Environmental Product Declaration

according to ISO 14025 and EN 15804

This declaration is for:

Alpha Sectional doors ALU, with wicket door

Provided by:

Novoferm Nederland Holding B.V.



program operator

Stichting MRPI®

publisher

Stichting MRPI®

www.mrpi.nl

MRPI® registration

1.1.00365.2022

date of first issue

23-12-2022

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23-12-2027

COMPANY INFORMATION

Intelligent Door Solutions

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PRODUCT

Alpha Sectional doors ALU, with wicket door

DECLARED UNIT/FUNCTIONAL UNIT

1 m2

DESCRIPTION OF PRODUCT

ALU 40/60 with wicket door is a sectional door which consist of aluminium panels fitted with acrylic glazing.

VISUAL PRODUCT



MRPI® REGISTRATION

1.1.00365.2022

DATE OF ISSUE

23-12-2022

EXPIRY DATE

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MORE INFORMATION

https://www.alpha-deuren.nl/en/category/industrial-doors/

SCOPE OF DECLARATION

This MRPI®-EPD certificate is verified by **Gert-Jan Vroege, Eco Intelligence.**
The LCA study has been done by **Mariëlle van Elderen and Branco Schipper, SGS Search.**
The certificate is based on an LCA-dossier according to ISO14025 and EN15804+A2/Bepalingsmethode. It is verified according to the 'MRPI®-EPD verification protocol November 2020.v4.0'. EPDs of construction products may not be comparable if they do not comply with EN15804+A2/Bepalingsmethode. Declaration of SVHC that are listed on the 'Candidate List of Substances of Very High Concern for authorisation' when content exceeds the limits for registration with ECHA.

PROGRAM OPERATOR

Stichting MRPI®
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1043GR
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ir. J-P den Hollander, Managing director MRPI®

DEMONSTRATION OF VERIFICATION
CEN standard EN15804 serves as the core PCR[a]
Independent verification of the declaration and data, according to EN ISO 14025:2010: internal: external: X
Third party verifier: Gert-Jan Vroege, Eco Intelligence
[a] PCR = Product Category Rules

DETAILED PRODUCT DESCRIPTION

Alpha industrial sectional doors are used in private homes, agricultural buildings, industrial buildings and non-residential buildings. The spacesaving industrial sectional door can be fitted to both outdoor and indoor walls.

Sectional doors, type ALU, are constructed from extruded aluminium sections fitted with acrylic glazing. The panels are 40 or 60 mm thick and available in heights varying between 366 and 732 mm. The panels are supplied as standard with an anodised finish or painted with primer in RAL 9002. They can also be painted in a RAL colour chosen by the customer. This option is covered in this EPD.

These ALU sections can be combined with insulated, steel-skinned ISO panels.

When the door is opened, the sections slide back under the roof. The industrial sectional door can be operated manually by pull cord or chain hoist, or supplied with an electric drive. This option is covered in this EPD. The energy use of the motor is not included in the EPD. The energy use is estimated at 0,251 Wh/m² per opening/closing cycle. At 3,000 yearly cycles this would amount to 0,75 kWh/m².

The ALU industrial sectional door can be supplied with an integral wicket door or a pass door next to the sectional door. This option is covered in this EPD.

Sectional doors, type ALU, have an expected service life of more than 100.000 cycles, which complies for 10 years of standard daily use and with a recommended yearly service check. The specified service life is independent of the manufacturer's warranty.

Technical details based on a sectional door ALU for an opening of 3800 x 3500 mm (W x H). These dimensions for the standard door are chosen based on frequency of sale. The presented data comply with those given in the DoP. The different values have been tested by TÜV Nord. The industrial sectional doors comply with EN 13241:2003+A2:2016 (products without smoke control and fire resistant characteristics)

Name	ALU 40	ALU 60	Unit
Airborne sound reduction acc. to EN 717-1	21	21	dB
Heat transfer coefficient Windows / Doors acc. DIN EN 10077-1,-2 or DIN EN ISO 12567	4.8	2.8	W/(m2K)
Air permeability acc. EN 12426	1	1	class
Resistance to water penetration acc. to EN 12425	1	1	class
Deflection as a result of wind loads acc. to EN 12424	2	2	class

COMPONENT > 1% of total mass	[%]
Aluminium	30% - 40%
PMMA	12% - 12,5%
Galvanized steel	24% - 27,5%
Coated steel	3% - 7,5%
Packaging (pallet / cardboard / paper / film)	13,5% - 14,5%
EPDM	2,5% - 3%
Electronics (motor)	4% - 4,5%
PVC	<1%
Polystyrene	<1%

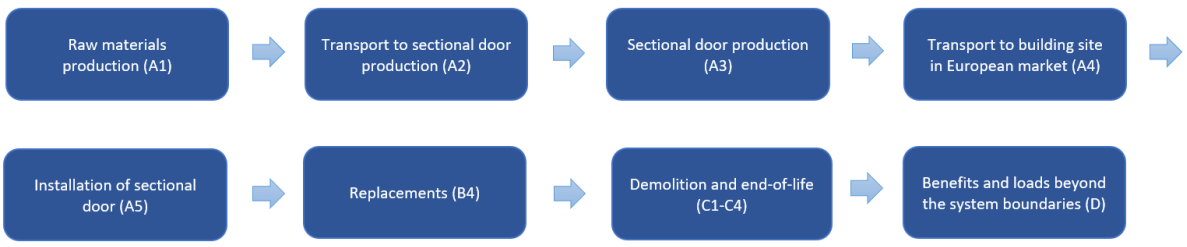
SCOPE AND TYPE

Sectional doors are assembled in the Netherlands and sold on the European market. The type of EPD is Cradle-to-grave in which all modules are included. SimaPro 9.3 was used to perform the LCA calculations. The data used in the module is sourced from Ecoinvent 3.6 and the NMD basisprocessendatabase 3.5. The results are calculated with the exclusion of long-term emissions.

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
Raw material supply	Transport	Manufacturing	Transport gate to site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse- Recovery- Recycling- potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

X = Modules Assessed

ND = Not Declared



LCA process diagram according to EN 15804 (7.2.1)

REPRESENTATIVENESS

This EPD is representative for sectional doors, type ALU with wicket door, produced by Alpha Deuren in The Netherlands for use in the European market.

ENVIRONMENTAL IMPACT per functional unit or declared unit (indicators A1)

	UNIT	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
ADPE	kg Sb eq.	0.00	0.00	0.00	3.81 E-2	1.40 E-5	3.35 E-6	0.00	0.00	0.00	4.29 E-4	0.00	0.00	0.00	9.85 E-7	5.20 E-6	2.79 E-5	9.50 E-8	-3.66 E-3
ADPF	MJ	0.00	0.00	0.00	2.88 E+3	8.39 E+0	5.50 E+0	0.00	0.00	0.00	4.59 E+0	0.00	0.00	0.00	3.77 E+0	3.11 E+0	1.30 E+1	2.17 E-1	-1.66 E+3
GWP	kg CO2 eq.	0.00	0.00	0.00	2.05 E+2	5.49 E-1	1.07 E+0	0.00	0.00	0.00	3.19 E-1	0.00	0.00	0.00	2.41 E-1	2.04 E-1	8.63 E+0	1.17 E-2	-1.19 E+2
ODP	kg CFC11 eq.	0.00	0.00	0.00	9.43 E-6	9.73 E-8	3.10 E-8	0.00	0.00	0.00	1.99 E-8	0.00	0.00	0.00	1.19 E-8	3.61 E-8	5.29 E-8	1.64 E-9	-5.26 E-6
POCP	kg ethene eq.	0.00	0.00	0.00	1.37 E-1	3.31 E-4	2.73 E-4	0.00	0.00	0.00	4.58 E-4	0.00	0.00	0.00	3.59 E-5	1.23 E-4	2.42 E-4	8.64 E-6	-8.33 E-2
AP	kg SO2 eq.	0.00	0.00	0.00	1.22 E+0	2.41 E-3	1.24 E-3	0.00	0.00	0.00	2.68 E-3	0.00	0.00	0.00	4.52 E-4	8.95 E-4	5.06 E-3	6.82 E-5	-6.00 E-1
EP	kg (PO4)3- eq.	0.00	0.00	0.00	1.31 E-1	4.74 E-4	3.30 E-4	0.00	0.00	0.00	4.80 E-4	0.00	0.00	0.00	9.29 E-5	1.76 E-4	8.96 E-4	9.95 E-6	-6.00 E-2

Toxicity indicators for Dutch market

HTP	kg DCB eq.	0.00	0.00	0.00	1.52 E+2	2.31 E-1	1.54 E+0	0.00	0.00	0.00	1.91 E-1	0.00	0.00	0.00	2.71 E-2	8.57 E-2	8.56 E-1	4.55 E-3	-1.06 E+2
FAETP	kg DCB eq.	0.00	0.00	0.00	3.96 E+0	6.74 E-3	1.02 E-2	0.00	0.00	0.00	3.21 E-3	0.00	0.00	0.00	7.48 E-4	2.50 E-3	3.24 E-2	1.40 E-4	-1.17 E+0
MAETP	kg DCB eq.	0.00	0.00	0.00	1.07 E+4	2.43 E+1	3.57 E+1	0.00	0.00	0.00	8.20 E+0	0.00	0.00	0.00	3.16 E+0	9.00 E+0	1.28 E+2	3.72 E-1	-4.33 E+3
TETP	kg DCB eq.	0.00	0.00	0.00	4.87 E-1	8.16 E-4	2.23 E-3	0.00	0.00	0.00	5.99 E-4	0.00	0.00	0.00	1.23 E-3	3.03 E-4	4.69 E-3	2.07 E-5	2.77 E-1
ECI	Euro	0.00	0.00	0.00	3.17 E+1	6.61 E-2	2.05 E-1	0.00	0.00	0.00	5.05 E-2	0.00	0.00	0.00	1.79 E-2	2.45 E-2	5.52 E-1	1.43 E-3	-1.92 E+1
ADPF	kg Sb. eq.	0.00	0.00	0.00	1.39 E+0	4.03 E-3	2.65 E-3	0.00	0.00	0.00	2.21 E-3	0.00	0.00	0.00	1.81 E-3	1.50 E-3	6.24 E-3	1.04 E-4	-8.00 E-1

ADPE = Abiotic Depletion Potential for non-fossil resources
ADPF = Abiotic Depletion Potential for fossil resources
GWP = Global Warming Potential
ODP = Depletion potential of the stratospheric ozone layer
POCP = Formation potential of tropospheric ozone photochemical oxidants
AP = Acidification Potential of land and water
EP = Eutrophication Potential
HTP = Human Toxicity Potential
FAETP = Fresh water aquatic ecotoxicity potential
MAETP = Marine aquatic ecotoxicity potential
TETP = Terrestrial ecotoxicity potential
ECI = Environmental Cost Indicator
ADPF = Abiotic Depletion Potential for fossil resources expressed in [kg Sb-eq.]

ENVIRONMENTAL IMPACT per functional unit or declared unit (core indicators A2)

	UNIT	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-total	kg CO2 eq.	0.00	0.00	0.00	2.07 E+2	5.54 E-1	7.77 E+0	0.00	0.00	0.00	3.35 E-1	0.00	0.00	0.00	2.47 E-1	2.05 E-1	8.66 E+0	1.21 E-2	-3.51 E+1
GWP-fossil	kg CO2 eq.	0.00	0.00	0.00	2.11 E+2	5.53 E-1	5.57 E-1	0.00	0.00	0.00	3.33 E-1	0.00	0.00	0.00	2.44 E-1	2.05 E-1	8.65 E+0	1.20 E-2	-1.23 E+2
GWP-biogenic	kg CO2 eq.	0.00	0.00	0.00	-4.27 E+0	2.56 E-4	7.21 E+0	0.00	0.00	0.00	1.20 E-3	0.00	0.00	0.00	2.68 E-3	9.49 E-5	5.76 E-3	1.26 E-4	8.80 E+1
GWP-luluc	kg CO2 eq.	0.00	0.00	0.00	4.98 E-1	2.03 E-4	1.36 E-4	0.00	0.00	0.00	1.90 E-4	0.00	0.00	0.00	7.21 E-5	7.52 E-5	1.51 E-3	9.64 E-6	-4.09 E-1
ODP	kg CFC11 eq.	0.00	0.00	0.00	1.00 E-5	1.22 E-7	3.56 E-8	0.00	0.00	0.00	1.98 E-8	0.00	0.00	0.00	1.18 E-8	4.53 E-8	5.30 E-8	2.01 E-9	-5.85 E-6
AP	mol H+ eq.	0.00	0.00	0.00	1.52 E+0	3.21 E-3	1.62 E-3	0.00	0.00	0.00	4.23 E-3	0.00	0.00	0.00	5.71 E-4	1.19 E-3	6.35 E-3	8.62 E-5	-7.20 E-1
EP-freshwater	kg P eq.	0.00	0.00	0.00	1.01 E-2	5.58 E-6	1.55 E-5	0.00	0.00	0.00	1.55 E-5	0.00	0.00	0.00	1.39 E-5	2.07 E-6	4.95 E-5	3.60 E-7	-3.98 E-3
EP-marine	kg N eq.	0.00	0.00	0.00	2.13 E-1	1.13 E-3	6.25 E-4	0.00	0.00	0.00	3.98 E-4	0.00	0.00	0.00	1.22 E-4	4.20 E-4	1.52 E-3	2.24 E-5	-1.24 E-1
EP-terrestrial	mol N eq.	0.00	0.00	0.00	3.07 E+0	1.25 E-2	5.59 E-3	0.00	0.00	0.00	1.54 E-2	0.00	0.00	0.00	1.50 E-3	4.63 E-3	1.69 E-2	2.50 E-4	-1.38 E+0
POCP	kg NMVOC eq.	0.00	0.00	0.00	7.55 E-1	3.56 E-3	1.70 E-3	0.00	0.00	0.00	1.64 E-3	0.00	0.00	0.00	3.71 E-4	1.32 E-3	4.14 E-3	7.37 E-5	-4.66 E-1
ADP-minerals & metals	kg Sb eq.	0.00	0.00	0.00	3.81 E-2	1.40 E-5	3.35 E-6	0.00	0.00	0.00	4.29 E-4	0.00	0.00	0.00	9.85 E-7	5.20 E-6	2.79 E-5	9.50 E-8	-3.66 E-3
ADP-fossil	MJ, net calorific value	0.00	0.00	0.00	2.43 E+3	8.34 E+0	4.90 E+0	0.00	0.00	0.00	3.56 E+0	0.00	0.00	0.00	3.20 E+0	3.10 E+0	1.13 E+1	1.99 E-1	-1.29 E+3
WDP	m3 world eq. deprived	0.00	0.00	0.00	6.66 E+1	2.98 E-2	4.15 E-2	0.00	0.00	0.00	1.14 E-1	0.00	0.00	0.00	2.46 E-2	1.11 E-2	6.96 E-1	6.30 E-3	-1.70 E+1

GWP-total = Global 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 = Depletion potential of the stratospheric ozone layer
AP = Acidification Potential, Accumulated Exceedence
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 Exceedence
POCP = Formation potential of tropospheric ozone photochemical oxidants
ADP-minerals&metals = Abiotic Depletion Potential for non fossil resources [2]
ADP-fossil = Abiotic Depletion for fossil resources potential [2]
WDP = Water (user) deprivation potential, deprivation-weighted water consumption [2]

Disclaimer [2]

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

ENVIRONMENTAL IMPACT per functional unit or declared unit (additional indicators A2)

	UNIT	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PM	Disease incidence	0.00	0.00	0.00	1.53 E-5	4.97 E-8	3.88 E-8	0.00	0.00	0.00	4.42 E-8	0.00	0.00	0.00	1.87 E-9	1.84 E-8	3.87 E-8	1.29 E-9	-9.85 E-6
IRP	kBq U235 eq.	0.00	0.00	0.00	4.57 E+0	3.50 E-2	1.37 E-2	0.00	0.00	0.00	7.53 E-3	0.00	0.00	0.00	6.62 E-3	1.30 E-2	4.81 E-2	7.21 E-4	-1.77 E+0
ETP-fw	CTUe	0.00	0.00	0.00	7.34 E+3	7.44 E+0	6.91 E+0	0.00	0.00	0.00	1.28 E+1	0.00	0.00	0.00	3.26 E+0	2.76 E+0	4.89 E+1	1.51 E+2	-2.95 E+3
HTP-c	CTUh	0.00	0.00	0.00	3.21 E-7	2.41 E-10	5.64 E-10	0.00	0.00	0.00	1.49 E-9	0.00	0.00	0.00	5.59 E-11	8.96 E-11	1.08 E-9	9.41 E-12	-1.71 E-7
HTP-nc	CTUh	0.00	0.00	0.00	5.83 E-6	8.14 E-9	7.19 E-9	0.00	0.00	0.00	1.31 E-8	0.00	0.00	0.00	1.82 E-9	3.02 E-9	5.68 E-8	2.68 E-10	-3.16 E-7
SQP	---	0.00	0.00	0.00	9.22 E+2	7.24 E+0	1.98 E+0	0.00	0.00	0.00	1.02 E+0	0.00	0.00	0.00	6.59 E-1	2.69 E+0	3.31 E+0	3.01 E-1	-8.03 E+3

PM = Potential incidence of disease due to PM emissions
IRP = Potential Human exposure efficiency relative to U235 [1]
ETP-fw = Potential Comparative Toxic Unit for ecosystems [2]
HTP-c = Potential Comparative Toxic Unit for humans [2]
HTP-nc = Potential Comparative Toxic Unit for humans, non-cancer [2]
SQP = Potential soil quality index [2]

Disclaimer [1]

- 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.

Disclaimer [2]

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

RESOURCE USE per functional unit or declared unit (A1 / A2)

	UNIT	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	0.00	0.00	0.00	2.23 E+2	1.04 E-1	3.81 E-1	0.00	0.00	0.00	1.70 E-1	0.00	0.00	0.00	3.45 E-1	3.88 E-2	1.36 E+0	8.59 E-3	-1.26 E+3
PERM	MJ	0.00	0.00	0.00	5.79 E+1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PERT	MJ	0.00	0.00	0.00	2.81 E+2	1.04 E-1	3.81 E-1	0.00	0.00	0.00	1.70 E-1	0.00	0.00	0.00	3.45 E-1	3.88 E-2	1.36 E+0	8.59 E-3	-1.26 E+3
PENRE	MJ	0.00	0.00	0.00	2.47 E+3	8.86 E+0	5.23 E+0	0.00	0.00	0.00	3.78 E+0	0.00	0.00	0.00	3.43 E+0	3.29 E+0	1.21 E+1	2.12 E-1	-1.38 E+3
PENRM	MJ	0.00	0.00	0.00	1.21 E+2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	MJ	0.00	0.00	0.00	2.59 E+3	8.86 E+0	5.23 E+0	0.00	0.00	0.00	3.78 E+0	0.00	0.00	0.00	3.43 E+0	3.29 E+0	1.21 E+1	2.12 E-1	-1.38 E+3
SM	kg	0.00	0.00	0.00	4.95 E+0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	MJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	MJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	m3	0.00	0.00	0.00	2.37 E+0	1.02 E-3	2.60 E-3	0.00	0.00	0.00	3.07 E-3	0.00	0.00	0.00	1.96 E-3	3.77 E-4	2.35 E-2	1.70 E-4	-7.64 E-1

PERE = Use of renewable energy excluding renewable primary energy resources
PERM = Use of renewable energy resources used as raw materials
PERT = Total use of renewable primary energy resources
PENRE = Use of non-renewable primary energy resources excluding non-renewable 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 materials
RSF = Use of renewable secondary fuels
NRSF = Use of non renewable secondary fuels
FW = Use of net fresh water

OUTPUT FLOWS AND WASTE CATEGORIES per functional unit or declared unit (A1 / A2)

	UNIT	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
HWD	kg	0.00	0.00	0.00	3.24 E-2	2.11 E-5	6.75 E-6	0.00	0.00	0.00	7.78 E-5	0.00	0.00	0.00	2.47 E-6	7.85 E-6	1.19 E-5	2.26 E-7	4.65 E-2
NHWD	kg	0.00	0.00	0.00	3.41 E+1	5.29 E-1	1.06 E-1	0.00	0.00	0.00	6.85 E-2	0.00	0.00	0.00	9.44 E-3	1.96 E-1	2.31 E-1	6.71 E-1	-2.25 E+1
RWD	kg	0.00	0.00	0.00	4.48 E-3	5.48 E-5	1.72 E-5	0.00	0.00	0.00	7.50 E-6	0.00	0.00	0.00	6.62 E-6	2.03 E-5	3.48 E-5	9.53 E-7	-2.16 E-3
CRU	kg	0.00	0.00	0.00	0.00	0.00	1.91 E+0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MFR	kg	0.00	0.00	0.00	5.25 E-1	0.00	3.18 E+0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.83 E+1	0.00	0.00
MER	kg	0.00	0.00	0.00	8.74 E-3	0.00	3.06 E-1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.32 E+0	0.00	0.00
EEE	MJ	0.00	0.00	0.00	0.00	0.00	8.49 E-1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.92 E+1	0.00	0.00
ETE	MJ	0.00	0.00	0.00	0.00	0.00	1.46 E+0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.31 E+1	0.00	0.00

HWD = Hazardous Waste Disposed
NHWD = Non Hazardous Waste Disposed
RWD = Radioactive Waste Disposed
CRU = Components for reuse
MFR = Materials for recycling
MER = Materials for energy recovery
EEE = Exported Electrical Energy
ETE = Exported Thermal Energy

BIOGENIC CARBON CONTENT per functional unit or declared unit (A1 / A2)

	UNIT	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
BCCpr	kg C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BCCpa	kg C	0.00	0.00	0.00	1.75 E+0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

BCCpr = Biogenic carbon content in product
BCCpa = Biogenic carbon content in packaging

CALCULATION RULES

The results in the EPD are representative for the ALU 40 door. Results for thicknesses of 60 mm can be calculated by making use of the scaling formula presented below. The scaling formula is a linear relationship with the structure: Y = A*x + C. x is the thickness in mm.

Name	A value	C value
Linear scaling formula	0.057659	12.868718

Cut-off rules: The following processes are considered below cutoff: • Maintenance and the use of auxiliary materials and equipment, with exception of such processes that are included in the Ecoinvent background processes.
• Capital goods and infrastructure processes, with exception of such processes that are included in the Ecoinvent background processes. Only the processes considered below cut-off are excluded from the study. No additional processes are excluded.

SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION

A1 - Extraction of raw materials and processing of intermediate products: This module considers the extraction and processing of all raw materials and energy which occur upstream to the Alpha Deuren manufacturing process, as well as waste processing up to the end-of waste state. This includes manufacturing of intermediate products such as the steel / PUR panels. A2 - Transport to production location: This includes the transport distance of the raw materials and intermediate products to the manufacturing facility via road. A3 - Production: This module takes into account the manufacturing of sectional doors and includes all processes linked to the production such as assembly and packaging.

The results for A4 are given for a transport scenario within the Netherlands (150 km), but a score per 1 km is also given so that users may calculate the impact of transport to an exact location, elsewhere in the European market.

DECLARATION OF SVHC

The sectional door does not contain any substances of very high consern (SVHC).

REFERENCES

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EN 15804+A1:2012 Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products.

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REMARKS

None