



Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

Bollo Dining Chair



FOGIA

The Norwegian EPD Foundation

Owner of the declaration:

Fogia Collection AB

Product:

Bollo Dining Chair

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-8585-8241-EN

Registration number:

NEPD-8585-8241-EN

Issue date: 20.12.2024

Valid to: 20.12.2029

EPD software:

LCAno EPD generator ID: 470048



General information

Product

Bollo Dining Chair

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-8585-8241-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 Bollo Dining Chair

Declared unit (cradle to gate) with option:

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

Functional unit:

Dining chair

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:

Fogia Collection AB Contact person: Gabriel Follonier Phone: +46 73 565 87 33 e-mail: gabriel.follonier@fogia.se

Manufacturer:

Fogia Collection AB

Place of production:

Fogia Collection AB

, Sweden

Management system:

ISO 9001, ISO 14001 (Fogia Furniture Sp. Z o.o.)

Organisation no:

SE556204621801

Issue date:

20.12.2024

Valid to:

20.12.2029

Year of study:

2023

Comparability:

EPD of construction products may not be comparable if they not comply with EN 15804 and seen in a building context.

Development and verification of EPD:

The declaration is created using EPD tool lca.tools ver EPD2022.03, developed by LCA.no. The EPD tool is integrated in the company's management system, and has been approved by EPD Norway.

Developer of EPD: Gabriel Follonier

Reviewer of company-specific input data and EPD: Bashir Momeni

Approved:

Håkon Hauan

Managing Director of EPD-Norway

Product

Product description:

Designed for deep comfort and narrow enough to fit around the table, the Bollo Dining Chair is for those occasions when you want to talk into the night.

Like its sibling Bollo Armchair, it is informed by mid-century lounge chairs with deep cushioning wrapped generously around a distinctive metal tubing frame. Its armrests and upright position make it ideal for dining.

Product specification

Both the frame and upholstery can be customised so you can choose matching or contrasting colourways and cushioning in fabric, leather or velvet

The model analysed in this declaration is a Bollo Dining Chair with Smooth III by Kirkby Design and a powder coated metal base, including packaging. Standard leathers include Elmosoft by Elmo and Vintage Cognac by Nevotex.

This product is Möbelfakta certified.

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Plastic - Polypropylene (PP)	0,24	2,49	0,00	0,00
Plastic - Polyurethane (PUR)	1,92	19,94	0,00	0,00
Powder coating	0,05	0,52	0,00	0,00
Rubber, synthetic	0,82	8,51	0,00	0,00
Wood - High Density Fibreboard (HDF)	0,33	3,49	0,00	0,00
Metal - Steel	4,31	44,91	0,00	0,00
Textile - Polyester	0,74	7,69	0,00	0,00
Wood - Plywood	1,20	12,46	0,00	0,00
Total	9,60	100,00	0,00	

Packaging	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Packaging - Plastic	0,22	4,69	0,00	0,00
Packaging - Wood	1,01	21,90	0,00	0,00
Recycled cardboard	3,40	73,41	3,40	100,00
Total incl. packaging	14,24	100,00	3,40	

Technical data:

Dimensions:

Width: 64cm Depth: 64.5cm Height: 79cm Seat Height: 47cm Seat Depth: 46cm Volume: 0.37m³

Finishes:

Customisable, list available on request

Market:

Worldwide

Reference service life, product

15 years, designed to last longer

Reference service life, building

LCA: Calculation rules

Declared unit:

1 pcs Bollo Dining Chair

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.

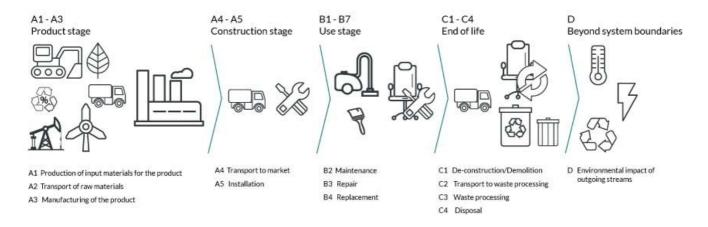
Materials	Source	Data quality	Year
Metal - Steel	ecoinvent 3.6	Database	2019
Packaging - Plastic	ecoinvent 3.6	Database	2019
Packaging - Wood	ecoinvent 3.6	Database	2019
Plastic - Polypropylene (PP)	ecoinvent 3.6	Database	2019
Plastic - Polyurethane (PUR)	ecoinvent 3.6	Database	2019
Powder coating	Ecoinvent 3.6	Database	2019
Recycled cardboard	Modified ecoinvent 3.6	Database	2019
Rubber, synthetic	ecoinvent 3.6	Database	2019
Textile - Polyester	ecoinvent 3.6	Database	2019
Wood - High Density Fibreboard (HDF)	ecoinvent 3.6	Database	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	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	MND	Χ	Χ	Χ	MND	MND	MND	Χ	Χ	Χ	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.

A4 Transport: Calculated with an average distance of 1'000 km from factory to market.

 $\ensuremath{\mathsf{B2}}$ Maintenance: No specific maintenance is required.

Transport from production place to user (A4)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, 16-32 tonnes, EURO 6 (km)	36,7 %	1000	0,043	l/tkm	43,00
Assembly (A5)	Unit	Value			
Waste, packaging, plastic film (LDPE), to average treatment - A5 (kg)	kg	0,20			
Waste, polyvinylchloride, PVC, average, to average treatment - A5, inkl. transp. (kg)	kg	0,02			
Waste, Wood, average treatment (kg) - A5, inkl. 85 km transp.	kg	1,01			
Waste, packaging, cardboard, 100 % recycled, to average treatment (kg)	kg	3,40			
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 %	85	0,043	l/tkm	3,66
Waste processing (C3)	Unit	Value			
Waste processing (cs) Waste, materials to recycling (kg)	kg	1,46			
Waste treatment per kg Scrap steel, incineration	_				
with fly ash extraction (kg)	kg	4,31			
Waste treatment per kg Non-hazardous waste, incineration with fly ash extraction - C3 (kg)	kg	0,05			
Waste treatment per kg Polyurethane (PU), incineration (kg)	kg	1,92			
Waste treatment per kg Rubber, municipal incineration with fly ash extraction (kg)	kg	0,82			
Waste treatment per kg Wood, incineration with fly ash extraction (kg)	kg	1,53			
Waste treatment per kg Textile, incineration with fly ash extraction (kg)	kg	0,74			
Waste treatment per kg Polypropylene (PP), incineration with fly ash extraction - C3 (kg)	kg	0,24			
Disposal (C4)	Unit	Value			
Landfilling of ashes and residues from incineration of Scrap steel (kg)	kg	2,85			
Landfilling of ashes from incineration of Non- hazardous waste, 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	0,07			
Landfilling of ashes from incineration of Rubber, process per kg ashes and residues - C4 (kg)	kg	0,04			
Landfilling of ashes from incineration of Wood, process per kg ashes and residues (kg)	kg	0,02			
Landfilling of ashes from incineration of Textile, soiled, process per kg ashes and residues (kg)	kg	0,04			
Landfilling of ashes from incineration of Polypropylene, PP, process per kg ashes and residues - C4 (kg)	kg	0,01			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of primary steel with net scrap (kg)	kg	1,46			
Substitution of electricity, in Norway (MJ)	MJ	5,96			
Substitution of thermal energy, district heating, in Norway (MJ)	МЈ	90,22			



LCA: Results

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

	ental impact	ed drift defined on page i						
	Indicator	Unit		A1-A3	A4	A5	B2	В3
	GWP-total	kg CO ₂ -	eq	4,43E+01	2,33E+00	7,59E+00	0	0
	GWP-fossil	kg CO ₂ -	eq	5,39E+01	2,33E+00	9,95E-02	0	0
	GWP-biogenic	kg CO ₂ -	kg CO ₂ -eq		9,63E-04	7,49E+00	0	0
	GWP-luluc	kg CO ₂ -	eq	9,87E-02	8,28E-04	2,65E-05	0	0
Ö	ODP	kg CFC11	-eq	4,39E-06	5,27E-07	1,70E-08	0	0
	АР	mol H+ -	eq	3,49E-01	6,68E-03	5,01E-04	0	0
**	EP-FreshWater	kg P -e	9	3,29E-03	1,86E-05	8,14E-07	0	0
4	EP-Marine	kg N -e	q	7,33E-02	1,32E-03	2,00E-04	0	0
*	EP-Terrestial	mol N -	eq	7,66E-01	1,48E-02	2,02E-03	0	0
	POCP	kg NMVO0	C-eq	2,48E-01	5,67E-03	5,52E-04	0	0
	ADP-minerals&metals ¹	kg Sb-e	q	2,25E-03	6,43E-05	1,87E-06	0	0
	ADP-fossil ¹	MJ		8,08E+02	3,52E+01	1,16E+00	0	0
<u>%</u>	WDP ¹	m ³	m ³		3,40E+01	1,72E+00	0	0
	Indicator	Unit	B4	C1	C2	C3	C4	D
	GWP-total	kg CO ₂ -eq	0	0	1,98E-01	1,21E+01	4,24E-02	-2,15E+00
	GWP-fossil	kg CO ₂ -eq	0	0	1,98E-01	8,49E+00	4,24E-02	-2,13E+00
	GWP-biogenic	kg CO ₂ -eq	0	0	8,18E-05	3,64E+00	3,37E-05	-1,97E-03
	GWP-luluc	kg CO ₂ -eq	0	0	7,04E-05	5,11E-05	1,11E-05	-1,87E-02
Ö	ODP	kg CFC11 -eq	0	0	4,48E-08	3,51E-08	1,08E-08	-3,81E-02
CA .	АР	mol H+ -eq	0	0	5,68E-04	5,34E-03	2,59E-04	-1,23E-02
	EP-FreshWater	kg P -eq	0	0	1,58E-06	3,12E-06	4,64E-07	-1,45E-04
	EP-Marine	kg N -eq	0	0	1,12E-04	2,88E-03	9,05E-05	-3,06E-03
**	EP-Terrestial	mol N -eq	0	0	1,26E-03	2,79E-02	1,01E-03	-3,21E-02
	POCP	kg NMVOC -eq	0	0	4,82E-04	6,69E-03	2,88E-04	-1,23E-02
	ADP-minerals&metals ¹	kg Sb-eq	0	0	5,46E-06	1,44E-06	5,99E-07	-3,29E-05
	ADP-fossil ¹	MJ	0	0	2,99E+00	2,76E+00	8,12E-01	-2,10E+01
<u>%</u>	WDP ¹	m ³	0	0	2,89E+00	9,02E+00	2,48E+00	-9,84E+00

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 env	ironmental impact ind	licators					
	Indicator	Unit	A1-A3	A4	A5	B2	В3
	PM	Disease incidence	4,84E-06	1,42E-07	6,91E-09	0	0
	IRP ²	kgBq U235 -eq	1,93E+00	1,54E-01	4,78E-03	0	0
€2	ETP-fw ¹	CTUe	3,04E+03	2,61E+01	1,46E+00	0	0
48. *** <u>B</u>	HTP-c ¹	CTUh	1,48E-07	0,00E+00	7,40E-11	0	0
4° B	HTP-nc ¹	CTUh	1,85E-06	2,85E-08	3,30E-09	0	0
	SQP ¹	dimensionless	5,75E+02	2,46E+01	8,20E-01	0	0

li li	ndicator	Unit	B4	C1	C2	C3	C4	D
	PM	Disease incidence	0	0	1,21E-08	2,66E-08	4,50E-09	-3,94E-07
	IRP ²	kgBq U235 -eq	0	0	1,31E-02	4,93E-03	3,33E-03	-4,20E-02
<i>(2)</i>	ETP-fw ¹	CTUe	0	0	2,22E+00	2,01E+01	6,10E-01	-1,30E+02
44. *** <u>\$</u>	HTP-c ¹	CTUh	0	0	0,00E+00	6,49E-10	2,40E-11	-8,47E-09
28	HTP-nc ¹	CTUh	0	0	2,42E-09	2,11E-08	7,54E-10	1,29E-07
	SQP ¹	dimensionless	0	0	2,09E+00	3,59E-01	1,83E+00	-5,10E+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	В3
	PERE		N	ΜJ	2,09E+02	5,03E-01	2,10E-02	0	0
	PERM		N	ΜJ	4,67E+01	0,00E+00	-2,64E+01	0	0
₽	PERT		N	N۱	2,56E+02	5,03E-01	-2,64E+01	0	0
	PENRE		N	MJ	7,01E+02	3,52E+01	1,16E+00	0	0
	PENRM		N	MJ	1,15E+02	0,00E+00	-8,86E+00	0	0
IA	PENRT		N	MJ	8,15E+02	3,52E+01	-7,70E+00	0	0
	SM		k	кg	3,40E+00	0,00E+00	0,00E+00	0	0
2	RSF		N	MJ	8,83E-01	1,80E-02	6,59E-04	0	0
	NRSF		N	MJ	2,05E+00	6,44E-02	4,04E-03	0	0
%	FW		,	n ³	7,05E-01	3,76E-03	6,34E-04	0	0
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		1	Jnit	B4	C1	C2	C3	C4	D
i de la companya de l	PERE	1	Jnit MJ	B4 0	C1 0	C2 4,28E-02	C3 9,24E-02	C4 1,92E-02	D -4,73E+01
e e	PERE PERM	1	Jnit MJ	0 0	C1 0	C2 4,28E-02 0,00E+00	C3 9,24E-02 -2,00E+01	C4 1,92E-02 0,00E+00	D -4,73E+01 0,00E+00
्र (हे) ्र	PERE PERM PERT	1	Jnit MJ MJ	0 0 0	C1 0 0	C2 4,28E-02 0,00E+00 4,28E-02	C3 9,24E-02 -2,00E+01 -1,99E+01	C4 1,92E-02 0,00E+00 1,92E-02	D -4,73E+01 0,00E+00 -4,73E+01
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# # # # #	PERE PERM PERT PENRE PENRM	1	MJ MJ MJ MJ MJ	B4 0 0 0 0 0	C1 0 0 0 0	C2 4,28E-02 0,00E+00 4,28E-02 2,99E+00 0,00E+00	C3 9,24E-02 -2,00E+01 -1,99E+01 2,78E+00 -1,06E+02	C4 1,92E-02 0,00E+00 1,92E-02 8,12E-01 0,00E+00	D -4,73E+01 0,00E+00 -4,73E+01 -2,10E+01 0,00E+00
	PERE PERM PERT PENRE PENRM PENRT	1	MJ MJ MJ MJ MJ MJ MJ	B4 0 0 0 0 0 0	C1 0 0 0 0 0	C2 4,28E-02 0,00E+00 4,28E-02 2,99E+00 0,00E+00 2,99E+00	C3 9,24E-02 -2,00E+01 -1,99E+01 2,78E+00 -1,06E+02 -1,03E+02	C4 1,92E-02 0,00E+00 1,92E-02 8,12E-01 0,00E+00 8,12E-01	D -4,73E+01 0,00E+00 -4,73E+01 -2,10E+01 0,00E+00 -2,10E+01
	PERE PERM PERT PENRE PENRM PENRT SM	1	MJ MJ MJ MJ MJ MJ MJ kg	B4 0 0 0 0 0 0	C1 0 0 0 0 0 0	C2 4,28E-02 0,00E+00 4,28E-02 2,99E+00 0,00E+00 2,99E+00 0,00E+00	C3 9,24E-02 -2,00E+01 -1,99E+01 2,78E+00 -1,06E+02 -1,03E+02 0,00E+00	C4 1,92E-02 0,00E+00 1,92E-02 8,12E-01 0,00E+00 8,12E-01 0,00E+00	D -4,73E+01 0,00E+00 -4,73E+01 -2,10E+01 0,00E+00 -2,10E+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	idicator		Unit		A4	A5	B2	В3
	HWD	HWD		kg		1,81E-03	0,00E+00	0	0
Ū	NHWD		k	g	9,27E+00	1,71E+00	4,63E+00	0	0
.	RWD		k	g	2,08E-03	2,40E-04	0,00E+00	0	0
In	dicator		Unit	B4	C1	C2	C3	C4	D
	HWD		kg	0	0	1,54E-04	0,00E+00	2,95E+00	-8,70E-03
Ū	NHWD		kg	0	0	1,45E-01	5,00E-02	1,23E-01	-8,33E-01
8	RWD		kg	0	0	2,04E-05	0,00E+00	4,98E-06	-3,47E-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	Ur	Unit		A4	A5	B2	В3
@ >	CRU	kg	9	0,00E+00	0,00E+00	0,00E+00	0	0
&>	MFR	k	9	9,67E-01	0,00E+00	3,27E+00	0	0
DF	MER	k	kg		0,00E+00	1,01E+00	0	0
₹	EEE	M	J	5,89E-01	0,00E+00	9,00E-01	0	0
D	EET	MJ		8,91E+00	0,00E+00	1,36E+01	0	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	1,46E+00	0,00E+00	0,00E+00
D₽	MER	kg	0	0	0,00E+00	9,60E+00	0,00E+00	0,00E+00
50	EEE	MJ	0	0	0,00E+00	5,90E+00	0,00E+00	0,00E+00
D	EET	MJ	0	0	0,00E+00	8,92E+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	7,34E-01						
kg C	2,07E+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, low voltage, wind, solar and hydro based, with Guarantee of origin, 01.01.2023-31.12.2023, Poland (kWh) - FOGIA	Modified ecoinvent 3.6	89,07	g CO2- eg/kWh

Dangerous substances

The product contains substances given by the REACH Candidate list that are less than 0,1 % by weight.

Indoor environment

No impact on indoor environment

Additional Environmental Information

Key Environmental Indicators

Key environmental indicators	Unit	A1-A3	A4	A1-C4	A1-D
GWPtotal	kg CO ₂ -eq	44,26	2,33	66,56	64,41
Total energy consumption	MJ	912,36	35,76	956,08	886,79
Amount of recycled materials	%	23,88			

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		5,36E+01	2,33E+00	9,95E-02	0	0
Indicator	Unit	B4	C1	C2	C3	C4	D
GWPIOBC	kg CO ₂ -eq	0	0	1,98E-01	9,64E+00	4,53E-02	-2,94E+00

GWP-IOBC: Global warming potential calculated according to the principle of instantaneous oxidation. In order to increase the transparency of biogenic carbon contribution to climate impact, the indicator GWP-IOBC is required as it declares climate impacts calculated according to the principle of instantaneous oxidation. GWP-IOBC is also referred to as GWP-GHG in context to Swedish public procurement legislation.

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