Environmental Product Declaration

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

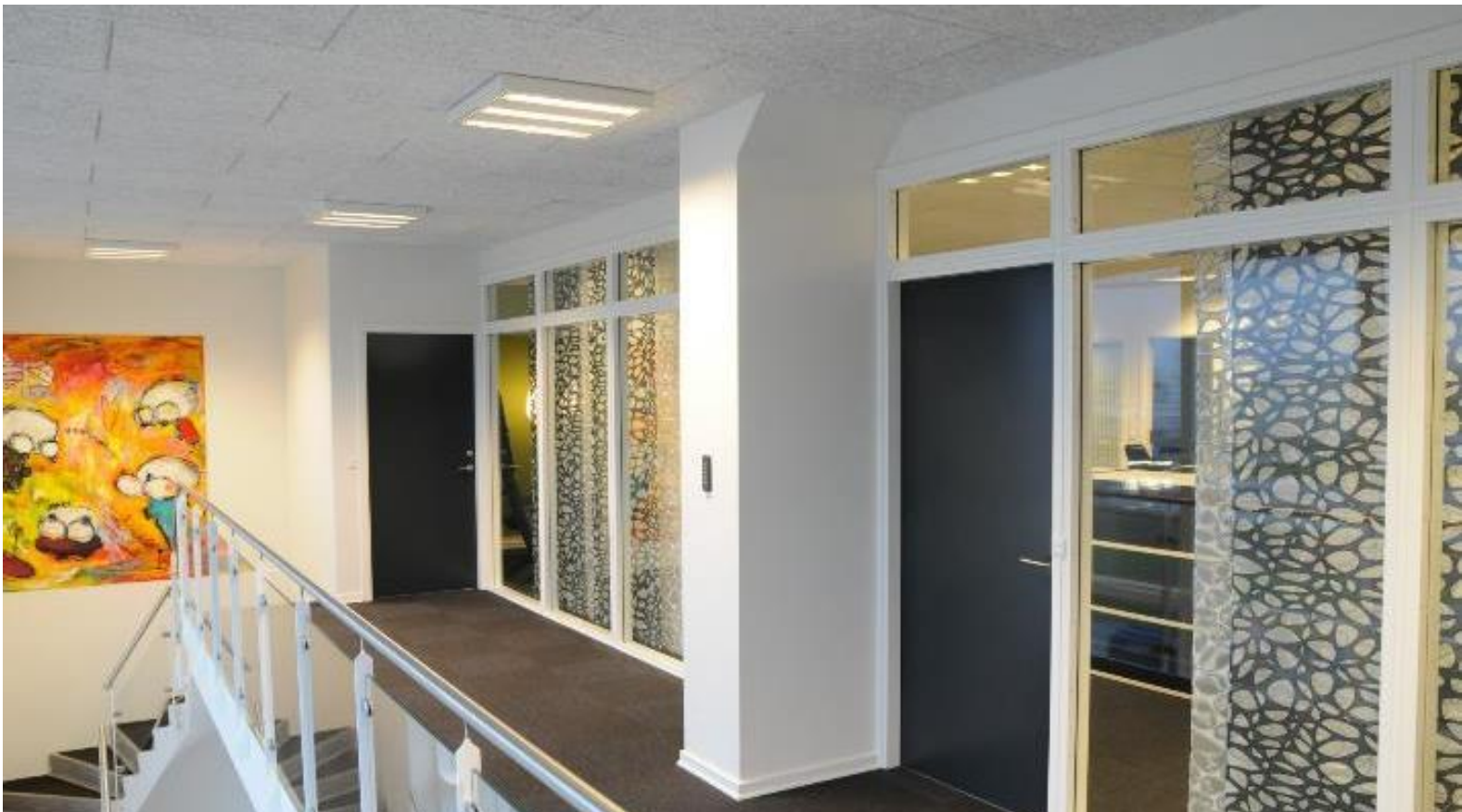
62mm door without glass

from

Trehøje Døre A/S

Programme:	The International EPD® System, www.environdec.com
Programme operator:	EPD International AB
EPD registration number:	S-P-12181
Publication date:	2024-02-02
Valid until:	2029-02-01
	EPD of multiple products, based on the worst-case results

An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com



General information

Programme information

Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	info@environdec.com

Accountabilities for PCR, LCA and independent, third-party verification
Product Category Rules (PCR)
CEN standard EN 15804:2012 +A2 (2019) serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): Construction products, 2019:14, Version 1.3.1
PCR review was conducted by: *The Technical Committee of the International EPD® System.* Claudia A. Peña*. Contact via info@environdec.com*
Life Cycle Assessment (LCA)
LCA accountability: *Amy Stockwell, Carbon Zero AB, amy.stockwell@eando.se*
Third-party verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: ☒ EPD verification by individual verifier Third-party verifier: *Vladimir Koci, vladimir.koci@lcastudio.cz* Approved by: The International EPD® System
Procedure for follow-up of data during EPD validity involves third party verifier: ☐ Yes ☒ No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

Company information

Owner of the EPD: Trehøje Døre A/S
Contact: Ramus Budde Rasmus@Trehoeje.dk
Description of the organisation: Trehøje Døre A/S is a leading Danish manufacturer of internal doors equipped with cutting-edge production technology. We specialise in delivering tailored door solutions that prioritise customer needs, incorporating fire and sound certifications. Committed to sustainability, we take conscientious measures in our production processes.
Product-related or management system-related certifications: Dansk Dørkontrol, SBC 210, SBC214, FSC
Name and location of production site(s): Ørnhøj, Denmark

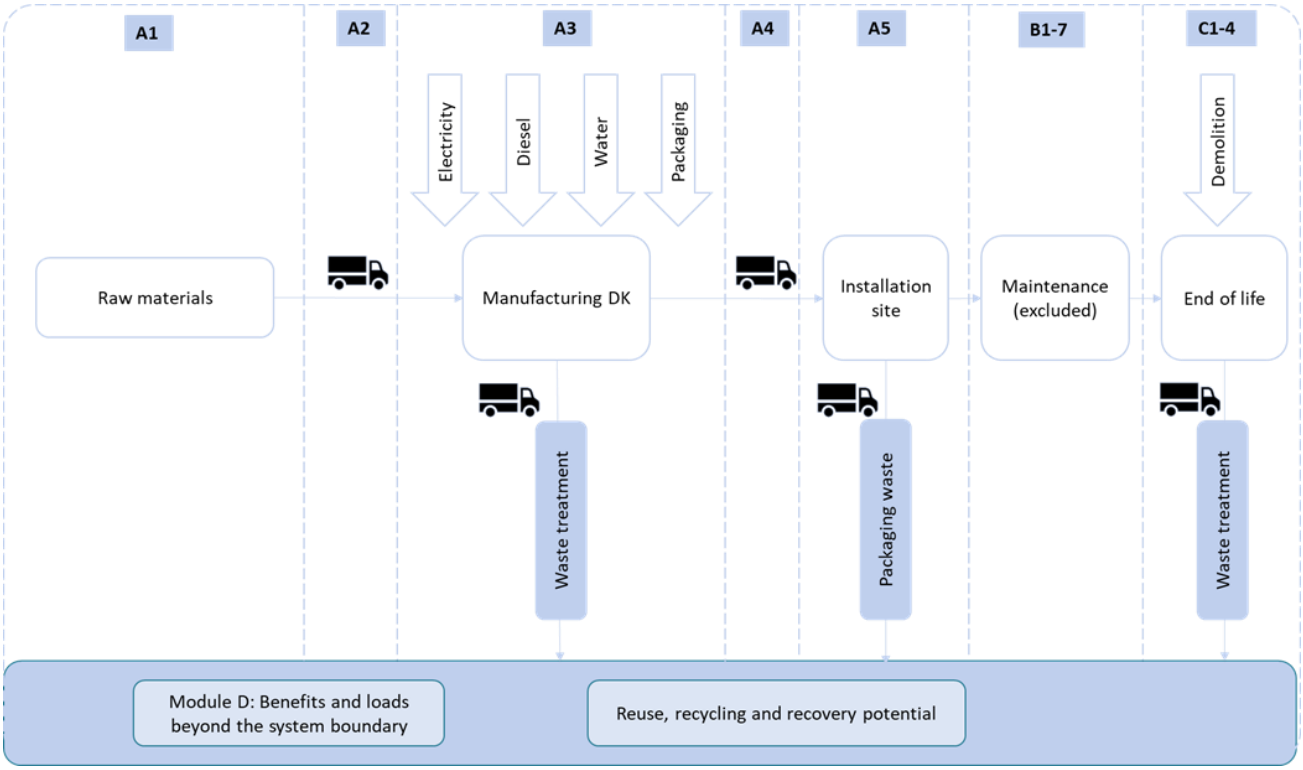
Product information

Product name: 62mm door without glass
Products included: MA, Klima, RC3, CSA, CS200, BD30, BD60, F60, 35dB, 40dB, BD30/35dB, BD30/40dB, BD60/35dB, BD60/40dB
Product description: Solid high-quality wooden doors suitable for buildings with fire and sound reduction requirements. Most notably they are used in office buildings, schools, hospitals, and other public areas. Our doors are fully customizable to meet our customers' preferences and requirements.
UN CPC code: 88319
Geographical scope: Products are made and sold in Denmark

LCA information

Functional unit / declared unit: 1 m^2 of door
Calculations are based on a door of size 930 x 2045 mm (WxH)
Reference service life: The Reference Service Life (RSL) is not included in this report, as per the draft c-PCR for doors and windows, this should only be included if the B modules are included.
Time representativeness: Manufacturing data is from 2022.
Database(s) and LCA software used: LCA for Experts (GaBi) v 10.7.1.28 and Ecoinvent v 3.8
Description of system boundaries: Cradle to gate with options: A1–A3, A4-A5 + C + D

System diagram:



More information:
Module A3: The manufacturer's electricity grid mix comes 100% from wind power. It has a GHG-GWP of 9.3 E-03 kg CO2e per kWh.

Module A5: The product is installed by hand. The pallet was assumed reuseable and the other packaging recycled. The biogenic carbon is virtually emitted.

Modules C and D: The product is assumed disposed of as per Statbank Denmark data on construction waste, as listed in the table below. C4 also includes the virtual biogenic carbon emissions of the materials which are recycled.

Material	Recycling rate	Incineration rate	Landfill rate
Construction waste	93 %	3 %	4 %

Modules declared, geographical scope, share of specific data (in GWP-GHG results) and data variation (in GWP-GHG results):

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Modules declared	X	X	X	X	X	-	-	-	-	-	-	-	X	X	X	X	X
Geography	EU	EU	DK	DK	DK	ND	ND	ND	ND	ND	ND	ND	DK	DK	DK	DK	DK
Specific data used	Factory specific data used for A3			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	>10%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

Multiple doors are included in this EPD. The worst case scenario results are shown.

Using the results of modules A1-A3 without considering the results of module C is discouraged.

Content information

Product components	Weight, kg	Post-consumer material, weight %	Biogenic material	
			Weight %	kg C/kg
Wood	8.8E+00	0	9%	3.6E+00
Door core	1.6E+01	0	18%	7.3E+00
Surface board	1.0E+01	0	10%	4.3E+00
Paint and adhesive	2.9E+00	0	0	0
Steel	2.0E+00	14 %	0	0
Plastic	1.7E+00	0	0	0
TOTAL	4.1E+01	0.01 %	37 %	1.5E+01

Packaging materials	Weight, kg	Weight-% (versus the product)	Weight biogenic carbon, kg C/kg
PE film	3.0E-02	0.1%	0
Wood	2.3E-01	0.6%	9.6E-02
Pallet	1.7E-01	0.4%	7.1E-02
Total	4.3E-01	1.0%	1.7E-01

No substances that appear in the REACH candidate list of SVHC (Candidate List of Substances of Very High Concern) are present or used in the product concerning this EPD.

Results of the environmental performance indicators

Mandatory impact category indicators according to EN 15804

Results per functional or declared unit									
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-fossil	kg CO_2 eq.	5.84E+01	3.05E-01	2.86E-02	2.35E-02	2.76E-01	6.59E-01	0	-5.04E+01
GWP-biogenic	kg CO_2 eq.	-5.42E+01	0	6.07E+00	-3.19E-04	0.00E+00	1.84E+00	4.63E+01	4.71E+01
GWP-luluc	kg CO_2 eq.	7.06E+00	2.81E-03	2.64E-04	2.14E-04	2.55E-03	6.90E-05	0	-1.37E+01
GWP-total	kg CO_2 eq.	1.12E+01	3.08E-01	6.10E+00	2.34E-02	2.79E-01	2.50E+00	4.63E+01	-1.71E+01
ODP	kg CFC 11 eq.	3.32E-06	3.59E-14	2.50E-15	3.00E-15	3.25E-14	3.62E-13	0	-3.62E-10
AP	mol H^+ eq.	2.66E-01	5.76E-04	3.28E-05	1.20E-04	5.21E-04	9.75E-04	0	-1.11E-01
EP-freshwater	kg P eq.	5.91E-03	1.12E-06	1.04E-07	8.43E-08	1.01E-06	3.23E-05	0	-6.96E-03
EP-marine	kg N eq.	7.47E-02	2.38E-04	1.13E-05	5.65E-05	2.16E-04	5.78E-04	0	-6.23E-02
EP-terrestrial	mol N eq.	7.05E-01	2.72E-03	1.34E-04	6.26E-04	2.46E-03	4.24E-03	0	-4.35E-01
POCP	kg NMVOC eq.	2.04E-01	5.13E-04	2.86E-05	1.58E-04	4.64E-04	1.42E-03	0	-1.02E-01
ADP-minerals&metals*	kg Sb eq.	8.51E-05	2.00E-08	1.85E-09	1.53E-09	1.81E-08	1.88E-09	0	-2.29E-05
ADP-fossil*	MJ	1.07E+03	4.18E+00	3.88E-01	3.14E-01	3.79E+00	1.80E+00	0	-9.36E+02
WDP*	m^3	1.87E+01	3.92E-03	3.29E-04	2.79E-04	3.55E-03	1.86E-01	0	-3.05E+00
Acronyms	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 = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption								

** Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.*

Additional mandatory and voluntary impact category indicators

Results per functional or declared unit									
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-GHG[1]	kg CO_2 eq.	6.62E+01	1.08E+00	2.89E-02	2.38E-02	2.79E-01	1.74E+00	0	-6.47E+01
GWP[2]	kg CO_2 eq.	6.83E-02	9.44E-05	5.13E-06	2.00E-05	8.55E-05	1.33E-03	0	-8.34E-02
Acronyms	*GWP-GHG global warming potential - greenhouse gases;*								

[1]This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO_2 is set to zero.

[2]This indicator supports comparability with EPDs based on the previous version of EN 15804 (EN 15804:2012+A1:2013).

Resource use indicators

Results per functional or declared unit									
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ	9.15E+02	3.41E-01	2.75E-02	2.29E-02	3.09E-01	2.39E-01	0	-5.91E+02
PERM	MJ	0	0	0	0	0	0	0	0
PERT	MJ	9.15E+02	3.41E-01	2.75E-02	2.29E-02	3.09E-01	2.39E-01	0	-5.91E+02
PENRE	MJ	1.07E+03	4.20E+00	3.89E-01	3.15E-01	3.80E+00	1.80E+00	0	-9.37E+02
PENRM	MJ	0	0	0	0	0	0	0	0
PENRT	MJ	1.07E+03	4.20E+00	3.89E-01	3.15E-01	3.80E+00	1.80E+00	0	-9.37E+02
SM	kg	1.68E-01	0	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0
FW	m^3	8.75E-01	3.92E-04	3.03E-05	2.50E-05	3.55E-04	4.39E-03	0	-5.24E-01
Acronyms	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 re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water								

Waste indicators

Results per functional or declared unit									
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
Hazardous waste disposed	kg	-5.66E-09	5.05E-12	1.44E-12	9.76E-13	4.58E-12	1.24E-10	0	-3.83E-08
Non-hazardous waste disposed	kg	4.36E+00	6.60E-04	5.61E-05	4.81E-05	5.98E-04	1.37E+00	0	-1.17E+00
Radioactive waste disposed	kg	2.40E-02	2.37E-05	5.03E-07	5.90E-07	2.15E-05	4.23E-05	0	-3.86E-02

Output flow indicators

Results per functional or declared unit									
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
Components for re-use	kg	0	0	3.58E+00	0	0	0	0	0
Material for recycling	kg	0	0	4.33E-01	0	0	3.57E+01	0	0
Materials for energy recovery	kg	0	0	0	0	0	0	0	0
Exported energy, electricity	MJ	0	0	0	0	0	1.88E+00	0	0
Exported energy, thermal	MJ	0	0	0	0	0	3.23E+00	0	0

References

EN 15804:2012+A2	Sustainability of construction works – Environmental product declaration – Core rules for the product category of constructions products
EN 17213:2020	Windows and Doors – Environmental Product Declarations – Product category rules for windows and pedestrian doorsets
EPD International (2021)	General Programme Instructions of the International EPD® System, version 4.0
ISO 14020:2022	International Standard ISO 14020 – Environmental statements and programmes for products – Principles and general requirements
ISO 14025:2006	International Standard ISO 14025 – Environmental labels and declarations — Type III environmental declarations — Principles and procedures
ISO 14040:2006	International Standard ISO 14040: Environmental Management – Life cycle assessment – Principles and framework. Second edition 2006-07-01.
ISO 14044:2006	International Standard ISO 14044: Environmental Management – Life cycle assessment – Requirements and Guidelines.

PCR 2019:14	PCR 2019:14 Construction products (EN 15804:A2) v1.3.1
Statbank (2020)	www.statbank.dk/statbank5a/selectvarval/saveselections.asp accessed 2023-10-17

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