



# Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

## Add accessories



## **LAMMHULTS**

Owner of the declaration:

Lammhults Möbel AB

**Product:** 

Add accessories

**Declared unit:** 

1 pc

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-9377-8973

Registration number:

NEPD-9377-8973

**Issue date:** 13.03.2025

Valid to: 13.03.2030

**EPD** software:

LCAno EPD generator ID: 690830

The Norwegian EPD Foundation

## **General information**

## **Product**

Add accessories

## **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-9377-8973

## 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 Add accessories

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

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

#### Functional unit:

Add Coat hanger 50 cm with rail in natural ash and 4 hooks.

#### 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:

Lammhults Möbel AB
Contact person: Alexandra Lidnert
Phone: +46 732 52 94 03
e-mail: alexandra.lidnert@lammhults.se

#### Manufacturer:

Lammhults Möbel AB

#### Place of production:

Lammhults Möbel AB Växjövägen 41 SE-363 45 Lammhult, Sweden

## Management system:

ISO 14001, 9001, 45001

#### **Organisation no:**

556058-2602

#### Issue date:

13.03.2025

#### Valid to:

13.03.2030

## 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: Lovisa Aiff

Reviewer of company-specific input data and EPD: Alexandra Lidnert

### **Approved:**

Håkon Hauan

Managing Director of EPD-Norway

## **Product**

## **Product description:**

Add accessories, designed by Anya Sebton, include Add coat hanger and Add magazine rack or storage rack. It stores clothes, journals and even flowerpots. Add stores just about anything you need, simply and elegantly. The storage elements are structural and thoughtfully simple, allowing them to be easily linked in any combination. The powder-coated steel tubing elements come in two widths, with fixed or swivel base.

#### **Product specification**

Foot plate in texture powder coat, black or white, casted iron. Adjustable feet. Optional: swivel foot plate. Frame of 28 mm powder coated steel tubing, width 50 or 75 cm. Umberella stand as an option.

#### ADD COAT HANGER

Clothes rail in chromium plated oval steel tubing 30x15 mm or in natural ash. Hooks in black or white polyamide. Width 50 cm incl. 4 hooks, width 75 cm incl. 6 hooks.

#### ADD MAGAZINE RACK / STORAGE RACK

Magazine rack incl. 3 pcs of powder coated perforated iron boxes. Storage rack incl. 3 pcs of powder coated iron boxes.

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Plastic - Nylon (PA)	0,096	0,56	0.00	0.00
Powder coating	0,060	0,35	0.00	0.00
Wood - Solid ash	0,12	0,72	0.00	0.00
Metal - Cast iron	12,72	74,75	4,98	39,21
Metal - Steel	3,97	23,37	0.00	0.00
Metall	0,038	0,22	0.00	0.00
Total	17,016	100,00	4,99	

Packaging	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Packaging - Cardboard	0,02	0,28	0,00	0,00
Packaging - Pallet	5,52	95,94	0,00	0,00
Packaging - Plastic	0,13	2,26	0,00	0,00
Packaging - Plastic straps	0,05	0,87	0,00	0,00
Recycled cardboard	0,04	0,66	0,04	100,00
Total incl. packaging	22,77	100,00	5,03	

## Technical data:

Width: 50 cm Depth: 42 cm Height: 170 cm

Add coat hanger and magazine/storage rack meets the requirements of EN 16121:2013, EN 1023-2:2000, EN 1023-3:2000 and Möbelfakta.

## Market:

Available world wide

## Reference service life, product

15 years (5 years warranty)

## Reference service life, building

## LCA: Calculation rules

#### **Declared unit:**

1 pcs Add accessories

#### 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.

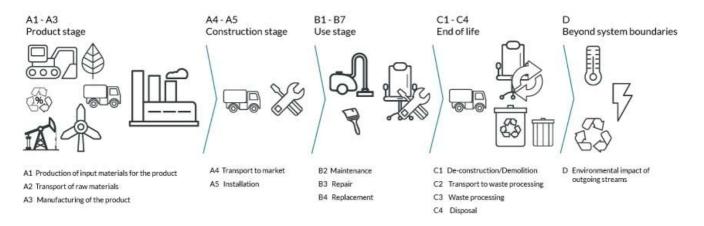
Materials	Source	Data quality	Year
Metal - Cast iron	Ecoinvent 3.6	Database	2019
Metal - Steel	ecoinvent 3.6	Database	2019
Metall	ecoinvent 3.6	Database	2019
Packaging - Cardboard	Modified ecoinvent 3.6	Database	2019
Packaging - Pallet	ecoinvent 3.6	Database	2019
Packaging - Plastic	ecoinvent 3.6	Database	2019
Packaging - Plastic straps	ecoinvent 3.6	Database	2019
Plastic - Nylon (PA)	ecoinvent 3.6	Database	2019
Powder coating	ecoinvent 3.6	Database	2019
Recycled cardboard	Modified ecoinvent 3.6	Database	2019
Wood - Solid ash	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	X	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 Lammhults' 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:

https://www.lammhults.se/products/accessories/add

 $Lammhults\ Care\ \&\ Maintenance:\ https://issuu.com/lammhults/docs/lammhultscaremaintenance 2205$ 

## 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 the capitol of each country sold/delivered to. An average distance (A4) 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 cleaning the product with water and window cleaner. 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)
Truck, 16-32 tonnes, EURO 6 (km)	36,7 %	548	0,043	l/tkm	23,56
Assembly (A5)	Unit	Value			
Waste, packaging, PET straps, to average treatment - A5 (kg)	kg	0,050			
Waste, packaging, Pallet, EUR wooden pallet, single use, average treatment (kg)	kg	5,52			
Waste, packaging, corrugated board box, 0 % recycled, to average treatment (kg)	kg	0,016			
Waste, packaging, plastic film (LDPE), to average treatment - A5 (kg)	kg	0,13			
Waste, packaging, cardboard, 100 % recycled, to average treatment (kg)	kg	0,038			
Maintenance (B2)	Unit	Value			
Water, tap water (m3)	m3	0,0010			
Household detergent, 5% soap solution (kg)	kg	0,0010			
Wastewater, average treatment (m3)	m3	0,0000010			
Transport to waste processing (C2)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, over 32 tonnes, EURO 6 (km)	53,3 %	50	0,023	l/tkm	1,15
Waste processing (C3)	Unit	Value			
Waste, materials to recycling (kg)	kg	5,66			
Waste treatment per kg Scrap steel, incineration with fly ash extraction (kg)	kg	16,69			
Waste treatment per kg Wood, incineration with fly ash extraction (kg)	kg	0,12			
Waste treatment per kg Non-hazardous waste, incineration with fly ash extraction - C3 (kg)	kg	0,098			
Waste treatment per kg Plastics, Mixture, municipal incineration with fly ash extraction (kg)	kg	0,096			
Disposal (C4)	Unit	Value			
Landfilling of ashes and residues from incineration of Scrap steel (kg)	kg	11,032			
Landfilling of ashes from incineration of Wood, process per kg ashes and residues (kg)	kg	0,0014			
Landfilling of ashes from incineration of Non- hazardous waste, process per kg ashes and residues - C4 (kg)	kg	0,023			
Landfilling of ashes from incineration of Plastics, Mixture, municipal incineration with fly ash extraction, process per kg ashes and residues - C4 (kg)	kg	0,0033			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of primary steel with net scrap (kg)	kg	3,96			
Substitution of thermal energy, district heating, in Norway (MJ)	МЈ	4,41			
Substitution of electricity, in Norway (MJ)	MJ	0,29			

**LCA: Results** 

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

		1 3						
Environm	ental impact	Unit		A1 A2	A.4	۸۶	<b>D</b> 2	D2
	Indicator  GWP-total	kg CO <sub>2</sub> -	eq	A1-A3 6,49E+01	A4 2,04E+00	A5 8,63E+00	B2 6,33E-04	B3 0
	GWP-fossil	kg CO <sub>2</sub> -	kg CO <sub>2</sub> -eq		2,04E+00	1,64E-01	4,54E-04	0
	GWP-biogenic	kg CO <sub>2</sub> -	eq	-5,26E+00	8,44E-04	8,47E+00	2,31E-05	0
	GWP-luluc	kg CO <sub>2</sub> -	eq	1,81E-01	7,25E-04	3,95E-05	1,56E-04	0
٨	ODP	kg CFC11	-eq	6,52E-06	4,62E-07	2,48E-08	4,90E-11	0
Œ.	АР	mol H+ -	eq	3,55E-01	5,86E-03	1,22E-03	3,31E-06	0
<del></del>	EP-FreshWater	kg P -e	9	4,09E-03	1,63E-05	1,82E-06	8,26E-07	0
*	EP-Marine	kg N -e	q	7,88E-02	1,16E-03	5,30E-04	1,65E-06	0
<del>**</del>	EP-Terrestial	mol N -e	eq	8,47E-01	1,30E-02	5,57E-03	8,09E-06	0
	POCP	kg NMVOC	:-eq	3,13E-01	4,97E-03	1,44E-03	1,91E-06	0
	ADP-minerals&metals <sup>1</sup>	kg Sb-e	9	4,45E-03	5,63E-05	2,51E-06	1,64E-08	0
	ADP-fossil <sup>1</sup>	MJ	МЈ		3,08E+01	1,82E+00	7,06E-03	0
<u>%</u>	WDP <sup>1</sup>	m <sup>3</sup>	m <sup>3</sup>		2,98E+01	2,91E+00	1,07E-01	0
	Indicator	Unit	B4	C1	C2	C3	C4	D
	GWP-total	kg CO <sub>2</sub> -eq	0	0	9,92E-02	7,45E-01	1,18E-01	-4,39E+00
	GWP-fossil	kg CO <sub>2</sub> -eq	0	0	9,92E-02	5,37E-01	1,18E-01	-4,39E+00
	GWP-biogenic	kg CO <sub>2</sub> -eq	0	0	4,25E-05	2,08E-01	9,00E-05	-2,46E-03
	GWP-luluc	kg CO <sub>2</sub> -eq	0	0	3,02E-05	2,77E-05	3,66E-05	-2,84E-03
Ġ	ODP	kg CFC11 -eq	0	0	2,39E-08	9,62E-09	3,78E-08	-1,87E-03
Œ.	АР	mol H+ -eq	0	0	3,19E-04	6,76E-04	8,58E-04	-2,19E-02
<del></del>	EP-FreshWater	kg P -eq	0	0	7,89E-07	2,84E-06	1,16E-06	-2,71E-04
<del></del>	EP-Marine	kg N -eq	0	0	6,99E-05	2,60E-04	3,07E-04	-4,55E-03
<del></del>	EP-Terrestial	mol N -eq	0	0	7,80E-04	2,80E-03	3,40E-03	-4,66E-02
	POCP	kg NMVOC -eq	0	0	3,06E-04	8,32E-04	9,77E-04	-2,21E-02
	ADP-minerals&metals <sup>1</sup>	kg Sb-eq	0	0	1,77E-06	6,21E-07	2,11E-06	-7,55E-05
	ADP-fossil <sup>1</sup>	MJ	0	0	1,61E+00	8,81E-01	2,79E+00	-3,71E+01
<u>%</u>	WDP <sup>1</sup>	m <sup>3</sup>	0	0	1,23E+00	2,41E+00	5,06E+00	2,22E+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 er	Additional environmental impact indicators										
	Indicator	Unit		A1-A3	A4	A5	B2	В3			
	PM	Disease incidence	Disease incidence		1,25E-07	1,50E-08	3,60E-11	0			
(po)) <u>B</u>	IRP <sup>2</sup>	kgBq U235 -eq	kgBq U235 -eq		1,35E-01	6,65E-03	4,49E-05	0			
	ETP-fw <sup>1</sup>	CTUe		2,51E+03	2,28E+01	2,06E+00	1,66E-02	0			
40. *** <u>B</u>	HTP-c <sup>1</sup>	CTUh		3,75E-07	0,00E+00	2,22E-10	1,00E-12	0			
42	HTP-nc <sup>1</sup>	CTUh		6,08E-06	2,50E-08	1,07E-08	2,70E-11	0			
	SQP <sup>1</sup>	dimensionless	dimensionless		2,16E+01	1,09E+00	7,94E-03	0			
lı	ndicator	Unit	B4	C1	C2	C3	C4	D			
	PM	Disease incidence	0	0	9,11E-09	2,94E-08	1,58E-08	-3,75E-07			
	IRP <sup>2</sup>	kgBq U235 -eq	0	0	7,04E-03	2,59E-03	1,11E-02	1,33E-02			
	ETP-fw <sup>1</sup>	CTUe	0	0	1,18E+00	7,50E+00	1,58E+00	-2,45E+02			
48. <u>*</u>	HTP-c <sup>1</sup>	CTUh	0	0	0,00E+00	8,21E-10	5,50E-11	-2,10E-08			

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)

1,14E-09

1,85E+00

5,09E-09

2,16E-01

1,42E-09

6,03E+00

4,54E-07

-5,19E+00

CTUh

dimensionless

HTP-nc<sup>1</sup>

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.

## **LAMMHULTS**

Resource use									
	Indicator		U	nit	A1-A3	A4	A5	B2	В3
	PERE		N	۷J	5,84E+02	4,41E-01	3,76E-02	2,28E-03	0
	PERM		N	۷J	7,89E+01	0,00E+00	-7,72E+01	0,00E+00	0
Ţ,	PERT		N	۷J	6,63E+02	4,41E-01	-7,71E+01	2,28E-03	0
	PENRE		N	۷J	1,14E+03	3,08E+01	1,82E+00	7,27E-03	0
	PENRM		N	NJ	1,04E+01	0,00E+00	-6,67E+00	0,00E+00	0
IA	PENRT		N	NJ	1,15E+03	3,08E+01	-4,85E+00	7,27E-03	0
<u></u>	SM		k	g	5,03E+00	0,00E+00	0,00E+00	0,00E+00	0
2	RSF		N	NJ	4,31E+00	1,58E-02	1,09E-03	6,56E-05	0
	NRSF		MJ		2,56E+01	5,64E-02	1,21E-02	6,55E-05	0
<b>%</b>	FW		m <sup>3</sup>		7,90E-01	3,30E-03	1,31E-03	1,02E-03	0
	ndicator	U	Jnit	B4	C1	C2	C3	C4	D
Ç.	PERE		MJ	0	0	2,03E-02	4,59E-02	4,97E-02	-5,24E+00
	PERM	ı	MJ	0	0	0,00E+00	-1,73E+00	0,00E+00	0,00E+00
<b>**</b>	PERT	I	MJ	0	0	2,03E-02	-1,69E+00	4,97E-02	-5,24E+00
	PENRE	I	MJ	0	0	1,61E+00	8,92E-01	2,79E+00	-3,71E+01
	PENRM	I	MJ	0	0	0,00E+00	-3,74E+00	0,00E+00	0,00E+00
IA	PENRT	ı	MJ	0	0	1,61E+00	-2,85E+00	2,79E+00	-3,71E+01
	SM		kg	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
2	RSF	ı	MJ	0	0	7,09E-04	9,08E-04	1,32E-03	1,57E-01
	NRSF	ı	MJ	0	0	2,38E-03	0,00E+00	6,32E-02	4,45E+00
<b>&amp;</b>	FW	ı	m <sup>3</sup>	0	0	1,83E-04	1,19E-03	2,51E-03	-1,19E-02

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

## **LAMMHULTS**

End of life - Waste									
	Indicator		Uı	nit	A1-A3	A4	A5	B2	В3
	HWD		kg		1,72E+00	1,59E-03	0,00E+00	1,72E-05	0
Ū	NHWD		kg		1,77E+01	1,50E+00	5,76E+00	1,18E-04	0
<b>3</b>	RWD		kg		6,44E-03	2,10E-04	0,00E+00	3,91E-08	0
In	dicator		Unit	B4	C1	C2	C3	C4	D
Ā	HWD		kg	0	0	8,81E-05	0,00E+00	1,10E+01	-2,27E-02
Ū	NHWD	HWD		0	0	1,40E-01	9,80E-02	6,49E-02	-1,79E+00
<u> </u>	RWD	RWD k		0	0	1,10E-05	0,00E+00	1,72E-05	1,01E-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	t	A1-A3	A4	A5	B2	В3
<b>®▷</b>	CRU	kg		0,00E+00	0,00E+00	0,00E+00	0,00E+00	0
&>	MFR	kg		1,27E+00	0,00E+00	1,42E-01	0,00E+00	0
Þ₹	MER	kg		1,88E+00	0,00E+00	5,48E+00	0,00E+00	0
50	EEE	MJ		9,26E-01	0,00E+00	3,81E+00	0,00E+00	0
<b>D</b>	EET	MJ		1,40E+01	0,00E+00	5,77E+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
&D	MFR	kg	0	0	0,00E+00	5,67E+00	0,00E+00	0,00E+00
DF	MER	kg	0	0	0,00E+00	1,70E+01	0,00E+00	0,00E+00
<b>₹</b> D	EEE	MJ	0	0	0,00E+00	6,97E-01	0,00E+00	0,00E+00
DØ	EET	MJ	0	0	0,00E+00	1,05E+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	5,64E-02								
kg C	2,31E+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	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	64,93	2,04	76,57	72,18
Total energy consumption	MJ	1751,35	31,33	1790,04	1752,35
Amount of recycled materials	%	11,21			

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			1,64E-01	6,32E-04	0
Indicator	Unit	B4	C1	C2	C3	C4	D
GWPIOBC	kg CO <sub>2</sub> -eq	0	0	9,92E-02	4,31E-01	1,19E-01	-6,56E+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 (%)	
Add coat hanger W75	23,27	67,07	1794,64	21,60	
Add magazine rack W50	26,33	91,97	2029,30	19,09	
Add magazine rack W75	28,47	102,96	2218,18	17,65	
Add storage rack W50	28,89	104,90	2254,90	17,40	
Add storage rack W75	32,13	121,36	2539,73	15,65	

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 (%)	
Umbrella stand for Add accessories	0,86	2,69	56,35	0,00	

## **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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