

Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

EcoNordic WH4 Indoor Climate Heat Pump



FLEXIT®

Owner of the declaration:

Flexit AS

Product:

EcoNordic WH4 Indoor Climate Heat Pump

Declared unit:

1 pcs

This declaration is based on Product Category Rules:

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

NPCR 030:2021 Part B for ventilation components

Program operator:

The Norwegian EPD Foundation

Declaration number:

NEPD-12320-12376

Registration number:

NEPD-12320-12376

Issue date:

12.09.2025

Valid to:

12.09.2030

EPD software:

LCAno EPD generator ID: 922722

The Norwegian EPD Foundation

General information

Product

EcoNordic WH4 Indoor Climate Heat Pump

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-12320-12376

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core PCR
NPCR 030:2021 Part B for ventilation components

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 EcoNordic WH4 Indoor Climate Heat Pump

Declared unit with option:

A1-A3, A4, C1, C2, C3, C4, D

Functional unit:

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:

Alexander Borg, Asplan Viak AS

(no signature required)

Owner of the declaration:

Flexit AS
Contact person: Anton Olsson
Phone: +46761325238
e-mail: anton.olsson@flexit.no

Manufacturer:

Flexit AS
Moseveien 8
1870 Ørje, Norway

Place of production:

Flexit AB
Källhultsvängen 5B
672 41 Töcksfors, Sweden

Management system:

ISO 14001 : 2015 iaf

Organisation no:

502066-4826

Issue date:

12.09.2025

Valid to:

12.09.2030

Year of study:

2024

Comparability:

EPDs of construction products may not be comparable if they do not comply with EN 15804 and are not 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.
NEPDT46 VKEs EPD-generator

Developer of EPD: Viktor Lennartsson

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

Approved:

Håkon Hauan, CEO EPD-Norge

Product

Product description:

Flexit EcoNordic WH4 is an indoor climate control centre with integrated functions for balanced ventilation, hot water and heating for homes. It ensures a healthy indoor climate, abundant hot water and heating at a high level of energy efficiency. If little domestic heating is required, the energy is taken directly from the tank without starting the heat pump. To simplify management and installation, the product is modular. All of the indoor climate control centre functions can be easily managed using the Flexit GO app.

Product specification

Materials	kg	%
Additives	2,37	1,07
Electronic - Printed wiring board	0,942	0,4282
Electronic - Unspecified	7,29	3,31
Electronic - Wire	1,71	0,7791
Expanded Polystyrene (EPS)	4,37	1,99
Filter, mineral based	0,8238	0,3745
Filter, plastic based	1,42	0,6469
Insulation, Plastic based	0,308	0,14
Metal	0,027	0,01227
Metal - Aluminium	8,26	3,76
Metal - Brass	2,21	1,01
Metal - Cast iron	1,42	0,6464
Metal - Copper	21,31	9,69
Metal - Stainless steel	23,48	10,67
Metal - Steel	125,75	57,16
Motor	5,84	2,65
Other	0,2591	0,1178
Plastic	0,536	0,2436
Plastic - Acrylonitrile butadiene styrene (ABS)	1,92	0,8727
Plastic - Polyamide	1,29	0,5857
Plastic - Polycarbonate (PC)	0,1213	0,05513
Plastic - Polyethylene	0,9519	0,4327
Plastic - Polyethylene (HDPE)	0,096	0,04364
Plastic - Polypropylene (PP)	4,18	1,90
Plastic - Polystyrene (PS)	0,973	0,4423
Plastic - Polyvinyl chloride (PVC)	0,3326	0,1512
Plastics	0,50	0,2273
Printed paper	0,042	0,01909
Rubber, synthetic	0,8405	0,382
Sealant	0,285	0,1295
Silicon products	0,1029	0,04679
Textile - Polyester	0,03614	0,01643
Total	220,00	100,00

Packaging	kg	%
Packaging - Cardboard	9,60	24,00
Packaging - Pallet	30,00	75,00
Packaging - Paper	0,15	0,38
Packaging - Plastic	0,25	0,61
Total incl. packaging	260,00	100,00

Technical data:

The total weight of the product is 220 kg. The packaging has a average weight of 40 kg.
For more technical specification, please visit our website:
www.flexit.com

Market:

Europe

Reference service life, product

25

Reference service life, building or construction works

60

LCA: Calculation rules

Declared unit:

1 pcs EcoNordic WH4 Indoor Climate Heat Pump

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. Energy, 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. The data represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on EPDs according to EN 15804 and different LCA databases. The data quality of the raw materials in A1 is presented in the table below.

Materials	Source	Data quality	Year
Additives	ecoinvent 3.6	Database	2019
Additives	ecoinvent 3.6	Database	2020
Additives	EPD-FEI-20220106-IBG1-EN	EPD	2021
Electronic - Printed wiring board	ecoinvent 3.6	Database	2019
Electronic - Unspecified	ecoinvent 3.6	Database	2019
Electronic - Wire	Product composition + ecoinvent 3.6	Supplier data + database	2019
Expanded Polystyrene (EPS)	ecoinvent 3.10.1	Database	2023
Filter, mineral based	ecoinvent 3.6	Database	2019
Filter, plastic based	ecoinvent 3.6	Database	2019
Filter, plastic based	Modified ecoinvent 3.6	Database	2019
Insulation, Plastic based	ecoinvent 3.6	Database	2019
Metal	ecoinvent 3.6	Database	2019
Metal - Aluminium	ecoinvent 3.6	Database	2019
Metal - Aluminium	Modified ecoinvent 3.6	Database	2019
Metal - Brass	ecoinvent 3.6	Database	2019
Metal - Cast iron	ecoinvent 3.10.1	Database	2023
Metal - Copper	ecoinvent 3.6	Database	2019
Metal - Stainless steel	ecoinvent 3.6	Database	2019
Metal - Steel	ecoinvent 3.6	Database	2019
Metal - Steel	Modified ecoinvent 3.6	Database	2019
Motor	Modified ecoinvent 3.6	Database	2019
Other	Material composition + ecoinvent 3.6	Supplier data + database	2019
Packaging - Cardboard	ecoinvent 3.6	Database	2019
Packaging - Pallet	ecoinvent 3.6	Database	2019
Packaging - Paper	ecoinvent 3.6	Database	2019
Packaging - Plastic	ecoinvent 3.6	Database	2019
Plastic	ecoinvent 3.6	Database	2019
Plastic - Acrylonitrile butadiene styrene (ABS)	ecoinvent 3.6	Database	2019
Plastic - Polyamide	ecoinvent 3.6	Database	2019
Plastic - Polycarbonate (PC)	ecoinvent 3.6	Database	2019
Plastic - Polyethylene	ecoinvent 3.6	Database	2019
Plastic - Polyethylene (HDPE)	ecoinvent 3.6	Database	2019
Plastic - Polypropylene (PP)	ecoinvent 3.6	Database	2019
Plastic - Polystyrene (PS)	ecoinvent 3.6	Database	2019
Plastic - Polyvinyl chloride (PVC)	ecoinvent 3.6	Database	2019
Plastics	ecoinvent 3.6	Database	2019
Printed paper	ecoinvent 3.6	Database	2019
Rubber, synthetic	ecoinvent 3.6	Database	2019
Sealant	ecoinvent 3.6	Database	2019
Silicon products	ecoinvent 3.6	Database	2019
Textile - Polyester	ecoinvent 3.6	Database	2019

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

Product stage			Construction installation 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	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	MND	MND	MND	MND	MND	MND	MND	MND	X	X	X	X	X

System boundary:

A1 includes the extraction and production of all raw materials used in the product

A2 includes all types of transportation methods used for the raw materials to the production site in Töcksfors, Sweden

A3 includes the manufacturing and packaging process of the air handling unit

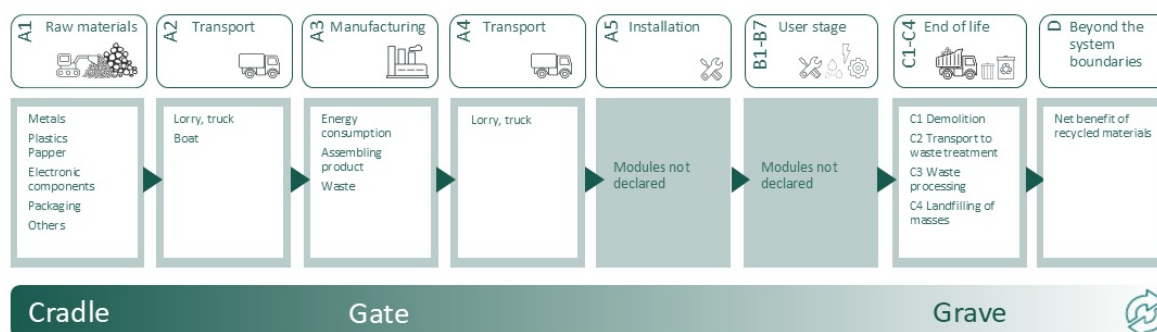
A4 includes the transport to the market/user

A5 modules not declared

B1 - B7 modules not declared

C1 - C4 includes the use of energy and other auxiliary materials required to demolish the building or construction in which the product is included, as well as transport from the building site to the waste processing facility, distribution of the product to different waste treatment methods and the disposal

D includes energy and materials that have achieved a new function and are no longer considered waste



Additional technical information:

During the lifetime of the air handling unit, some parts, such as the filters will need to be replaced minimum once a year.

For a full account of maintenance information, please visit our website:

www.flexit.com

LCA: Scenarios and additional technical information

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

A2: The transport methods used when there were no available data from the suppliers, were assumed to be:

Sweden, Finland and Norway - Class EURO 6 trucks

Thailand, Vietnam and Taiwan - Class EURO 4 trucks

Remaining countries - Class EURO 5 trucks

Distances with seagoing vessels - Ship, Freight, Transoceanic (km)

A3: The energy used in manufacturing was calculated by: the total yearly energy consumption (kWh) divided by the total yearly production of air handling units (kg)

A4: For the Nordic market, the default average travel distance from the manufacturing site to the building site is 300 km provided in NPCR 030 Part B for ventilation components.

C2: The average distance used from the deconstruction site to the waste processing facility is 85 km for the Norwegian market.



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 %	300,00	0,043	l/tkm	12,90
De-construction demolition (C1)	Unit	Value			
Demolition of building per kg of ventilation product (kg)	kg	223,50			
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 %	85,00	0,043	l/tkm	3,66
Waste processing (C3)	Unit	Value			
Materials to recycling (kg)	kg	170,72			
Waste treatment per kg Plastics, to incineration (kg)	kg	6,73			
Waste treatment per kg Electronics scrap, Control units, incineration (kg)	kg	7,29			
Waste treatment per kg Rubber, municipal incineration with fly ash extraction (kg)	kg	0,8405			
Waste treatment per kg Hazardous waste, incineration (kg)	kg	2,89			
Waste treatment per kg Polyethylene (PE), incineration (kg)	kg	0,524			
Waste treatment per kg Bulk iron waste, excluding reinforcement, sorting plant (kg)	kg	5,84			
Waste treatment per kg plastic, industrial electronics, municipal incineration with fly ash extraction (kg)	kg	0,055			
Waste treatment per kg Polyvinylchloride (PVC), incineration with fly ash extraction (kg)	kg	0,3326			
Waste treatment per kg Polypropylene (PP), incineration (kg)	kg	2,20			
Waste treatment per kg Expanded Polystyrene (EPS), incineration with fly ash extraction (kg)	kg	0,209			
Waste treatment per kg Paper and Paperboard, incineration - C3 (kg)	kg	0,042			
Waste treatment per kg wire plastic, municipal incineration - C3 - RoW	kg	0,06046			

Disposal (C4)	Unit	Value			
Waste, scrap steel, to landfill (kg)	kg	15,51			
Landfilling of ashes from incineration of Plastics, process per kg ashes and residues (kg)	kg	0,1495			
Waste treatment per kg Copper slag, to landfill, residual material landfill (kg) - GLO	kg	2,33			
Landfilling of ashes from incineration of Electronics scrap, Control units, process of ashes and residues (kg)	kg	5,12			
Waste, plastic, mixture, to landfill (kg)	kg	7,87			
Landfilling of ashes from incineration of Rubber, municipal incineration with fly ash extraction (kg)	kg	0,04395			
Landfilling of ashes from incineration per kg Hazardous waste, from incineration (kg)	kg	0,5457			
Waste, hazardous waste, to landfill (kg)	kg	0,5225			
Landfilling of ashes from incineration of Polyethylene (PE), process per kg ashes and residues (kg)	kg	0,01846			
Waste, aluminium, to landfill (kg)	kg	0,6152			
Waste treatment per kg Brass slag, to landfill, residual material landfill (kg)	kg	0,2212			
Landfilling of ashes from incineration per kg plastic, industrial electronics, From municipal incineration with fly ash extraction (kg)	kg	0,00373			
Landfilling of ashes from incineration of Polyvinylchloride (PVC), process per kg ashes and residues (kg)	kg	0,05299			
Landfilling of ashes from incineration of Polypropylene (PP), process per kg ashes and residues (kg)	kg	0,06552			
Waste, mineral wool, to landfill (kg)	kg	0,8238			
Waste, Expanded polystyrene, EPS, to landfill (kg)	kg	0,209			
Landfilling of ashes from incineration of Expanded polystyrene (EPS), process per kg ashes and residues (kg)	kg	0,007573			
Landfilling of ashes from incineration of Paperboard, process per kg ashes and residues (kg)	kg	0,0007505			
Landfilling of ashes from incineration per kg wire plastic, from municipal incineration - C4 - RoW	kg	0,008992			

Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of primary steel with net scrap (kg)	kg	117,77			
Substitution of electricity, in Norway (MJ)	MJ	6,61			
Substitution of thermal energy, district heating, in Norway (MJ)	MJ	100,06			
Substitution of primary copper with net scrap (kg)	kg	9,47			
Substitution of primary aluminium with net scrap (kg)	kg	7,93			
Substitution of primary Brass with net scrap (kg)	kg	0,9977			
Substitution of cast iron (kg)	kg	0,726			

LCA: Results

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

Environmental impact									
Indicator	Unit	A1-A3	A4	C1	C2	C3	C4	D	
 GWP-total	kg CO ₂ -eq	1.69E+03	1.28E+01	2.95E-01	3.61E+00	4.13E+01	2.02E+00	-2.31E+02	
 GWP-fossil	kg CO ₂ -eq	1.73E+03	1.27E+01	2.95E-01	3.61E+00	4.13E+01	2.01E+00	-2.29E+02	
 GWP-biogenic	kg CO ₂ -eq	-4.49E+01	5.27E-03	5.52E-05	1.49E-03	1.83E-02	1.33E-03	-5.27E-01	
 GWP-luluc	kg CO ₂ -eq	5.57E+00	4.53E-03	2.32E-05	1.28E-03	2.21E-03	1.29E-03	-1.45E+00	
 ODP	kg CFC11 -eq	1.36E-04	2.89E-06	6.37E-08	8.18E-07	9.11E-07	1.17E-07	-4.23E-02	
 AP	mol H ⁺ -eq	2.84E+01	3.66E-02	3.08E-03	1.04E-02	1.63E-02	3.79E-03	-5.33E+00	
 EP-FreshWater	kg P -eq	3.10E-01	1.02E-04	1.07E-06	2.88E-05	1.76E-04	1.70E-05	-4.01E-02	
 EP-Marine	kg N -eq	2.71E+00	7.25E-03	1.36E-03	2.05E-03	4.72E-03	2.04E-03	-3.72E-01	
 EP-Terrestrial	mol N -eq	4.14E+01	8.10E-02	1.49E-02	2.30E-02	5.05E-02	1.23E-02	-4.77E+00	
 POCP	kg NMVOC -eq	9.70E+00	3.10E-02	4.11E-03	8.80E-03	1.32E-02	3.89E-03	-1.62E+00	
 ADP-minerals&metals ¹	kg Sb-eq	6.97E-01	3.52E-04	4.52E-07	9.97E-05	3.19E-05	5.53E-06	-4.91E-02	
 ADP-fossil ¹	MJ	2.26E+04	1.93E+02	4.06E+00	5.46E+01	3.50E+01	1.02E+01	-2.26E+03	
 WDP ¹	m ³	1.95E+05	1.86E+02	8.62E-01	5.28E+01	1.50E+02	6.54E+01	-3.26E+04	

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







"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

Remarks to environmental impacts

Additional environmental impact indicators

Indicator	Unit	A1-A3	A4	C1	C2	C3	C4	D
 PM	Disease incidence	1.46E-04	7.80E-07	8.16E-08	2.21E-07	1.84E-07	5.65E-08	-2.45E-05
 IRP ²	kgBq U235 -eq	1.15E+02	8.42E-01	1.74E-02	2.39E-01	1.53E-01	4.35E-02	-4.03E+00
 ETP-fw ¹	CTUe	2.63E+05	1.43E+02	2.22E+00	4.05E+01	2.47E+02	4.30E+02	-4.71E+04
 HTP-c ¹	CTUh	8.45E-06	0.00E+00	0.00E+00	0.00E+00	8.43E-09	6.02E-08	-1.36E-06
 HTP-nc ¹	CTUh	2.45E-04	1.56E-07	2.01E-09	4.42E-08	1.50E-07	4.09E-06	-3.57E-05
 SQP ¹	dimensionless	1.42E+04	1.35E+02	5.15E-01	3.82E+01	1.30E+01	2.62E+01	-6.38E+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 = Potential Soil Quality Index (dimensionless)

"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	C1	C2	C3	C4	D
	PERE	MJ	3.73E+03	2.76E+00	2.19E-02	7.81E-01	5.54E+00	9.44E-01	-5.59E+02
	PERM	MJ	4.98E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	PERT	MJ	4.23E+03	2.76E+00	2.19E-02	7.81E-01	5.54E+00	9.44E-01	-5.59E+02
	PENRE	MJ	2.20E+04	1.93E+02	4.06E+00	5.46E+01	3.50E+01	1.02E+01	-2.26E+03
	PENRM	MJ	7.15E+02	0.00E+00	0.00E+00	0.00E+00	-2.11E+02	0.00E+00	0.00E+00
	PENRT	MJ	2.27E+04	1.93E+02	4.06E+00	5.46E+01	-1.76E+02	1.02E+01	-2.26E+03
	SM	kg	4.17E+01	0.00E+00	1.99E-03	0.00E+00	6.43E-05	1.14E-02	6.01E+00
	RSF	MJ	2.42E+01	9.87E-02	5.40E-04	2.80E-02	1.23E-01	1.22E-02	5.07E+00
	NRSF	MJ	2.69E+02	3.53E-01	7.94E-03	9.99E-02	-4.49E-03	1.43E-01	1.35E+02
	FW	m ³	1.97E+01	2.06E-02	2.09E-04	5.84E-03	7.54E-02	2.21E-02	-2.77E+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 used as raw materials; PENRT = Total 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	Unit	A1-A3	A4	C1	C2	C3	C4	D
 HWD	kg	1.22E+01	9.94E-03	1.19E-04	2.81E-03	2.42E-02	7.98E-01	-9.14E-01
 NHWD	kg	5.40E+02	9.37E+00	4.80E-03	2.65E+00	6.33E+00	3.18E+01	-8.85E+01
 RWD	kg	8.11E-02	1.31E-03	2.82E-05	3.72E-04	1.46E-05	3.02E-05	-3.77E-03

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed

*Reading example: 9,0 E-03 = $9,0 \cdot 10^{-3}$ = 0,009"

*INA Indicator Not Assessed

End of life - Output flow

Indicator	Unit	A1-A3	A4	C1	C2	C3	C4	D
 CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
 MFR	kg	1.02E+01	0.00E+00	1.96E-03	0.00E+00	1.71E+02	8.81E-04	-3.03E-01
 MER	kg	1.22E-01	0.00E+00	6.06E-06	0.00E+00	7.15E+00	2.20E-05	-3.94E-02
 EEE	MJ	6.02E-01	0.00E+00	2.08E-05	0.00E+00	1.07E+01	1.14E-03	-1.17E-01
 EET	MJ	9.11E+00	0.00E+00	3.15E-04	0.00E+00	1.62E+02	1.72E-02	-1.77E+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 = $9,0 \cdot 10^{-3}$ = 0,009"

*INA Indicator Not Assessed

Biogenic Carbon Content

Indicator	Unit	At the factory gate
Biogenic carbon content in product	kg C	1.10E-02
Biogenic carbon content in accompanying packaging	kg C	1.69E+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	Source	Amount	Unit
Electricity, Sweden (kWh)	ecoinvent 3.6	54,94	g CO ₂ -eq/kWh

Dangerous substances

The product contains no substances on the REACH Candidate list at or above 100 ppm, 0,01 % by weight.

Indoor environment

Additional Environmental Information

Additional environmental impact indicators required in NPCR Part A for construction products								
Indicator	Unit	A1-A3	A4	C1	C2	C3	C4	D
GWPIOBC	kg CO ₂ -eq	1.75E+03	1.28E+01	2.95E-01	3.61E+00	4.13E+01	2.04E+00	-2.59E+02

GWPI-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.

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

Graafland and Iversen (2022) EPD generator for NPCR 030 Ventilation components, Background information for EPD generator application and LCA data, LCA.no report number: 12.22

NPCR Part A: Construction products and services. Ver. 2.0. April 2021, EPD-Norge.

NPCR 030 Part B for Ventilation components, Ver. 1.0, 18.05.2021, EPD Norway.

 epd-norge Global program operator	Program operator and publisher The Norwegian EPD Foundation Post Box 5250 Majorstuen, 0303 Oslo, Norway	Phone: +47 977 22 020 e-mail: post@epd-norge.no web: www.epd-norge.no
	Owner of the declaration: Flexit AS Moseveien 8, 1870 Ørje, Norway	Phone: +46761325238 e-mail: anton.olsson@flexit.no web: https://www.flexit.no/
	Author of the Life Cycle Assessment LCA.no AS Dokka 6A, 1671 Kråkerøy, Norway	Phone: +47 916 50 916 e-mail: post@lca.no web: www.lca.no
	Developer of EPD generator LCA.no AS Dokka 6A, 1671 Kråkerøy, Norway	Phone: +47 916 50 916 e-mail: post@lca.no web: www.lca.no
	ECO Platform ECO Portal	web: www.eco-platform.org web: ECO Portal