



**Environmental
Product
Declaration**

According to EN15804+A2 (+indicators A1)



This declaration is for:
Fixed flange and extendable Ground Screws

Provided by:
FIRST BASE Ground screws



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

MRPI® registration
1.1.00565.2024
date of first issue
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15-05-2029



COMPANY INFORMATION



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MRPI® REGISTRATION

1.1.00565.2024

DATE OF ISSUE

15-05-2024

EXPIRY DATE

15-05-2029

SCOPE OF DECLARATION

This MRPI®-EPD certificate is verified by Anne Kees Jeeninga, Advieslab VOF. The LCA study has been done by Chantal Houben, SGS INTRON. The certificate is based on an LCA-dossier according to EN15804+A2 (+indicators A1). It is verified according to the 'MRPI®-EPD verification protocol November 2020.v4.0'. EPD's of construction products may not be comparable if they do not comply with EN15804+A2. 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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Ing. L. L. Oosterveen MSc. MBA
Managing Director MRPI

PRODUCT

Fixed flange and extendable ground screws

DECLARED UNIT/FUNCTIONAL UNIT

1 kg

DESCRIPTION OF PRODUCT

The ground screws are used as a foundation for houses and other structures, such as solar panels or sheds.

VISUAL PRODUCT



MORE INFORMATION

<https://firstbasegroundscrews.com>

DEMONSTRATION OF VERIFICATION

CEN standard EN15804 serves as the core PCR(a)

Independent verification of the declaration and data according to ISO14025 and EN15804+A2 (+indicators A1)
internal: external: x

Third party verifier: Anne Kees Jeeninga, Advieslab VOF

[a] PCR = Product Category Rules

DETAILED PRODUCT DESCRIPTION

The Ground screws are made from steel pipes. These steel pipes get sawn to size. After which they get heated, and a point is drawn to make the shape of the pipe conical at one side. The screw tread is then welded on as well as the flange and bolt which are produced externally by a cold extrusion process. The ground screw is now transported to be galvanized at another location and transported back to be finished. When the product is finished the ground screws are transported from the factory in China to the warehouse of First Base in the Netherlands. This transport is included in A2. These ground screws have a reference service lifetime of 70+ years.

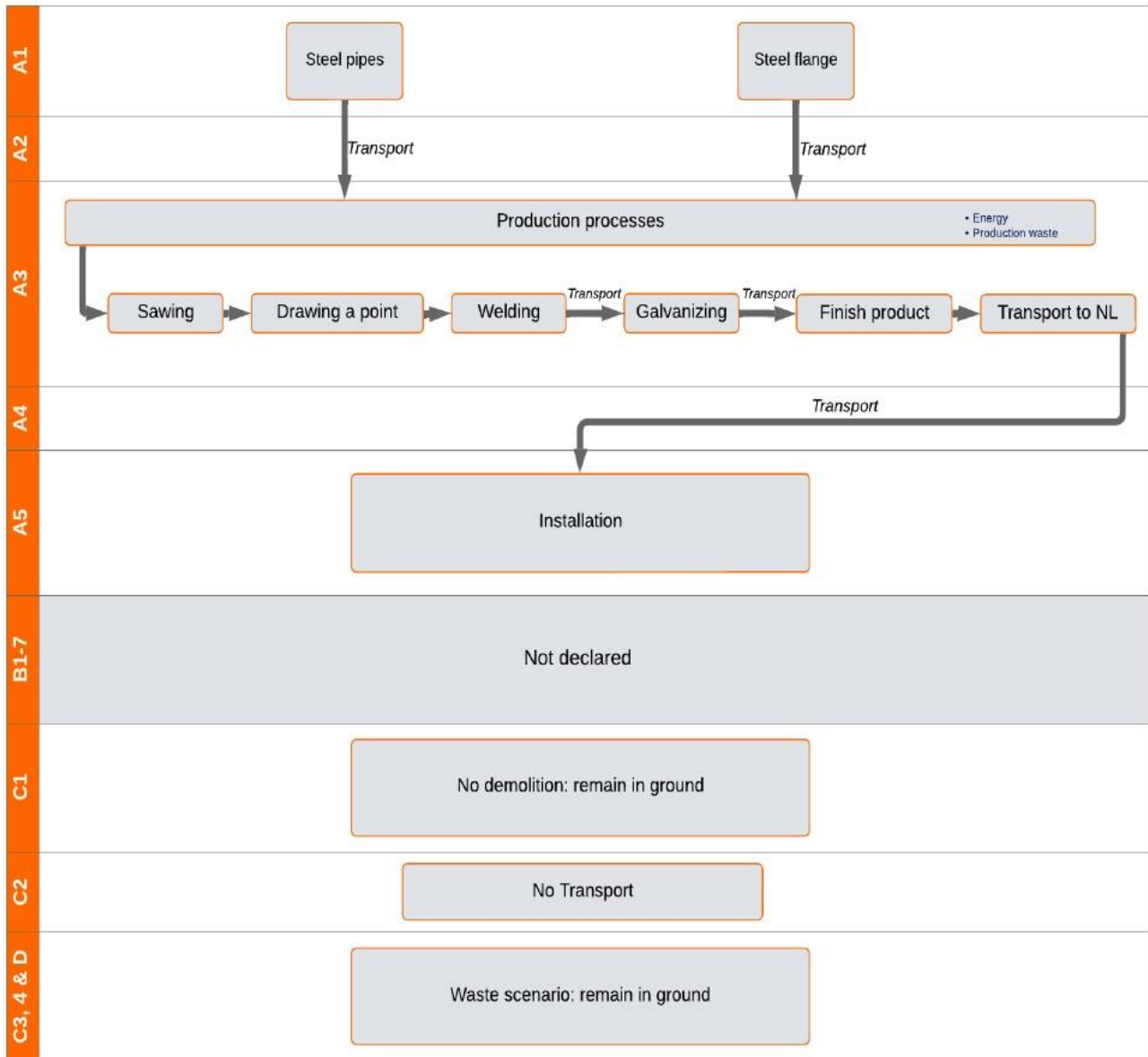
The production figures (A1-3) do not include packaging since FIRST BASE uses steel packaging that is re-used as product itself. Therefore there is no waste treatment of packaging materials.

Composition	Amount per kg
Steel pipe	0,853
Steel flange and nut	0,113
Zinc	0,0424

SCOPE AND TYPE

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USER 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	ND	ND	ND	ND	ND	ND	X	X	X	X	X

X= Modules Assessed
ND= Not Declared



REPRESENTATIVENESS

This EPD is representative for 1 kg of Ground screw and can be used to calculate the environmental impact of every first base ground screw.

ENVIRONMENT IMPACT per functional unit or declared unit (core 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.	1,19 E-04	6,90 E-07	2,05 E-04	3,25 E-04	1,03 E-06	7,41 E-09	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	9,64 E-08	2,67 E-07
ADPF	MJ	4,40 E+01	4,11 E-01	1,38 E+01	5,82 E+01	6,11 E-01	2,41 E-02	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	2,94 E-01	2,77 E+00
GWP	kg CO2 eq.	4,41 E+00	2,70 E-02	1,29 E+00	5,73 E+00	4,01 E-02	1,82 E-03	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,03 E-02	3,69 E-01
ODP	Kg CFC11 eq.	2,34 E-07	4,79 E-09	1,16 E-07	3,55 E-07	7,12 E-09	8,96 E-11	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	3,44 E-09	1,29 E-08
POCP	kg ethene eq.	6,30 E-03	1,63 E-05	1,07 E-03	7,39 E-03	2,42 E-05	2,70 E-07	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,10 E-05	8,03 E-04
AP	kg SO2 eq.	1,61 E-02	1,19 E-04	1,33 E-02	2,96 E-02	1,77 E-04	3,40 E-06	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	7,56 E-05	1,25 E-03
EP	kg (PO4) 3- eq.	2,49 E-03	2,33 E-05	1,87 E-03	4,38 E-03	3,47 E-05	6,99 E-07	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,46 E-05	1,48 E-04

Toxicity indicators for Dutch market

HTP	kg DCB-Eq	2,86 E+00	1,14 E-02	1,19 E+00	4,06 E+00	1,69 E-02	2,04 E-04	3,58 E-02	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	4,67 E-03	2,31 E-01
FAETP	kg DCB-Eq	8,80 E-02	3,32 E-04	7,64 E-02	1,65 E-01	4,93 E-04	5,63 E-06	4,04 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,11 E-04	-2,86 E-03
MAETP	kg DCB-Eq	8,51 E+01	1,19 E+00	8,40 E+01	1,70 E+02	1,78 E+00	2,38 E-02	6,11 E+02	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	3,96 E-01	-2,39 E+00
TETP	kg DCB-Eq	3,08 E-02	4,02 E-05	2,70 E-02	5,79 E-02	5,97 E-05	9,25 E-06	2,09 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,17 E-05	-1,93 E-02
ECI	euro	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00
ADPF	kg Sb eq.	2,83 E-02	1,99 E-04	7,47 E-03	3,60 E-02	2,95 E-04	1,37 E-05	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,41 E-04	2,28 E-03

- 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.]

ENVIRONMENT 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.	4,63 E+00	2,73 E-02	1,33 E+00	5,98 E+00	4,05 E-02	1,86 E-03	ND	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,06 E-02	3,92 E-01
GWP-fossil	kg CO2 eq.	4,58 E+00	2,72 E-02	1,29 E+00	5,90 E+00	4,05 E-02	1,84 E-03	ND	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,05 E-02	3,96 E-01
GWP-biogenic	kg CO2 eq.	3,20 E-02	1,26 E-05	1,83 E-02	5,03 E-02	1,87 E-05	2,02 E-05	ND	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	2,09 E-05	-4,12 E-03
GWP-luluc)	kg CO2 eq.	1,67 E-02	9,98 E-06	1,61 E-02	3,28 E-02	1,48 E-05	5,43 E-07	ND	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	2,94 E-06	-2,92 E-04
ODP	kg CFC11 eq.	2,21 E-07	6,01 E-09	1,35 E-07	3,63 E-07	8,94 E-09	8,91 E-11	ND	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	4,34 E-09	9,67 E-09
AP	mol H+ eq.	1,97 E-02	1,58 E-04	1,66 E-02	3,64 E-02	2,35 E-04	4,30 E-06	ND	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,00 E-04	1,53 E-03
EP-freshwater	kg PO4 eq.	2,79 E-04	2,75 E-07	1,12 E-04	3,92 E-04	4,08 E-07	1,05 E-07	ND	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,18 E-07	1,40 E-05
EP-marine	kg N eq.	3,94 E-03	5,56 E-05	3,98 E-03	7,97 E-03	8,27 E-05	9,22 E-07	ND	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	3,44 E-05	2,83 E-04
EP-terrestrial	mol N eq.	4,18 E-02	6,14 E-04	4,31 E-02	8,55 E-02	9,12 E-04	1,13 E-05	ND	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	3,79 E-04	3,31 E-03
POCP	kg NMVOC eq.	2,09 E-02	1,75 E-04	1,19 E-02	3,29 E-02	2,60 E-04	2,80 E-06	ND	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,10 E-04	2,25 E-03
ADP-minerals & metals	kg Sb eq.	1,19 E-04	6,90 E-07	2,05 E-04	3,25 E-04	1,03 E-06	7,41 E-09	ND	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	9,64 E-08	2,67 E-07
ADP-fossil	MJ, net calorific value	4,40 E+01	4,11 E-01	1,38 E+01	5,82 E+01	6,11 E-01	2,41 E-02	ND	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	2,94 E-01	2,77 E+00
WDP	m3 world eq. Deprived	1,94 E+00	1,47 E-03	1,36 E+00	3,30 E+00	2,18 E-03	1,85 E-04	ND	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,32 E-02	7,55 E-02

- 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.

ENVIRONMENT 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	3,61 E-07	2,45 E-09	8,54 E-08	4,48 E-07	3,64 E-09	1,41 E-11	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,94 E-09	2,29 E-08
IRP	kBq U235 eq.	7,29 E-02	1,72 E-03	4,72 E-02	1,22 E-01	2,56 E-03	4,98 E-05	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,21 E-03	-6,77 E-03
ETP-fw	CTUe	1,54 E+02	3,66 E-01	2,99 E+01	1,84 E+02	5,44 E-01	2,45 E-02	6,19 E+01	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,91 E-01	1,33 E+01
HTP-c	CTUh	2,17 E-08	1,18 E-11	5,39 E-09	2,71 E-08	1,76 E-11	4,00 E-13	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	4,40 E-12	5,06 E-11
HTP-nc	CTUh	1,52 E-07	4,00 E-10	3,36 E-08	1,86 E-07	5,95 E-10	1,37 E-11	8,41 E-06	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,36 E-10	-7,67 E-08
SQP	----	1,37 E+01	3,56 E-01	4,33 E+00	1,84 E+01	5,30 E-01	4,96 E-03	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	6,17 E-01	6,11 E-01

- 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.

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.

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	3,56 E-04	1,04 E-06	5,36 E-05	4,10 E-04	1,55 E-06	1,86 E-08	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	4,40 E-07	4,75 E-05
NHWD	kg	8,44 E-01	2,60 E-02	3,03 E-01	1,17 E+00	3,87 E-02	7,11 E-05	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	2,00 E+00	3,88 E-02
RWD	kg	7,62 E-05	2,70 E-06	5,82 E-05	1,37 E-04	4,01 E-06	4,99 E-08	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	1,93 E-06	- 2,34 E-06
CRU	kg	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00
MFR	kg	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00
MER	kg	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00
EEE	MJ	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00
ETE	MJ	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	ND	ND	ND	ND	ND	ND	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+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

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	2,10 E+00	5,14 E-03	8,42 E-01	2,95 E+00	8E-03	3E-03	0E+00	INA	INA	INA	INA	INA	INA	0E+00	0E+00	0E+00	2E-03	-8E-02
PERM	MJ	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0E+00	0E+00	0E+00	INA	INA	INA	INA	INA	INA	0E+00	0E+00	0E+00	0E+00	0E+00
PERT	MJ	2,10 E+00	5,14 E-03	8,42 E-01	2,95 E+00	8E-03	3E-03	0E+00	INA	INA	INA	INA	INA	INA	0E+00	0E+00	0E+00	2E-03	-8E-02
PENRE	MJ	4,65 E+01	4,36 E-01	1,46 E+01	6,16 E+01	6E-01	3E-02	0E+00	INA	INA	INA	INA	INA	INA	0E+00	0E+00	0E+00	3E-01	3E+00
PENRM	MJ	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0E+00	0E+00	0E+00	INA	INA	INA	INA	INA	INA	0E+00	0E+00	0E+00	0E+00	0E+00
PENRT	MJ	4,65 E+01	4,36 E-01	1,46 E+01	6,16 E+01	6E-01	3E-02	0E+00	INA	INA	INA	INA	INA	INA	0E+00	0E+00	0E+00	3E-01	3E+00
SM	kg	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0E+00	0E+00	0E+00	INA	INA	INA	INA	INA	INA	0E+00	0E+00	0E+00	0E+00	0E+00
RSF	MJ	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0E+00	0E+00	0E+00	INA	INA	INA	INA	INA	INA	0E+00	0E+00	0E+00	0E+00	0E+00
NRSF	MJ	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0E+00	0E+00	0E+00	INA	INA	INA	INA	INA	INA	0E+00	0E+00	0E+00	0E+00	0E+00
FW	m3	4,99 E-02	5,00 E-05	3,36 E-02	8,35 E-02	7E-05	1E-05	0E+00	INA	INA	INA	INA	INA	INA	0E+00	0E+00	0E+00	3E-04	1E-03

- 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

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
BBCpr	Kg C	ND	ND	ND	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BCCpa	kg C	ND	ND	ND	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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



CALCULATION RULES

Primary data at the one of the main production locations of First Base where collected in 2023. No materials or processes have been excluded from the study (cut-of rule is well below 1%).

The LCA calculations are made using the Ecoinvent database v3.6. Infrastructure processes in Ecoinvent processes have been included, long term emissions in Ecoinvent processes have been excluded from the LCA calculations.

SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION

Transport from the factory in China to the Netherlands was included in A2. The ground screws are transported from the factory in China to the harbor 120 km away. A ship transports the ground screws 20468 km to Rotterdam harbor from which it is transported to Veghel by an inland barge for 110 km. In Veghel, the ground screws are loaded onto trucks to be transported 8,4 km to Uden, where the warehouse is located.

Transport to the construction site can vary greatly and can depend on customer. Therefore, truck transport with a default distance of 150 km was included to model transport to the customer.

The Ground screws are installed using either an electric installation machine or a hydraulic machine. Both installation methods are given in separate A5. According to FIRST BASE, the electric installation machine consumes about 1800 watts. At maximum capacity, about 100m of ground screw can be installed per day which is 635kg of steel, only the electricity use was taken into consideration. According to FIRST BASE, the hydraulic installation machine consumes about 40 liters of Diesel per day. At maximum capacity, about 400m of ground screw can be installed per day which is 2540kg of steel.

Installation method	Per kg ground screw
Electric (W)	2,83
Hydraulic (diesel L)	0,0157

Almost all ground screws remain in the ground since they are not removed and are therefore counted as 100% disposal. The 100% of the product remains in ground is not recycled so no benefit can be attributed in D. However, according to the Assessment Method, secondary steel needs to be added in module D, since there is a loss of secondary material of 21,8%. Do note this is not done on the international market and can therefore be disregarded when used for the international market.

DECLARATION OF SVHC

No substances that are listed in the latest "Candidate List of Substances of Very High Concern for authorisation" are included in the product that exceeds the limit for registration.

REFERENCES

Stichting nationale Milieudatabase, Bepalingsmethode Milieuprestatie Bouwwerken versie 1.0.

EN 15804:2012+A2:2019, Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products, 2019.

ISO, ISO 14025:2006 Environmental labels and declarations — Type III environmental declarations — Principles and procedures, 2006.

SGS INTRON report: A145380/R20241604, march 2024

REMARKS

According to the Dutch Assessment Method, secondary steel needs to be added in module D, since there is a loss of secondary material. Do note this is not done on the international market and can therefore be disregarded when used for the international market.