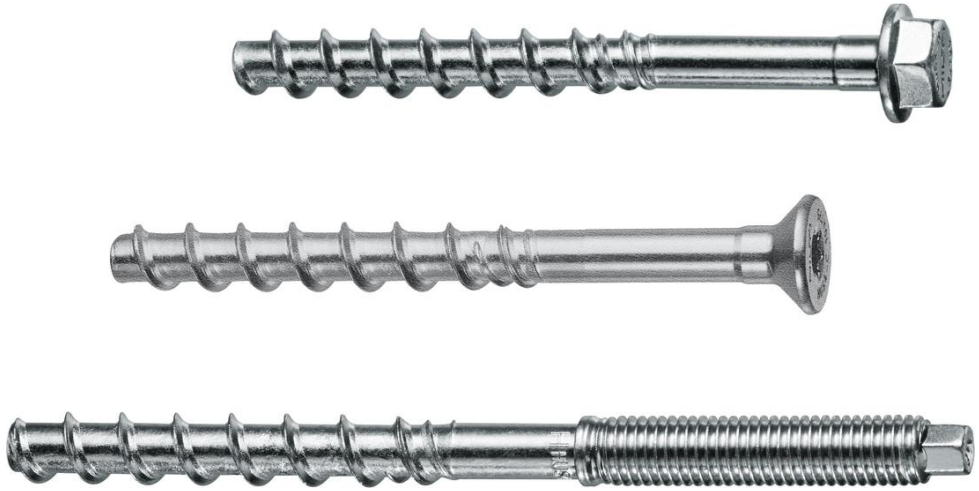
ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025 / ISO 21930

Screw Anchor Portfolio HUS4
Hilti AG



EPD HUB, HUB-3084
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Created with One Click LCA

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Hilti AG
Address	Feldkircherstrasse 100 | P.O. Box 333 | FL-9494 Schaan | Principality of 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+A2:2019 and ISO 14025
PCR	EPD Hub Core PCR version 1.1, 5 Dec 2023
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	Frank Geisler, Hilti AG
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ External verification
EPD verifier	Imane Uald Lamkaddam as an authorized verifier for EPD Hub

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	Screw anchor HUS4 Portfolio
Additional labels	See appendix
Product reference	2293553
Place of production	9494 Schaan, Principality of Liechtenstein
Period for data	Calendar year 2024
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3	-2 % / +4 %

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg
Declared unit mass	1 kg
GWP-fossil, A1-A3 (kgCO2e)	1.52E+00
GWP-total, A1-A3 (kgCO2e)	1.26E+00
Secondary material, inputs (%)	87.2
Secondary material, outputs (%)	0
Total energy use, A1-A3 (kWh)	6.74
Net fresh water use, A1-A3 (m3)	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. Hilti generated annual sales of CHF 6.4 billion in 2024. 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 V

Hilti high performing HUS4 Screw anchor works with undercutting principle to resist static, seismic and fire load in structural and non-structural as well as for temporary and permanent fastening for construction professionals. HUS4 portfolio comes with different lengths and head configurations (Hexagonal, Countersunk, Threated head). It's galvanized for indoor use or specially coated (comparable to HDG) for corrosion environment class C3 up to 25 years. It is approved for steel to concrete, steel to masonry and concrete overlay under. The HUS4 screw anchors can also be used in fresh concrete and be reused. Hilti HUS4 screw anchors functioning principle is based on undercutting which is achieved by driving the screw in the base material with an impact wrench (in concrete) or screwdriver (in masonry). 70% of the HUS4 portfolio is made of Green Steel (EAF).

Further information can be found at www.hilti.com.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals	100	Europe
Minerals	0	-
Fossil materials	0	-
Bio-based materials	0	-

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	0.0748

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit VP-011	1
Mass per declared unit VP-012	1 kg
Functional unit	1 kg galvanized screw anchor
Reference service life	n.a.

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	Deconstr./demol.	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.

The screw anchor is made of galvanized carbon steel. The steel (EAF/BOF) is produced in Germany, Austria or France. Transportation by lorry. The screw is cold formed at HILTI manufacturing site in Liechtenstein (FL), externally heat treated in Germany, additionally hardened at Hilti (FL) and electroplated in Switzerland. Afterwards, the screw anchor is packed at an external supplier in Switzerland. Faulty parts and production waste (only steel) is considered in A3 and 100% recycled. Packaging waste during production is inferior and therefore neglected. Electricity is consumed at every stage of production; compressed air is mainly consumed by pneumatic drives at cold forming. Auxiliary materials like forming lubricants, cleaning agents etc. are inferior and therefore neglected. Electricity is 100% renewable with a mix of 89% certified wind energy and 11% electricity produced by Hilti owned photovoltaic arrays. For transportation to customer (via HILTI logistic centre in FL), anchors are packed in sales boxes and export boxes (both cardboard) and transported on a pallet.

100% of the product is made of carbon steel. 29% of the carbon steel in the portfolio is produced via blast oxygen furnace (BOF), with recycled material of 20%. 71% of the carbon steel in the portfolio is produced via electric arc furnace (EAF), with recycled material of 95%. Based on the most comprehensive market information and internal evaluations available, the recycled content is estimated to consist of approximately 30% pre-consumer and 70% post-consumer material. For further information, see the table below:

Steel Type	Weight	Recycled Material	Steel Source	Recycled Content	Pre-Consumer	Post-Consumer
Carbon	29%	20%	BOF	5.8%	1.7%	4.1%
Carbon	71%	95%	EAF	67.5%	20.2%	47.2%

Notes:
Recycled Material refers to the % of recycled material in the steel type
Recycled Content refers to the % contribution of recycled material to the total product
Recycled Content = (% Weight) x (% Recycled Material)
Pre-/Post Consumer = (% Recycled Content) × (% Pre- or Post-Consumer Share, 30% or 70%)

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.

From the logistic centre in FL the anchors are distributed in containers to Hilti distribution centres all over the world. The route is basically lorry - sea freight - lorry. The stated distances are weighted mean values based on 2024 sales figures. Transportation plays only a subordinate role at final results. Package (cardboard and pallet) is the only waste at installation. It is assumed that 100% of cardboard is recycled. 70% of wooden pallet will be incinerated with energy recovery, 30% will be recycled. Distances for waste treatment are assumed to be 50km in general. Energy for anchor installation is negligible.

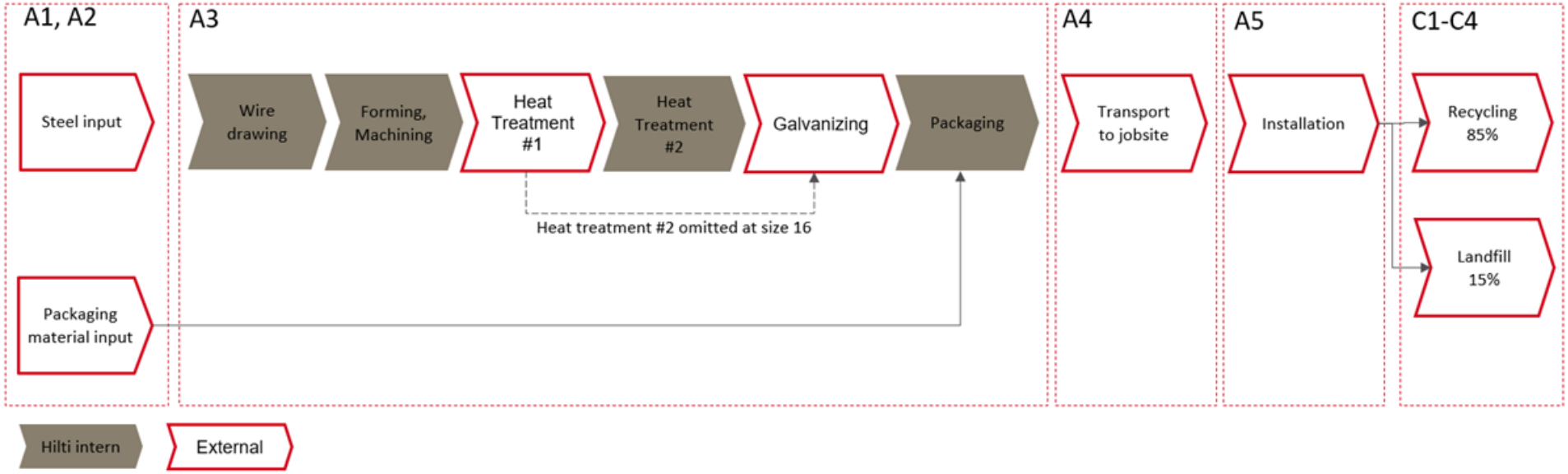
PRODUCT USE AND MAINTENANCE (B1-B7) V

No emissions during lifecycle.

PRODUCT END OF LIFE (C1-C4, D)

At end of life, the product will be dismantled together with the building and separated via magnet. Based on worldsteel.org studies, a recycling share of 85% is assumed. 15% are assumed to be deposited. Distances for waste treatment are assumed to be 50km in general. Demolition energy is assumed to be negligible. Module D benefits are considered for the product and packaging.

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 materials	Allocated by mass or volume
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

AVERAGES AND VARIABILITY

Type of average	Multiple products
Averaging method	Representative product
Variation in GWP-fossil for A1-A3	-2% / +4%

The averaging of products is calculated based on a mid-size product which is also the bestselling one, the smallest and the biggest version. All products are identical except head shape, length and diameter.

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 and One Click LCA databases as sources of environmental data.

ENVIRONMENTAL IMPACT DATA

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total[1)]	kg CO_2e	1,35E+00	5,67E-02	-1,45E-01	1,26E+00	3,93E-01	2,82E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,38E-03	2,31E-02	9,37E-04	9,61E-03
GWP – fossil	kg CO_2e	1,34E+00	5,66E-02	1,30E-01	1,52E+00	3,93E-01	5,26E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,38E-03	2,31E-02	9,36E-04	1,01E-02
GWP – biogenic	kg CO_2e	0,00E+00	0,00E+00	-2,76E-01	-2,76E-01	0,00E+00	2,76E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-3,40E-07
GWP – LULUC	kg CO_2e	8,24E-03	2,53E-05	1,23E-03	9,49E-03	1,76E-04	7,01E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,41E-06	2,72E-05	5,35E-07	-5,26E-04
Ozone depletion pot.	kg $CFC\text{-}_{11}$e	1,20E-08	8,36E-10	3,30E-09	1,61E-08	5,80E-09	5,90E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,95E-11	2,48E-10	2,71E-11	-9,50E-11
Acidification potential	mol H^+e	8,61E-03	1,93E-04	7,37E-04	9,54E-03	1,34E-03	3,24E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,84E-05	2,47E-04	6,64E-06	1,94E-05
EP-freshwater[2)]	kg Pe	9,57E-04	4,41E-06	5,57E-05	1,02E-03	3,06E-05	1,36E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,19E-07	1,25E-05	7,70E-08	1,40E-06
EP-marine	kg Ne	1,38E-03	6,34E-05	1,91E-04	1,63E-03	4,40E-04	1,44E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,03E-06	5,49E-05	2,53E-06	8,69E-05
EP-terrestrial	mol Ne	2,45E-02	6,90E-04	1,82E-03	2,70E-02	4,79E-03	1,32E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,56E-05	6,19E-04	2,76E-05	5,49E-05
POCP ("smog")[3)]	kg NMVOCe	4,30E-03	2,85E-04	6,59E-04	5,25E-03	1,97E-03	3,86E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,70E-05	1,82E-04	9,90E-06	-5,61E-06
ADP-minerals & metals[4)]	kg Sbe	1,35E-05	1,58E-07	1,23E-06	1,49E-05	1,10E-06	2,20E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,50E-08	1,36E-06	1,49E-09	-5,99E-08
ADP-fossil resources	MJ	1,62E+01	8,22E-01	2,11E+00	1,91E+01	5,70E+00	6,01E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,81E-02	2,73E-01	2,30E-02	1,11E-01
Water use[5)]	m^3e depr.	1,12E+00	4,06E-03	7,31E-02	1,20E+00	2,81E-02	3,38E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,86E-04	4,31E-03	6,63E-05	-2,04E-02

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, PEF

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	1,42E-07	5,67E-09	1,49E-08	1,63E-07	3,93E-08	7,63E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,39E-10	3,45E-09	1,51E-10	-9,68E-10
Ionizing radiation6)	kBq U235e	1,28E-01	7,16E-04	2,39E-02	1,53E-01	4,96E-03	1,84E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,80E-05	9,79E-04	1,44E-05	1,21E-04
Ecotoxicity (freshwater)	CTUe	1,12E+01	1,16E-01	6,33E-01	1,19E+01	8,06E-01	3,07E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,10E-02	1,58E-01	1,93E-03	-2,08E-02
Human toxicity, cancer	CTUh	3,47E-09	9,35E-12	2,50E-10	3,73E-09	6,48E-11	5,53E-12	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,88E-13	1,85E-11	1,73E-13	-1,97E-11
Human tox. non-cancer	CTUh	1,84E-08	5,32E-10	2,19E-09	2,11E-08	3,69E-09	2,85E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,06E-11	1,18E-09	3,97E-12	-5,46E-10
SQP7)	-	4,43E+00	8,28E-01	2,21E+01	2,74E+01	5,74E+00	4,03E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,87E-02	5,16E-01	4,52E-02	-2,93E+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 energy8)	MJ	1,66E+00	1,13E-02	3,54E+00	5,21E+00	7,81E-02	-2,67E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,07E-03	4,24E-02	2,22E-04	-8,91E-01
Renew. PER as material	MJ	0,00E+00	0,00E+00	2,38E+00	2,38E+00	0,00E+00	-2,38E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,96E-01
Total use of renew. PER	MJ	1,66E+00	1,13E-02	5,91E+00	7,58E+00	7,81E-02	-5,05E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,07E-03	4,24E-02	2,22E-04	-9,48E-02
Non-re. PER as energy	MJ	1,62E+01	8,22E-01	1,98E+00	1,90E+01	5,70E+00	6,01E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,81E-02	2,73E-01	2,30E-02	1,17E-01
Non-re. PER as material	MJ	0,00E+00	0,00E+00	1,42E-01	1,42E-01	0,00E+00	-1,42E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,49E-02
Total use of non-re. PER	MJ	1,62E+01	8,22E-01	2,12E+00	1,91E+01	5,70E+00	-8,18E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,81E-02	2,73E-01	2,30E-02	1,51E-01
Secondary materials	kg	8,72E-01	3,50E-04	1,82E-02	8,91E-01	2,43E-03	7,65E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,32E-05	3,16E-04	5,78E-06	1,38E-02
Renew. secondary fuels	MJ	1,06E-04	4,44E-06	6,94E-02	6,95E-02	3,08E-05	4,41E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,22E-07	1,43E-05	1,20E-07	5,10E-03
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	m3	2,82E-02	1,21E-04	1,81E-03	3,01E-02	8,42E-04	3,16E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,15E-05	1,19E-04	2,39E-05	-4,94E-04

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	6,28E-01	1,39E-03	1,02E-02	6,40E-01	9,65E-03	8,12E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,32E-04	2,13E-03	2,54E-05	8,24E-05
Non-hazardous waste	kg	6,80E+00	2,58E-02	2,99E-01	7,13E+00	1,79E-01	9,59E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,45E-03	5,98E-02	5,80E-04	3,93E-02
Radioactive waste	kg	3,27E-05	1,75E-07	6,07E-06	3,90E-05	1,21E-06	4,55E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,67E-08	2,41E-07	3,52E-09	-1,38E-08

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	1,53E-02	1,53E-02	0,00E+00	8,89E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for energy rec	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
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,73E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	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	1,47E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	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	8,26E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	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 CO2e	1,34E+00	5,63E-02	1,32E-01	1,53E+00	3,91E-01	6,62E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,35E-03	2,30E-02	9,28E-04	1,58E-02
Ozone depletion Pot.	kg CFC-11e	1,11E-08	6,67E-10	2,97E-09	1,47E-08	4,63E-09	4,82E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,34E-11	2,06E-10	2,15E-11	-3,75E-11
Acidification	kg SO2e	6,27E-03	1,47E-04	5,67E-04	6,98E-03	1,02E-03	2,40E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,40E-05	1,99E-04	4,91E-06	1,29E-05
Eutrophication	kg PO43e	1,63E-03	3,59E-05	1,69E-03	3,36E-03	2,49E-04	7,84E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,41E-06	2,83E-05	1,56E-06	3,94E-05
POCP (“smog”)	kg C2H4e	5,91E-04	1,31E-05	6,32E-05	6,67E-04	9,11E-05	2,57E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,25E-06	1,18E-05	4,65E-07	7,39E-07
ADP-elements	kg Sbe	1,32E-05	1,54E-07	1,21E-06	1,45E-05	1,07E-06	2,12E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,46E-08	1,36E-06	1,46E-09	-4,89E-08
ADP-fossil	MJ	1,40E+01	8,10E-01	1,68E+00	1,65E+01	5,62E+00	5,71E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,70E-02	2,57E-01	2,28E-02	1,07E-01

ENVIRONMENTAL IMPACTS – GWP-GHG - THE INTERNATIONAL EPD SYSTEM

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG[9)]	kg CO_2e	1,35E+00	5,67E-02	1,31E-01	1,53E+00	3,93E-01	5,27E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,38E-03	2,31E-02	9,37E-04	9,61E-03

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product as defined by IPCC AR 5 (IPCC 2013). In addition, the characterisation factors for the flows - CH4 fossil, CH4 biogenic and Dinitrogen monoxide - were updated in line with the guidance of IES PCR 1.2.5 Annex 1. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterization factor for biogenic CO2 is set to zero.

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
21.03.2025

APPENDIX

PRODUCT PORTFOLIO INCLUDED IN SCOPE

The following products are included in the scope of this declaration, as represented by HUS4-H 10x70 (item number 2293553).

Item number	Item designation	Weight [kg]
2293134	Screw anchor HUS4-H 8x45	0,028
2293135	Screw anchor HUS4-H 8x55	0,031
2293136	Screw anchor HUS4-H 8x65	0,035
2293137	Screw anchor HUS4-H 8x75	0,039
2293138	Screw anchor HUS4-H 8x85	0,042
2293139	Screw anchor HUS4-H 8x100	0,048
2293550	Screw anchor HUS4-H 8x120	0,056
2293551	Screw anchor HUS4-H 8x150	0,067
2293552	Screw anchor HUS4-H 10x60	0,050
2293553	Screw anchor HUS4-H 10x70	0,056
2293554	Screw anchor HUS4-H 10x80	0,061
2293555	Screw anchor HUS4-H 10x90	0,067
2293556	Screw anchor HUS4-H 10x100	0,072
2293557	Screw anchor HUS4-H 10x110	0,078
2293558	Screw anchor HUS4-H 10x130	0,089
2293559	Screw anchor HUS4-H 10x150	0,100
2293560	Screw anchor HUS4-H 10x180	0,121
2293561	Screw anchor HUS4-H 10x200	0,132
2293562	Screw anchor HUS4-H 10x240	0,155
2293563	Screw anchor HUS4-H 10x280	0,179

Item number	Item designation	Weight [kg]
2293564	Screw anchor HUS4-H 10x305	0,200
2293565	Screw anchor HUS4-H 12x70	0,084
2293566	Screw anchor HUS4-H 12x100	0,109
2293567	Screw anchor HUS4-H 12x130	0,133
2293568	Screw anchor HUS4-H 12x150	0,150
2293569	Screw anchor HUS4-H 14x75	0,128
2293570	Screw anchor HUS4-H 14x100	0,156
2293571	Screw anchor HUS4-H 14x130	0,189
2293572	Screw anchor HUS4-H 14x150	0,211
2293583	Screw anchor HUS4-C 8x55	0,026
2293584	Screw anchor HUS4-C 8x75	0,033
2293585	Screw anchor HUS4-C 8x85	0,038
2293586	Screw anchor HUS4-C 10x70	0,047
2293587	Screw anchor HUS4-C 10x90	0,058
2293588	Screw anchor HUS4-C 10x100	0,063
2293589	Screw anchor HUS4-C 10x120	0,074
2293590	Screw anchor HUS4-HF 8x65	0,035
2293591	Screw anchor HUS4-HF 8x75	0,039
2293592	Screw anchor HUS4-HF 8x85	0,042
2293593	Screw anchor HUS4-HF 8x100	0,048

Item number	Item designation	Weight [kg]
2293594	Screw anchor HUS4-HF 10x60	0,050
2293595	Screw anchor HUS4-HF 10x80	0,061
2293596	Screw anchor HUS4-HF 10x100	0,072
2293597	Screw anchor HUS4-HF 10x150	0,100
2293598	Screw anchor HUS4-HF 14x75	0,128
2293599	Screw anchor HUS4-HF 14x100	0,156
2293600	Screw anchor HUS4-HF 14x150	0,211
2313326	Screw anchor HUS4-HF 10x110	0,078
2333575	Screw anchor HUS4-H 16x100	0,211
2333576	Screw anchor HUS4-H 16x140	0,268
2333577	Screw anchor HUS4-H 16x165	0,306
2333578	Screw anchor HUS4-H 16x205	0,367
2333579	Screw anchor HUS4-HF 16x100	0,211
2333710	Screw anchor HUS4-HF 16x140	0,268
2333711	Screw anchor HUS4-HF 16x165	0,306
2333712	Screw anchor HUS4-HF 16x205	0,367
2392435	Screw anchor HUS4-A 10x120	0,073
2392436	Screw anchor HUS4-A 10x140	0,085
2392437	Screw anchor HUS4-A 10x165	0,100
2392438	Screw anchor HUS4-AF 10x120	0,073

Item number	Item designation	Weight [kg]
2392439	Screw anchor HUS4-AF 10x140	0,085
2392620	Screw anchor HUS4-AF 10x165	0,100
2392621	Screw anchor HUS4-A 14x155	0,178
2392622	Screw anchor HUS4-A 14x185	0,225
2392623	Screw anchor HUS4-A 14x205	0,228
2392624	Screw anchor HUS4-AF 14x155	0,178
2392625	Screw anchor HUS4-AF 14x185	0,225
2392626	Screw anchor HUS4-AF 14x205	0,228
2423621	Screw anchor HUS4-HF 14x130	0,189
2435666	Screw anchor HUS4-HF 10x90	0,067
2435667	Screw anchor HUS4-HF 12x90	0,146
2435669	Screw anchor HUS4 T-H 8x150	0,072
2435697	Screw anchor HUS4-H 12x110	0,168
2435698	Screw anchor HUS4-HF 12x100	0,109
2435699	Screw anchor HUS4-H 14x120	0,179
2435813	Screw anchor HUS4-C 10x110	0,069
2435815	Screw anchor HUS4-HF 10x70	0,056
2435816	Screw anchor HUS4-HF 12x110	0,168
2435818	Screw anchor HUS4 T-H 8x75	0,041
2435819	Screw anchor HUS4 T-H 8x120	0,060

Item number	Item designation	Weight [kg]
2435840	Screw anchor HUS4-H 12x90	0,146
2435841	Screw anchor HUS4-HF 10x130	0,089
2435842	Screw anchor HUS4-HF 12x70	0,084
2435843	Screw anchor HUS4-HF 12x130	0,189
2435844	Screw anchor HUS4 T-H 8x65	0,037
2435845	Screw anchor HUS4 T-H 8x85	0,045
2435846	Screw anchor HUS4 T-H 8x100	0,051
2435847	Screw anchor HUS4 T-C 8x65	0,031
2435850	Screw anchor HUS4-HF 12x150	0,149
2435851	Screw anchor HUS4-HF 14x120	0,179
2435852	Screw anchor HUS4 T-H 8x55	0,033
2435853	Screw anchor HUS4 T-C 8x75	0,035
2435854	Screw anchor HUS4 T-C 8x85	0,039
2435855	Screw anchor HUS4 T-HF 8x75	0,041
2435856	Screw anchor HUS4 T-HF 8x85	0,045
2435860	Screw anchor HUS4 T-HF 8x65	0,037
2435862	Screw anchor HUS4-C 8x120	0,051
2435863	Screw anchor HUS4-C 8x160	0,067

Item number	Item designation	Weight [kg]
2435870	Screw anchor HUS4 T-HF 8x100	0,051
2440480	Screw anchor HUS4-C 10x175	0,105
2443380	Screw anchor HUS4-H 14x90	0,145
2446566	Screw anchor HUS4T-H 10x130	0,100
2446567	Screw anchor HUS4T-H 10x150	0,114
2446568	Screw anchor HUS4T-C 10x70	0,052
2446572	Screw anchor HUS4T-H 10x70	0,062
2446573	Screw anchor HUS4T-H 10x80	0,067
2446574	Screw anchor HUS4T-H 10x90	0,074
2446575	Screw anchor HUS4T-HF 10x80	0,068
2446576	Screw anchor HUS4T-HF 10x100	0,081
2446577	Screw anchor HUS4T-HF 10x110	0,087
2446581	Screw anchor HUS4T-H 10x60	0,055
2446582	Screw anchor HUS4T-H 10x100	0,081
2446583	Screw anchor HUS4T-H 10x110	0,087
2446584	Screw anchor HUS4T-HF 10x60	0,054
2446585	Screw anchor HUS4T-C 10x90	0,065
2446586	Screw anchor HUS4T-C 10x100	0,072