ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Edux Interior doors, 62 mm, unglazed

Edux Ovet Oy

EPD HUB, HUB-3952

Published on 11.09.2025, last updated on 11.09.2025, valid until 11.09.2030

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.1 (5 Dec 2023) and JRC characterization factors EF 3.1.

Created with One Click LCA

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Edux Ovet Oy
Address	Välikyläntie 541, 85500 Nivala, Finland
Contact details	myynti@edux.fi
Website	https://www.edux.fi

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804+A2:2019 and ISO 14025
PCR	EPD Hub Core PCR Version 1.1, 05 Dec 2023
Sector	Construction product
Category of EPD	Third party verified EPD
Scope of the EPD	Cradle to gate with modules C1-C4, D
EPD author	Jori Jokela, Macon Oy
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ External verification
EPD verifier	Imane Uald Lamkaddam as an authorized verifier for EPD Hub

This EPD is intended for business-to-business and/or business-to-consumer communication. 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	Edux Interior doors 62 mm unglazed
Place of production	Nivala, Finland
Period for data	Year 2023
Averaging in EPD	No grouping

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 m2 of the interior door 62 mm unglazed
Declared unit mass	37,6 kg
GWP-fossil, A1-A3 ($kgCO_2e$)	24,2
GWP-total, A1-A3 ($kgCO_2e$)	-6,9
Secondary material, inputs (%)	0,92
Secondary material, outputs (%)	89,8
Total energy use, A1-A3 (kWh)	274
Net freshwater use, A1-A3 (m^3)	0,56

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

We are a family-owned company founded in 1990 in Nivala, Finland. We manufacture interior and exterior doors for domestic and foreign markets. Our range is designed to cater for modern requirements, whether it is a case of a public building, a residential detached house, an apartment building or a holiday home. Our doors are also well-suited for renovations.

PRODUCT DESCRIPTION

This EPD represents an exterior door with a glass opening of low- energy structures. The energy efficiency of the insulation used in the door is 25 % better than standard insulation, and it is also an environmentally friendly choice. The surface treatment agents we use are class M1. In manufacturing, we prefer materials and solutions that support sustainable development and reduce the carbon footprint.

Our products are long-lasting and easy to maintain, which reduces the environmental impact during their life cycle. All our production processes are designed in such a way that they follow strict environmental protection principles. More information about the products https://www.edux.fi/.

Further information can be found at https://www.edux.fi.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	3,6	Finland
Minerals	-	-
Fossil materials	4,8	Finland
Bio-based materials	91,6	EU, Finland

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	6,5
Biogenic carbon content in packaging, kg C	1

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 m2 of the interior door 62 mm unglazed
Mass per declared unit	37,6 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		
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D		
x	x	x	MND	MND	MND	MND	MND	MND	MND	MND	MND	x	x	x	x	x		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/ demolition	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 environmental impacts of raw material supply (A1) include emissions generated when raw materials are taken from nature, transported to industrial units for processing and processed, along with waste handling from the various production processes. All major upstream processes are taken into consideration, including infrastructure. Loss of raw material and energy transmission losses are also taken into account. This stage includes all the aforementioned for the raw materials which end up in the final product (i.e. wood, steel, aluminum, adhesives, surface treatment and packaging) as well as the electricity and heat production which are consumed during manufacturing at the plant.

The use of green energy in manufacturing is demonstrated through contractual instruments (GOs, RECs, etc.), and its use is ensured throughout the validity period of this EPD.

TRANSPORT AND INSTALLATION (A4-A5)

This EPD does not cover the transportation impacts occurred from final products delivery to construction site (A4). In installation only packaging waste impacts are shown in Environmental Impact Data tables (A5). Installation materials and energy consumption were not taken into account because installation situations vary case by case and are not managed by Edux-ovet Oy. Wooden and plastic packing materials will be recycled as materials or used for energy recovery.

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)

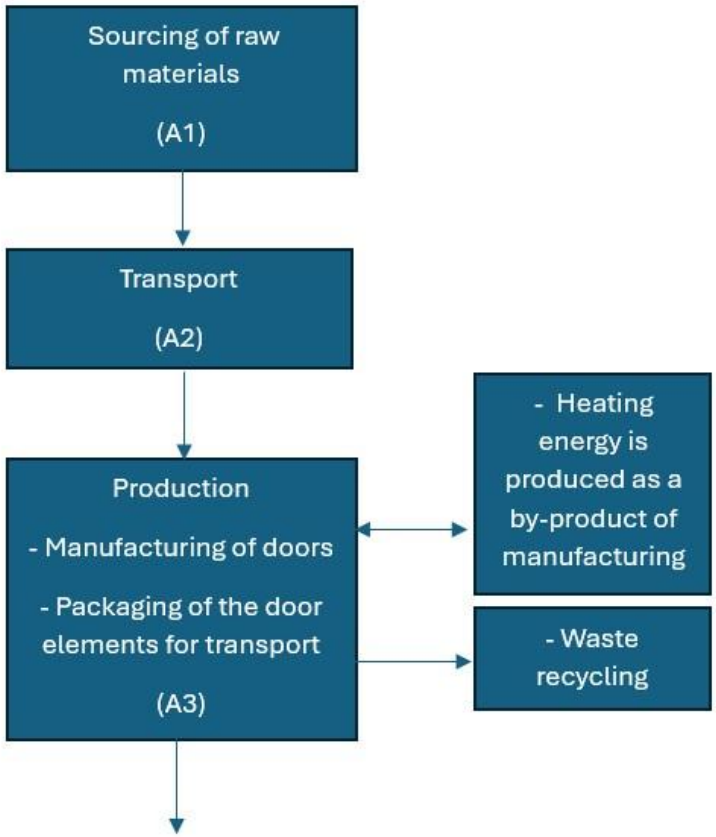
Demolition is assumed to have only small effects due to easy dismantling. It is conservatively assumed that energy consumption could be 0,01 kWh/kg. It is assumed that 100 % of the wooden products are collected (C1). Distance

for transportation to treatment is assumed as 50 to 250 km and the transportation method is assumed to be lorry (C2 Eurostat & BuildLCA 2020). 76 % of wooden parts are assumed to be recycled or chipped (C3). There is a 24 % conservative rate of rejects that is assumed to be sent to landfill (C4) (Eurostat & BuildLCA 2020). Later on, chipped wood is incinerated with energy recovery by utilizer of the chips (D). 60 % of copper-based metal alloys are recycled (C3), whereas 40 % are landfilled (Copper Alliance 2021). Metal parts are used to manufacture new materials containing recycled content (D).

Packaging components can be recycled as materials or utilized in energy production (plastic 77%, wood 62%) (Eurostat: https://ec.europa.eu/eurostat/web/main/home). Later on, reusable metals and packaging materials are utilized to manufacture new products or are utilized as energy (D).

MANUFACTURING PROCESS

In the procurement of materials, energy efficiency, recyclability, and the product's long service life have been taken into account. The environmental effects considered during production include the processing of raw materials, surface treatment, electricity, heating, and fuels. Wood chips produced during processing can be efficiently utilized as a by-product in our own heating plant. The production process starts with cutting the parts, after which they go to gluing and pressing. The blank is transferred to a CNC machining machine, where the necessary machining (such as for the lock and hinge) is performed. After machining, the door is surface-treated with M1 emission-classified material. During the assembly phase, the ordered fittings are installed on the door, and a final inspection is conducted. The door is packed on a pallet and protected with plastic. Packaging materials can be recycled.



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.

The production of capital equipment, construction activities, and infrastructure, maintenance and operation of capital equipment, personnel-related activities, energy and water use related to company management and sales activities are excluded.

VALIDATION OF DATA

Data collection for production, transport, and packaging was conducted using time and site-specific information, as defined in the general information section on page 1 and 2. Upstream process calculations rely on generic data as defined in the Bibliography section. Manufacturer-provided specific and generic data were used for the product's manufacturing stage. The analysis was performed in One Click LCA EPD Generator, with the 'Cut-Off, EN 15804+A2' allocation method, and characterization factors according to EN 15804:2012+A2:2019/AC2021 and JRC EF 3.1.

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 material	Allocated by mass or volume
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	No grouping
Grouping method	Not applicable

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, EF 3.1

Impact category	Unit	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
GWP – total[1)]	kg CO_2e	-1,08E+01	1,92E+00	1,99E+00	-6,90E+00	0,00E+00	4,23E-01	5,24E+01	8,05E+00	-1,12E+01
GWP – fossil	kg CO_2e	1,84E+01	1,92E+00	3,95E+00	2,42E+01	0,00E+00	4,23E-01	1,53E+01	7,20E-02	-5,60E+00
GWP – biogenic	kg CO_2e	-2,92E+01	2,23E-04	-1,99E+00	-3,12E+01	0,00E+00	3,07E-05	3,71E+01	7,98E+00	-5,62E+00
GWP – LULUC	kg CO_2e	3,94E-02	7,54E-04	3,02E-02	7,03E-02	0,00E+00	1,87E-04	6,64E-04	3,65E-05	-1,42E-02
Ozone depletion pot.	kg $CFC\text{-}_{11}e$	9,08E-07	3,97E-08	8,79E-08	1,04E-06	0,00E+00	6,37E-09	3,86E-08	1,48E-09	-9,25E-08
Acidification potential	mol H^+e	2,92E-01	4,74E-03	2,31E-02	3,19E-01	0,00E+00	1,43E-03	1,11E-02	4,04E-04	-3,32E-01
EP-freshwater[2)]	kg Pe	1,76E+00	1,35E-04	1,29E-03	1,76E+00	0,00E+00	3,26E-05	1,00E-03	4,09E-05	-2,69E-02
EP-marine	kg Ne	2,53E-02	1,25E-03	7,75E-03	3,43E-02	0,00E+00	4,72E-04	4,60E-03	1,76E-03	-1,83E-02
EP-terrestrial	mol Ne	2,96E-01	1,36E-02	7,11E-02	3,80E-01	0,00E+00	5,13E-03	4,19E-02	1,66E-03	-2,48E-01
POCP ("smog")[3)]	kg NMVOCe	1,06E-01	8,02E-03	2,69E-02	1,41E-01	0,00E+00	2,12E-03	1,31E-02	6,73E-04	-7,13E-02
ADP-minerals & metals[4)]	kg Sbe	1,88E-03	5,50E-06	3,13E-05	1,92E-03	0,00E+00	1,20E-06	5,59E-06	1,26E-07	-4,52E-03
ADP-fossil resources	MJ	2,93E+02	2,88E+01	4,13E+02	7,35E+02	0,00E+00	6,12E+00	3,01E+01	1,27E+00	-9,62E+01
Water use[5)]	m^3e depr.	1,95E+01	1,47E-01	5,40E+00	2,50E+01	0,00E+00	3,02E-02	1,71E+00	5,94E-03	-4,57E+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, EF 3.1

Impact category	Unit	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
Particulate matter	Incidence	2,93E-06	1,87E-07	9,19E-07	4,04E-06	0,00E+00	4,15E-08	1,15E-07	9,18E-09	-8,42E-07
Ionizing radiation[6]	kBq U235e	1,75E+00	3,44E-02	1,88E+01	2,06E+01	0,00E+00	5,47E-03	4,70E-02	1,22E-03	-1,39E+00
Ecotoxicity (freshwater)	CTUe	2,51E+02	3,42E+00	2,16E+01	2,75E+02	0,00E+00	8,65E-01	4,17E+01	6,09E-01	-4,62E+02
Human toxicity, cancer	CTUh	3,30E-07	3,21E-10	4,47E-09	3,35E-07	0,00E+00	7,01E-11	1,31E-08	1,74E-11	-3,46E-08
Human tox. non-cancer	CTUh	1,18E-06	1,86E-08	5,80E-08	1,25E-06	0,00E+00	3,95E-09	1,43E-07	1,44E-09	-3,39E-06
SQP[7]	-	2,41E+03	2,88E+01	4,99E+02	2,93E+03	0,00E+00	5,94E+00	6,81E+00	2,95E+00	-1,37E+02

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	C1	C2	C3	C4	D
Renew. PER as energy[8]	MJ	2,22E+02	4,66E-01	7,31E+01	2,96E+02	0,00E+00	8,52E-02	-3,28E+02	-7,91E+01	-4,66E-01
Renew. PER as material	MJ	2,50E+02	0,00E+00	1,72E+01	2,67E+02	0,00E+00	0,00E+00	-1,98E+02	-6,88E+01	4,31E+01
Total use of renew. PER	MJ	4,72E+02	4,66E-01	9,02E+01	5,63E+02	0,00E+00	8,52E-02	-5,26E+02	-1,48E+02	4,26E+01
Non-re. PER as energy	MJ	2,74E+02	2,88E+01	3,89E+02	6,91E+02	0,00E+00	6,12E+00	-1,26E+02	-3,56E+00	-9,62E+01
Non-re. PER as material	MJ	2,16E+01	0,00E+00	2,46E+01	4,62E+01	0,00E+00	0,00E+00	-3,48E+01	-1,14E+01	9,88E+00
Total use of non-re. PER	MJ	2,95E+02	2,88E+01	4,13E+02	7,37E+02	0,00E+00	6,12E+00	-1,61E+02	-1,50E+01	-8,63E+01
Secondary materials	kg	3,44E-01	1,25E-02	1,15E+00	1,51E+00	0,00E+00	2,62E-03	2,02E-02	4,52E-04	6,86E-01
Renew. secondary fuels	MJ	4,20E-02	1,57E-04	9,24E-01	9,66E-01	0,00E+00	3,33E-05	1,81E-04	8,52E-06	-1,11E-03
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	2,60E-03	2,60E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m^3	4,27E-01	4,25E-03	1,23E-01	5,55E-01	0,00E+00	8,97E-04	2,57E-02	-1,77E-02	-1,83E-01

8) PER = Primary energy resources.

END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
Hazardous waste	kg	2,82E+00	4,19E-02	3,62E-01	3,22E+00	0,00E+00	1,03E-02	1,25E+00	2,16E-03	-1,36E+00
Non-hazardous waste	kg	5,39E+01	8,37E-01	1,71E+01	7,18E+01	0,00E+00	1,92E-01	3,83E+01	2,39E+01	-9,18E+01
Radioactive waste	kg	7,52E-04	8,51E-06	4,47E-03	5,23E-03	0,00E+00	1,34E-06	1,19E-05	2,98E-07	-3,60E-04

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	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	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	2,28E-01	0,00E+00	3,68E-01	5,96E-01	0,00E+00	0,00E+00	5,88E+00	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,79E+01	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,69E+01	0,00E+00	0,00E+00
Exported energy – Electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,98E+01	0,00E+00	0,00E+00
Exported energy – Heat	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,72E+01	0,00E+00	0,00E+00

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
11.09.2025