# Environmental Product Declaration according to ISO 14025 and EN 15804

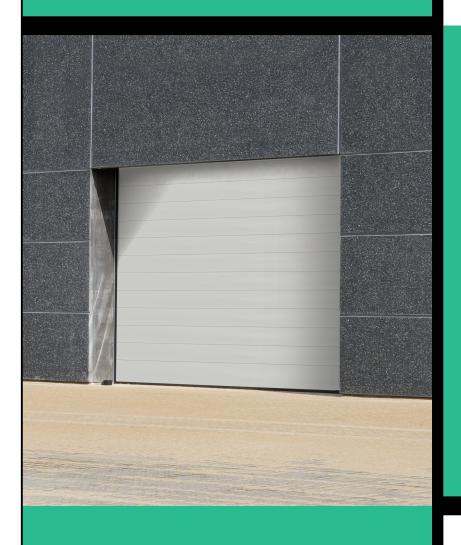


This declaration is for:

Alpha Sectional doors Helix ISO

Provided by:

**Novoferm Nederland Holding B.V.** 





program operator
Stichting MRPI®
publisher
Stichting MRPI®
www.mrpi.nl

MRPI® registration
1.1.00363.2022
date of first issue
23-12-2022
date of this issue
23-12-2022
expiry date
23-12-2027









### **COMPANY INFORMATION**



# Intelligent Door Solutions

Novoferm Nederland Holding B.V. Bedrijvenpark Twente 187 7602 KG Almelo 31 (0) 88 888 8400 sustainability @novoferm.com www.alpha-deuren.nl



# **PRODUCT**

Alpha Sectional doors Helix ISO





### **DESCRIPTION OF PRODUCT**

The Helix ISO is a sectional door which has heat-insulating and sound-absorbing properties, constructed from PUR foam-insulated steel sandwich panels.









### **MRPI® REGISTRATION**

1.1.00363.2022

DATE OF ISSUE

23-12-2022

**EXPIRY DATE** 

23-12-2027



# MORE INFORMATION

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



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® Kingsfordweg 151 1043GR Amsterdam



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 Helix ISO, constructed from PUR (polyurethane) foam-insulated (CFC-free) steel sandwich panels. The panels are 40 mm thick and available in heights of 366, 488 or 610 mm. The end caps are made of galvanised steel or aluminium. The horizontal seal retaining profile on the top section is made from aluminium, or supplied with a powder coat finish (optional). The Helix ISO panels can be combined with Helix ALU sections, assembled fromanodised aluminium profiles. The Helix sectional door is supplied with an electric drive with frequency inverter. The drive is directly connected to the shaft. The energy use of the motor is not included in the EPD. The energy use is estimated at 1,253 Wh/m² per opening/closing cycle. At 3,000 yearly cycles this would amount to 3,76 kWh/m².

The ISO panels are finished in a standard coil coat colour or can be painted in a RAL colour chosen by the customer. This option is covered in this EPD.

Sectional doors, type Helix ISO, have an expected service life of more than 200.000 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 ISO 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	Value	Unit
Airborne sound reduction acc. to EN 717-1	25	dB
Heat transfer coefficient Windows / Doors acc. DIN EN	1.0	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
10077-1,-2 or DIN EN ISO 12567	1.9	W/(m2K)
Air permeability acc. EN 12426	1	class
Resistance to water penetration acc. to EN 12425	1	class
Deflection as a result of wind loads acc. to EN 12424	3	class

COMPONENT > 1% of total mass	[%]
Panels - Steel / PUR	26%
Steel, galvanized	39.5%
Aluminium	8.5%
Packaging (pallet / cardboard / paper / film)	17.5%
Electronics (motor)	5.5%
EPDM	1%
PVC	<1%
Polystyrene	<1%







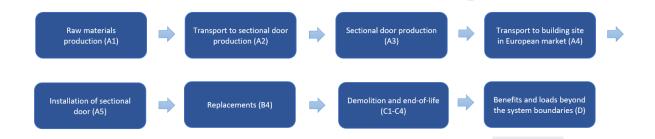


Sectional doors are assembled in the Netherlands and sold on the European market. The type of EPD is Cradle-to-grave in which all modules are included. SimaPro 9.3 was used to perform the LCA calculations. The data used in the module is sourced from Ecoinvent 3.6 and the NMD basisprocessendatabase 3.5.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

PROD	UCT ST	AGE		RUCTION			US	SE ST	TAGE			E	ND OI STA		<b>=</b>	BENEFITS AND LOADS BEYOND THE
			ST	AGE												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	<b>B3</b>	B4	B5	B6	B7	C1	C2	C3	C4	D
Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х

X = Modules Assessed

ND = Not Declared



LCA process diagram according to EN 15804 (7.2.1)



This EPD is representative for sectional doors type Helix ISO, 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	А3	A1-A3	A4	A5	В1	B2	В3	B4	В5	В6	В7	C1	C2	СЗ	C4	D
ADPE	kg Sb eq.	0.00	0.00	0.00	1.88	1.67	5.05	0.00	0.00	0.00	1.32	0.00	0.00	0.00	9.85	6.46	3.68	6.89	-1.89
ADFL	kg Sb eq.	0.00	0.00	0.00	E-1	E-5	E-6	0.00	0.00	0.00	E-3	0.00	0.00	0.00	E-7	E-6	E-5	E-8	E-2
ADPF	MJ	0.00	0.00	0.00	2.09	1.00	6.80	0.00	0.00	0.00	3.14	0.00	0.00	0.00	3.78	3.88	1.81	2.10	-7.28
ADIT	IVIO	0.00	0.00	0.00	E+3	E+1	E+0	0.00	0.00	0.00	E+1	0.00	0.00	0.00	E+0	E+0	E+1	E-1	E+2
GWP	kg CO2 eg.	0.00	0.00	0.00	1.42	6.54	1.60	0.00	0.00	0.00	2.37	0.00	0.00	0.00	2.41	2.53	1.28	7.39	-4.55
GWF	kg CO2 eq.	0.00	0.00	0.00	E+2	E-1	E+0	0.00	0.00	0.00	E+0	0.00	0.00	0.00	E-1	E-1	E+1	E-3	E+1
ODP	kg CFC11 eq.	0.00	0.00	0.00	1.07	1.16	4.51	0.00	0.00	0.00	2.74	0.00	0.00	0.00	1.19	4.49	8.81	2.46	-3.17
ODI	kg of off eq.	0.00	0.00	0.00	E-5	E-7	E-8	0.00	0.00	0.00	E-7	0.00	0.00	0.00	E-8	E-8	E-8	E-9	E-6
POCP	kg ethene eq.	0.00	0.00	0.00	1.28	3.95	4.67	0.00	0.00	0.00	6.24	0.00	0.00	0.00	3.59	1.53	3.56	7.87	-7.18
FOCE	ky ethene eq.	0.00	0.00	0.00	E-1	E-4	E-4	0.00	0.00	0.00	E-3	0.00	0.00	0.00	E-5	E-4	E-4	E-6	E-2
AP	kg SO2 eg.	0.00	0.00	0.00	1.38	2.88	1.83	0.00	0.00	0.00	1.16	0.00	0.00	0.00	4.52	1.11	8.02	5.40	-1.78
Ai	kg 502 eq.	0.00	0.00	0.00	E+0	E-3	E-3	0.00	0.00	0.00	E-1	0.00	0.00	0.00	E-4	E-3	E-3	E-5	E-1
EP	kg (PO4)3- eq.	0.00	0.00	0.00	2.27	5.65	5.14	0.00	0.00	0.00	6.70	0.00	0.00	0.00	9.29	2.19	1.89	1.04	-2.70
LF	kg (FO4)3- eq.	0.00	0.00	0.00	E-1	E-4	E-4	0.00	0.00	0.00	E-3	0.00	0.00	0.00	E-5	E-4	E-3	E-5	E-2

Toxicity indicators for Dutch market

HTP	kg DCB eg.	0.00	0.00	0.00	1.09	2.75	2.83	0.00	0.00	0.00	1.86	0.00	0.00	0.00	2.71	1.07	1.15	3.34	-3.44
l nie	kg DCB eq.	0.00	0.00	0.00	E+2	E-1	E+0	0.00	0.00	0.00	E+1	0.00	0.00	0.00	E-2	E-1	E+0	E-3	E+1
FAETP	kg DCB eq.	0.00	0.00	0.00	3.03	8.04	1.64	0.00	0.00	0.00	4.17	0.00	0.00	0.00	7.48	3.11	4.79	7.93	-7.36
FAEIF	kg DCB eq.	0.00	0.00	0.00	E+0	E-3	E-2	0.00	0.00	0.00	E-1	0.00	0.00	0.00	E-4	E-3	E-2	E-5	E-1
MAETP	kg DCB eg.	0.00	0.00	0.00	8.03	2.89	6.06	0.00	0.00	0.00	1.86	0.00	0.00	0.00	3.16	1.12	1.73	2.83	-7.12
WALTE	kg DCB eq.	0.00	0.00	0.00	E+3	E+1	E+1	0.00	0.00	0.00	E+3	0.00	0.00	0.00	E+0	E+1	E+2	E-1	E+2
TETP	kg DCB eg.	0.00	0.00	0.00	4.68	9.73	3.07	0.00	0.00	0.00	4.97	0.00	0.00	0.00	1.23	3.76	6.16	8.39	9.62
1515	kg DCB eq.	0.00	0.00	0.00	E-1	E-4	E-3	0.00	0.00	0.00	E-2	0.00	0.00	0.00	E-3	E-4	E-3	E-6	E-1
ECI	Euro	0.00	0.00	0.00	2.58	7.88	3.55	0.00	0.00	0.00	2.53	0.00	0.00	0.00	1.79	3.05	8.13	1.04	-6.56
[ [	Eulo	0.00	0.00	0.00	E+1	E-2	E-1	0.00	0.00	0.00	E+0	0.00	0.00	0.00	E-2	E-2	E-1	E-3	E+0
ADDE	ka Sh. oa	0.00	0.00	0.00	1.00	4.81	3.26	0.00	0.00	0.00	1.51	0.00	0.00	0.00	1.81	1.86	8.70	1.01	-3.49
ADPF kg Sb. eq.	kg Sb. eq.	0.00	0.00	0.00	E+0	E-3	E-3	0.00	0.00	0.00	E-2	0.00	0.00	0.00	E-3	E-3	E-3	E-4	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	А3	A1-A3	A4	A5	B1	B2	В3	B4	В5	В6	В7	C1	C2	С3	C4	D
GWP-total	ka CO2 oa	0.00	0.00	0.00	1.42	6.60	1.11	0.00	0.00	0.00	2.43	0.00	0.00	0.00	2.47	2.55	1.28	7.55	3.80
GWP-total	kg CO2 eq.	0.00	0.00	0.00	E+2	E-1	E+1	0.00	0.00	0.00	E+0	0.00	0.00	0.00	E-1	E-1	E+1	E-3	E+1
GWP-fossil	kg CO2 eq.	0.00	0.00	0.00	1.46	6.60	6.49	0.00	0.00	0.00	2.42	0.00	0.00	0.00	2.44	2.55	1.28	7.53	-4.73
GVVF-IOSSII	kg CO2 eq.	0.00	0.00	0.00	E+2	E-1	E-1	0.00	0.00	0.00	E+0	0.00	0.00	0.00	E-1	E-1	E+1	E-3	E+1
GWP-biogenic	kg CO2 eg.	0.00	0.00	0.00	-3.83	3.05	1.05	0.00	0.00	0.00	4.95	0.00	0.00	0.00	2.68	1.18	6.51	1.49	8.54
OWI -blogeriic	kg OO2 eq.	0.00	0.00	0.00	E+0	E-4	E+1	0.00	0.00	0.00	E-4	0.00	0.00	0.00	E-3	E-4	E-3	E-5	E+1
GWP-luluc	kg CO2 eg.	0.00	0.00	0.00	2.64	2.42	1.86	0.00	0.00	0.00	1.95	0.00	0.00	0.00	7.21	9.35	1.90	2.10	-6.05
OVVI Idide	Ng 002 cq.	0.00	0.00	0.00	E-1	E-4	E-4	0.00	0.00	0.00	E-3	0.00	0.00	0.00	E-5	E-5	E-3	E-6	E-2
ODP	kg CFC11 eq.	0.00	0.00	0.00	1.10	1.46	5.30	0.00	0.00	0.00	2.82	0.00	0.00	0.00	1.18	5.63	9.07	3.10	-3.34
OBI	kg or orreq.	0.00	0.00	0.00	E-5	E-7	E-8	0.00	0.00	0.00	E-7	0.00	0.00	0.00	E-8	E-8	E-8	E-9	E-6
AP	mol H+ eq.	0.00	0.00	0.00	2.08	3.83	2.40	0.00	0.00	0.00	1.34	0.00	0.00	0.00	5.71	1.48	1.04	7.15	-2.22
7.5		0.00	0.00	0.00	E+0	E-3	E-3	0.00	0.00	0.00	E-1	0.00	0.00	0.00	E-4	E-3	E-2	E-5	E-1
EP-freshwater	kg PO4 eg.	0.00	0.00	0.00	9.45	6.66	1.67	0.00	0.00	0.00	1.04	0.00	0.00	0.00	1.39	2.57	6.25	8.44	-1.84
	9 . 0 . 04.	0.00	0.00	0.00	E-3	E-6	E-5	0.00	0.00	0.00	E-3	0.00	0.00	0.00	E-5	E-6	E-5	E-8	E-3
EP-marine	kg N eg.	0.00	0.00	0.00	2.04	1.35	1.01	0.00	0.00	0.00	6.89	0.00	0.00	0.00	1.22	5.21	3.26	2.46	-4.91
					E-1	E-3	E-3		0.00		E-3				E-4	E-4	E-3	E-5	E-2
EP-terrestrial	mol N eg.	0.00	0.00	0.00	6.83	1.49	8.61	0.00	0.00	0.00	1.15	0.00	0.00	0.00	1.50	5.75	3.41	2.71	-5.53
					E+0	E-2	E-3				E-1				E-3	E-3	E-2	E-4	E-1
POCP	kg NMVOC eg.	0.00	0.00	0.00	6.38	4.24	2.71	0.00	0.00	0.00	2.76	0.00	0.00	0.00	3.71	1.64	8.28	7.87	-2.56
	3				E-1	E-3	E-3				E-2				E-4	E-3	E-3	E-5	E-1
ADP-mineral	kg Sb eq.	0.00	0.00	0.00	1.88	1.67	5.05	0.00	0.00	0.00	1.32	0.00	0.00	0.00	9.85	6.46	3.68	6.89	-1.89
s & metals					E-1	E-5	E-6				E-3				E-7	E-6	E-5	E-8	E-2
ADP-fossil	MJ, net	0.00	0.00	0.00	1.77	9.95	6.16	0.00	0.00	0.00	2.70	0.00	0.00	0.00	3.20	3.85	1.59	2.10	-5.85
	calorific value				E+3	E+0	E+0				E+1				E+0	E+0	E+1	E-1	E+2
WDP	m3 world eq.	0.00	0.00	0.00	5.93	3.56	5.53	0.00	0.00	0.00	1.91	0.00	0.00	0.00	2.46	1.38	1.52	9.44	-1.05
	deprived				E+1	E-2	E-2				E+0				E-2	E-2	E+0	E-3	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	А3	A1-A3	A4	A5	B1	B2	ВЗ	B4	B5	В6	В7	C1	C2	С3	C4	D
PM	Disease	0.00	0.00	0.00	1.77	5.92	6.94	0.00	0.00	0.00	3.53	0.00	0.00	0.00	1.87	2.29	5.62	1.39	-3.68
FIVI	incidence	0.00	0.00	0.00	E-5	E-8	E-8	0.00	0.00	0.00	E-7	0.00	0.00	0.00	E-9	E-8	E-8	E-9	E-6
IRP	kBg U235 eg.	0.00	0.00	0.00	4.60	4.17	1.89	0.00	0.00	0.00	6.69	0.00	0.00	0.00	6.62	1.61	6.25	8.64	-5.00
IIXF	KBQ 0233 eq.	0.00	0.00	0.00	E+0	E-2	E-2	0.00	0.00	0.00	E-2	0.00	0.00	0.00	E-3	E-2	E-2	E-4	E-1
ETP-fw	CTUe	0.00	0.00	0.00	8.02	8.87	9.85	0.00	0.00	0.00	1.25	0.00	0.00	0.00	3.26	3.43	8.52	1.37	-1.73
ETF-IW	Croe	0.00	0.00	0.00	E+3	E+0	E+0	0.00	0.00	0.00	E+3	0.00	0.00	0.00	E+0	E+0	E+1	E-1	E+3
HTP-c	CTUh	0.00	0.00	0.00	4.63	2.88	9.75	0.00	0.00	0.00	1.91	0.00	0.00	0.00	5.59	1.11	1.47	3.16	-5.47
IIIF-C	Cron	0.00	0.00	0.00	E-7	E-10	E-10	0.00	0.00	0.00	E-8	0.00	0.00	0.00	E-11	E-10	E-9	E-12	E-8
HTP-nc	CTUh	0.00	0.00	0.00	7.10	9.70	1.14	0.00	0.00	0.00	1.46	0.00	0.00	0.00	1.82	3.75	7.79	9.71	3.36
TITE-IIC	CTOIL	0.00	0.00	0.00	E-6	E-9	E-8	0.00	0.00	0.00	E-6	0.00	0.00	0.00	E-9	E-9	E-8	E-11	E-6
SQP		0.00	0.00	0.00	9.43	8.63	2.96	0.00	0.00	0.00	2.06	0.00	0.00	0.00	6.59	3.34	4.62	4.41	-8.00
SQF		0.00	0.00	0.00	E+2	E+0	E+0	0.00	0.00	0.00	E+1	0.00	0.00	0.00	E-1	E+0	E+0	E-1	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	А3	A1-A3	A4	A5	B1	B2	В3	B4	В5	В6	В7	C1	C2	<b>C</b> 3	C4	D
PERE	MJ	0.00	0.00	0.00	1.34 E+2	1.25 E-1	4.09 E-1	0.00	0.00	0.00	4.38 E+0	0.00	0.00	0.00	3.45 E-1	4.82 E-2	1.74 E+0	1.70 E-3	-1.16 E+3
PERM	MJ	0.00	0.00	0.00	8.54 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	2.20 E+2	1.25 E-1	4.09 E-1	0.00	0.00	0.00	4.38 E+0	0.00	0.00	0.00	3.45 E-1	4.82 E-2	1.74 E+0	1.70 E-3	-1.16 E+3
PENRE	MJ	0.00	0.00	0.00	1.80 E+3	1.06 E+1	6.57 E+0	0.00	0.00	0.00	2.88 E+1	0.00	0.00	0.00	3.43 E+0	4.08 E+0	1.70 E+1	2.24 E-1	-6.25 E+2
PENRM	MJ	0.00	0.00	0.00	7.90 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
PENRT	MJ	0.00	0.00	0.00	1.88 E+3	1.06 E+1	6.57 E+0	0.00	0.00	0.00	2.88 E+1	0.00	0.00	0.00	3.43 E+0	4.08 E+0	1.70 E+1	2.24 E-1	-6.25 E+2
SM	kg	0.00	0.00	0.00	5.68 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	1.84 E+0	1.21 E-3	3.09 E-3	0.00	0.00	0.00	5.01 E-2	0.00	0.00	0.00	1.96 E-3	4.69 E-4	5.01 E-2	2.25 E-4	-2.75 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	А3	A1-A3	A4	A5	B1	B2	В3	В4	В5	В6	В7	C1	C2	СЗ	C4	D
HWD	kg	0.00	0.00	0.00	3.59	2.52	9.77	0.00	0.00	0.00	3.53	0.00	0.00	0.00	2.47	9.75	1.85	3.15	-2.07
	ng.	0.00	0.00	0.00	E-2	E-5	E-6	0.00	0.00	0.00	E-3	0.00	0.00	0.00	E-6	E-6	E-5	E-7	E-3
NHWD	kg	0.00	0.00	0.00	2.52	6.31	1.76	0.00	0.00	0.00	6.87	0.00	0.00	0.00	9.44	2.44	4.37	1.43	-6.85
INIIVID	Ng	0.00	0.00	0.00	E+1	E-1	E-1	0.00	0.00	0.00	E-1	0.00	0.00	0.00	E-3	E-1	E-1	E+0	E+0
RWD	kg	0.00	0.00	0.00	4.35	6.53	2.50	0.00	0.00	0.00	6.25	0.00	0.00	0.00	6.62	2.53	4.73	1.38	-8.60
KWD	Ng	0.00	0.00	0.00	E-3	E-5	E-5	0.00	0.00	0.00	E-5	0.00	0.00	0.00	E-6	E-5	E-5	E-6	E-4
CRU	kg	0.00	0.00	0.00	0.00	0.00	1.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CINO	Ng	0.00	0.00	0.00	0.00	0.00	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	8.76	0.00	3.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.29	0.00	0.00
IVIER	kg	0.00	0.00	0.00	E-1	0.00	E+0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	E+1	0.00	0.00
MER	kg	0.00	0.00	0.00	6.16	0.00	5.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.32	0.00	0.00
IVIER	kg	0.00	0.00	0.00	E-2	0.00	E-1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	E+0	0.00	0.00
EEE	MJ	0.00	0.00	0.00	3.24	0.00	1.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00
	IVIJ	0.00	0.00	0.00	E-1	0.00	E+0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	E+1	0.00	0.00
ETE	MJ	0.00	0.00	0.00	5.58	0.00	2.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.06	0.00	0.00
LIE	IVIJ	0.00	0.00	0.00	E-1	0.00	E+0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	E+1	0.00	0.00

HWD = Hazardous Waste Disposed

RWD = Radioactive Waste Disposed

MFR = Materials for recycling

EEE = Exported Electrical Energy

NHWD = Non Hazardous Waste Disposed

CRU = Components for reuse

MER = Materials for energy recovery

ETE = Exported Thermal Energy







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

	UNIT	A1	A2	А3	A1-A3	A4	A5	В1	B2	ВЗ	B4	В5	В6	В7	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
ВССра	kg C	0.00	0.00	0.00	2.48 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**

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**

ISO, 2006. "Environmental management. Life cycle assessment - Principles and framework". ISO 14040:2006 and Requirements and Guidelines". ISO 14044:2006;.

ISO/TR 14025, "Environmental labels and declarations – Type III environmental declarations", ISO/TR 14025:2000:.

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

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

"Bepalingsmethode Milieuprestatie Bouwwerken versie 1.1, maart 2022".



# **REMARKS**

None

