

Owner: Dansk Polyglas A/S
No.: MD-26022-EN
Issued: 04-03-2026
Valid to: 04-03-2031

3rd PARTY VERIFIED

EPD

VERIFIED ENVIRONMENTAL PRODUCT DECLARATION | ISO 14025 & EN 15804



Owner of declaration

Dansk Polyglas A/S
 Industrivej 12, 5672 Broby
 VAT no. 21802042
<https://polyglas.dk/>



Issued:
04-03-2026

Valid to:
04-03-2031

Programme

EPD Danmark
www.epddanmark.dk



- | | |
|---|---|
| <input type="checkbox"/> Industry EPD | <input type="checkbox"/> Product specific |
| <input checked="" type="checkbox"/> Product EPD | <input type="checkbox"/> Average |
| | <input type="checkbox"/> Worst Case |

Declared product(s)

Composite Fire Door H120

Number of declared datasets/product variations: 1

Production site

Industrivej 12, 5672 Broby, Denmark

Use of Guarantees of Origin

- No certificates used
- Electricity covered by GoO
- Biogas covered by GoO

Declared/ functional unit

1m²

Year of production site data (A3)

2025

EPD version

Version 1.0. Prospective EPD with 1 year validity

Basis of calculation

This EPD is developed and verified in accordance with the European standard EN 15804+A2.

Comparability

EPDs of construction products may not be comparable if they do not comply with the requirements in EN 15804. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database.

Validity

This EPD has been verified in accordance with ISO 14025 and is valid for 5 years from the date of issue.

Use

The intended use of an EPD is to communicate scientifically based environmental information for construction products, for the purpose of assessing the environmental performance of buildings.

EPD type

- Cradle-to-gate with modules C1-C4 and D
- Cradle-to-gate with options, modules C1-C4 and D
- Cradle-to-grave and module D
- Cradle-to-gate
- Cradle-to-gate with options

CEN standard EN 15804 serves as the core PCR
Independent verification of the declaration and data, according to EN ISO 14025
<input type="checkbox"/> internal <input checked="" type="checkbox"/> external
Third party verifier:  Mie Ostenfeldt Ostenfeldt Consulting


 Martha Katrine Sørensen
 EPD Danmark

Life cycle stages and modules (ND = module not declared)

Product			Construction process		Use								End of life				Beyond the system boundary
Raw material supply	Transport	Manufacturing	Transport	Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Re-use, recovery and recycling potential	
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X	

Product information

Product description

The Composite Fire Door H120 is a high-performance fire-rated door manufactured from glass-reinforced plastic (GRP) with a phenolic resin matrix and fire-resistant core. The product is designed to meet stringent requirements for fire resistance, mechanical strength, and durability in demanding environments.

The main product components are shown in the table below.

Material	Weight-% of declared product
Resin (phenolic)	30-50%
Glass fiber	20-30%
Core material (mineral wool)	10-20%
Seal (EPDM)	>5%
Paint	>5%
Fasteners (stainless steel)	10-20%
Sum	100%

Product packaging:

The composition of the sales- and transport packaging of the product is shown in the table below.

Material	Weight of packaging material (kg)	Weight-% of packaging
Shrink film	0,37	13%
EUR-pallet	0,64	22%
Cardboard	1,85	65%
Total	2,86	100

Representativity

This declaration, including data collection and the modeled foreground system including results, represents the production of the declared product on the production site located in Broby, Denmark. Product specific data are based on average values collected in the period 2025. Background data are based on Ecoinvent 3.11 and are less than 10 years old. Generally, the used background datasets are of high quality, and the majority of the datasets are only a couple of years old.

Hazardous substances

The declared product does not contain substances listed on the "Candidate List of Substances of Very High Concern for authorisation"

(<http://echa.europa.eu/candidate-list-table>)

Product use

The door is primarily used in marine, offshore, energy, and industrial installations where H120 fire class, low smoke emission, and resistance to corrosion, moisture, and chemical exposure are required. Typical applications include technical rooms, battery rooms, access routes, safety compartments, and escape routes

Essential characteristics

Technical information can be obtained by contacting Dansk Polyglas A/S directly or by visiting their website:

<https://polyglas.dk/>

Reference Service Life (RSL)

The reference is declared as 30 years.

Picture of product(s)



LCA background

Declared unit

The LCI and LCIA results in this EPD relate to 1m² declared product.

Name	Value	Unit
Declared unit	1	1m ²

Functional unit

Not defined

Material properties

The table below presents the material properties of the declared product

Name	Value	Unit
Area of door	2,16	m ²
Weight of door	207,5	kg

PCR

This EPD is developed according to the core rules for the product category of construction products in EN 15804:2012+A2:2019, and DS/EN 17213:2020 Windows and doors – Environmental Product Declarations – Product

category rules for windows and pedestrian doorsets.

Energy modelling principles

Foreground system:

The product is produced using residual mix, and natural gas in production.

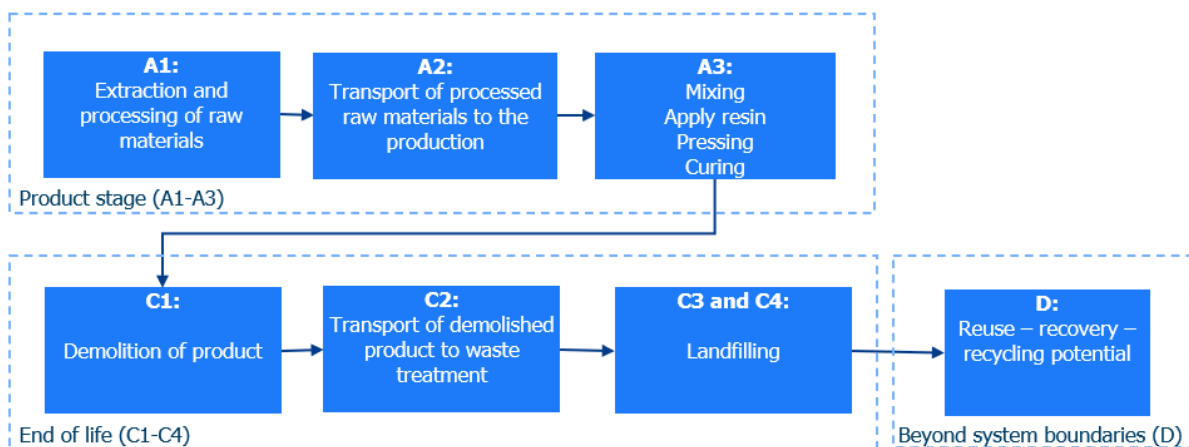
Information about the energy mix in the foreground system:

Energy mix	EF	Unit
Residual grid mix	0,72	kg CO _{2e} /kWh
Natural gas	0,07	kg CO _{2e} /MJ

Background system:

Upstream and downstream processes are modeled with the electricity sources on which the used dataset is based. This will most often be the national average electricity mix.

Flowdiagram



System boundary

This EPD is based on a cradle-to-gate LCA, in which 100 weight-% has been accounted for.

The general rules for the exclusion of inputs and outputs follows the requirements in EN 15804, 6.3.5, where the total of neglected input flows per module shall be a maximum of 5 % of energy usage and mass and 1 % of energy usage and mass for unit processes.

Product stage (A1-A3) includes:

A1 – Extraction and processing of raw materials

A2 – Transport to the production site

A3 – Manufacturing processes

The product stage comprises the acquisition of all raw materials, products and energy, transport to the production site, packaging and waste processing up to the “end-of-waste” state or final disposal. The production process is based on manual composite manufacturing combined with pressing and curing. Phenolic resin is prepared and mixed in liquid form before being applied to the glass fibre reinforcement to ensure full impregnation. The impregnated layers are then manually arranged together with the core material and other components using a hand lay-up process. The assembled structure is pressed to achieve the required thickness and structural integrity.

Following pressing, the composite is cured to enable polymerization of the resin and to obtain the necessary mechanical strength and fire-resistant properties. After curing, mineral wool is manually installed. The final assembly includes mounting EPDM sealing components and stainless-steel fasteners. The finished door is subsequently prepared and packaged for transport.

End of Life (C1-C4) includes:

The de-construction of the product is assumed to be carried out using a diesel-powered forklift. 100 km ship transport and 100km truck transport is assumed from the demolition site (offshore) to waste treatment.

Waste treatment includes crushing of the product and landfilling.

Re-use, recovery and recycling potential (D) includes:

No recovery and recycling potentials have been modelled in this study.

LCA results

ENVIRONMENTAL IMPACTS PER 1 m ² Composite Fire Door H120										
Parameter	Unit	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	3,08E+02	1,40E+00	3,28E+01	3,42E+02	2,70E+00	1,91E+00	5,03E-02	8,71E-01	0,00E+00
GWP-fossil	[kg CO ₂ eq.]	3,07E+02	1,40E+00	3,08E+01	3,39E+02	2,70E+00	1,90E+00	5,03E-02	8,67E-01	0,00E+00
GWP-biogenic	[kg CO ₂ eq.]	-3,83E-01	9,73E-04	3,40E+00	3,02E+00	5,47E-04	1,41E-03	1,02E-05	3,61E-03	0,00E+00
GWP-luluc	[kg CO ₂ eq.]	1,84E+00	4,71E-04	2,00E-02	1,86E+00	2,76E-04	6,59E-04	5,15E-06	2,57E-04	0,00E+00
ODP	[kg CFC 11 eq.]	2,80E-06	7,36E-10	1,42E-08	2,81E-06	8,53E-10	9,67E-10	1,59E-11	6,24E-10	0,00E+00
AP	[mol H ⁺ eq.]	1,66E+00	3,00E-03	8,50E-02	1,75E+00	2,42E-02	6,51E-03	4,50E-04	9,24E-03	0,00E+00
EP-freshwater	[kg P eq.]	1,31E-01	9,71E-05	1,31E-02	1,44E-01	8,71E-05	1,35E-04	1,62E-06	1,29E-03	0,00E+00
EP-marine	[kg N eq.]	2,90E-01	7,24E-04	3,13E-02	3,22E-01	1,12E-02	1,47E-03	2,09E-04	2,42E-03	0,00E+00
EP-terrestrial	[mol N eq.]	3,03E+00	7,81E-03	2,21E-01	3,26E+00	1,23E-01	1,60E-02	2,29E-03	2,61E-02	0,00E+00
POCP	[kg NMVOC eq.]	1,31E+00	4,77E-03	6,66E-02	1,38E+00	3,68E-02	7,80E-03	6,86E-04	9,46E-03	0,00E+00
ADPm ¹	[kg Sb eq.]	9,57E-03	4,80E-06	5,16E-05	9,63E-03	9,64E-07	6,20E-06	1,80E-08	1,43E-06	0,00E+00
ADPf ¹	[MJ]	1,39E+03	1,59E+00	2,01E+02	1,60E+03	1,37E+00	2,24E+00	2,55E-02	1,27E+00	0,00E+00
WDP ¹	[m ³ world eq. deprived]	7,94E+01	7,81E-02	2,78E+00	8,23E+01	7,51E-02	1,04E-01	1,40E-03	-9,62E+00	0,00E+00
Caption	<p>GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential</p> <p>The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.</p>									
Disclaimer	<p>¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.</p>									

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 m ² Composite Fire Door H120										
Parameter	Unit	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	1,57E-05	1,05E-07	3,95E-07	1,62E-05	6,90E-07	1,38E-07	1,28E-08	1,47E-07	0,00E+00
IRP ²	[kBq U235 eq.]	2,57E+01	2,40E-02	2,57E+00	2,83E+01	1,50E-02	3,44E-02	2,79E-04	2,40E-02	0,00E+00
ETP-fw ¹	[CTUe]	3,60E+03	2,67E+00	7,42E+01	3,68E+03	1,91E+00	3,52E+00	3,55E-02	1,09E+01	0,00E+00
HTP-c ¹	[CTUh]	5,63E-07	2,34E-10	5,10E-09	5,68E-07	2,75E-10	3,19E-10	5,12E-12	3,21E-10	0,00E+00
HTP-nc ¹	[CTUh]	5,71E-06	1,25E-08	2,05E-07	5,93E-06	4,32E-09	1,63E-08	8,05E-11	1,92E-08	0,00E+00
SQP ¹	-	1,29E+03	1,19E+01	1,96E+02	1,50E+03	2,34E+00	1,54E+01	4,35E-02	4,93E+01	0,00E+00
Caption	<p>PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)</p> <p>The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.</p>									
Disclaimers	<p>¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.</p> <p>² This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.</p>									

RESOURCE USE PER 1 m ² Composite Fire Door H120										
Parameter	Unit	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	3,56E+02	2,57E-01	6,30E+00	3,63E+02	1,82E-01	3,66E-01	3,38E-03	2,88E-01	0,00E+00
PERM	[MJ]	1,14E+02	7,16E-02	3,22E+01	1,47E+02	4,01E-02	9,75E-02	7,47E-04	7,87E-02	0,00E+00
PERT	[MJ]	4,71E+02	3,29E-01	3,85E+01	5,09E+02	2,22E-01	4,64E-01	4,13E-03	3,67E-01	0,00E+00
PENRE	[MJ]	1,09E+03	9,04E-01	1,39E+02	1,23E+03	2,10E-01	1,81E+00	2,12E-02	8,48E-01	0,00E+00
PENRM	[MJ]	3,07E+02	6,82E-01	6,23E+01	3,70E+02	4,27E-01	2,23E-01	4,34E-03	4,18E-01	0,00E+00
PENRT	[MJ]	1,39E+03	1,59E+00	2,01E+02	1,60E+03	1,37E+00	2,24E+00	2,55E-02	1,27E+00	0,00E+00
SM	[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
RSF	[MJ]	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
NRSF	[MJ]	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
FW	[m ³]	2,35E+00	2,50E-03	2,75E-02	2,38E+00	2,46E-03	3,36E-03	4,59E-05	-2,07E-01	0,00E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water									
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.									

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 m ² Composite Fire Door H120										
Parameter	Unit	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	5,61E-02	1,36E-04	2,11E-03	5,83E-02	2,45E-04	1,80E-04	4,56E-06	1,38E-04	0,00E+00
NHWD	[kg]	3,31E+01	9,69E-01	1,12E+00	3,52E+01	2,37E-02	1,24E+00	4,42E-04	9,62E+01	0,00E+00
RWD	[kg]	6,54E-03	5,92E-06	6,54E-04	7,20E-03	3,68E-06	8,51E-06	6,86E-08	5,78E-06	0,00E+00
CRU	[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
MFR	[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
MER	[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
EEE	[MJ]	0,00E+00	0,00E+00	1,54E+01	1,54E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	4,41E+01	4,41E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy									
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.									

BIOGENIC CARBON CONTENT PER 1 m ² Composite Fire Door H120		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0
Biogenic carbon content in accompanying packaging	[kg C]	1,4
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

Additional information

LCA interpretation

Raw material extraction and processing (A1) is the dominant life cycle stage across all assessed impact categories, accounting for approximately 88–99% of total impacts. This shows that the environmental profile of the product is primarily driven by upstream material production.

For Global Warming Potential (GWP), A1 contributes 89%, followed by manufacturing (A3) at 9%, while transport (A2) and end-of-life stages are negligible. A similar distribution is observed for acidification (AP), eutrophication (EP-AF, EP-AM, EP-T) and photochemical ozone creation potential (OPCP), with A1 representing around 90–94% of total impacts.

The manufacturing stage (A3) is the second most relevant contributor, notably for ADPf (13%) and GWP (9%), whereas construction (C1), end-of-life stages (C2–C4), and Module D contribute only marginally to the overall results.

Reference service life

RSL information		Unit
Reference service Life	30	Years

End of life (C1-C4)

Scenario information	Value	Unit
For final disposal	96,1	kg


Indoor air

The EPD does not give information on release of dangerous substances to indoor air because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.1.

Soil and water

The EPD does not give information on release of dangerous substances to soil and water because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.2.

References

<p>Publisher</p>	<p> www.epddanmark.dk <small>Template version 2025.1</small></p>
<p>Programme operator</p>	<p>Danish Technological Institute Gregersensvej DK-2630 Taastrup www.teknologisk.dk</p>
<p>LCA-practitioner</p>	<p>Jonatan Bohr FORCE Technology Park Allé 345 2605 Brøndby www.forcetechnology.com</p> 
<p>LCA software / background data</p>	<p><i>Simapro vers 10.2.0.2</i> <i>Ecoinvent v3.11 (www.ecoinvent.org)</i> <i>EN 15804 reference package 3.1</i></p>
<p>3rd party verifier</p>	<p>Mie Ostenfeldt Ostenfeldt Consulting https://ostenfeldtconsulting.dk</p>  <p>Verified according to Verification Checklist 1 v. 2.9.1</p>

General programme instructions

General Programme Instructions, version 3.0, spring 2025
www.epddanmark.dk

Technical Rules and Guidelines

Technical Rules and Guidelines, version 1.0, spring 2025

www.epddanmark.dk

EN 15804

DS/EN 15804 + A2:2019 - "Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products"

EN 17213

DS/EN 17213:2020 Windows and doors – Environmental Product Declarations – Product category rules for windows and pedestrian doorsets

EN 15942

DS/EN 15942:2011 – " Sustainability of construction works – Environmental product declarations – Communication format business-to-business"

ISO 14025

DS/EN ISO 14025:2010 – " Environmental labels and declarations – Type III environmental declarations – Principles and procedures"

ISO 14040

DS/EN ISO 14040:2008 – " Environmental management – Life cycle assessment – Principles and framework"

ISO 14044

DS/EN ISO 14044:2008 – " Environmental management – Life cycle assessment – Requirements and guidelines"