

Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

Solflex 1 x 6 H1Z2Z2-K Black 1,5kV D.C 0,6/1,0kV A.C. Halogenfree



TECCON

The Norwegian EPD Foundation

Owner of the declaration:

TECCON Norge AS

Product:

Solflex 1 x 6 H1Z2Z2-K Black 1,5kV D.C 0,6/1,0kV A.C.
Halogenfree

Declared unit:

1 m

This declaration is based on Product Category

Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core
PCR
NPCR 027:2020 Part B for Electrical cables and wires

Program operator:

The Norwegian EPD Foundation

Declaration number:

Registration number:

Issue date:

03.07.2024

Valid to:

EPD software:

LCAno EPD generator ID: 374388

General information

Product

Solflex 1 x 6 H1Z2Z2-K Black 1,5kV D.C 0,6/1,0kV A.C. Halogenfree

Program operator:

The Norwegian EPD Foundation
Post Box 5250 Majorstuen, 0303 Oslo, Norway
Phone: +47 977 22 020
web: www.epd-norge.no

Declaration number:

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core PCR
NPCR 027:2020 Part B for Electrical cables and wires

Statement of liability:

The owner of the declaration shall be liable for the underlying information and evidence. EPD Norway shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

Declared unit:

1 m Solflex 1 x 6 H1Z2Z2-K Black 1,5kV D.C 0,6/1,0kV A.C.
Halogenfree

Declared unit with option:

A1,A2,A3,A4,A5,B6,C1,C2,C3,C4,D

Functional unit:

General information on verification of EPD from EPD tools:

Independent verification of data, other environmental information and the declaration according to ISO 14025:2010, § 8.1.3 and § 8.1.4. Verification of each EPD is made according to EPD-Norway's guidelines for verification and approval requiring that tools are i) integrated into the company's environmental management system, ii) the procedures for use of the EPD tool are approved by EPD-Norway, and iii) the process is reviewed annually by an independent third party verifier. See Appendix G of EPD-Norway's General Programme Instructions for further information on EPD tools

Verification of EPD tool:

Independent third party verification of the EPD tool, background data and test-EPD in accordance with EPDNorway's procedures and guidelines for verification and approval of EPD tools. Approval number: NEPDT32.

Third party verifier:

Vito D'Incognito, Take Care International

(no signature required)

Owner of the declaration:

TECCON Norge AS
Contact person: Jan Vestergaard
Phone: 51 73 37 00
e-mail: jan.vestergaard@teccon.no

Manufacturer:

TECCON Norge AS
Mekjarvik 18
4072 Randaberg, Norway

Place of production:

Teccon production site Léon (Spain)

, Spain

Management system:

Eco-lighthouse: 4247

Organisation no:

986 452 125

Issue date:

03.07.2024

Valid to:

Year of study:

2023

Comparability:

EPD of construction products may not be comparable if they not comply with EN 15804 and seen in a building context.

Development and verification of EPD:

The declaration is created using EPD tool lca.tools ver EPD2022.03, developed by LCA.no. The EPD tool is integrated in the company's management system, and has been approved by EPD Norway. Approval number:

Developer of EPD: Jan Vestergaard, Teccon Norge AS

Reviewer of company-specific input data and EPD: Jorulv Søbstad

Approved:

Product

Product description:

SOLFLEX H1Z2Z2-K is intended for fixed or mobile (heavy duty) photovoltaic (PV) installations in ground, rooftopsystems or other architectural integrations. They are suitable for indoor or outdoor installations. Ideal for solar trackers which require flexibility and aptitude for mobile service. It is recommended for panel interconnection in PV installations or from the string boxes to the inverter.

SOLFLEX H1Z2Z2-K is designed to operate at a normal maximum conductor temperature of 90°C, - but for a maximum of 20.000 hours a max. conductor temperature of 120°C at a max. ambient temperature of 90°C is permitted.

Life expectancy greater than 25 years. The expected period of use under normal usage conditions as specified in the technical datasheet is at least 25 years.

Intended for use in PV installations acc. to HD 60364-7-712.

- Interconnection between PV panels (panel wire).
- Interconnection between PV panels and the connection box
- Direct installation between PV panels and the (DC/AC) inverter when there is no connection box

Product specification

Construction and tests. Standards: EN 50618

Compliance with the Low Voltage Directive (LVD): 2014/35 / EU

Construction Products Regulation (CPR) - Regulation (EU) N°305/2011: Reaction to fire - Eca

Certified by AENOR <HAR> (N° 042/001106 – Product range: From 1x1,5 up to 1x50 mm2)

RoHS compliant

Materials	kg	%
Plastic - Polyethylene	0,01	23,60
Metal - Copper	0,05	76,40
Total	0,06	100,00

Packaging	kg	%
Packaging - Wood	0,00	100,00
Total incl. packaging	0,06	100,00

Technical data:

Construction standards

EN 50618

Conductor

Tinned copper EN 60228 C 5

Insulation - conductor

XLPE, Cross linked polyolefin

Conductor marking

Jacket

Cross linked Polyolefin UV resistant

Marking

Solflex H1Z2Z2-K 1X xy MM7AA EN50618

Voltage - nominel Uo/U

1,5vD.C.

0,6/1kV A.C.

Voltage - test

1,8 kV D.C.

Max Conductor temperature operation

"90° at normal operation

120° instant at 90° ambient temp. And 20.000Hours"

Short circuit 5s max

Resistant to fire performance

Flame retardant EN 60332-1-2

CPR EN 50575 compliance

Eca

DoP

MEHZ2Z2K

Temperature - operation

Min - 40°C - Max. + 90°C

Temperature - installation

Min -25°C - Max. + 30°C

Bending radius

8xD

Market:

Nordic

Reference service life, product

10 years. Standard lifetime for photovoltaic power plants applications, provided in appendix 1 of PSR for wires, cables, and accessories of PEP Ecopassport.

Reference service life, building or construction works

n/a

LCA: Calculation rules

Declared unit:

1 m Solflex 1 x 6 H1Z2Z2-K Black 1,5kV D.C 0,6/1,0kV A.C. Halogenfree

Cut-off criteria:

All major raw materials and all the essential energy is included. The production processes for raw materials and energy flows with very small amounts (less than 1%) are not included. These cut-off criteria do not apply for hazardous materials and substances.

All major materials have been included. Substance representing < 1% have not been included. This include folio film for packaging!

Allocation:

The allocation is made in accordance with the provisions of EN 15804. Incoming energy and water and waste production in-house is allocated equally among all products through mass allocation. Effects of primary production of recycled materials is allocated to the main product in which the material was used. The recycling process and transportation of the material is allocated to this analysis. The allocation is made in accordance with the guidelines given in EN 15804.

Raw material - Information derived from manufactory and from a LCA generator

Processing: Derived from actual measurements during production of the individual units/stages

Data quality:

Specific data for the product composition are provided by the manufacturer. The data represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on EPDs according to EN 15804 and different LCA databases. The data quality of the raw materials in A1 is presented in the table below.

Data from material supplier and the LCA generator has been accepted "As-Is"

Data from processing TECCON in-house has been repeated ongoingly without major deviations. Figures given in document are worst case values.

Materials	Source	Data quality	Year
Metal - Copper	ecoinvent 3.6	Database	2019
Packaging - Wood	Modified ecoinvent 3.6	Database	2019
Plastic - Polyethylene	ecoinvent 3.6	Database	2019

System boundaries (X=included, MND=module not declared, MNR=module not relevant)

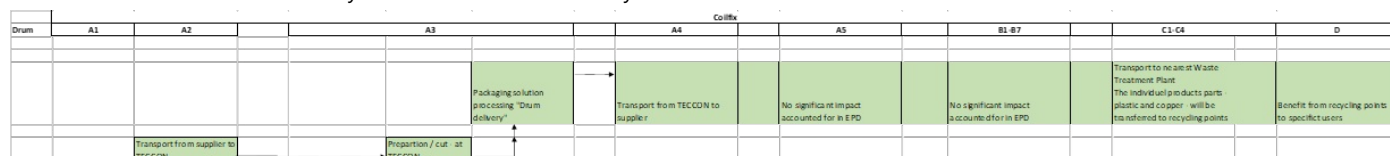
Product stage			Construction installation stage		Use stage							End of life stage				Beyond the system boundaries
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	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	MND	MND	MND	MND	MND	X	MND	X	X	X	X	X

System boundary:

Cradle to Gate.

The following stages have been declared: A1-A4

The flowchart below illustrates the system boundaries of the analysis:



Additional technical information:

Article 1010173 Solflex H1Z2Z2-K 6mm2 cable represent the maximum energy consumption from the product family below - from a production volume perspective as follow:

1010180 7042720001519 H1Z2Z2-K 1X4 C500 Black
 1010179 7042720001502 H1Z2Z2-K 1X4 C1000 Black
 1010171 7042720002110 H1Z2Z2-K 1X4 C500 Red
 1010188 7042720002301 H1Z2Z2-K 1X4 C1000 Red
 1010173 7042720001540 H1Z2Z2-K 1X6 C500 Black
 1010189 7042720002318 H1Z2Z2-K 1X6 C1000 Black
 1010175 7042720002127 H1Z2Z2-K 1X6 C500 Red
 1010172 7042720001533 H1Z2Z2-K 1X6 C1000 Red
 1010187 7042720001120 H1Z2Z2-K 1X10 C1000 Red
 1010186 7042720001113 H1Z2Z2-K 1X10 C1000 Black
 1010182 7042720001076 H1Z2Z2-K 1X4 B200 Black
 1010183 7042720001083 H1Z2Z2-K 1X6 B200 Black
 1010184 7042720001090 H1Z2Z2-K 1X6 B100 Black
 1010185 7042720001106 H1Z2Z2-K 1X6 B100 Red
 1251738 7042720005036 PP16/Solflex H1Z2Z2-K 1x4 Black
 1251739 7042720005043 PP16/Solflex H1Z2Z2-K 1x4 Red
 1257740 7042720005050 PP16/Solflex H1Z2Z2-K 1x6 Bleck
 1251741 7042720005067 PP16/Solflex H1Z2Z2-K 1x6 Red
 1251742 7042720001588 PP20/Solflex H1Z2Z2-K 2x6 Black/Red

If required individual EPD may be conducted accordingly!














LCA: Scenarios and additional technical information













The following information describe the scenarios in the different modules of the EPD.

Transport from production place to user (A4)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, 16-32 tonnes, EURO 6 (km)	36,7 %	988	0,043	l/tkm	42,48
Assembly (A5)	Unit	Value			
Product loss during installation (percentage of cable)	Units/DU	0,02			
Waste, wood, to average treatment - A5 including transport (kg)	kg	0,00			
Operational energy (B6)	Unit	Value			
Electricity, Norway (kWh)	kWh/DU	0,14			
Transport to waste processing (C2)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, 16-32 tonnes, EURO 6 (km)	36,7 %	300	0,043	l/tkm	12,90
Waste processing (C3)	Unit	Value			
Waste treatment of polyethylene (PE), incineration with energy recovery and fly ash extraction (kg)	kg	0,01			
Copper to recycling (kg)	kg	0,03			
Disposal (C4)	Unit	Value			
Landfilling of plastic mixture (kg)	kg	0,01			
Landfilling of ashes from incineration of Polyethylene (PE), process per kg ashes and residues (kg)	kg	0,00			
Landfilling of copper (kg)	kg	0,02			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of electricity, in Norway (MJ)	MJ	0,01			
Substitution of thermal energy, district heating, in Norway (MJ)	MJ	0,21			
Substitution of primary copper with net scrap (kg)	kg	0,02			

LCA: Results

The LCA results are presented below for the declared unit defined on page 2 of the EPD document.

Environmental impact							
Indicator	Unit	A1	A2	A3	A4	A5	
 GWP-total	kg CO ₂ -eq	2,37E-01	6,98E-03	1,57E-01	1,02E-02	1,23E-02	
 GWP-fossil	kg CO ₂ -eq	2,36E-01	6,98E-03	1,55E-01	1,02E-02	8,72E-03	
 GWP-biogenic	kg CO ₂ -eq	1,32E-03	2,65E-06	4,47E-04	4,23E-06	3,52E-03	
 GWP-luluc	kg CO ₂ -eq	2,40E-04	3,06E-06	1,39E-03	3,64E-06	3,27E-05	
 ODP	kg CFC11 -eq	1,83E-08	1,56E-09	1,70E-08	2,31E-09	8,02E-10	
 AP	mol H ⁺ -eq	1,07E-02	7,14E-05	1,40E-03	2,94E-05	2,45E-04	
 EP-FreshWater	kg P -eq	8,74E-05	4,91E-08	7,41E-06	8,16E-08	1,90E-06	
 EP-Marine	kg N -eq	7,12E-04	1,68E-05	1,99E-04	5,81E-06	1,90E-05	
 EP-Terrestrial	mol N -eq	1,05E-02	1,87E-04	2,25E-03	6,50E-05	2,63E-04	
 POCP	kg NMVOC -eq	2,68E-03	5,27E-05	6,03E-04	2,49E-05	6,80E-05	
 ADP-minerals&metals ¹	kg Sb-eq	9,83E-05	1,58E-07	1,27E-06	2,82E-07	2,00E-06	
 ADP-fossil ¹	MJ	3,82E+00	1,01E-01	3,60E+00	1,54E-01	1,55E-01	
 WDP ¹	m ³	1,73E+01	8,11E-02	-8,19E+01	1,49E-01	-1,28E+00	

Indicator	Unit	B6	C1	C2	C3	C4	D
 GWP-total	kg CO ₂ -eq	3,31E-03	0	3,10E-03	2,17E-02	1,10E-03	-4,95E-02
 GWP-fossil	kg CO ₂ -eq	3,21E-03	0	3,10E-03	2,17E-02	1,10E-03	-4,92E-02
 GWP-biogenic	kg CO ₂ -eq	8,88E-05	0	1,28E-06	1,76E-07	8,07E-08	-2,26E-04
 GWP-luluc	kg CO ₂ -eq	1,32E-05	0	1,10E-06	2,58E-08	1,22E-07	-9,28E-05
 ODP	kg CFC11 -eq	2,20E-10	0	7,03E-10	1,70E-11	9,80E-11	-8,92E-05
 AP	mol H ⁺ -eq	2,51E-05	0	8,91E-06	2,72E-06	2,69E-06	-8,07E-03
 EP-FreshWater	kg P -eq	2,31E-07	0	2,48E-08	1,67E-09	5,78E-09	-5,44E-05
 EP-Marine	kg N -eq	2,76E-06	0	1,76E-06	1,31E-06	1,81E-06	-3,34E-04
 EP-Terrestrial	mol N -eq	3,59E-05	0	1,97E-05	1,41E-05	1,08E-05	-5,17E-03
 POCP	kg NMVOC -eq	9,66E-06	0	7,56E-06	3,38E-06	3,23E-06	-1,40E-03
 ADP-minerals&metals ¹	kg Sb-eq	2,40E-07	0	8,57E-08	7,60E-10	2,66E-09	-4,51E-05
 ADP-fossil ¹	MJ	4,38E-02	0	4,69E-02	1,42E-03	7,96E-03	-4,46E-01
 WDP ¹	m ³	7,64E+00	0	4,54E-02	3,22E-03	1,75E-01	2,41E+00

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 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







"Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009"







*INA Indicator Not Assessed

1. 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 experienced with the indicator

Remarks to environmental impacts

Additional environmental impact indicators

Indicator	Unit	A1	A2	A3	A4	A5
 PM	Disease incidence	2,94E-08	3,21E-10	3,23E-09	6,25E-10	6,80E-10
 IRP ²	kgBq U235 -eq	1,49E-02	4,42E-04	3,88E-02	6,75E-04	1,10E-03
 ETP-fw ¹	CTUe	1,30E+02	7,17E-02	2,99E+00	1,14E-01	2,89E+00
 HTP-c ¹	CTUh	2,32E-09	0,00E+00	7,70E-11	0,00E+00	4,80E-11
 HTP-nc ¹	CTUh	1,77E-07	6,50E-11	2,61E-09	1,25E-10	3,60E-09
 SQP ¹	dimensionless	2,57E+00	5,85E-02	7,75E-01	1,08E-01	7,14E-02

Indicator	Unit	B6	C1	C2	C3	C4	D
 PM	Disease incidence	1,80E-10	0	1,90E-10	1,10E-11	4,80E-11	-1,67E-08
 IRP ²	kgBq U235 -eq	7,95E-04	0	2,05E-04	2,40E-06	5,00E-05	-6,44E-04
 ETP-fw ¹	CTUe	2,00E-01	0	3,48E-02	4,24E-03	1,15E+01	-7,42E+01
 HTP-c ¹	CTUh	1,00E-11	0	0,00E+00	0,00E+00	1,00E-12	-1,05E-09
 HTP-nc ¹	CTUh	2,25E-10	0	3,80E-11	1,80E-11	1,00E-11	-8,97E-08
 SQP ¹	dimensionless	2,21E-02	0	3,28E-02	1,72E-04	1,73E-02	-1,06E+00











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 = Potential Soil Quality Index (dimensionless)











"Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009"

*INA Indicator Not Assessed

1. 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 experienced with the indicator

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.

Resource use							
Indicator		Unit	A1	A2	A3	A4	A5
	PERE	MJ	7,08E-01	1,28E-03	9,46E-01	2,21E-03	3,32E-02
	PERM	MJ	3,19E-02	0,00E+00	0,00E+00	0,00E+00	-3,13E-02
	PERT	MJ	7,40E-01	1,28E-03	9,46E-01	2,21E-03	1,91E-03
	PENRE	MJ	3,25E+00	1,01E-01	3,60E+00	1,54E-01	1,44E-01
	PENRM	MJ	6,24E-01	0,00E+00	0,00E+00	0,00E+00	2,45E-04
	PENRT	MJ	3,88E+00	1,01E-01	3,60E+00	1,54E-01	1,44E-01
	SM	kg	7,89E-03	0,00E+00	0,00E+00	0,00E+00	1,58E-04
	RSF	MJ	1,98E-02	4,43E-05	6,26E-03	7,91E-05	5,24E-04
	NRSF	MJ	6,77E-04	1,96E-04	1,68E-02	2,83E-04	3,66E-04
	FW	m ³	4,40E-03	9,64E-06	1,59E-03	1,65E-05	1,21E-04




Indicator		Unit	B6	C1	C2	C3	C4	D
	PERE	MJ	5,68E-01	0	6,71E-04	4,18E-05	9,48E-04	-2,80E-01
	PERM	MJ	0,00E+00	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	PERT	MJ	5,68E-01	0	6,71E-04	4,18E-05	9,48E-04	-2,80E-01
	PENRE	MJ	4,39E-02	0	4,69E-02	1,42E-03	7,96E-03	-4,46E-01
	PENRM	MJ	0,00E+00	0	0,00E+00	-6,12E-01	0,00E+00	0,00E+00
	PENRT	MJ	4,39E-02	0	4,69E-02	-6,10E-01	7,96E-03	-4,46E-01
	SM	kg	0,00E+00	0	0,00E+00	0,00E+00	0,00E+00	1,40E-02
	RSF	MJ	4,46E-04	0	2,40E-05	1,18E-06	1,97E-05	1,32E-03
	NRSF	MJ	1,11E-03	0	8,59E-05	0,00E+00	2,84E-05	-3,53E-03
	FW	m ³	4,24E-03	0	5,02E-06	4,01E-06	1,03E-05	-1,30E-03




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 materials; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water

"Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009"

*INA Indicator Not Assessed

End of life - Waste

Indicator		Unit	A1	A2	A3	A4	A5
	HWD	kg	2,60E-03	5,03E-06	2,01E-04	7,97E-06	7,46E-05
	NHWD	kg	9,39E-02	3,91E-03	1,42E-02	7,51E-03	5,24E-03
	RWD	kg	1,37E-05	6,94E-07	2,77E-05	1,05E-06	8,67E-07

Indicator		Unit	B6	C1	C2	C3	C4	D
	HWD	kg	2,82E-05	0	2,42E-06	0,00E+00	9,14E-04	-5,44E-04
	NHWD	kg	3,38E-03	0	2,28E-03	0,00E+00	2,62E-02	-2,35E-02
	RWD	kg	3,93E-07	0	3,19E-07	0,00E+00	5,48E-08	-5,73E-07

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed

"Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009"

*INA Indicator Not Assessed

End of life - Output flow

Indicator		Unit	A1	A2	A3	A4	A5
	CRU	kg	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	5,60E-04
	MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,44E-03
	EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,88E-03
	EET	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,84E-02

Indicator		Unit	B6	C1	C2	C3	C4	D
	CRU	kg	0,00E+00	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	MFR	kg	0,00E+00	0	0,00E+00	2,80E-02	6,46E-07	-5,49E-04
	MER	kg	0,00E+00	0	0,00E+00	7,20E-03	1,58E-08	-7,24E-05
	EEE	MJ	0,00E+00	0	0,00E+00	1,40E-02	1,02E-06	-1,77E-04
	EET	MJ	0,00E+00	0	0,00E+00	2,11E-01	1,55E-05	-2,68E-03

CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported energy electrical; EET = Exported energy thermal

"Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009"

*INA Indicator Not Assessed

Biogenic Carbon Content

Indicator	Unit	At the factory gate
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in accompanying packaging	kg C	9,51E-04

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO₂

Additional requirements

Greenhouse gas emissions from the use of electricity in the manufacturing phase

National production mix from import, low voltage (production of transmission lines, in addition to direct emissions and losses in grid) of applied electricity for the manufacturing process (A3).

Electricity mix	Source	Amount	Unit
Electricity, Spain (kWh)	ecoinvent 3.6	337,33	g CO ₂ -eq/kWh

Dangerous substances

The product contains no substances given by the REACH Candidate list.

Indoor environment

No effect on in-door environment

Additional Environmental Information

Additional environmental impact indicators required in NPCR Part A for construction products							
Indicator	Unit	A1	A2	A3	A4	A5	
GWPIOBC	kg CO ₂ -eq	2,39E-01	6,98E-03	1,63E-01	1,02E-02	8,93E-03	
Indicator	Unit	B6	C1	C2	C3	C4	D
GWPIOBC	kg CO ₂ -eq	3,31E-03	0	3,10E-03	2,17E-02	1,16E-03	-2,40E-02

GWP-IOBC: Global warming potential calculated according to the principle of instantaneous oxidation. In order to increase the transparency of biogenic carbon contribution to climate impact, the indicator GWP-IOBC is required as it declares climate impacts calculated according to the principle of instantaneous oxidation. GWP-IOBC is also referred to as GWP-GHG in context to Swedish public procurement legislation.

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 epd-norge Global program operator	Program operator and publisher The Norwegian EPD Foundation Post Box 5250 Majorstuen, 0303 Oslo, Norway	Phone: +47 977 22 020 e-mail: post@epd-norge.no web: www.epd-norge.no
	Owner of the declaration: TECCON Norge AS Mekjarvik 18, 4072 Randaberg	Phone: 51 73 37 00 e-mail: jan.vestergaard@teccon.no web: teccon.no
	Author of the Life Cycle Assessment LCA.no AS Dokka 6A, 1671 Kråkerøy	Phone: +47 916 50 916 e-mail: post@lca.no web: www.lca.no
	Developer of EPD generator LCA.no AS Dokka 6A, 1671 Kråkerøy	Phone: +47 916 50 916 e-mail: post@lca.no web: www.lca.no
	ECO Platform ECO Portal	web: www.eco-platform.org web: ECO Portal