

Environmental Product Declaration

In accordance with ISO14025:2006 and EN15804:2012+A2:2019

Isover CLIMCOVER CR Alu2



The Norwegian
EPD Foundation

Owner of the declaration:
Saint-Gobain Denmark A/S, Isover

Product name:
Isover CLIMCOVER CR Alu2

Functional unit:
1 m² of product with a thermal resistance of
1 K.m².K/W and a thickness of 35 mm, with
a reference service life of 60 years.

Product category /PCR:
Core PCR EN 15804 :2012+A2:2019
NPCR 012:2022 Part B for thermal insulation
products

This EPD is based on less than 1 year for the
production data (January + February 2025)
and a full year of raw material data (2024).

Program holder and publisher:
The Norwegian EPD foundation

Declaration number:
NEPD-11624-11575

Registration number:
NEPD-11624-11575

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Issue date:
08.07.2025

Valid to:
08.07.2030

General information

Product:

Isover CLIMCOVER CR Alu2

Program operator:

The Norwegian EPD Foundation
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Declaration number:

NEPD-11624-11575

This declaration is based on Product Category Rules:

Core PCR EN 15804 :2012+A2:2019
NPCR 012:2022 Part B for thermal insulation products

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, life cycle assessment data and evidence.

Declared unit:

1 m² of product with a thermal resistance of 1 K.m².K/W and a thickness of 35 mm

Declared unit with option:

Cradle to grave and module D (A + B + C + D).

Functional unit:

1 m² of product with a thermal resistance of 1 K.m².K/W and a thickness of 35 mm, with a reference service life of 60 years

Verification:

Independent verification of the declaration and data, according to ISO14025:2010
Internal verification ☐ External verification ☒

Owner of the declaration:

Saint-Gobain Denmark A/S, Isover
Contact person: Stinne Sander
E-mail: Stinne.sander@saint-gobain.com

Manufacturer:

Saint-Gobain Denmark A/S, Isover

Place of production:

Østermarksvej 4, 6580 Vamdrup, Denmark

Management system:

ISO 9001 (Certificate no. DK016070)
ISO 14001 (Certificate no. DK016069)
ISO 45001 (Certificate no. DK016071)
ISO 50001 (Certificate no. DK018748)

Organisation no:

1020917543

Revision date:

08.07.2025

Valid to:

08.07.2030

Year of study:

Raw material data: 2024
Production data: 2025 (January and February)
To be recalculated when 1 year of data is available.

Comparability:

EPD of construction products may not be able to compare if they do not comply with EN 15804 and are seen in a building context.

The EPD has been worked out by:

Helene Løvkvist Andersen (Saint-Gobain Nordic) and Saint-Gobain LCA central team, using GaBi version 10.
Company-specific data has been verified by Hans Ramsing Orehøj and Helene Løvkvist Andersen.

Approved



Håkon Hauan
Manager of EPD Norway

Martin Erlandsson
Independent verifier approved by EPD Norway

Product

Product description:

This Environmental Product Declaration (EPD[®]) describes the environmental impacts of 1 m² of glass wool with a thermal resistance of 1 K.m².K/W of Isover CLIMCOVER CR Alu2. To calculate the impact of the range of commercial thicknesses between 35 mm and 100 mm, see the table "Conversion to mass and to specific thicknesses" in additional information section.

This EPD applies for one specific product from one single plant in Denmark.

UN CPC CODE: 37990 Non-metallic mineral products n.e.c. (including mineral wool, expanded mineral materials, worked mica, articles of mica, non-electrical articles of graphite or other carbon and articles of peat)

For more information: <https://www.saint-gobain.dk/isover/produktoversigt/isover-climcover-cr-alu2>

Product specification:

Description of the main components and/or materials for 1 m² of Isover CLIMCOVER CR Alu2 with a thermal resistance of 1 m².K/W, and a thickness of 35 mm.

Materials	Weight (%)
Mineral materials	30 – 40
Recycled glass (external cullet)	58 – 70
Binder	3 – 8
Additives	< 0,8
Sum	100
Facing	Weight (kg / m ²)
Alu-foil, including glue	0,084
Packaging	Weight (kg)
LDPE (foils + stretch film, including paper labels, glue etc.)	0,03
Wooden pallet	0,06

Technical data: For a thickness of 35 mm.

Characteristics	Value	Unit
Thermal resistance	1	m ² .K/W
Thermal conductivity	0,035	W/(m.K)
Reaction to fire	A2-s1; d0	
Density	35	kg/m ³
Quantity for 1 m² of product, excluding facing	1,2	kg
Product used for the Installation	none	m ² .K/W

Market:

Isover CLIMCOVER CR Alu2 is manufactured and sold in Denmark, Sweden and the Netherlands.

Reference service life, product:

The reference service life of the product is similar to the service life of the building.

Reference service life, building:

60 years.

Additional technical information

This EPD® includes a range of thicknesses between 35 mm and 100 mm by applying a conversion factor. All the results in the table of this EPD® refer to Isover CLIMCOVER CR Alu2 with a thickness of 35 mm, for a functional unit of 1 m² with a thermal resistance equals to 1 m² K/W.

In the table below, the main thicknesses of the product are listed. Due to the facing, it is not possible to make a linear scaling between different thicknesses. Therefore, this EPD only applies to the thicknesses below and for scaling GWP-GHG, GWP Total and GWP Fossil. Scaling is done by multiplying the factor below with the corresponding indicator.

Also, a conversion to mass (kg) is given to convert the results per 1 kg of product

Thickness (mm)	Product	Multiplication factor			Conversion factor to mass (1 kg of wool)
	Thermal resistance	GWP-GHG	GWP- Total	GWP- fossil	
35	1,00	-	-	-	0,82
50	1,43	1,17	1,17	1,17	-
60	1,71	1,29	1,28	1,28	-
70	2,00	1,42	1,39	1,40	-
80	2,29	1,53	1,50	1,51	-
100	2,86	1,75	1,71	1,72	-

LCA: Calculation rules

Parameter	Value / Description
Type of EPD	Cradle to grave and module D
Functional unit	Providing a thermal insulation on 1 m ² of product with a thermal resistance of 1 K.m ² .K/W and a thickness of 35 mm, with a reference service life of 60 years
System boundaries	Cradle to grave and module D (A + B + C + D)
Reference service life (RSL)	The Reference Service Life (RSL) of the insulation product is 60 years, provided that the product is installed correct into the building. This 60-year value is the amount of time that we recommend our products last for without refurbishment and corresponds to standard building design life.
Cut-off rules	<p>All data is available, no cut-off rules has been applied.</p> <p>In the case if there was not enough information, the following procedure would have been taken: the process energy and materials representing less than 1% of the whole energy and mass used can be excluded (if they do not cause significant impacts). The addition of all the inputs and outputs excluded cannot be bigger than the 5% of the whole mass and energy used, as well of the emissions to environment occurred.</p> <p>Flows related to human activities such as employee transport are excluded. The construction of plants, production of machines and transportation systems are excluded since the related flows are supposed to be negligible compared to the production of the building product when compared at these systems lifetime level.</p>
Allocations	<p>Allocation has been avoided when possible and when not possible a mass allocation has been applied.</p> <p>The polluter pays and the modularity principles as well have been followed.</p>
Geographical coverage And time period	<p>Scope: Denmark</p> <p>Data is collected from one production site; Vamdrup located in Denmark.</p> <p>Raw material data: 2024</p> <p>Production data: January and February 2025</p> <p><i>The EPD will be recalculated when 1 year of data is available</i></p>
Background data source	The databases Sphera 2023.2 and ecoinvent v.3.9.1
Software	Sphera LCA for experts (GaBi) 10

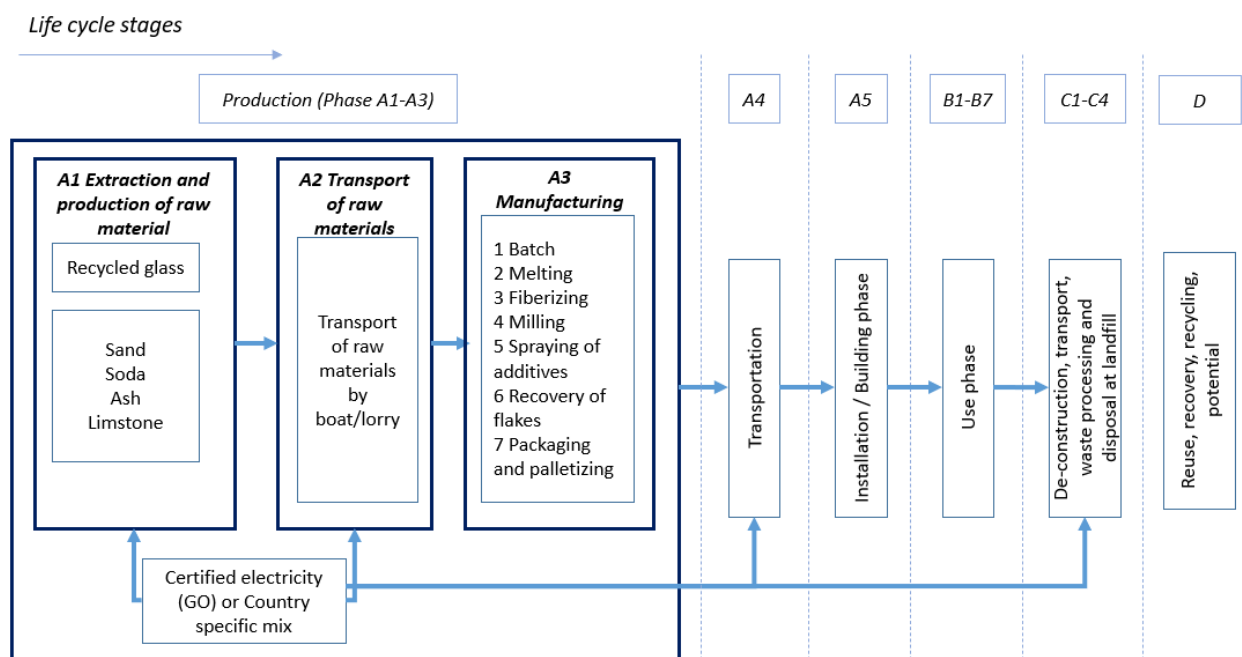
LCA: Scenarios and additional technical information

The following stages and modules have been included for this product.

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

Product stage			Assembly stage		Use stage							End of life stage				Benefits & loads beyond system boundary
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	X	X	X	X	X	X	X	X	X	X	X	X	X

System boundary:



Product stage (A1-A3)

A1, Raw materials supply

This module includes the extraction and transformation of raw materials.

A2, Transport to the manufacturer

This module includes the transportation of raw materials and packaging to the manufacturing site. The modelling includes road, ship and/or train transportations.

A3, Manufacturing

This module includes the manufacture of products such as (fusion, fiberizing, etc.) and the manufacture of packaging. The production of packaging material is considered at this stage. The processing of any waste arising from this stage is also included.

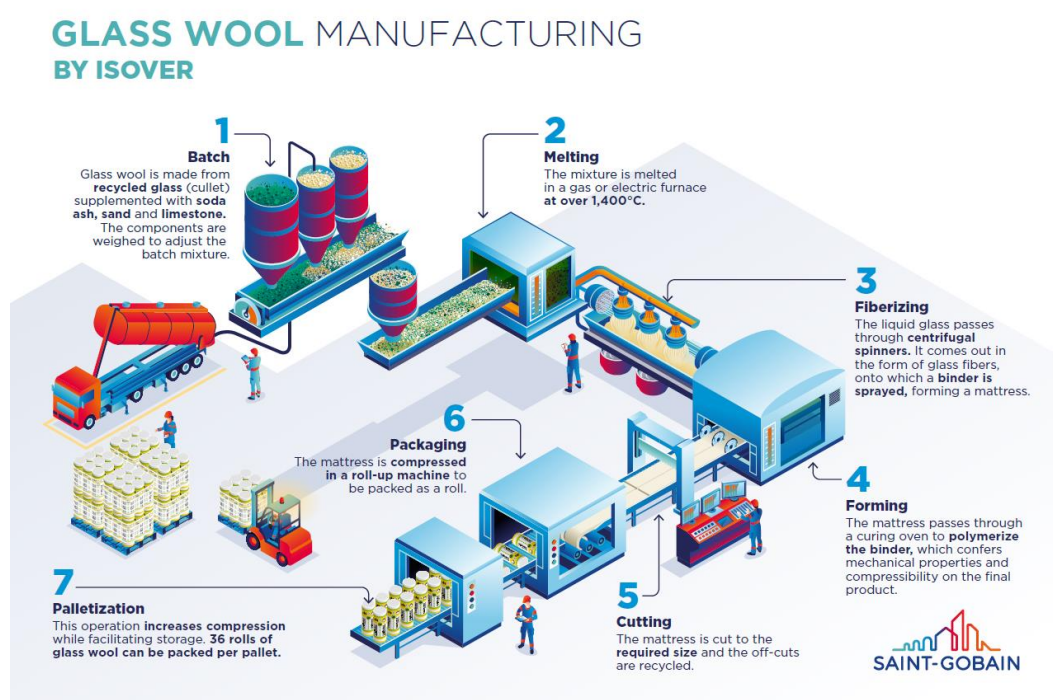
During the manufacturing process, electricity based on 100% renewable electricity bought with Guarantee of Origin (GO) has been used. The amount of electricity purchases with GO's correspond to 100% of the electricity consumed at the manufacturing site, leaving 0% to be covered by the Danish national grid mix.

During the manufacturing process, biogas bought with Guarantee of Origin (GO) has been used. The amount of biogas purchases with GO's correspond to 100% of the gas consumed at the manufacturing site.

Guarantees of origin for the use of electricity and biogas in the manufacturing phase

Parameter	Consumption covered (%)	Value, GWP total	Description
Electricity mix (GO's)	100 %	0,00614 kg CO ₂ eq. / kWh	100% Hydro – RER from Sphera
Gas mix (GO's)	100 %	0,0573 kg CO ₂ eq. / kWh	100% Biogas – RER from Sphera

Manufacturing process flow diagram



Manufacturing in detail:

Glass wool is made from high-temperature molten glass that is blown away using centrifugal force to form fine cotton-like fibers.

Then, a binder is sprayed on the material to form it, and the product is heated in an oven. Hereafter, the product is cut to size and packed.

Construction process stage (A4-A5)

A4, Transport from production place to building site

This module includes transport from the production gate to the building site. Transport is calculated based on a scenario with the parameters described in the following table.

Parameter	Value / Description
Fuel type and consumption of vehicle or vehicle type used for transport e.g., long distance truck, boat, etc.	Freight truck, maximum load weight of 24 t and consumption of 0,38 liters diesel per km. Real 5 t load.
Distance	116 km by truck*
Capacity utilization (including empty returns)	16% in weight (30% empty returns)
Bulk density of transported products	70 kg/m ³

*For transport to Sweden and The Netherlands, see "Additional information"

A5, Installation in the building

This module includes the installation of the product manually and no additional accessories, nor energy are considered.

Parameter	Value / Description
Wastage of materials on the building site before waste processing, generated by the product's installation (specified by type)	2% for product 100% for packaging
Output materials (specified by type) as results of waste processing at the building site e.g., of collection for recycling, for energy recovering, disposal (specified by route)	Product waste: 0,0245 kg, 100% landfill Facing waste: 0,0017 kg, 100% landfill LDPE: 0,03 kg, 99% recycled + 1% incineration with energy recovery Wooden pallet: 0,06 kg, 96% recycling + 2,5% incineration with energy recovery + 1,5% landfill
Distance to waste treatment facilities	25 km to landfill by truck 25 km to recycling by truck 25 km to incineration with energy recovery by truck
Assumption for scenario development (e.g. transportation)	The waste going to landfill will be transported by truck with 24 t payload, consuming 0,38 liters diesel per km.
Direct emissions to ambient air, soil, and water	None

Use stage (B1-B7)

The use stage is divided into the following modules:

- **B1:** Use
- **B2:** Maintenance
- **B3:** Repair
- **B4:** Replacement
- **B5:** Refurbishment
- **B6:** Operational energy use
- **B7:** Operational water use

The product has a reference service life of 60 years. This assumes that the product will last in situ with no requirements for maintenance, repair, replacement, or refurbishment throughout this period. Therefore, it has no impact at this stage.

End of Life stage (C1-C4)

This stage includes the following modules:

- **C1:** The de-construction and/or dismantling of the product takes part of the demolition of the entire building.
- **C2:** Transport to waste processing.
- **C3:** Waste processing for reuse, recovery and/or recycling.
- **C4:** Waste disposal, including physical pre-treatment and site management.

Parameter	Value / Description
Energy for demolition and sorting	0,045 MJ/kg of product (diesel)
Collection process (specified by type)	The entire product 1,2 kg of glass wool and 0,085 kg facing are collected with mixed construction waste
Recovery system (specified by type)	There is no recovery, recycling or reuse of the product once it has reached its end-of-life phase.
Disposal (specified by type)	1,2 kg of product and 0,085 kg facing are landfilled
Assumption for scenario development (e.g. transportation)	The waste going to landfill will be transported by truck with 24 t payload, consuming 0,38 liters diesel per km. Transport distance to landfill: 25 km

Benefits and loads beyond the system boundaries (D)

There is inclusion of secondary materials in the product and packaging.

100% of product waste is considered landfilled.

The packaging is to be reuse, recycling and/or incineration with energy recovery which is taken into consideration in stage D.

LCA: Results

As specified in EN 15804:2012+A2:2019/AC:2021 and the Product Category Rules, the environmental impacts are declared and reported using the baseline characterization factors from the ILCD. Raw materials and energy consumption, as well as transport distances have been taken directly from the manufacturing plant. Characterization factors of EN15804 are based on EF 3.1.

The estimated impact results are only relative statements which do not indicate the end points of the impact categories, exceeding threshold values, safety margins or risks.








All emissions to air, water, and soil, and all materials and energy used have been included.

The results of the impact categories abiotic depletion of minerals and metals, land use, human toxicity (cancer), human toxicity, noncancer and ecotoxicity (freshwater) may be highly uncertain in LCAs that include capital goods/infrastructure in generic datasets, in case infrastructure/capital goods contribute greatly to the total results. This is because the LCI data of infrastructure/capital goods used to quantify these indicators in currently available generic datasets sometimes lack temporal, technological and geographical representativeness. Caution should be taken when using the results of these indicators for decision-making purposes.

Since this EPD includes module C, we strongly advise not to use the results of modules A1-A3 without considering the results of module C.

Results refer to a functional unit of 1 m² of glass wool with thermal resistance of 1 K.m².K/W for a thickness of 35 mm. To obtain results with different commercial thicknesses and density, see additional technical information section (p.4).











Core environmental impact indicators

		PRODUCT STAGE	CONSTRUCTION STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE LIFE CYCLE
Environmental indicators		A1 / A2 / A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
	Climate Change (total) [kg CO ₂ eq.]	1,81E+00	3,84E-02	1,39E-01	0	0	0	0	0	0	0	5,47E-03	2,39E-03	0	3,83E-02	-3,83E-02
	Climate Change (fossil) [kg CO ₂ eq.]	1,83E+00	3,79E-02	4,68E-02	0	0	0	0	0	0	0	5,47E-03	2,36E-03	0	2,09E-02	-3,90E-02
	Climate Change (biogenic) [kg CO ₂ eq.]	-2,28E-02	1,00E-04	9,18E-02	0	0	0	0	0	0	0	6,90E-07	6,31E-06	0	1,73E-02	6,37E-04
	Climate Change (land use change) [kg CO ₂ eq.]	1,64E-03	3,55E-04	4,43E-05	0	0	0	0	0	0	0	6,16E-07	2,17E-05	0	6,09E-05	-7,03E-06
	Ozone depletion [kg CFC-11 eq.]	2,75E-07	3,36E-15	5,59E-09	0	0	0	0	0	0	0	8,70E-11	3,05E-16	0	2,71E-11	-1,11E-10
	Acidification terrestrial and freshwater [Mole of H ⁺ eq.]	1,32E-02	5,08E-05	3,02E-04	0	0	0	0	0	0	0	5,07E-05	2,99E-06	0	1,48E-04	-1,52E-04
	Eutrophication freshwater [kg P eq.]	1,52E-04	1,40E-07	4,60E-06	0	0	0	0	0	0	0	1,68E-07	8,58E-09	0	7,31E-07	-5,42E-06
	Eutrophication marine [kg N eq.]	2,65E-03	1,87E-05	6,98E-05	0	0	0	0	0	0	0	2,35E-05	1,05E-06	0	3,83E-05	-2,07E-05
	Eutrophication terrestrial [Mole of N eq.]	3,14E-02	2,18E-04	7,51E-04	0	0	0	0	0	0	0	2,55E-04	1,22E-05	0	4,20E-04	-2,63E-04
	Photochemical ozone formation - human health [kg NMVOC eq.]	6,85E-03	4,50E-05	1,81E-04	0	0	0	0	0	0	0	7,57E-05	2,62E-06	0	1,18E-04	-2,06E-04
	Resource use, mineral and metals [kg Sb eq.] ¹	6,28E-05	2,49E-09	1,30E-06	0	0	0	0	0	0	0	1,91E-09	1,56E-10	0	5,58E-09	-1,36E-07
	Resource use, energy carriers [MJ] ¹	2,40E+01	5,21E-01	6,12E-01	0	0	0	0	0	0	0	7,14E-02	3,20E-02	0	2,88E-01	-1,87E+00
	Water deprivation potential [m ³ world equiv.] ¹	6,42E-01	4,42E-04	1,48E-02	0	0	0	0	0	0	0	2,42E-04	2,83E-05	0	3,14E-03	-2,95E-02

Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009









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

Resource use


Resources Use indicators	PRODUCT STAGE	CONSTRUCTION STAGE		USE STAGE							END OF LIFE STAGE			BENEFITS AND LOADS BEYOND THE LIFE CYCLE	
	A1 / A2 / A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
 Use of renewable primary energy (PERE) [MJ] ²	2,60E+01	3,69E-02	5,28E-01	0	0	0	0	0	0	0	4,08E-04	2,33E-03	0	4,30E-02	-3,09E-02
 Primary energy resources used as raw materials (PERM) [MJ] ²	1,04E+00	0	-8,58E-01	0	0	0	0	0	0	0	0	0	0	0	0
 Total use of renewable primary energy resources (PERT) [MJ] ²	2,71E+01	3,69E-02	-3,30E-01	0	0	0	0	0	0	0	4,08E-04	2,33E-03	0	4,30E-02	-3,09E-02
 Use of non-renewable primary energy (PENRE) [MJ] ²	2,11E+01	5,23E-01	5,54E-01	0	0	0	0	0	0	0	7,14E-02	3,21E-02	0	2,89E-01	-1,87E+00
 Non-renewable primary energy resources used as raw materials (PENRM) [MJ] ²	3,26E+00	0	-1,26E+00	0	0	0	0	0	0	0	0	0	0	0	0
 Total use of non-renewable primary energy resources (PENRT) [MJ] ²	2,43E+01	5,23E-01	-7,02E-01	0	0	0	0	0	0	0	7,14E-02	3,21E-02	0	2,89E-01	-1,87E+00
 Input of secondary material (SM) [kg]	8,47E-01	0	1,69E-02	0	0	0	0	0	0	0	0	0	0	0	0
 Use of renewable secondary fuels (RSF) [MJ]	3,35E-29	0	6,70E-31	0	0	0	0	0	0	0	0	0	0	0	0
 Use of non-renewable secondary fuels (NRSF) [MJ]	3,94E-28	0	7,88E-30	0	0	0	0	0	0	0	0	0	0	0	0
 Use of net fresh water (FW) [m ³]	2,01E-02	4,07E-05	4,49E-04	0	0	0	0	0	0	0	5,62E-06	2,55E-06	0	8,83E-05	-6,86E-04

² For this study, both the product and its packaging energy content is considered in the indicators "use of renewable primary energy resources used as raw materials" (PERM) and "use of non-renewable primary energy resources used as raw materials" (PENRM). PERM and PENRM are reported as negative values when materials are reused, recycled, or recovered for energy, but not when they are landfilled.



End of life – Waste & output flow

Waste Category & Output Flows		PRODUCT STAGE	CONSTRUCTION STAGE	USE STAGE								END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE LIFE CYCLE
		A1 / A2 / A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
	Hazardous waste disposed (HWD) [kg]	3,04E-04	1,93E-12	6,49E-06	0	0	0	0	0	0	0	4,82E-07	9,93E-14	0	1,11E-07	7,60E-08
	Non-hazardous waste disposed (NHWD) [kg]	6,46E-01	7,53E-05	4,88E-02	0	0	0	0	0	0	0	4,41E-04	4,89E-06	0	1,32E+00	1,60E-03
	Radioactive waste disposed (RWD) [kg]	1,63E-04	6,76E-07	3,43E-06	0	0	0	0	0	0	0	7,85E-09	6,00E-08	0	2,89E-06	-8,10E-07
	Components for re-use (CRU) [kg]	0	0	5,75E-02	0	0	0	0	0	0	0	0	0	0	0	0
	Materials for Recycling (MFR) [kg]	1,12E-01	0	9,04E-02	0	0	0	0	0	0	0	0	0	0	0	0
	Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Exported electrical energy (EEE) [MJ]	0	0	5,44E-03	0	0	0	0	0	0	0	0	0	0	0	0
	Exported thermal energy (EET) [MJ]	0	0	9,76E-03	0	0	0	0	0	0	0	0	0	0	0	0

Additional environmental impact indicators required for construction products

		PRODUCT STAGE	CONSTRUCTION STAGE	USE STAGE								END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE LIFE CYCLE
Environmental indicators		A1 / A2 / A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
	GWP-IOBC / GWP-GHG [kg CO ₂ eq.] ³	1,91E+00	3,84E-02	4,97E-02	0	0	0	0	0	0	0	5,47E-03	2,39E-03	0	2,10E-02	-3,83E-02

Information describing the biogenic carbon content at the factory gate

		PRODUCT STAGE
Biogenic Carbon Content		A1 / A2 / A3
	Biogenic carbon content in product [kg]	3,26E-03
	Biogenic carbon content in packaging [kg]	2,42E-02

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

The product contains biogenic carbon due to the binder.

The packaging contains biogenic carbon due to the wooden pallet.

³ The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product.

Additional requirements

Electricity and gas information

Market-based approach is used in the manufacturing phase (A3) for electricity and gas that are covered by GOs. There are no remaining quantities to be covered by location based electricity mix and gas mix.

Type of information	Description of electricity
Share of consumption covered	0%
Location based electricity mix	National production mix, Denmark
Type of dataset	Cradle to gate from Sphera
Source	Dataset Sphera DK: Electricity grid mix
CO ₂ emission kg CO ₂ eq. / kWh (Climate Change – Fossil)	0,573 kg CO ₂ eq. / kWh

Note: Amount bought electricity to the core process is not reported as it is business sensitive and therefore confidential.

Type of information	Description of gas
Share of consumption covered	0%
Location based conservative mix	Natural gas (conservative approach)
Type of dataset	Cradle to gate from Sphera
Source	Dataset Sphera: Thermal energy from natural gas, RER
CO ₂ emission kg CO ₂ eq. / MJ (Climate Change – Fossil)	0,0169 kg CO ₂ eq. / MJ

Note: Amount bought gas to the core process is not reported as it is business sensitive and therefore confidential

Hazardous substances

At the date of issue of this declaration, there is no “Substance of Very High Concern” (SVHC) in concentration above 0.1% by weight, and neither do their packaging, following the European REACH regulation (Registration, Evaluation, Authorization and Restriction of Chemicals).

The verifier and the program operator do not make any claim nor have any responsibility of the legality of the product.

Indoor environment

The product has an Indoor Air Comfort GOLD certificate (IACG-400-08-03-2024)

Carbon footprint

The GWP-IOBC value can be found in previous tab of “Additional environmental impact indicators required for construction products” (p.14).

Additional information

Transport to other countries

The transport to building site (A4) in the main result is based on Denmark. Based on the following transport scenarios, additional A4 results has been calculated for Sweden and the Netherlands






Country	Truck (km)	Ship (km)	Rail (km)
Sweden	791	0	50
The Netherlands	922	0	0

The table below presents additional set of result for Sweden and the Netherlands:

	Sweden	The Netherlands
	A4 Transport	A4 Transport
Environmental indicators		
Climate Change [kg CO ₂ eq.]	2,63E-01	3,05E-01
Climate Change (fossil) [kg CO ₂ eq.]	2,59E-01	3,01E-01
Climate Change (biogenic) [kg CO ₂ eq.]	6,88E-04	7,95E-04
Climate Change (land use change) [kg CO ₂ eq.]	2,42E-03	2,82E-03
Ozone depletion [kg CFC-11 eq.]	3,47E-14	2,67E-14
Acidification terrestrial and freshwater [Mole of H ⁺ eq.]	3,50E-04	4,04E-04
Eutrophication freshwater [kg P eq.]	9,56E-07	1,11E-06
Eutrophication marine [kg N eq.]	1,29E-04	1,49E-04
Eutrophication terrestrial [Mole of N eq.]	1,50E-03	1,73E-03
Photochemical ozone formation - human health [kg NMVOC eq.]	3,11E-04	3,57E-04
Resource use, mineral and metals [kg Sb eq.]	1,71E-08	1,98E-08
Resource use, energy carriers [MJ]	3,57E+00	4,14E+00
Water deprivation potential [m ³ world equiv.]	3,16E-03	3,51E-03
Resource Use Indicators		
Use of renewable primary energy (PERE) [MJ]	2,60E-01	2,93E-01
Primary energy resources used as raw materials (PERM) [MJ]	0,00E+00	0,00E+00
Total use of renewable primary energy resources (PERT) [MJ]	2,60E-01	2,93E-01
Use of non-renewable primary energy (PENRE) [MJ]	3,58E+00	4,15E+00
Non-renewable primary energy resources used as raw materials (PENRM) [MJ] ²	0,00E+00	0,00E+00
Total use of non-renewable primary energy resources (PENRT) [MJ]	3,58E+00	4,15E+00
Input of secondary material (SM) [kg]	0,00E+00	0,00E+00
Use of renewable secondary fuels (RSF) [MJ]	0,00E+00	0,00E+00
Use of non-renewable secondary fuels (NRSF) [MJ]	0,00E+00	0,00E+00
Use of net fresh water (FW) [m ³]	2,84E-04	3,23E-04
Waste category & Output flows		
Hazardous waste disposed (HWD) [kg]	1,21E-11	1,54E-11
Non-hazardous waste disposed (NHWD) [kg]	5,24E-04	5,99E-04
Radioactive waste disposed (RWD) [kg]	6,74E-06	5,37E-06
Components for re-use (CRU) [kg]	0,00E+00	0,00E+00
Materials for Recycling (MFR) [kg]	0,00E+00	0,00E+00
Material for Energy Recovery (MER) [kg]	0,00E+00	0,00E+00
Exported electrical energy (EEE) [MJ]	0,00E+00	0,00E+00
Exported thermal energy (EET) [MJ]	0,00E+00	0,00E+00
Additional Indicator		
GWP-GHG / GWP-IOBC [kg CO ₂ eq.]	2,63E-01	3,05E-01

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
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ISO 21930:2017	Sustainability in building construction - Environmental declaration of building products
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NPCR Part A	NPCR for Construction products and services (version 2.0)
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