E-04	C3 1,29E+02 7,73E+01 5,18E+01 1,04E-03	C4 4,57E-02 4,57E-02 2,64E-05 9,09E-06	D -3,10E+00 -2,99E+00 -6,14E-03 -1,02E-01
	Indicator  GWP-total  GWP-fossil  GWP-biogenic  GWP-luluc  ODP	kg C kg C kg C kg C mol	Unit  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq	0 0 0 0	0 0 0 0 0	C2 3,73E-01 3,73E-01 1,54E-04 1,33E-04 8,45E-08	C3 1,29E+02 7,73E+01 5,18E+01 1,04E-03 4,64E-07	C4 4,57E-02 4,57E-02 2,64E-05 9,09E-06 8,01E-09	D -3,10E+00 -2,99E+00 -6,14E-03 -1,02E-01 -2,16E-01
	Indicator  GWP-total  GWP-fossil  GWP-biogenic  GWP-luluc  ODP  AP	kg C kg C kg C kg Cf mol	Unit  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  H+ -eq	0 0 0 0 0	C1 0 0 0 0 0	C2 3,73E-01 3,73E-01 1,54E-04 1,33E-04 8,45E-08 1,07E-03	C3 1,29E+02 7,73E+01 5,18E+01 1,04E-03 4,64E-07 2,61E-02	C4 4,57E-02 4,57E-02 2,64E-05 9,09E-06 8,01E-09 2,12E-04	D -3,10E+00 -2,99E+00 -6,14E-03 -1,02E-01 -2,16E-01 -2,46E-02
	Indicator  GWP-total  GWP-fossil  GWP-biogenic  GWP-luluc  ODP  AP  EP-FreshWater	kg C kg C kg C kg Cl mol kg	Unit  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  H+ -eq  P -eq	0 0 0 0 0 0	C1 0 0 0 0 0 0	C2 3,73E-01 3,73E-01 1,54E-04 1,33E-04 8,45E-08 1,07E-03 2,98E-06	C3 1,29E+02 7,73E+01 5,18E+01 1,04E-03 4,64E-07 2,61E-02 4,34E-05	C4 4,57E-02 4,57E-02 2,64E-05 9,09E-06 8,01E-09 2,12E-04 5,70E-07	D -3,10E+00 -2,99E+00 -6,14E-03 -1,02E-01 -2,16E-01 -2,46E-02 -2,65E-04
	Indicator  GWP-total  GWP-fossil  GWP-biogenic  GWP-luluc  ODP  AP  EP-FreshWater  EP-Marine	kg C kg C kg C kg Ci mol kg	Unit  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  H+ -eq  P -eq  N -eq	0 0 0 0 0 0	C1 0 0 0 0 0 0 0	C2 3,73E-01 3,73E-01 1,54E-04 1,33E-04 8,45E-08 1,07E-03 2,98E-06 2,12E-04	C3 1,29E+02 7,73E+01 5,18E+01 1,04E-03 4,64E-07 2,61E-02 4,34E-05 1,31E-02	C4 4,57E-02 4,57E-02 2,64E-05 9,09E-06 8,01E-09 2,12E-04 5,70E-07 7,06E-05	D -3,10E+00 -2,99E+00 -6,14E-03 -1,02E-01 -2,16E-01 -2,46E-02 -2,65E-04 -8,02E-03
	Indicator  GWP-total  GWP-fossil  GWP-biogenic  GWP-luluc  ODP  AP  EP-FreshWater  EP-Marine  EP-Terrestial	kg C kg C kg C kg Cl mol kg mo	Unit  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  H+ -eq  P -eq  N -eq	0 0 0 0 0 0 0	C1 0 0 0 0 0 0 0	C2 3,73E-01 3,73E-01 1,54E-04 1,33E-04 8,45E-08 1,07E-03 2,98E-06 2,12E-04 2,37E-03	C3 1,29E+02 7,73E+01 5,18E+01 1,04E-03 4,64E-07 2,61E-02 4,34E-05 1,31E-02 1,27E-01	C4 4,57E-02 4,57E-02 2,64E-05 9,09E-06 8,01E-09 2,12E-04 5,70E-07 7,06E-05 7,91E-04	D -3,10E+00 -2,99E+00 -6,14E-03 -1,02E-01 -2,16E-01 -2,46E-02 -2,65E-04 -8,02E-03 -8,67E-02
	Indicator  GWP-total  GWP-fossil  GWP-biogenic  GWP-luluc  ODP  AP  EP-FreshWater  EP-Marine  EP-Terrestial  POCP	kg C kg C kg C kg Cl mol kg mo	Unit  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  CO <sub>2</sub> -eq  FC11 -eq  H+ -eq  P -eq  N -eq  IN -eq	0 0 0 0 0 0 0	C1 0 0 0 0 0 0 0 0	C2 3,73E-01 3,73E-01 1,54E-04 1,33E-04 8,45E-08 1,07E-03 2,98E-06 2,12E-04 2,37E-03 9,09E-04	C3 1,29E+02 7,73E+01 5,18E+01 1,04E-03 4,64E-07 2,61E-02 4,34E-05 1,31E-02 1,27E-01 3,04E-02	C4 4,57E-02 4,57E-02 2,64E-05 9,09E-06 8,01E-09 2,12E-04 5,70E-07 7,06E-05 7,91E-04 2,24E-04	D -3,10E+00 -2,99E+00 -6,14E-03 -1,02E-01 -2,16E-01 -2,46E-02 -2,65E-04 -8,02E-03 -8,67E-02 -2,39E-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	rironmental impact ind	licators					
	Indicator	Unit	A1-A3	A4	A5	B2	В3
	PM	Disease incidence	8,34E-06	1,37E-07	3,93E-09	0	0
	IRP <sup>2</sup>	kgBq U235 -eq	1,50E+01	1,48E-01	3,37E-03	0	0
42	ETP-fw <sup>1</sup>	CTUe	3,23E+03	2,51E+01	1,05E+00	0	0
40.* **** <b>!</b>	HTP-c <sup>1</sup>	CTUh	8,62E-08	0,00E+00	3,10E-11	0	0
42	HTP-nc <sup>1</sup>	CTUh	1,36E-06	2,74E-08	1,32E-09	0	0
	SQP <sup>1</sup>	dimensionless	4,42E+03	2,37E+01	5,28E-01	0	0

II.	ndicator	Unit	B4	C1	C2	C3	C4	D
	PM	Disease incidence	0	0	2,28E-08	1,13E-07	3,22E-09	-1,48E-06
	IRP <sup>2</sup>	kgBq U235 -eq	0	0	2,46E-02	4,97E-02	2,73E-03	-2,71E-01
<b>3</b>	ETP-fw <sup>1</sup>	CTUe	0	0	4,18E+00	1,93E+02	9,02E-01	-2,32E+02
40.* *** <u>\$</u>	HTP-c <sup>1</sup>	CTUh	0	0	0,00E+00	6,07E-09	4,80E-11	-4,33E-09
<del>48</del>	HTP-nc <sup>1</sup>	CTUh	0	0	4,57E-09	1,67E-07	1,71E-09	-2,19E-07
	SQP <sup>1</sup>	dimensionless	0	0	3,94E+00	2,83E+00	1,29E+00	-2,84E+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		Uı	nit	A1-A3	A4	A5	B2	В3
	PERE		N	۷J	9,15E+02	4,84E-01	1,30E-02	0	0
	PERM		N	۷J	5,03E+02	0,00E+00	-2,04E+01	0	0
T <sub>s</sub>	PERT		N	۷J	1,42E+03	4,84E-01	-2,03E+01	0	0
	PENRE		N	۷J	1,65E+03	3,38E+01	7,87E-01	0	0
Å	PENRM		N	۷J	3,50E+02	0,00E+00	0,00E+00	0	0
IA	PENRT		N	۷J	2,00E+03	3,38E+01	7,87E-01	0	0
	SM		k	g	1,48E+01	0,00E+00	0,00E+00	0	0
2	RSF		N	NJ	2,93E+01	1,73E-02	4,30E-04	0	0
	NRSF		N	NJ	2,49E+00	6,19E-02	1,77E-03	0	0
<b>6</b> 6	FW		_	n <sup>3</sup>	1,77E+00	3,62E-03	3,71E-04	0	0
_			11	n-	1,772+00	3,022 03	3,712 04	O	O
	ndicator	Unit		B4	C1	C2	C3	C4	D
		<b>Unit</b> MJ	t						
	ndicator		t	B4	C1	C2	C3	C4	D
ूर कु	I <b>ndicator</b> PERE	MJ	it	B4 0	C1 0	C2 8,07E-02	C3 1,14E+00	C4 2,31E-02	D -2,62E+02
	Indicator PERE PERM	МЛ	it	B4 0 0	C1 0 0	C2 8,07E-02 0,00E+00	C3 1,14E+00 -4,82E+02	C4 2,31E-02 0,00E+00	D -2,62E+02 0,00E+00
्रह © <b>1</b> इन्हे	PERE PERM PERT	MJ MJ	it	B4 0 0	C1 0 0	C2 8,07E-02 0,00E+00 8,07E-02	C3 1,14E+00 -4,82E+02 -4,81E+02	C4 2,31E-02 0,00E+00 2,31E-02	D -2,62E+02 0,00E+00 -2,62E+02
्रह - क्षेत्र - क्षेत्र - क्षेत्र	PERE PERM PERT PENRE	MJ MJ		B4 0 0 0 0	C1 0 0 0	C2 8,07E-02 0,00E+00 8,07E-02 5,64E+00	C3 1,14E+00 -4,82E+02 -4,81E+02 2,05E+01	C4 2,31E-02 0,00E+00 2,31E-02 6,26E-01	D -2,62E+02 0,00E+00 -2,62E+02 -4,26E+01
	PERE PERM PERT PENRE PENRM	MJ MJ MJ		B4 0 0 0 0 0	C1 0 0 0 0	C2 8,07E-02 0,00E+00 8,07E-02 5,64E+00 0,00E+00	C3 1,14E+00 -4,82E+02 -4,81E+02 2,05E+01 -3,49E+02	C4 2,31E-02 0,00E+00 2,31E-02 6,26E-01 0,00E+00	D -2,62E+02 0,00E+00 -2,62E+02 -4,26E+01 0,00E+00
	PERE PERM PERT PENRE PENRM PENRT	мл мл мл мл мл		B4 0 0 0 0 0	C1 0 0 0 0 0	C2 8,07E-02 0,00E+00 8,07E-02 5,64E+00 0,00E+00 5,64E+00	C3 1,14E+00 -4,82E+02 -4,81E+02 2,05E+01 -3,49E+02 -3,29E+02	C4 2,31E-02 0,00E+00 2,31E-02 6,26E-01 0,00E+00 6,26E-01	D -2,62E+02 0,00E+00 -2,62E+02 -4,26E+01 0,00E+00 -4,26E+01
	PERE PERM PERT PENRE PENRM PENRT SM	MJ MJ MJ MJ MJ kg		B4 0 0 0 0 0 0	C1 0 0 0 0 0 0	C2 8,07E-02 0,00E+00 8,07E-02 5,64E+00 0,00E+00 5,64E+00 0,00E+00	C3 1,14E+00 -4,82E+02 -4,81E+02 2,05E+01 -3,49E+02 -3,29E+02 0,00E+00	C4 2,31E-02 0,00E+00 2,31E-02 6,26E-01 0,00E+00 6,26E-01 0,00E+00	D -2,62E+02 0,00E+00 -2,62E+02 -4,26E+01 0,00E+00 -4,26E+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		3,61E-01	1,74E-03	0,00E+00	0	0	
Ū	NHWD		k	g	1,54E+01	1,65E+00	3,48E+00	0	0
<u> </u>	RWD		k	9	1,22E-02	2,30E-04	0,00E+00	0	0
In	dicator		Unit	B4	C1	C2	C3	C4	D
	HWD		kg	0	0	2,91E-04	0,00E+00	5,06E+00	-2,10E-03
Ū	NHWD		kg	0	0	2,74E-01	2,31E+01	1,03E+00	-1,01E+00
<u> </u>	RWD		kg	0	0	3,84E-05	0,00E+00	1,03E-05	-2,22E-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								
Ind	icator	Un	it	A1-A3	A4	A5	B2	В3
<b>@▷</b>	CRU	kç	)	0,00E+00	0,00E+00	0,00E+00	0	0
&▷	MFR	kç	J	2,67E+00	0,00E+00	3,24E+00	0	0
DF	MER	kç	J	4,47E+00	0,00E+00	4,74E-06	0	0
50	EEE	М	j	3,31E+00	0,00E+00	1,99E-01	0	0
DØ	EET	М	j	5,00E+01	0,00E+00	3,01E+00	0	0
Indicato	or	Unit	B4	C1	C2	C3	C4	D
<b>∅&gt;</b>	CRU	kg	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
\$>	MFR	kg	0	0	0,00E+00	2,44E-02	0,00E+00	0,00E+00
DF	MER	kg	0	0	0,00E+00	4,22E+01	0,00E+00	0,00E+00
50	EEE	МЈ	0	0	0,00E+00	1,98E+01	0,00E+00	0,00E+00
DØ	EET	МЈ	0	0	0,00E+00	2,99E+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							
Unit	At the factory gate						
kg C	1,34E+01						
kg C	1,69E+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	Source	Amount	Unit
Electricity, Sweden (kWh)	ecoinvent 3.6	54.94	a CO2-ea/kWh

## **Dangerous substances**

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

#### **Indoor environment**

No effect on 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	36,53	2,24	174,25	171,15
Total energy consumption	MJ	2596,62	34,40	2659,91	2339,51
Amount of recycled materials	%	27,42			

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		2,24E+00	5,63E-02	0	0
Indicator	Unit	B4	C1	C2	C3	C4	D
GWPIOBC	kg CO <sub>2</sub> -eq	0	0	3,73E-01	5,52E+01	9,88E-02	-3,06E+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 (%)	
Escape Sofa (1200x1200)	51,06	39,57	2896,01	27,18	
Escape Sofa (2400x800)	67.61	51.66	3775.58	27.90	

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 (%)	
Escape Between backrest (1120 mm)	12,64	15,35	718,01	20,75	
Escape Flush backrest (1120 mm)	13,00	16,27	732,41	20,18	
Escape Table 280x380 mm - (HPL)	3,40	3,36	217,05	7,02	
Escape Table 280x380 mm - (Veneer)	3,29	2,88	205,49	6,08	

## **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

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