

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025 / ISO 21930

SWEDOOR INTERIOR CLASSIFIED DOORS

60MM DOORS GLAZED

JELD-WEN



EPD HUB, HUB-3357

Published on 23.05.2025, last updated on 23.05.2025, valid until 23.05.2030

GENERAL INFORMATION

MANUFACTURER

Manufacturer	JELD-WEN
Address	Fabrikgatan 38, 571 78 Forserum, Sweden
Contact details	EU_Sustainability@jeldwen.com
Website	www.jeld-wen.biz

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804+A2 & ISO 14025 / ISO 21930
PCR	EPD Hub Core PCR Version 1.1, 5 Dec 2023 EN 17213 Windows and doors
Sector	Construction product
Category of EPD	Third party verified EPD
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Aleksandra Andrejeva
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal verification <input checked="" type="checkbox"/> External verification
EPD verifier	Imane Uald Lamkaddam as an authorized verifier for EPD Hub

The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

PRODUCT

Product name	Swedoor interior classified 60mm doors – Glazed
Additional labels	Solid Core Door EI30/BD30/Rw35/35dB/RC1/Sa/S200 - PL Glazed; Solid Core Door EI60/BD60 /Sa/ S200 - NL Glazed
Product reference	
Place of production	Forserum, Sweden
Period for data	2021
Averaging in EPD	No averaging
Variation in GWP-fossil for A1-A3	0 %

ENVIRONMENTAL DATA SUMMARY

Declared unit	one square meter
Declared unit mass	34,2 kg
GWP-fossil, A1-A3 (kgCO₂e)	8,51E+01
GWP-total, A1-A3 (kgCO₂e)	3,69E+01
Secondary material, inputs (%)	17,8
Secondary material, outputs (%)	42,9
Total energy use, A1-A3 (kWh)	384
Total water use, A1-A3 (m³)	0,73

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Headquartered in Charlotte, N.C., USA, JELD-WEN is a leading global manufacturer of high-performance interior and exterior building products, offering one of the broadest selections of windows, interior and exterior doors, and wall systems. JELD-WEN delivers a differentiated customer experience, providing construction professionals with durable, energy-efficient products and labor-saving services that help them maximize productivity and create beautiful, secure spaces for all to enjoy. The JELD-WEN team is driven by innovation and committed to creating safe, sustainable environments for customers, associates, and local communities. The JELD-WEN family of brands includes JELD-WEN® worldwide; LaCantina™ and VPI™ in North America; Swedoor® and DANA® in Europe; and Corinthian®, Stegbar®, and Breezway® in Australia. Visit JELD-WEN.com for more information.

PRODUCT DESCRIPTION

Technical high-performance door with glass opening, available with fire and sound classifications of EI30 and Rw 35 dB. Doorleaf has wooden sandwich construction with a flaxboard core. Suitable for use in challenging environments, where either one or both fire and sound performance are needed, e.g. hospitals, schools and hotels or as apartment doors. When used as an apartment door, product can be equipped with the necessary special hardware, such as mailbox, doorbell, and spyhole. The specific technical standards and additional product information for each door design can be found on Swedoor website. The scope of this EPD is the finished glazed doorleaf with standard hardware and surface treatment. The

declared unit of one square meter of product are calculated with the reference module size of 10 X 21 (0,925 m x 2,040 m). The glass type follows the classification of the door with maximum opening size. For the results of the whole set, please add the EPDs of the frame set and other accompanying products of your choice, e.g. threshold and side- or toplights to your project.

Further information can be found at www.jeld-wen.biz.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Bio-based materials	34,85	EU
Fossil materials	4,5	EU
Metals	0,85	GLOBAL
Minerals	59,8	GLOBAL

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	13,04
Biogenic carbon content in packaging, kg C	0,18

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	one square meter
Mass per declared unit	34,2 kg

SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

PRODUCT LIFE-CYCLE

SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries		
A 1	A 2	A 3	A 4	A 5	B 1	B 2	B 3	B 4	B 5	B 6	B 7	C 1	C 2	C 3	C 4	D		
x	x	x	x	x	MND							x	x	x	x	x		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstr./demol.	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Modules not declared = MND. Modules not relevant = MNR.

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

The manufacturing process begins by gluing and pressing the doorleaf together. This is followed then by different milling phases, where the product components are made to meet the correct dimensions, as well as the holes for the hardware installations and

edge profiles, and the glazing hole are made. Next, the door undergoes the surface treatment. After the painting process, the door is ready for installing the glazing and hardware (lock & hinges). Lastly, before leaving the factory, the door is stacked onto pallets along other doors (max. 20 doors per pallet) and to shield the finished product during transportation phase, the stack is protected with packaging materials, including protective softboard between doors in the stack, then finishing the whole stack with cardboard and plastic packaging materials.

TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurred from final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

When considering this phase of the life-cycle, there is not only one place where the transportation from us would end, as our customers can have multiple locations between each other, thus causing variance to the transport distance and the needed vehicles. The travel distances used on the transportation data is then a theoretical value, a weighted average value for this product, which is calculated based on its previous transportation history. The assumed vehicle for the transportation is a lorry, with the vehicle capacity value of 1, meaning that the lorry is carrying a full load all around while transporting the goods, causing distortion to the results. However, when considering the overall results of the product life-cycle, the impact of the road variance among transportation can be considered negligible due having a low impact to the overall results. Empty returns are considered to be out of scope, as the transportation company is considered to be out of our use, when they are not having our goods on board, and serving their

other customers or routes. Material loss is not expected to take place during transportation phase due to sufficient protective packaging of our products. Upon installing the products, the packaging materials are removed, leading to generating packaging waste. As the final product is only installed, there is no material loss expected to happen during installing phase nor such construction practices that would lead to material loss are needed. The installing work consists of mounting and fastening, which can be done with hand tools. There is no extra materials needed to be used for the installing purposes. The energy consumption for installing is then considered to be zero, due to the small size of the consumption and the impact it has on this life-cycle stage.

PRODUCT USE AND MAINTENANCE (B1-B7)

This EPD does not cover the use phase. Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-C4, D)

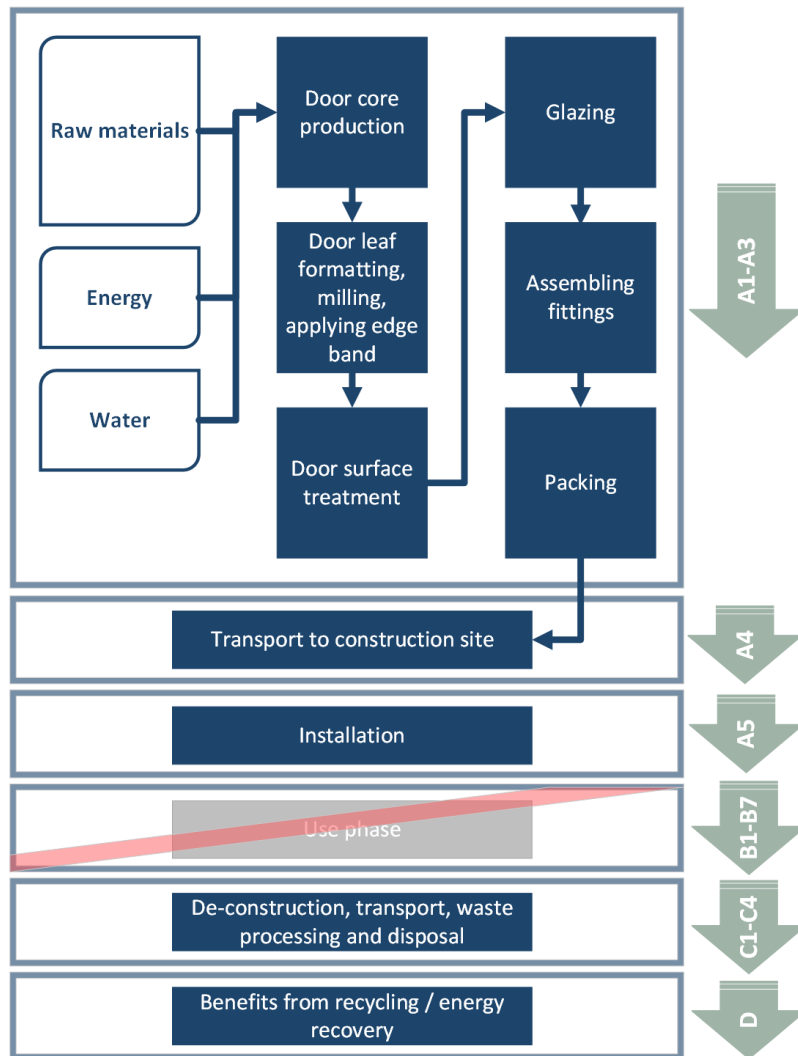
The energy and use of natural resources upon demolition process are considered negligible. Assumptions regarding the waste management are given regarding the sorting practices and transport distance. The waste collecting vehicle is assumed to a lorry and the waste is assumed to be part of the mixed construction waste- fraction. The travel distance of the lorry carrying the waste from the demolition site to the waste handling site is assumed to be 50 kilometres.

Upon arriving to the waste management plant, the recyclable material of the waste and/or the energy-recovery applicable materials are separated from the waste and diverted to correct use. Per the end of life scenario of timber windows and doorsets (EN17213 Annex B), the wood, metal, plastic, paint and glue are

sorted. Module C3 accounts for energy and resource inputs for sorting and treating these waste streams for recycling and incineration with energy recovery. Per the end of life scenario of timber windows and doorsets (EN17213 Annex B), 5% of wood, 5% of metal, 5% of plastic and 5% of paint and glue waste goes to landfill. Additionally, hazardous waste that is incinerated is included in Module C4 (not included in Module D for benefits outside of the system boundary).

As specific national data is not used for timber / wooden products, then according to the end of life scenario of timber windows and doorsets (EN17213 Annex B), 100% of sorted timber materials goes to incineration. The wooden pallet, wooden board, cardboard packaging and plastic packaging used during transportation are also incinerated for energy recovery or recycled. The benefits and loads of incineration and recycling are included in Module D. Plastic and steel parts hold potential for recycling and material recovery for secondary material production purposes, that reduce the need for virgin raw materials (D) The fibreboards and wooden content of the doorleaf have great heating value and are applicable for energy production upon used as a fuel in the incineration process (D), decreasing the demand for virgin fuel production and use.

MANUFACTURING PROCESS AND SYSTEM BOUNDARY



LIFE-CYCLE ASSESSMENT

CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	No allocation
Packaging materials	Allocated by mass or volume
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

AVERAGES AND VARIABILITY

Type of average	No averaging
Averaging method	Not applicable
Variation in GWP-fossil for A1-A3	0 %

This EPD is product and factory specific and does not contain average calculations.

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1 environmental data sources follow the methodology 'allocation, Cut-off, EN 15804+A2'.

ENVIRONMENTAL IMPACT DATA

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total ¹⁾	kg CO ₂ e	1,30E+01	1,47E+01	9,20E+00	3,69E+01	3,97E+00	8,87E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,86E-01	4,76E+01	6,84E+00	-2,46E+01
GWP – fossil	kg CO ₂ e	6,06E+01	1,47E+01	9,83E+00	8,51E+01	3,97E+00	3,00E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,86E-01	2,18E+00	4,45E+00	-1,13E+01
GWP – biogenic	kg CO ₂ e	-4,78E+01	6,37E-04	-6,52E-01	-4,85E+01	0,00E+00	8,57E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	4,54E+01	2,39E+00	-1,33E+01
GWP – LULUC	kg CO ₂ e	2,25E-01	5,19E-03	2,48E-02	2,55E-01	1,40E-03	1,14E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,02E-04	3,42E-04	8,41E-04	-1,47E-02
Ozone depletion pot.	kg CFC ₁₁ e	1,42E-05	2,92E-07	1,90E-07	1,47E-05	7,90E-08	3,78E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,71E-09	5,05E-09	3,41E-08	-8,40E-07
Acidification potential	mol H ⁺ e	2,91E-01	4,59E-02	2,42E-02	3,61E-01	1,24E-02	1,50E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,85E-04	1,34E-03	4,39E-03	-7,07E-02
EP-freshwater ²⁾	kg Pe	1,16E-02	9,73E-04	5,96E-04	1,32E-02	2,63E-04	5,48E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,90E-05	1,08E-04	7,05E-05	-1,95E-03
EP-marine	kg Ne	6,84E-02	1,55E-02	6,13E-03	9,00E-02	4,19E-03	7,32E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,96E-04	3,55E-04	1,29E-03	-1,84E-02
EP-terrestrial	mol Ne	7,84E-01	1,68E-01	6,22E-02	1,01E+00	4,55E-02	6,79E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,22E-03	3,69E-03	1,15E-02	-1,27E-01
POCP (“smog”) ³⁾	kg NMVOCe	2,19E-01	7,20E-02	3,20E-02	3,24E-01	1,95E-02	1,98E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,40E-03	1,31E-03	5,93E-03	-3,19E-02
ADP-minerals & metals ⁴⁾	kg Sbe	1,27E-04	4,78E-05	1,21E-05	1,87E-04	1,30E-05	8,94E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,07E-07	1,13E-06	2,25E-06	-1,23E-04
ADP-fossil resources	MJ	9,59E+02	2,06E+02	1,49E+02	1,31E+03	5,58E+01	2,81E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,05E+00	4,75E+00	2,37E+01	-1,21E+02
Water use ⁵⁾	m ³ e depr.	7,82E+01	1,01E+00	2,31E+00	8,16E+01	2,74E-01	2,26E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,00E-02	1,36E-01	9,47E-02	-4,30E+00

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO₄e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	1,30E-04	1,16E-06	2,40E-07	1,32E-04	3,12E-07	2,25E-09	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,36E-08	1,44E-08	6,55E-08	-6,38E-07
Ionizing radiation ⁶⁾	kBq U235e	2,08E+00	2,63E-01	1,82E+00	4,16E+00	7,11E-02	5,29E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,10E-03	5,67E-02	1,93E-02	-1,25E+00
Ecotoxicity (freshwater)	CTUe	1,10E+02	2,70E+01	1,33E+01	1,50E+02	7,32E+00	1,69E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,20E-01	3,35E+00	6,21E+00	-1,60E+02
Human toxicity, cancer	CTUh	6,31E-08	2,50E-09	3,78E-09	6,93E-08	6,77E-10	2,47E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,84E-11	1,27E-09	7,94E-09	-4,54E-09
Human tox. non-cancer	CTUh	4,63E-07	1,30E-07	6,94E-08	6,62E-07	3,50E-08	1,37E-09	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,56E-09	6,97E-09	1,49E-08	-1,34E-07
SQP ⁷⁾	-	2,67E+03	1,25E+02	8,10E+01	2,88E+03	3,32E+01	1,72E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,75E+00	2,21E+00	7,92E+00	-5,53E+01

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. 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; 7) SQP = Land use related impacts/soil quality.

USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. energy ⁸⁾ PER as	MJ	3,94E+02	3,56E+00	-2,77E+02	1,21E+02	9,64E-01	-9,99E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,91E-02	-4,45E-01	-9,85E+00	1,69E+02
Renew. material PER as	MJ	4,37E+02	0,00E+00	9,49E+00	4,47E+02	0,00E+00	-7,24E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-4,14E+02	-2,32E+01	0,00E+00
Total use of renew. PER	MJ	8,31E+02	3,56E+00	-2,67E+02	5,67E+02	9,64E-01	-1,72E+01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,91E-02	-4,14E+02	-3,30E+01	1,69E+02
Non-re. energy PER as	MJ	8,86E+02	2,06E+02	1,46E+02	1,24E+03	5,58E+01	-1,74E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,05E+00	-2,81E+01	-1,45E-01	-1,21E+02
Non-re. material PER as	MJ	7,99E+01	0,00E+00	3,09E+00	8,30E+01	0,00E+00	-2,39E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-6,66E+01	-1,33E+01	0,00E+00
Total use of non-re. PER	MJ	9,66E+02	2,06E+02	1,49E+02	1,32E+03	5,58E+01	-4,13E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,05E+00	-9,47E+01	-1,34E+01	-1,21E+02
Secondary materials	kg	6,09E+00	9,43E-02	8,19E-02	6,27E+00	2,55E-02	4,28E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,83E-03	2,21E-03	9,33E-03	-2,49E-01
Renew. secondary fuels	MJ	2,49E+01	1,19E-03	2,37E-01	2,51E+01	3,22E-04	2,91E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,31E-05	1,93E-05	3,71E-05	1,33E-02
Non-ren. secondary fuels	MJ	1,29E-02	0,00E+00	0,00E+00	1,29E-02	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m3	6,60E-01	2,78E-02	4,56E-02	7,33E-01	7,51E-03	1,93E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,55E-04	-1,73E-03	2,30E-03	-1,00E-01

8) PER = Primary energy resources.

END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	1,91E+00	2,96E-01	2,85E-01	2,49E+00	8,00E-02	5,00E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,81E-03	5,74E-02	8,69E-02	-1,04E+00
Non-hazardous waste	kg	7,94E+01	6,24E+00	2,91E+01	1,15E+02	1,69E+00	6,26E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,21E-01	7,59E+00	3,45E+00	-1,86E+01
Radioactive waste	kg	3,63E-02	6,53E-05	3,93E-04	3,67E-02	1,77E-05	1,33E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,27E-06	1,46E-05	4,84E-06	-4,46E-04

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	6,19E-01	0,00E+00	0,00E+00	6,19E-01	0,00E+00	4,75E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	6,44E+00	0,00E+00	0,00E+00
Materials for energy recovery	kg	2,70E-04	0,00E+00	1,75E+01	1,75E+01	0,00E+00	5,88E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	8,22E+00	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	7,77E+01	7,77E+01	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy – Electricity	MJ	0,00E+00	0,00E+00	1,17E+01	1,17E+01	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy – Heat	MJ	0,00E+00	0,00E+00	6,60E+01	6,60E+01	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO ₂ e	7,07E+01	1,46E+01	9,80E+00	9,51E+01	3,94E+00	2,98E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,84E-01	2,18E+00	4,47E+00	-1,11E+01
Ozone depletion Pot.	kg CFC ₁₁ e	7,77E-06	2,32E-07	1,51E-07	8,15E-06	6,29E-08	3,07E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,54E-09	4,08E-09	2,70E-08	-9,18E-07
Acidification	kg SO ₂ e	5,28E-01	3,49E-02	1,95E-02	5,82E-01	9,43E-03	1,08E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,74E-04	1,07E-03	3,53E-03	-5,88E-02
Eutrophication	kg PO ₄ ³ e	4,58E-01	8,87E-03	9,68E-03	4,76E-01	2,40E-03	3,61E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,71E-04	2,09E-04	6,07E-04	1,28E-03
POCP ("smog")	kg C ₂ H ₄ e	3,03E-02	3,33E-03	1,75E-03	3,54E-02	8,99E-04	9,24E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,43E-05	8,11E-05	3,06E-04	-2,59E-03
ADP-elements	kg Sbe	7,79E-04	4,67E-05	1,18E-05	8,38E-04	1,27E-05	8,41E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,86E-07	1,07E-06	2,07E-06	-1,23E-04
ADP-fossil	MJ	8,44E+02	2,02E+02	1,25E+02	1,17E+03	5,46E+01	2,72E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,96E+00	3,75E+00	2,33E+01	-1,09E+02

ENVIRONMENTAL IMPACTS – FRENCH NATIONAL COMPLEMENTS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
ADP-elements	kg Sbe	7,18E-05	4,67E-05	1,18E-05	1,30E-04	1,27E-05	8,41E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,86E-07	1,07E-06	2,07E-06	-1,23E-04
Hazardous waste disposed	kg	1,62E+00	2,96E-01	2,85E-01	2,20E+00	8,00E-02	5,00E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,81E-03	5,74E-02	8,69E-02	-9,86E-01
Non-haz. waste disposed	kg	7,35E+01	6,24E+00	2,91E+01	1,09E+02	1,69E+00	6,26E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,21E-01	7,59E+00	3,45E+00	-1,62E+01
Air pollution	m3	7,91E+03	2,72E+03	9,12E+02	1,15E+04	7,32E+02	5,50E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,52E+01	5,33E+01	1,33E+02	-2,22E+03
Water pollution	m3	2,15E+02	1,14E+02	7,78E+01	4,07E+02	3,09E+01	1,57E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,24E+00	3,28E+00	1,45E+01	2,81E-01

ENVIRONMENTAL IMPACTS – GWP-GHG - THE INTERNATIONAL EPD SYSTEM

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG ⁹⁾	kg CO ₂ e	6,08E+01	1,47E+01	9,85E+00	8,54E+01	3,97E+00	3,00E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,86E-01	2,18E+00	4,45E+00	-1,13E+01

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product as defined by IPCC AR 5 (IPCC 2013). In addition, the characterisation factors for the flows - CH₄ fossil, CH₄ biogenic and Dinitrogen monoxide - were updated in line with the guidance of IES PCR 1.2.5 Annex 1. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterization factor for biogenic CO₂ is set to zero.

SCENARIO DOCUMENTATION

MANUFACTURING ENERGY SCENARIO DOCUMENTATION

Scenario parameter	Value
Electricity data source and quality	Electricity, Sweden, medium voltage, Ecoinvent 3.10.1
Electricity CO2e / kWh	0,0254
District heating data source and quality	Heat production, light fuel oil, at industrial furnace 1MW, Ecoinvent 3.10.1
District heating CO2e / kWh	0,36

TRANSPORT SCENARIO DOCUMENTATION A4

Scenario parameter	Value
Specific transport CO2e emissions, kg CO2e / tkm	0,19
Average transport distance, km	552
Capacity utilization (including empty return) %	100
Bulk density of transported products	0
Volume capacity utilization factor	1

INSTALLATION SCENARIO DOCUMENTATION A5

Scenario information	Value
Ancillary materials for installation (specified by material) / kg or other units as appropriate	0
Water use / m³	0
Other resource use / kg	0
Quantitative description of energy type (regional mix) and consumption during the installation process / kWh or MJ	0
Waste materials on the building site before waste processing, generated by the product's installation (specified by type) / MJ	9,63
Output materials (specified by type) as result of waste processing at the building site e.g. collection for recycling, for energy recovery, disposal (specified by route) / kg	0,64
Direct emissions to ambient air, soil and water / kg	0

END OF LIFE SCENARIO DOCUMENTATION

Scenario information	Value
Collection process – kg collected separately	34,4
Collection process – kg collected with mixed waste	0
Recovery process – kg for re-use	0
Recovery process – kg for recycling	10,0
Recovery process – kg for energy recovery	9,3
Disposal (total) – kg for final deposition	15,1
Scenario assumptions e.g. transportation	As per EN17213 Annex B

VERIFICATION STATEMENT

VERIFICATION PROCESS FOR THIS EPD

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliancy with reference standard, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The digital background data for this EPD

Why does verification transparency matter? Read more online

This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried out, the presentation of environmental data in the EPD, and other additional environmental information, as present with respect to the procedural and methodological requirements in ISO 14025:2010 and reference standard.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

Imane Uald Lamkaddam as an authorized verifier for EPD Hub Limited
23.05.2025

