



# ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Self Drilling Screws  
Hilti AG



## EPD HUB, HUB-4074

Published on 01.10.2025, last updated on 23.10.2025, valid until 01.10.2030.

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.2 (24 Mar 2025) and JRC characterization factors EF 3.1.

## GENERAL INFORMATION

### MANUFACTURER

Manufacturer	Hilti AG
Address	Feldkircherstrasse 100, Schaan, Liechtenstein
Contact details	Sustainability@Hilti.com
Website	www.hilti.com

### EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804:2012+A2:2019/AC:2021 and ISO 14025
PCR	EPD Hub Core PCR Version 1.2, 24 Mar 2025
Sector	Construction product
Category of EPD	Third party verified EPD
Parent EPD number	-
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Jessa Valencia, Hilti AG
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal verification <input checked="" type="checkbox"/> External verification
EPD verifier	Imane Uald Lamkaddam as an authorized verifier for EPD Hub

This EPD is intended for business-to-business and/or business-to-consumer communication. The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products

may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

### PRODUCT

Product name	Self Drilling Screws
Additional labels	See appendix
Product reference	418613, 406473, 2211431
Place(s) of raw material origin	Taiwan
Place of production	Kaohsiung, Taiwan
Place(s) of installation and use	Worldwide
Period for data	Calendar year 2024
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	+/- 15.11%
A1-A3 Specific data (%)	21,2

### ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg
Declared unit mass	1 kg
GWP-fossil, A1-A3 (kgCO <sub>2</sub> e)	3,79E+00
GWP-total, A1-A3 (kgCO <sub>2</sub> e)	3,67E+00
Secondary material, inputs (%)	21,7
Secondary material, outputs (%)	79
Total energy use, A1-A3 (kWh)	12,6
Net freshwater use, A1-A3 (m <sup>3</sup> )	0,03

## PRODUCT AND MANUFACTURER

### ABOUT THE MANUFACTURER

The Hilti Group supplies the worldwide construction and energy industries with technologically leading products, systems, software and services. With about 33,000 team members in over 120 countries the company stands for direct customer relationships, quality and innovation. The headquarters of the Hilti Group have been located in Schaan, Liechtenstein, since its founding in 1941. The company is privately owned by the Martin Hilti Family Trust, which ensures its long-term continuity. The Hilti Group's purpose is making construction better, based on a passionate and inclusive global team and a caring and performance-oriented culture.

### PRODUCT DESCRIPTION

Hilti Self-drilling screws include a variety of screws designed for various board fastenings and sidelap applications. The portfolio consists of galvanized zinc plated and stainless-steel screws. Various head types (Hex head (HWH), Phillips Pan Head (PPH), TPCH (Torx Pancake Head), Phillips Truss Head (PTH), Phillips Pancake Head (PPCH), Phillips Flat Truss Head (PFTH)) and tip type (lightning tip, racing tip, pilot point, stitch) are covered in the offering. Typical application for the self-drilling screws includes, but are not limited to, typical applications involving interior fastening, exterior sheathing, metal framing, HVAC duct and fastening boards to metal substructures.

Further information can be found at: [www.hilti.com](http://www.hilti.com)

### PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	100	Kaohsiung, Taiwan
Minerals	-	-
Fossil materials	-	-
Bio-based materials	-	-

### BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	0,066

### FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 kg
Mass per declared unit	1 kg
Functional unit	-
Reference service life	-

### SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

# PRODUCT LIFE-CYCLE

## SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries		
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	MND	MND	X	X	X	X	X		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/ demolition	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Modules not declared = MND. Modules not relevant = MNR

## MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

A market-based approach is used in modelling the electricity mix utilized in the factory.

The screw is made of low-carbon galvanized steel and stainless steel . The steel is BOF. The coils are cut and cold formed to form the blank in its final size and shape. The part is the rolled to form the thread and the heat treated to get the desired properties. The steel screw is zinc coated and finally packaged and distributed. The manufacturing process requires electricity for powering the production equipment. A wooden pallet and cardboard are used as packaging materials for transporting the screw to the dedicated marketplaces.

## TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurred from final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

The transportation is calculated based on the distance traveled by lorry/ship from the supplier to the warehouses in Hilti Liechtenstein and Hilti North America. Vehicle capacity utilization volume factor may vary but as role of transportation emissions in total results is small, the variety in load is assumed to be negligible. To be conservative, empty returns are included in this study as implemented through an average load factor in the Ecoinvent transport datapoints. Transportation does not cause losses as product is packaged properly.

Environmental impacts from installation into the building include generation of waste packaging materials (A5) and release of biogenic carbon dioxide from wood pallets/cardboard boxes. The impacts of material production, its processing and its disposal as installation waste are also assessed. Screws used in the installation process and electricity consumption for the assembly are considered, too. No installation losses happen in this stage if the installation process is carried out appropriately according to Hilti instructions.

### PRODUCT USE AND MAINTENANCE (B1-B7)

The use phase is not relevant for the life cycle emissions of this product and is, therefore, not accounted into the assessment.

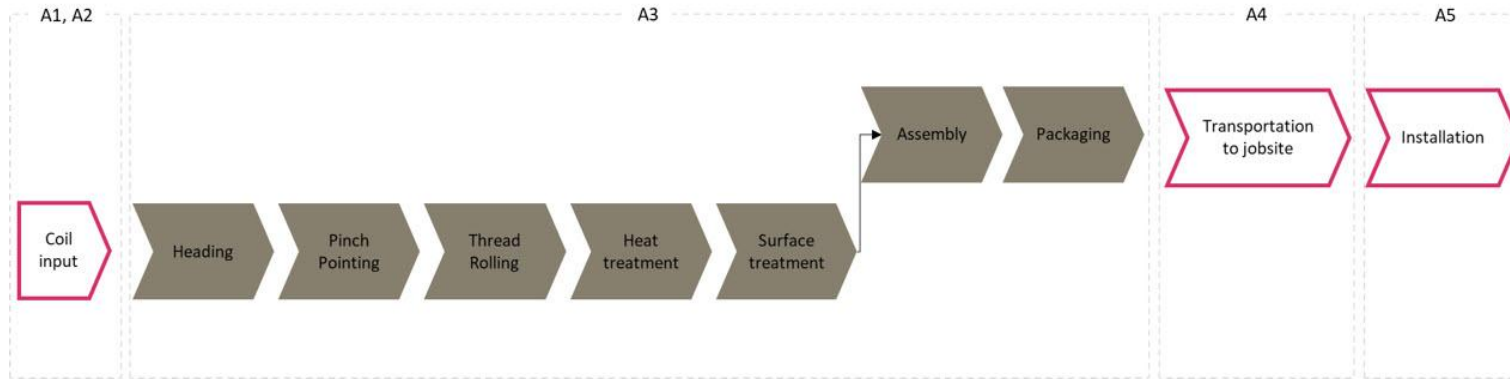
Air, soil, and water impacts during the use phase have not been studied.

### PRODUCT END OF LIFE (C1-C4, D)

The product is considered to be dismantled by a power tool and with negligible energy use. It is assumed that the steel waste is collected separately and transported to the waste treatment facility. Transportation distance to waste treatment plant and to landfill is assumed to be 100 km, the transportation method is assumed to be lorry. Module C3 accounts for energy and resource inputs for sorting and treating of steel for recycling. Landfilled material is included in module C4. Due to the material recovery potential of the product and material and energy recovery potential of its packaging, recycled raw materials lead to avoided virgin material production and the energy recovered from incineration replaces electricity and heat from primary sources. Benefits and loads from incineration and recycling are included in Module D.

Recycling rate of 85% in the calculation is based on world average. Actual recyclability may vary between regions.

# MANUFACTURING PROCESS



# LIFE-CYCLE ASSESSMENT

## CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

## ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	No allocation
Packaging material	No allocation
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

## PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	Multiple products
Grouping method	Representative products
Variation in GWP-fossil for A1-A3, %	+/- 15.11%

The averaging of products is calculated based on the three items in the product family: the best-selling variant (S-MS01Z 8-18x1/2 HWH #418613); the variant with the lowest CO<sub>2</sub> footprint (S-MS01Z 4,0x13 SQ #406473), and the variant with the highest CO<sub>2</sub> footprint (S-MD55SS 5,5x102 #2211431). The declared unit 1 kg of zinc plated screw is representative for a product consisting of a screw with total weight of 0.013kg. The thickness of the coating is on average 3 microns. The products included in the averaging are also self-drilling screws, hex head or flat head screws. They share the function of connecting exterior frames together.

## LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1/3.11 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1/3.11 environmental data sources follow the methodology ‘allocation, Cut-off, EN 15804+A2’.

# ENVIRONMENTAL IMPACT DATA

The estimated impact results are only relative statements which do not indicate the end points of the impact categories, exceeding threshold values, safety margins or risks.

## CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total <sup>1)</sup>	kg CO <sub>2</sub> e	2,79E+00	2,88E-01	5,91E-01	3,67E+00	2,99E-01	1,28E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,17E-02	1,04E-01	4,54E-02	-1,37E+00
GWP – fossil	kg CO <sub>2</sub> e	2,79E+00	2,88E-01	7,13E-01	3,79E+00	2,99E-01	2,99E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,17E-02	1,04E-01	4,54E-02	-1,37E+00
GWP – biogenic	kg CO <sub>2</sub> e	2,34E-03	5,15E-05	-1,25E-01	-1,22E-01	5,58E-05	1,25E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,11E-06	-4,30E-05	-3,95E-06	-9,99E-04
GWP – LULUC	kg CO <sub>2</sub> e	1,97E-03	1,30E-04	2,58E-03	4,68E-03	1,21E-04	1,73E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,85E-05	2,27E-05	9,69E-07	-2,02E-04
Ozone depletion pot.	kg CFC <sub>-11</sub> e	2,04E-08	4,85E-09	2,95E-08	5,47E-08	5,49E-09	3,18E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,83E-10	2,72E-10	4,64E-11	-4,55E-09
Acidification potential	mol H <sup>+</sup> e	2,73E-02	4,54E-03	3,08E-03	3,50E-02	3,10E-03	1,22E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,39E-04	2,32E-04	1,75E-05	-5,48E-03
EP-freshwater <sup>2)</sup>	kg Pe	1,03E-03	1,45E-05	1,30E-04	1,18E-03	1,70E-05	6,75E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,24E-06	1,18E-05	2,28E-07	-5,83E-04
EP-marine	kg Ne	2,99E-03	1,17E-03	6,64E-04	4,82E-03	8,32E-04	1,99E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,50E-05	5,82E-05	4,58E-05	-1,20E-03
EP-terrestrial	mol Ne	9,46E-02	1,30E-02	5,79E-03	1,13E-01	9,19E-03	3,92E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,90E-04	6,26E-04	7,92E-05	-1,32E-02
POCP (“smog”) <sup>3)</sup>	kg NMVOCe	9,51E-03	3,78E-03	2,45E-03	1,57E-02	2,88E-03	1,50E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,94E-04	1,81E-04	2,36E-05	-4,47E-03
ADP-minerals & metals <sup>4)</sup>	kg Sbe	7,49E-05	6,13E-07	8,05E-07	7,63E-05	7,89E-07	1,84E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,37E-07	1,27E-06	4,92E-09	-1,29E-05
ADP-fossil resources	MJ	3,18E+01	3,80E+00	9,28E+00	4,49E+01	4,05E+00	2,89E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,85E-01	2,56E-01	3,43E-02	-1,25E+01
Water use <sup>5)</sup>	m <sup>3</sup> e depr.	9,10E-01	1,51E-02	5,43E+00	6,36E+00	1,78E-02	7,09E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,71E-03	9,95E-03	2,91E-03	-2,28E-01

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO4e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.



### ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	3,82E-07	1,63E-08	1,56E-08	4,14E-07	1,95E-08	1,76E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,31E-09	2,99E-09	2,24E-10	-9,11E-08
Ionizing radiation <sup>6)</sup>	kBq 11235e	9,92E-02	3,33E-03	9,52E-02	1,98E-01	4,33E-03	1,70E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,73E-04	2,06E-03	3,34E-05	4,69E-02
Ecotoxicity (freshwater)	CTUe	2,34E+01	4,05E-01	1,46E+00	2,52E+01	4,74E-01	9,00E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,25E-02	3,08E-01	1,48E-01	-3,33E+00
Human toxicity, cancer	CTUh	3,28E-09	5,47E-11	1,14E-10	3,45E-09	5,44E-11	2,04E-12	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,09E-12	2,32E-11	4,02E-12	-2,19E-10
Human tox. non-cancer	CTUh	3,74E-08	1,74E-09	3,87E-09	4,30E-08	2,16E-09	1,09E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,66E-10	1,34E-09	1,72E-10	-1,07E-08
SQP <sup>7)</sup>	-	9,99E+00	1,51E+00	7,79E+00	1,93E+01	1,89E+00	2,39E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,49E-01	4,71E-01	5,50E-02	-4,00E+00

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. 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; 7) SQP = Land use related impacts/soil quality.

### USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy <sup>8)</sup>	MJ	3,37E+00	4,83E-02	4,54E-01	3,87E+00	6,03E-02	-1,30E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,02E-03	4,54E-02	6,25E-04	-8,90E-01
Renew. PER as material	MJ	0,00E+00	0,00E+00	1,10E+00	1,10E+00	0,00E+00	-1,10E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,02E-02
Total use of renew. PER	MJ	3,37E+00	4,83E-02	1,55E+00	4,97E+00	6,03E-02	-2,40E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,02E-03	4,54E-02	6,25E-04	-8,80E-01
Non-re. PER as energy	MJ	2,99E+01	3,80E+00	7,65E+00	4,14E+01	4,05E+00	2,89E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,85E-01	-1,05E+00	-1,27E+00	-1,25E+01
Non-re. PER as material	MJ	0,00E+00	0,00E+00	1,58E-02	1,58E-02	0,00E+00	-1,58E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,10E-04
Total use of non-re. PER	MJ	2,99E+01	3,80E+00	7,67E+00	4,14E+01	4,05E+00	1,31E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,85E-01	-1,05E+00	-1,27E+00	-1,25E+01
Secondary materials	kg	2,17E-01	1,76E-03	5,87E-02	2,77E-01	1,88E-03	4,30E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,63E-04	3,07E-04	1,46E-05	7,35E-01
Renew. secondary fuels	MJ	1,16E-03	1,38E-05	1,16E-02	1,28E-02	1,86E-05	2,57E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,35E-06	1,41E-05	3,91E-07	-1,13E-04
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m <sup>3</sup>	2,14E-02	4,03E-04	6,37E-03	2,82E-02	4,78E-04	-3,23E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,75E-05	2,24E-04	4,09E-06	-3,09E-03

8) PER = Primary energy resources.

## END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	1,20E+00	5,35E-03	8,99E-03	1,21E+00	5,70E-03	4,32E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,02E-03	3,04E-03	7,69E-04	-4,43E-01
Non-hazardous waste	kg	5,87E+00	9,44E-02	2,34E-01	6,20E+00	1,10E-01	7,32E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,91E-02	9,64E-02	1,10E-01	-3,49E+00
Radioactive waste	kg	2,48E-05	8,22E-07	1,10E-05	3,66E-05	1,07E-06	4,32E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,16E-07	5,28E-07	8,30E-09	1,22E-05

## END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	0,00E+00	0,00E+00	6,29E-12	6,29E-12	0,00E+00	6,39E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	7,90E-01	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	3,29E-20	3,29E-20	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,90E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	4,10E-01	0,00E+00	0,00E+00
Exported energy – Electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,20E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	1,70E-01	0,00E+00	0,00E+00
Exported energy – Heat	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,70E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	2,40E-01	0,00E+00	0,00E+00

## ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO <sub>2</sub> e	2,77E+00	2,86E-01	7,21E-01	3,78E+00	2,97E-01	1,09E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,15E-02	1,03E-01	4,53E-02	-1,36E+00
Ozone depletion Pot.	kg CFC <sub>11</sub> e	1,76E-08	3,86E-09	2,88E-08	5,02E-08	4,37E-09	2,60E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,66E-10	2,26E-10	3,84E-11	-4,99E-09
Acidification	kg SO <sub>2</sub> e	1,80E-02	3,61E-03	2,52E-03	2,41E-02	2,45E-03	9,30E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,06E-04	1,85E-04	1,26E-05	-4,42E-03
Eutrophication	kg PO <sub>4</sub> <sup>3</sup> e	4,92E-03	4,48E-04	8,14E-04	6,18E-03	3,44E-04	1,30E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,59E-05	2,97E-05	5,84E-06	-8,04E-04
POCP (“smog”)	kg C <sub>2</sub> H <sub>4</sub> e	1,10E-03	1,95E-04	1,37E-04	1,43E-03	1,45E-04	2,62E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,53E-06	1,10E-05	1,21E-06	-6,79E-04
ADP-elements	kg Sbe	7,46E-05	6,01E-07	7,93E-07	7,60E-05	7,72E-07	1,80E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,34E-07	1,27E-06	3,94E-09	-1,29E-05
ADP-fossil	MJ	3,03E+01	3,75E+00	9,16E+00	4,32E+01	3,98E+00	2,60E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,78E-01	2,20E-01	3,38E-02	-1,33E+01

### ADDITIONAL INDICATOR – GWP-GHG

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG <sup>9)</sup>	kg CO <sub>2</sub> e	2,79E+00	2,88E-01	7,15E-01	3,79E+00	2,99E-01	2,99E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,17E-02	1,04E-01	4,54E-02	-1,37E+00

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. In addition, the characterisation factors for the flows – CH<sub>4</sub> fossil, CH<sub>4</sub> biogenic and Dinitrogen monoxide – were updated. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterisation factor for biogenic CO<sub>2</sub> is set to zero.

## THIRD-PARTY VERIFICATION STATEMENT

### VERIFICATION PROCESS FOR THIS EPD

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliancy with reference standard, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The digital background data for this EPD

Why does verification transparency matter? Read more online

This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

### THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried out, the presentation of environmental data in the EPD, and other additional environmental information, as present with respect to the procedural and methodological requirements in ISO 14025:2010 and reference standard.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

Imane Uald Lamkaddam as an authorized verifier for EPD Hub Limited  
01.10.2025



## APPENDIX

### PRODUCT PORTFOLIO INCLUDED IN SCOPE

The following list of products are included in the scope of this declaration, as represented by Self-drill screw S-MD55SS 5,5x102 (item number 2211431), Self-drill screw S-MS01Z 8-18x1/2" HWH (item number 418613) and Self-drill screw S-MS01Z 4,0x13 SQ (item number 406473).

Item number	Item description	Weight (kg/pc)
285608	Self-drill screw S-MD01S 4,8x22	0.00202
375228	Self-drill screw S-MD51S 4,8x22	0.00152
375229	Self-drill screw S-MD51S 4,8x25	0.00316
378258	Self-drill screw S-MD51LS 5,5x25	0.00336
385448	Self-drill screw S-MS01Z 4,8x20	0.0038
385450	Self-drill screw S-MS01Z 4,8x20 M	0.00097
406471	Self-drill screw S-MS01Z 4,0x13 HEX	0.00146
406472	Self-drill screw S-MS01Z 4,0x13 TX	0.00143
406473	Self-drill screw S-MS01Z 4,0x13 SQ	0.00141
406474	Self-drill screw S-MS 8-18x1/2 HWH	0.00167
413408	Self-drill screw S-MD03S 5,5x25	0.00257
413409	Self-drill screw S-MD03S 5,5x32	0.00151
413410	Self-drill screw S-MD03S 5,5x38	0.00169
413411	Self-drill screw S-MD03S 5,5x50	0.00211
413412	Self-drill screw S-MD03S 5,5x63	0.00106
413415	Self-drill screw S-MD03Z 5,5x19	0.00205
413416	Self-drill screw S-MD03Z 5,5x22	0.00225
413417	Self-drill screw S-MD03Z 5,5x25	0.00225
413418	Self-drill screw S-MD03Z 5,5x25 M	0.00125

Item number	Item description	Weight (kg/pc)
413419	Self-drill screw S-MD03Z 5,5x32	0.00286
413420	Self-drill screw S-MD03Z 5,5x38	0.00322
413421	Self-drill screw S-MD03Z 6,3x19	0.00261
413422	Self-drill screw S-MD03Z 6,3x22	0.00285
413423	Self-drill screw S-MD03Z 6,3x25	0.00308
413424	Self-drill screw S-MD03Z 6,3x32	0.00369
413425	Self-drill screw S-MD03Z 6,3x50	0.00261
413426	Self-drill screw S-MD03Z 6,3x70	0.00347
413427	Self-drill screw S-MD23Z 5,5x22	0.00283
413428	Self-drill screw S-MD23Z 5,5x22 M	0.00118
413429	Self-drill screw S-MD23Z 6,3x19	0.00292
413430	Self-drill screw S-MD23Z 6,3x22	0.00314
413432	Self-drill screw S-MD23Z 6,3x25	0.00343
413433	Self-drill screw S-MD23Z 6,3x50	0.00275
413434	Self-drill screw S-MD53S 5,5x25	0.00381
413435	Self-drill screw S-MD53S 5,5x32	0.00213
413436	Self-drill screw S-MD53S 5,5x38	0.00236
413437	Self-drill screw S-MD53S 5,5x50	0.00272
413438	Self-drill screw S-MD53S 5,5x63	0.0013
413440	Self-drill screw S-MD53Z 5,5x19	0.00325
413441	Self-drill screw S-MD53Z 5,5x25	0.00363
413442	Self-drill screw S-MD53Z 5,5x32	0.00413
413443	Self-drill screw S-MD53Z 5,5x38	0.00227
413444	Self-drill screw S-MD53Z 5,5x50	0.00264
413445	Self-drill screw S-MD53Z 6,3x19	0.0038
413446	Self-drill screw S-MD53Z 6,3x25	0.00431
413447	Self-drill screw S-MD53Z 6,3x32	0.00486

Item number	Item description	Weight (kg/pc)
413448	Self-drill screw S-MD53Z 6,3x38	0.00276
413449	Self-drill screw S-MD53Z 6,3x50	0.0032
413450	Self-drill screw S-MD63S 5,5x25	0.00429
413451	Self-drill screw S-MD63S 5,5x32	0.00239
413452	Self-drill screw S-MD63S 5,5x38	0.00195
413454	Self-drill screw S-MD63S 5,5x63	0.00139
414293	Self-drill screw S-MD03Z 5,5x50	0.00398
414295	Self-drill screw S-MD03Z 6,3x38	0.0042
414297	Self-drill screw S-MD43S 5,5x25	0.00353
414302	Self-drill screw S-MD43S 5,5x38	0.00195
416184	Self-drill screw S-MS01Z 4,0x13 HEX	0.00472
418613	Self-drill screw S-MS01Z 8-18x1/2" HWH	0.01619
423252	Self-drill screw S-MS 10-12x3/4" HHWH	0.00373
423253	Self-drill screw S-MS10-12x3/4" HHWH	0.01645
434027	Self-drill screw S-MS01Z 4,0x13 HEX1/4"	0.00168
2054483	Self-drill screw S-MD 05Z 5,5x40	0.00168
2054484	Self-drill screw S-MD 05Z 5,5x52	0.00201
2054485	Self-drill screw S-MD 05Z 5,5x65	0.00102
2054486	Self-drill screw S-MD 05Z 5,5x82	0.00123
2054487	Self-drill screw S-MD 05Z 5,5x102	0.00147
2054488	Self-drill screw S-MD 25Z 5,5x40	0.00186
2054489	Self-drill screw S-MD 55Z 5,5x40	0.00225
2054830	Self-drill screw S-MD 55Z 5,5x52	0.00258
2054831	Self-drill screw S-MD 55Z 5,5x65	0.00125
2054832	Self-drill screw S-MD 55Z 5,5x82	0.00145
2054833	Self-drill screw S-MD 55Z 5,5x102	0.0017
2083693	Self-drill screw S-MS01S 4,8x20	0.00349

Item number	Item description	Weight (kg/pc)
2083695	Self-drill screw S-MS51Z 4,8x20	0.00265
2083699	Self-drill screw S-MS41S 4,8x20	0.00246
2083980	Self-drill screw S-MS51S 4,8x20	0.00277
2090661	Self-drill screw S-MD 65Z 5,5x40	0.00244
2096593	Self-drill screw S-MD51 LSS 5,5x25	0.00349
2114547	Self-drill screw S-MD51LSS 5,5x32	0.00196
2114790	Self-drill screw S-MD03SS 5,5x25	0.0026
2114791	Self-drill screw S-MD03SS 5,5x32	0.00155
2114792	Self-drill screw S-MD53SS 5,5x25	0.00384
2114793	Self-drill screw S-MD53SS 5,5x32	0.00214
2118297	Self-drill screw S-MD41LS 5,5x25	0.00332
2166430	Self-drill screw S-MD51LS 5,5x50	0.00253
2166435	Self-drill screw S-MD51LSS 5,5x50	0.00254
2209615	Self-drill screw S-MD05S 5,5x40	0.00169
2209616	Self-drill screw S-MD05S 5,5x52	0.00208
2209617	Self-drill screw S-MD05S 5,5x65	0.00096
2209618	Self-drill screw S-MD05S 5,5x82	0.00125
2209619	Self-drill screw S-MD05S 5,5x102	0.00153
2209960	Self-drill screw S-MD55S 5,5x40	0.00234
2209961	Self-drill screw S-MD55S 5,5x52	0.0027
2209962	Self-drill screw S-MD55S 5,5x65	0.0011
2209963	Self-drill screw S-MD55S 5,5x82	0.00149
2209964	Self-drill screw S-MD55S 5,5x102	0.00179
2209965	Self-drill screw S-MD65S 5,5x40	0.00259
2209966	Self-drill screw S-MD65S 5,5x52	0.00295
2209967	Self-drill screw S-MD65S 5,5x65	0.00138
2209970	Self-drill screw S-MD75S 5,5x40	0.00288

Item number	Item description	Weight (kg/pc)
2209974	Self-drill screw S-MD55SS 5,5x52	0.00271
2211017	Self-drill screw S-MD55SS 5,5x65	0.00129
2211018	Self-drill screw S-MD05SS 5,5x52	0.00208
2211019	Self-drill screw S-MD05SS 5,5x102	0.00155
2211430	Self-drill screw S-MD55SS 5,5x82	0.00154
2211431	Self-drill screw S-MD55SS 5,5x102	0.00179
2211432	Self-drill screw S-MD05SS 5,5x40	0.00172
2211433	Self-drill screw S-MD05SS 5,5x65	0.00103
2211434	Self-drill screw S-MD05SS 5,5x82	0.00127
2211435	Self-drill screw S-MD55SS 5,5x40	0.00231
2229841	Self-drill screw S-MD03C 5,5x22	0.00226
2229842	Self-drill screw S-MD03C 6,3x70	0.00335
2229843	Self-drill screw S-MD31LPSS 5,5x38	0.00185
2229844	Self-drill screw S-MD35PSS 5,5x40	0.00198
2229846	Self-drill screw S-MD05PS 5,5x52	0.002
2229847	Self-drill screw S-MD35PSS 5,5x52	0.00241
2229848	Self-drill screw S-MD31LPS 5,5x25	0.00275
2229849	Self-drill screw S-MD31LPS 5,5x32	0.00165
2229850	Self-drill screw S-MD31LPS 5,5x38	0.00174
2229851	Self-drill screw S-MD33PS 5,5x25	0.00314
2229852	Self-drill screw S-MD33PS 5,5x32	0.00182
2229853	Self-drill screw S-MD33PS 5,5x38	0.00201
2229854	Self-drill screw S-MD33PS 5,5x50	0.00239
2229855	Self-drill screw S-MD35PS 5,5x40	0.00193
2229856	Self-drill screw S-MD01LPS 5,5x25	0.00235
2229857	Self-drill screw S-MD01LPS 5,5x32	0.00142
2229858	Self-drill screw S-MD01LPS 5,5x38	0.00162

Item number	Item description	Weight (kg/pc)
2229859	Self-drill screw S-MD03PS 5,5x25	0.00246
2229860	Self-drill screw S-MD03PS 5,5x32	0.00152
2229861	Self-drill screw S-MD03PS 5,5x38	0.00171
2229862	Self-drill screw S-MD03PS 5,5x50	0.00209
2229863	Self-drill screw S-MD05PS 5,5x40	0.00214
2229864	Self-drill screw S-MD33PSS 5,5x25	0.00309
2229865	Self-drill screw S-MD33PSS 5,5x32	0.00182
2229866	Self-drill screw S-MD33PSS 5,5x38	0.00205
2229867	Self-drill screw S-MD33PSS 5,5x50	0.00239
2229868	Self-drill screw S-MS01PS 4,8x20	0.00349
2229869	Self-drill screw S-MS31PS 4,8x20	0.00227
2229870	Self-drill screw S-MD31LPSS 5,5x25	0.00279
2229902	Self-drill screw S-MD05GC 5.5x52	0.00203
2229904	Self-drill screw S-MD05GC 5.5x40	0.00168
2278706	Self-drill screw S-MD03PSS 5,5x25	0.00248
2322185	Screw S-MD 12-14 x 2 HWH #3 SS304	0.00254
2322186	Screw S-MD 12-14 x 2 1/2 HWH #3 SS304	0.00131
2322187	Screw S-MD 12-14 x 4 HWH #5 SS304	0.00178
2322193	Screw S-MD 12-14 x 1 HWH #3 SS304	0.00339
2322196	Screw S-MD 12-14 x 1 HWH #3 SS316	0.0034
2347796	Self-drill screw S-MD01S 4,8x22 K	0.00098
2387492	Self-drill screw S-AS 51S 4,8x20 K2	0.00262
2414921	Screw S-MS 51S 6.0X25	0.0019
2414922	Screw S-MS 51S 6.0X38	0.00248
413319	Screw S-MD53Z 5,5x25 RAL9010	0.005453
413320	Screw S-MD53Z 5,5x25 RAL9006	0.005452999

Item number	Item description	Weight (kg/pc)
413453	Self-drill screw S-MD63S 5,5x50	0.009421
414300	Self-drill screw S-MD43S 5,5x32	0.007027
414304	Self-drill screw S-MD43S 5,5x50	0.009421
414307	Self-drill screw S-MD43S 5,5x63	0.011808
2083694	Self-drill screw S-MS41Z 4,8x20	0.003736
2083981	Self-drill screw S-MS41S-A 4,8x20	0.003776
2083982	Self-drill screw S-MS51S-A 4,8x20	0.003776
2171657	Self-drill screw S-MD03SS 5,5x50	0.008256999
2210567	Self-drill screw S-MS01S 4,8x20 M	0.003686
2229819	Self-drill screw S-MD31LPSS 5,5x32	0.00692
2229845	Self-drill screw S-MD35PS 5,5x52	0.009652
2444360	S-MS10-12x3/4 SPH M3	0.002824
2441227	S-MS 01PZ 4.8x20 M3	0.002824