



Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

Urbanus 25L





TROBUNTER

The Norwegian EPD Foundation

Owner of the declaration:

Røros Produkter AS

Product:

Urbanus 25L

Declared unit:

1 pc

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core

NPCR 026:2022 Part B for Furniture

Program operator:

The Norwegian EPD Foundation

Declaration number:

NEPD-6583-5844-EN

Registration number:

NEPD-6583-5844-EN

Issue date: 13.05.2024

Valid to: 13.05.2029

EPD software:

LCAno EPD generator ID: 311167



General information

Product

Urbanus 25L

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-6583-5844-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 Urbanus 25L

Declared unit (cradle to gate) with option:

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

Functional unit:

Urbanus waste disposal unit can be used in both privat and public places.

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:

Røros Produkter AS Contact person: Beate Schjølberg Phone: +47 994 85 684 e-mail: beate.schjolberg@rorosprodukter.no

Manufacturer:

Røros Produkter AS

Place of production:

Røros Produkter AS Øverhagaen 6 7374 Røros, Norway

Management system:

Miljøfyrtårn

Organisation no:

NO 992169133 MVA

Issue date:

13.05.2024

Valid to:

13.05.2029

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: Andrea Mortensen

Reviewer of company-specific input data and EPD: Beate Schjølberg

Approved:

Håkon Hauan

Managing Director of EPD-Norway



Product

Product description:

Urbanus is a smart and flexible waste recycling unit that can stand alone or together in modules. The units can be assembled into the different waste disposal stations you need.

The Urbanus waste unit is available in 4 different sizes: 25 litres, 6 litres, 12 litres and 45 litres. This EPD is for the 25 liters, you will find the others as variants in this EPD.

We have also included 4 variants of the Oslo waste units and 3 variants of Terra waste units in this EPD.

Product specification

Urbanus is a steel unit with removable top in different designs.

The Urbanus waste disposal unit has many options for both tops and color combinations to create the expression the customer is looking for. The container is supplied with brackets for wall mounting. But we can also make it for placing on the floor with wheels.

https://rorosprodukter.no/produkt/urbanus/

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Metal - Steel	3,90	95,56	0,00	0,00
Metall	0,10	2,45	0,00	0,00
Powder coating	0,08	1,98	0,00	0,00
Total	4,08		0,00	

Packaging	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Packaging - Cardboard	0,58	95,25	0,21	36,00
Packaging - Plastic	0,01	1,48	0,00	0,00
Packaging - Wood	0,02	3,28	0,00	0,00
Total incl. packaging	4,69		0,21	

Technical data:

Kg	Hight	Width	Depth	Volume
4.0	41 cm	31 cm	21 cm	27 dm3

Market:

Norway

Reference service life, product

30 years

Reference service life, building

LCA: Calculation rules

Declared unit:

1 pcs Urbanus 25L

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.



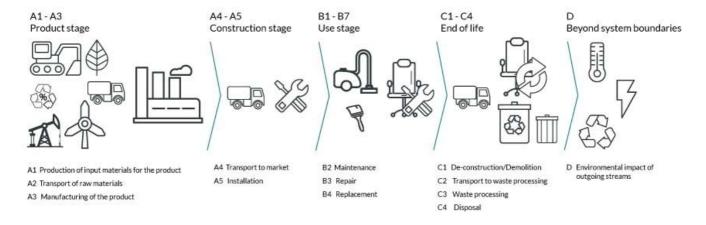
Materials	Source	Data quality	Year
Metal - Steel	ecoinvent 3.6	Database	2019
Metall	ecoinvent 3.6	Database	2019
Packaging - Cardboard	ecoinvent 3.6	Database	2019
Packaging - Plastic	ecoinvent 3.6	Database	2019
Packaging - Wood	Modified ecoinvent 3.6	Database	2019
Powder coating	Ecoinvent 3.6	Database	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:

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LCA: Scenarios and additional technical information

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

B-senario is 0 as it's not applicable for this product

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, corrugated board box, to average treatment (kg)	kg	0,58			
Waste, packaging, pallet, EUR wooden pallet, reusable, average treatment (kg)	kg	0,02			
Waste, packaging, plastic film (LDPE), to average treatment - A5 (kg)	kg	0,01			
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 treatment per kg Non-hazardous waste, incineration with fly ash extraction - C3 (kg)	kg	0,18			
Waste treatment per kg Scrap steel, incineration with fly ash extraction (kg)	kg	3,90			
Waste, materials to recycling (kg)	kg	1,32			
Disposal (C4)	Unit	Value			
Landfilling of ashes and residues from incineration of Scrap steel (kg)	kg	2,58			
Landfilling of ashes from incineration of Non- hazardous waste, process per kg ashes and residues - C4 (kg)	kg	0,04			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of electricity, in Norway (MJ)	MJ	0,11			
Substitution of primary steel with net scrap (kg)	kg	1,29			
Substitution of thermal energy, district heating, in Norway (MJ)	МЈ	1,63			



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 ₂ -e	eq	1,70E+01	2,45E-01	1,03E+00	0	0
	GWP-fossil		kg CO ₂ -eq		1,79E+01	2,45E-01	1,01E-02	0	0
	GWP-biogenic		kg CO ₂ -e	eq	-9,84E-01	1,01E-04	1,02E+00	0	0
	GWP-luluc		kg CO ₂ -e	eq	1,28E-02	8,72E-05	3,17E-06	0	0
٨	ODP		kg CFC11 -	-eq	1,34E-06	5,55E-08	2,03E-09	0	0
	АР		mol H+ -	eq	2,61E-01	7,04E-04	4,56E-05	0	0
	EP-FreshWater		kg P -eq	1	1,01E-03	1,96E-06	7,90E-08	0	0
4	EP-Marine		kg N -ec	7	2,28E-02	1,39E-04	1,56E-05	0	0
	EP-Terrestial		mol N -e	q	9,56E-01	1,56E-03	1,64E-04	0	0
	POCP		kg NMVOC	-eq	8,16E-02	5,97E-04	4,71E-05	0	0
	ADP-minerals&metals ¹		kg Sb-ed	7	8,04E-03	6,77E-06	2,33E-07	0	0
	ADP-fossil ¹		МЈ		2,09E+02	3,70E+00	1,35E-01	0	0
<u>%</u>	WDP ¹		m ³		8,30E+02	3,58E+00	1,78E-01	0	0
	Indicator								
	Indicator		Unit	B4	C1	C2	C3	C4	D
	Indicator GWP-total		Unit CO ₂ -eq	0 0	C1 0	C2 6,95E-02	C3 4,43E-01	C4 2,78E-02	D -1,43E+00
		kg (
_	GWP-total	kg (CO ₂ -eq	0	0	6,95E-02	4,43E-01	2,78E-02	-1,43E+00
	GWP-total GWP-fossil	kg (kg (CO ₂ -eq	0	0	6,95E-02 6,94E-02	4,43E-01 4,42E-01	2,78E-02 2,77E-02	-1,43E+00 -1,43E+00
	GWP-total GWP-fossil GWP-biogenic	kg (kg (kg (CO ₂ -eq CO ₂ -eq CO ₂ -eq	0 0	0 0	6,95E-02 6,94E-02 2,87E-05	4,43E-01 4,42E-01 3,84E-04	2,78E-02 2,77E-02 2,10E-05	-1,43E+00 -1,43E+00 -8,01E-04
	GWP-total GWP-fossil GWP-biogenic GWP-luluc	kg (kg (kg (kg C	CO ₂ -eq CO ₂ -eq CO ₂ -eq CO ₂ -eq	0 0 0	0 0 0 0	6,95E-02 6,94E-02 2,87E-05 2,47E-05	4,43E-01 4,42E-01 3,84E-04 1,24E-05	2,78E-02 2,77E-02 2,10E-05 8,58E-06	-1,43E+00 -1,43E+00 -8,01E-04 -9,60E-04
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP	kg (kg (kg (kg C mol	CO ₂ -eq CO ₂ -eq CO ₂ -eq CO ₂ -eq FC11 -eq	0 0 0 0	0 0 0 0	6,95E-02 6,94E-02 2,87E-05 2,47E-05 1,57E-08	4,43E-01 4,42E-01 3,84E-04 1,24E-05 4,55E-09	2,78E-02 2,77E-02 2,10E-05 8,58E-06 8,86E-09	-1,43E+00 -1,43E+00 -8,01E-04 -9,60E-04 -6,87E-04
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP	kg (kg (kg (kg C mol	CO ₂ -eq CO ₂ -eq CO ₂ -eq CO ₂ -eq FC11 -eq	0 0 0 0 0	0 0 0 0 0	6,95E-02 6,94E-02 2,87E-05 2,47E-05 1,57E-08 2,00E-04	4,43E-01 4,42E-01 3,84E-04 1,24E-05 4,55E-09 1,95E-04	2,78E-02 2,77E-02 2,10E-05 8,58E-06 8,86E-09 2,01E-04	-1,43E+00 -1,43E+00 -8,01E-04 -9,60E-04 -6,87E-04 -7,12E-03
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater	kg (kg (kg (kg C mol kg	CO ₂ -eq CO ₂ -eq CO ₂ -eq CO ₂ -eq FC11 -eq IH+ -eq	0 0 0 0 0 0	0 0 0 0 0 0	6,95E-02 6,94E-02 2,87E-05 2,47E-05 1,57E-08 2,00E-04 5,55E-07	4,43E-01 4,42E-01 3,84E-04 1,24E-05 4,55E-09 1,95E-04 8,93E-07	2,78E-02 2,77E-02 2,10E-05 8,58E-06 8,86E-09 2,01E-04 2,72E-07	-1,43E+00 -1,43E+00 -8,01E-04 -9,60E-04 -6,87E-04 -7,12E-03 -8,80E-05
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine	kg (kg (kg (kg C mol kg	CO ₂ -eq CO ₂ -eq CO ₂ -eq CO ₂ -eq FC11 -eq I H+ -eq J P -eq I N -eq	0 0 0 0 0 0	0 0 0 0 0 0	6,95E-02 6,94E-02 2,87E-05 2,47E-05 1,57E-08 2,00E-04 5,55E-07 3,95E-05	4,43E-01 4,42E-01 3,84E-04 1,24E-05 4,55E-09 1,95E-04 8,93E-07 7,27E-05	2,78E-02 2,77E-02 2,10E-05 8,58E-06 8,86E-09 2,01E-04 2,72E-07 7,19E-05	-1,43E+00 -1,43E+00 -8,01E-04 -9,60E-04 -6,87E-04 -7,12E-03 -8,80E-05 -1,48E-03
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine EP-Terrestial	kg (kg (kg (kg C mol kg kg	CO ₂ -eq CO ₂ -eq CO ₂ -eq CO ₂ -eq FC11 -eq I H+ -eq I P -eq I N -eq	0 0 0 0 0 0 0	0 0 0 0 0 0 0	6,95E-02 6,94E-02 2,87E-05 2,47E-05 1,57E-08 2,00E-04 5,55E-07 3,95E-05 4,42E-04	4,43E-01 4,42E-01 3,84E-04 1,24E-05 4,55E-09 1,95E-04 8,93E-07 7,27E-05 7,70E-04	2,78E-02 2,77E-02 2,10E-05 8,58E-06 8,86E-09 2,01E-04 2,72E-07 7,19E-05 7,96E-04	-1,43E+00 -1,43E+00 -8,01E-04 -9,60E-04 -6,87E-04 -7,12E-03 -8,80E-05 -1,48E-03 -1,52E-02
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine EP-Terrestial POCP	kg (kg (kg (kg C mol kg kg	CO ₂ -eq FC11 -eq I H+ -eq I P -eq I N -eq OI N -eq MVOC -eq	0 0 0 0 0 0 0	0 0 0 0 0 0 0	6,95E-02 6,94E-02 2,87E-05 2,47E-05 1,57E-08 2,00E-04 5,55E-07 3,95E-05 4,42E-04 1,69E-04	4,43E-01 4,42E-01 3,84E-04 1,24E-05 4,55E-09 1,95E-04 8,93E-07 7,27E-05 7,70E-04 2,23E-04	2,78E-02 2,77E-02 2,10E-05 8,58E-06 8,86E-09 2,01E-04 2,72E-07 7,19E-05 7,96E-04 2,29E-04	-1,43E+00 -1,43E+00 -8,01E-04 -9,60E-04 -6,87E-04 -7,12E-03 -8,80E-05 -1,48E-03 -1,52E-02 -7,17E-03

GWP-total = Global Warming Potential total; GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment: EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

Remarks to environmental impacts

[&]quot;Reading example: 9,0 E-03 = 9,0*10-3 = 0,009"

^{*}INA Indicator Not Assessed

^{1.} The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator



Additional e	Additional environmental impact indicators											
	Indicator	Unit	Unit			A5	B2	В3				
	PM	Disease incidence		2,54E-06	1,50E-08	6,76E-10	0	0				
(ION)	IRP ²	kgBq U235 -eq		5,87E-01	1,62E-02	5,77E-04	0	0				
	ETP-fw ¹	CTUe		8,18E+02	2,75E+00	1,79E-01	0	0				
46. ************************************	HTP-c ¹	CTUh		1,18E-07	0,00E+00	5,00E-12	0	0				
4% E	HTP-nc ¹	CTUh	CTUh		3,00E-09	2,25E-10	0	0				
	SQP ¹	dimensionless		9,05E+01	2,59E+00	9,35E-02	0	0				
I	Indicator Unit		B4	C1	C2	C3	C4	D				
	PM Disease incidence		0	0	4,25E-09	7,08E-09	3,71E-09	-1,22E-07				

I	ndicator	Unit	B4	C1	C2	C3	C4	D
	PM	Disease incidence	0	0	4,25E-09	7,08E-09	3,71E-09	-1,22E-07
	IRP ²	kgBq U235 -eq	0	0	4,59E-03	8,30E-04	2,61E-03	4,22E-03
3	ETP-fw ¹	CTUe	0	0	7,78E-01	2,61E+00	3,71E-01	-7,97E+01
40.* *** <u>*</u>	HTP-c ¹	CTUh	0	0	0,00E+00	2,18E-10	1,30E-11	-6,83E-09
48° E	HTP-nc ¹	CTUh	0	0	8,50E-10	1,64E-09	3,36E-10	1,47E-07
	SQP ¹	dimensionless	0	0	7,34E-01	6,14E-02	1,41E+00	-1,79E+00

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		Unit	A1-A3	A4	A5	B2	В3
	PERE		MJ		5,30E-02	2,25E-03	0	0
	PERM		MJ	5,04E+00	0,00E+00	-5,04E+00	0	0
Ţ,	PERT		MJ	5,16E+01	5,30E-02	-5,04E+00	0	0
	PENRE		MJ	2,09E+02	3,70E+00	1,35E-01	0	0
40	PENRM		МЈ	3,82E-01	0,00E+00	-3,82E-01	0	0
IA	PENRT		МЈ	2,09E+02	3,70E+00	-2,47E-01	0	0
<u></u>	SM		kg	2,09E-01	0,00E+00	0,00E+00	0	0
2	RSF		МЈ		1,90E-03	7,39E-05	0	0
	NRSF		МЈ		6,78E-03	3,03E-04	0	0
%	FW		m^3	3,60E-01	3,96E-04	6,38E-05	0	0
	ndicator	Unit	B4	C1	C2	C3	C4	D
i F	PERE	MJ	0	0	1,50E-02	1,64E-02	1,16E-02	-1,80E+00
4	PERM	МЈ	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
°₹s	PERT	МЈ	0	0	1,50E-02	1,64E-02	1,16E-02	-1,80E+00
B	PENRE	МЈ	0	0	1,05E+00	2,78E-01	6,54E-01	-1,20E+01
Å	PENRM	МЈ	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ĨĀ.	PENRT	МЈ	0	0	1,05E+00	2,78E-01	6,54E-01	-1,20E+01
	SM	kg	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	RSF	МЈ	0	0	5,38E-04	3,56E-04	3,09E-04	5,10E-02
	NRSF	МЈ	0	0	1,92E-03	0,00E+00	1,46E-02	1,44E+00
•	FW	m ³		0	1,12E-04			

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; PENRM = Use of non renewable primary energy resources; SM = Use of secondary materials; RESF = 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		Unit		A1-A3	A4	A5	B2	В3
	HWD	HWD		kg		1,91E-04	0,00E+00	0	0
Ū	NHWD	NHWD		kg		1,80E-01	5,91E-01	0	0
.	RWD		kg		5,84E-04	2,52E-05	0,00E+00	0	0
In	dicator		Unit	B4	C1	C2	C3	C4	D
	HWD		kg	0	0	5,41E-05	0,00E+00	2,60E+00	-7,37E-03
Ū	NHWD		kg	0	0	5,10E-02	1,81E-01	2,04E-02	-5,82E-01
₩	RWD		kg	0	0	7,15E-06	0,00E+00	4,07E-06	3,20E-06

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	k	9	0,00E+00	0,00E+00	1,90E-02	0	0
&▷	MFR	kį	kg		0,00E+00	5,45E-01	0	0
DF	MER	kį	kg		0,00E+00	4,16E-02	0	0
50	EEE	М	J	2,62E-03	0,00E+00	3,39E-02	0	0
DB	EET	M	J	3,96E-02	0,00E+00	5,13E-01	0	0
Indicato	or	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	1,32E+00	0,00E+00	0,00E+00
DF	MER	kg	0	0	0,00E+00	4,08E+00	0,00E+00	0,00E+00
50	EEE	MJ	0	0	0,00E+00	1,08E-01	0,00E+00	0,00E+00
D	EET	MJ	0	0	0,00E+00	1,64E+00	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					
Indicator	Unit	At the factory gate			
Biogenic carbon content in product	kg C	0,00E+00			
Biogenic carbon content in accompanying packaging	kg C	2,77E-01			

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO2



Additional requirements

Greenhouse gas emissions from the use of electricity in the manufacturing phase

National production mix from import, low voltage (production of transmission lines, in addition to direct emissions and losses in grid) of applied electricity for the manufacturing process (A3).

Electricity mix	Data source	Amount	Unit
Electricity, Norway (kWh)	ecoinvent 3.6	24,33	g CO2-eq/kWh

Dangerous substances

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

Indoor environment

The product will not affect the indoor climate

Additional Environmental Information

Key Environmental Indicators

Key environmental indicators	Unit	A1-A3	A4	A1-C4	A1-D
GWPtotal	kg CO ₂ -eq	16,97	0,25	18,78	17,35
Total energy consumption	MJ	267,23	3,77	273,18	260,82
Amount of recycled materials	%	4,28			

Additional environmental impact indicators required in NPCR Part A for construction products							
Indicator	Unit	Unit		A4	A5	B2	В3
GWPIOBC	kg CO ₂ -eq	kg CO ₂ -eq		2,45E-01	1,01E-02	0	0
Indicator	Unit	B4	C1	C2	C3	C4	D
GWPIOBC	kg CO ₂ -eq	0	0	6,95E-02	2,47E-01	2,81E-02	-2,13E+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 ₂ -eq)	Total energy consumption (MJ)	Amount of recycled materials (%)	
Urbanus 6L	2,80	8,49	154,94	7,74	
Urbanus 12L	3,80	12,50	206,64	5,65	
Urbanus 45L	10,00	36,40	514,48	2,16	
Urbanus 6L Dobbel	4,80	16,67	263,16	4,87	
Urbanus 12L Dobbel	6,80	24,50	364,98	3,44	
Urbanus 25L Dobbel	8,80	32,39	464,70	2,64	
Oslo Restavfall	5,50	19,63	300,56	4,20	
Oslo Duo mat og plast	6,60	23,71	355,00	3,55	
Oslo Duo plast og rest	6,60	23,71	355,00	3,55	
Terra Trippel	10,50	36,71	563,67	2,05	
Terra Duo	9,50	33,25	506,67	2,28	
Oslo papp og papir	5,80	19,90	319,01	3,68	
Terra Hotel Trippel	3,20	10,11	181,86	6,53	

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