ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

K-Doors (Non-Fire Rated Standard Doors)
Dortek

EPD HUB, HUB-3871
Publishing date 31 August 2025, last updated on 31 August 2025, valid until 30 August 2030.

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.2 (24 Mar 2025) and JRC characterization factors EF 3.1.

Created with One Click LCA

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Dortek
Address	N. Quay, Bond, St., Corporation Murragh, Co. Wicklow, Ireland.
Contact details	info@dortek.com
Website	https://dortek.com

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804:2012+A2:2019/AC:2021 and ISO 14025
PCR	EPD Hub Core PCR Version 1.2, 24 Mar 2025 EN 17213 Windows and doors
Sector	Manufactured product
Category of EPD	Third party verified EPD
Parent EPD number	-
Scope of the EPD	Cradle to gate with options, A5, and modules C1-C4, D
EPD author	Jack Guidera
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ External verification
EPD verifier	-

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	K-Doors (Non-Fire Rated Standard Doors)
Additional labels	-
Product reference	-
Place(s) of raw material origin	Ireland and Other European Countries.
Place of production	N. Quay, Bond, St., Corporation Murragh, Co. Wicklow, Ireland.
Place(s) of installation and use	Ireland and Other European Countries.
Period for data	01/01/2023 – 31/12/2023
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	-13% to 11%
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	37,3

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 m2 of finished door.
Declared unit mass	21,790 kg
GWP-fossil, A1-A3 ($kgCO_2e$)	1,06E+02
GWP-total, A1-A3 ($kgCO_2e$)	9,41E+01
Secondary material, inputs (%)	8,42
Secondary material, outputs (%)	22,9
Total energy use, A1-A3 (kWh)	512
Net freshwater use, A1-A3 (m^3)	0,86

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

At Dortek, we stick to what we do best and that's manufacturing innovative timber-free doors for controlled environments. For over 55 years we've specialised in providing access solutions to the world's leading pharmaceutical, health, food, retail and industrial companies across new build and refurbishment projects. Our dedication to excellence and craftmanship, and the expertise of our team, has made Dortek global leaders in cutting edge access solutions. We understand air flows, workflows, contaminants and local regulations – we really do know what works and what doesn't.

PRODUCT DESCRIPTION

Our range of GRP doors are manufactured from glass reinforced polyester and contain no organic material. With a smooth and seamless construction, Dortek doors have no ledges, lips, joins or seams where dust or bacteria can be trapped and grow. Our doors are completely water and chemical resistant which makes them ideal for areas with regular and rigorous cleaning regimes. Dortek Hygienic GRP doors are non-shedding and will not warp, swell, rot or rust, even in the most arduous conditions, whilst the built-in colour of our doors is aesthetically pleasing and requires no maintenance. Further information can be found at www.dortek.com.

TECHNICAL CHARACTERISTICS

As part of this study, 3 individual products with similar functions were assessed. The identifying codes of each product and their % allocation in the study is also listed in the table below. Lastly, the average size of each product generated in the study year is also listed.

Product Code	% Allocation in EPD	Average Dimensions
K-Door	13.08	929mm x 2287mm
K-Door (X-Ray)	4.92	904mm x 2076mm
K-Door - W	82	929mm x 2287mm

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	17	Europe
Minerals	83	Europe
Fossil materials	-	-
Bio-based materials	-	-

BIOGENIC CARBON CONTENT

Product’s biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	-
Biogenic carbon content in packaging, kg C	3,8

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 m2 of finished door.
Mass per declared unit	21,790 kg
Functional unit	-
Reference service life	-

SUBSTANCES, REACH - VERY HIGH CONCERN

Substances of very high concern	EC	CAS
Isopropylidenediphenol	201-245-8	80-05-7

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	x	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 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 of doors involves several key steps to ensure quality and durability. It begins with selecting the right materials, such as wood, metal, or composite. The chosen material is then cut and shaped into the desired door size and style.

Next, the door undergoes assembly, where components like panels, frames, and hardware are fitted together. Precision is crucial at this stage to ensure proper alignment and functionality. After assembly, the door is sanded and finished, which may include painting, staining, or applying a protective coating. This step enhances the door's appearance and provides protection against wear and tear. Finally, quality checks are conducted to ensure the door meets industry standards before it is packaged and shipped to customers.

All doors are packaged with high quality materials to ensure protection throughout the transportation process. The number of doors ordered will determine if wooden pallets or crates are used. Each door is also individually wrapped with packaging film and polystyrene to ensure the products are protected. It is assumed that the wooden pallets and polystyrene are incinerated at the end of life, with the heat and electricity generated collected and sent back to the grid for use. The polyethylene is recycled for future reuse. All of this is carried out at the nearest waste-sorting facility, which is approximately 50km away.

TRANSPORT AND INSTALLATION (A4-A5)

The transport phase was not declared within the scope of the EPD study. However, the installation phase was included to accurately represent the packaging materials used during this phase. It is estimated that these materials are transported 50km to the nearest treatment facility for recycling or incineration, where appropriate.

PRODUCT USE AND MAINTENANCE (B1-B7)

The product use and maintenance phase were not declared within the scope of the EPD study. Air, soil, and water impacts during the use phase have not been studied.

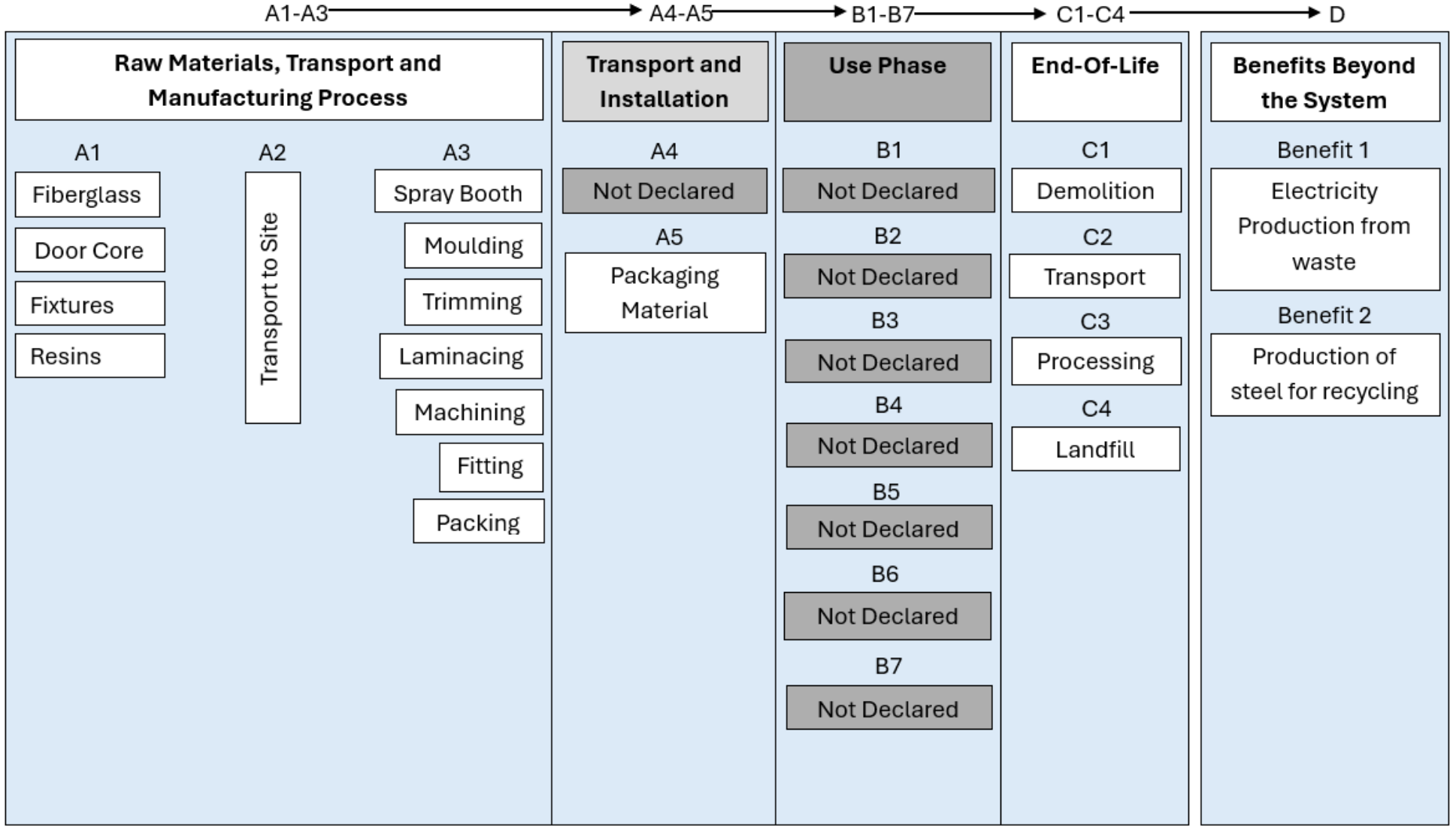
PRODUCT END OF LIFE (C1-C4, D)

At the end of its life, doors are removed carefully from the doorframe manually. They are then transported to the nearest waste processing facility by truck, which in this case is approximately 50km away. Next, the door is dismantled, and materials such as wood, metal, and glass are separated for recycling or disposal. Any hazardous materials, like certain fire-resistant coatings, are handled according to environmental and safety guidelines. Finally, the components are either recycled or disposed of in an environmentally responsible manner, ensuring minimal impact on the environment. This process helps maintain safety standards and supports sustainability efforts.

The D module benefits and loads are also included in this study. For the K-Doors, these primarily consist of the recyclable steel used in the fittings. However, since approximately 80% of this steel was already recycled, only the benefits of the virgin materials were included in this section. The heat and electricity generated from the packaging materials have also been included here.

The proper waste disposal of these materials is a core element of Dortek's commitment to environmental sustainability. After the steel is removed, it is reused. Also, some of the packing materials are burned in an incinerator and are converted into heat and electricity.

MANUFACTURING PROCESS



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 that is 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/AC:2021 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.

The averaging of this EPD was calculated in accordance with all relevant rules indicated within the PCR. Five separate products were included in this process, and their influence on the results was determined by their percentage of total mass produced in the study year. The study is also specific to the site of production named in this EPD.

In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	Allocated by mass or volume
Packaging material	Allocated by mass or volume
Ancillary materials	Not applicable
Manufacturing energy and waste	Allocated by mass or volume

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	Multiple products
Grouping method	Based on average results of product group - by total mass
Variation in GWP-fossil for A1-A3, %	-13% to 11%

LIMITATIONS OF THE STUDY

Since this EPD was generated by averaging of multiple products, there are some associated restrictions that interested parties should be aware of. Firstly, this EPD study is specific to the site. This means that the results are not representative of other sites, even if that site produces similar K-Door products.

Secondly, the background calculations required as part of the study, were completed by allocating the number of resources required in each stage of production, as well also any usage outside of the scope of the study. In any instance where accurate figures were not possible, the principle of conservative values were implemented. This was done to maintain the integrity of the results outlined in the Environmental Impact Data.

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

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.

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

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_2e	6,89E+01	9,45E-01	2,35E+01	9,34E+01	MND	2,50E+01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,07E-01	8,59E-02	1,68E-01	-1,27E+01
GWP – fossil	kg CO_2e	6,88E+01	9,45E-01	3,66E+01	1,06E+02	MND	8,26E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,07E-01	6,34E-02	1,68E-01	-1,27E+01
GWP – biogenic	kg CO_2e	1,13E-01	1,66E-04	-1,31E+01	-1,30E+01	MND	2,42E+01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,15E-05	2,23E-02	-2,77E-04	-2,40E-02
GWP – LULUC	kg CO_2e	5,91E-02	3,57E-04	3,28E-02	9,23E-02	MND	8,07E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,41E-05	1,10E-04	4,63E-05	-6,98E-03
Ozone depletion pot.	kg $CFC\text{-}_{11}$e	4,22E-06	1,82E-08	1,72E-06	5,96E-06	MND	2,99E-09	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,11E-09	6,91E-10	5,27E-09	-4,22E-07
Acidification potential	mol H^+e	4,00E-01	4,70E-03	1,07E-01	5,12E-01	MND	1,50E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,30E-04	3,28E-04	1,85E-03	-4,77E-02
EP-freshwater[2)]	kg Pe	1,41E-02	6,00E-05	2,30E-03	1,65E-02	MND	6,02E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,39E-05	2,56E-05	2,82E-04	-1,13E-03
EP-marine	kg Ne	8,02E-02	1,16E-03	3,46E-02	1,16E-01	MND	7,56E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,03E-04	1,20E-04	4,62E-04	-8,36E-03
EP-terrestrial	mol Ne	7,66E-01	1,27E-02	3,77E-01	1,16E+00	MND	7,15E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,11E-03	9,63E-04	4,96E-03	-9,75E-02
POCP ("smog")[3)]	kg NMVOCe	3,25E-01	5,13E-03	1,42E-01	4,72E-01	MND	1,96E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,15E-04	3,09E-04	1,82E-03	-3,48E-02
ADP-minerals & metals[4)]	kg Sbe	1,58E-03	2,91E-06	5,79E-05	1,64E-03	MND	6,34E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,88E-07	6,58E-07	3,30E-07	-3,73E-05
ADP-fossil resources	MJ	1,15E+03	1,31E+01	5,85E+02	1,75E+03	MND	2,26E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,91E+00	7,19E-01	3,91E+00	-1,78E+02
Water use[5)]	m^3e depr.	2,78E+01	6,25E-02	3,81E+00	3,16E+01	MND	2,68E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,44E-02	1,12E-02	2,37E-02	-1,50E+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	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	4,35E-06	6,52E-08	1,62E-06	6,03E-06	MND	2,04E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,52E-08	5,60E-09	2,82E-08	-5,83E-07
Ionizing radiation[6]	kBq U235e	4,50E+00	1,59E-02	1,26E+00	5,78E+00	MND	3,54E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,75E-03	4,52E-03	5,22E-03	-3,43E-01
Ecotoxicity (freshwater)	CTUe	1,71E+03	1,67E+00	8,04E+01	1,79E+03	MND	4,12E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,87E-01	6,04E-01	2,61E+00	-3,69E+01
Human toxicity, cancer	CTUh	2,61E-07	1,63E-10	1,67E-08	2,78E-07	MND	2,83E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,47E-11	4,29E-11	7,24E-11	-2,62E-09
Human tox. non-cancer	CTUh	2,53E-06	7,81E-09	1,19E-07	2,66E-06	MND	1,71E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,84E-09	1,26E-09	4,66E-09	-5,97E-08
SQP[7]	-	2,08E+02	7,27E+00	1,11E+03	1,32E+03	MND	1,15E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,76E+00	1,69E+00	9,60E+00	-4,74E+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. PER as energy[8]	MJ	7,74E+01	2,17E-01	1,70E+02	2,48E+02	MND	-1,27E+02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,09E-02	6,53E-02	8,23E-02	-2,01E+01
Renew. PER as material	MJ	0,00E+00	0,00E+00	1,15E+02	1,15E+02	MND	-1,15E+02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of renew. PER	MJ	7,74E+01	2,17E-01	2,85E+02	3,63E+02	MND	-2,42E+02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,09E-02	6,53E-02	8,23E-02	-2,01E+01
Non-re. PER as energy	MJ	1,01E+03	1,31E+01	5,66E+02	1,59E+03	MND	-1,29E+01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,91E+00	7,19E-01	3,91E+00	-1,78E+02
Non-re. PER as material	MJ	0,00E+00	0,00E+00	1,85E+01	1,85E+01	MND	-1,85E+01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of non-re. PER	MJ	1,01E+03	1,31E+01	5,85E+02	1,61E+03	MND	-3,13E+01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,91E+00	7,19E-01	3,91E+00	-1,78E+02
Secondary materials	kg	1,83E+00	6,10E-03	5,67E-01	2,41E+00	MND	3,70E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,35E-03	6,09E-04	1,30E-03	-3,32E-02
Renew. secondary fuels	MJ	2,26E-02	7,10E-05	3,88E+00	3,90E+00	MND	1,83E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,71E-05	3,52E-05	2,35E-05	-2,66E-02
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	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	m^3	5,11E-01	1,70E-03	3,49E-01	8,61E-01	MND	1,90E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,96E-04	-1,49E-03	-4,73E-02	-3,93E-02

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	1,11E+01	1,89E-02	7,62E-01	1,18E+01	MND	5,81E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,22E-03	4,80E-03	6,60E-03	-2,95E-01
Non-hazardous waste	kg	1,23E+02	3,86E-01	1,74E+01	1,41E+02	MND	8,03E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,91E-02	2,50E+00	6,00E+01	-9,19E+00
Radioactive waste	kg	1,50E-03	3,94E-06	2,70E-04	1,77E-03	MND	8,88E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,31E-07	1,14E-06	1,28E-06	-8,18E-05

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	MND	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	2,14E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	5,00E+00	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	7,72E+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	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	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	0,00E+00	0,00E+00	MND	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	0,00E+00	0,00E+00	MND	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

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_2e	6,85E+01	9,39E-01	3,66E+01	1,06E+02	MND	8,24E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,05E-01	8,12E-02	1,67E-01	-1,26E+01
Ozone depletion Pot.	kg $CFC_{-11}e$	4,96E-06	1,45E-08	1,40E-06	6,38E-06	MND	2,43E-09	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,27E-09	5,62E-10	4,19E-09	-3,45E-07
Acidification	kg SO_2e	3,30E-01	3,76E-03	8,26E-02	4,16E-01	MND	1,07E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,45E-04	2,57E-04	1,49E-03	-3,92E-02
Eutrophication	kg PO_4^3e	2,36E-01	6,15E-04	1,19E-01	3,56E-01	MND	3,87E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,72E-05	7,97E-05	3,96E-04	-6,95E-03
POCP (“smog”)	kg C_2H_4e	4,73E-02	2,66E-04	8,85E-03	5,64E-02	MND	8,86E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,65E-05	2,33E-05	9,66E-05	-2,66E-03
ADP-elements	kg Sbe	1,51E-03	2,84E-06	5,52E-05	1,57E-03	MND	5,82E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,72E-07	6,53E-07	3,20E-07	-2,91E-05
ADP-fossil	MJ	1,08E+03	1,28E+01	5,52E+02	1,65E+03	MND	2,20E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,84E+00	6,43E-01	3,82E+00	-1,70E+02

ENVIRONMENTAL IMPACTS – GWP-GHG

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_2e	6,88E+01	9,45E-01	3,66E+01	1,06E+02	MND	8,26E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,07E-01	6,35E-02	1,68E-01	-1,27E+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	Market for electricity, medium voltage (Reference product: electricity, medium voltage)
Electricity CO2e / kWh	0,33
District heating data source and quality	Market for heat, district or industrial, natural gas (Reference product: heat, district or industrial, natural gas)
District heating CO2e / kWh	0,0563

Installation scenario documentation A5

Scenario information	Value
Ancillary materials for installation (specified by material) / kg or other units as appropriate	N/A
Water use / m^3	N/A
Other resource use / kg	N/A
Quantitative description of energy type (regional mix) and consumption during the installation process / kWh or MJ	N/A
Waste materials on the building site before waste processing, generated by the product's installation (specified by type) / kg	N/A
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	Wooden Pallets: 7.531kg/m2 (For energy Recovery) Polyethylene: 0.214kg/m2 (For Recycling) Polystyrene: 0.188kg/m2 (For energy Recovery)
Direct emissions to ambient air, soil and water / kg	N/A

End of life scenario documentation

Scenario information	Value
Collection process – kg collected separately	29.73
Collection process – kg collected with mixed waste	-
Recovery process – kg for re-use	
Recovery process – kg for recycling	5.21
Recovery process – kg for energy recovery	7.73
Disposal (total) – kg for final deposition	16.79
Scenario assumptions e.g. transportation	Market for transport, freight, lorry 16-32 metric ton, EURO6 (Reference product: transport, freight, lorry 16-32 metric ton, EURO6)

THIRD-PARTY VERIFICATION STATEMENT

EPD Hub declares that this EPD is verified in accordance with ISO 14025 by an independent, third-party verifier. The project report on the Life Cycle Assessment and the report(s) on features of environmental relevance are filed at EPD Hub. EPD Hub PCR and ECO Platform verification checklist are used.

EPD Hub is not able to identify any unjustified deviations from the PCR and EN 15802+A2 in the Environmental Product Declaration and its project report.

EPD Hub maintains its independence as a third-party body; it was not involved in the execution of the LCA or in the development of the declaration and has no conflicts of interest regarding this verification.

The company-specific data and upstream and downstream data have been examined as regards plausibility and consistency. The publisher is responsible for ensuring the factual integrity and legal compliance of this declaration.

The software used in creation of this LCA and EPD is verified by EPD Hub to conform to the procedural and methodological requirements outlined in ISO 14025:2010, ISO 14040/14044, EN 15804+A2, and EPD Hub Core Product Category Rules and General Program Instructions.

Verified tools

Tool verifier: Magaly Gonzalez Vazquez
Tool verification validity: 27 March 2025 - 26 March 2028

Magaly González Vázquez, as an authorized verifier acting for EPD Hub Limited
31.08.2025