ENVIRONMENTAL PRODUCT DECLARATION

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

Safety Stud Anchor HST3 Portfolio
Hilti AG

EPD HUB, HUB-1803
Published on 30.08.2024, last updated on 15.05.2025, valid until 30.08.2029

Created with One Click LCA

GENERAL INFORMATION

MANUFACTURER

Manufacturer VP-001	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 VP-004	Frank Geisler, Hilti AG
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ External verification
EPD verifier VP-055	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 VP-007	Safety Stud Anchor HST3 Portfolio
Additional labels	See appendix
Product reference	2105719
Place of production VP-008	Principality of Liechtenstein
Period for data VP-013	Calender year 2023
Averaging in EPD VP-024-C	Multiple products
Variation in GWP-fossil for A1-A3	-0,3 % / -9,2 %

ENVIRONMENTAL DATA SUMMARY

Declared unit	**1 kg**
Declared unit mass	**1 kg**
GWP-fossil, A1-A3 (kgCO2e)	**3,16E+00**
GWP-total, A1-A3 (kgCO2e)	**3,01E+00**
Secondary material, inputs (%)	**25.3**
Secondary material, outputs (%)	**0**
Total energy use, A1-A3 (kWh)	**10.8**
Net fresh water use, A1-A3 (m3)	**0.04**

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 more than CHF 6.3 billion in 2022. 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

HST3 is a performance concrete wedge expansion anchor used to resist static and seismic structural loads in the construction industry (residential, industrial, infrastructure, etc.). For the placing of the product on the market in the European Union European Free Trade Association (EU/EFTA with the exception of Switzerland) Regulation (EU) No. 305/2011 (CPR) applies. The product needs a declaration of performance taking into consideration the following European Technical Approval ETA-98/0001 assessed based on EAD 330232-01-0601 (Dec 2019) Mechanical fasteners use in concrete. For the application and use the respective national provisions apply. The Hilti HST3 anchor is a torque-controlled expansion anchor which is installed into a drilled hole and anchored by torque-controlled expansion.

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

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals	100	Europe and China
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	0.0422

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit VP-011	1
Mass per declared unit VP-012	1 kg
Functional unit	1 kg galvanized stud anchor
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	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 anchor is made of galvanized carbon steel with a small amount of stainless steel. Carbon steel (BOF) and the wire for the bolt is produced in Austria. Transportation by lorry. Stainless steel (EAF) for the sleeve is produced in Finland, the metal sheet made of it is produced in Germany. Transportation by sea freight and lorry. Galvanized carbon steel (BOF) nut and washer are produced in China, transportation by sea freight and lorry.

The bolt is cold formed and sleeve is punched at HILTI manufacturing site in Liechtenstein (FL) and externally electroplated in Switzerland. Afterwards, all parts including screw and washer are assembled and packed in an automatic process at HILTI as well. 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 and automatic assembling process. 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 center in FL), anchors are packed in sales boxes and export boxes (both cardboard) and transported on a pallet.

93% of the total steel is carbon steel, produced via blast oxygen furnace (BOF), with 20% recycled material. 7% is stainless steel, produced via electric arc furnace (EAF), with 80% recycled material. Based on the most comprehensive market information and internal evaluations, the recycled content is around 30% pre-consumer and 70% post-consumer material.

Steel Type	Weight	Recycled Material	Steel Source	Recycled Content	Pre-Consumer	Post-Consumer
Carbon	93%	20%	BOF	18.6%	5.6%	13.0%
Stainless	7%	80%	EAF	5.6%	1.7%	3.9%
			Total	**24.2%**	**7.3%**	**16.9%**

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 2023 sales figures. Transportation plays only a subordinate role at final results. Package (card board 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.

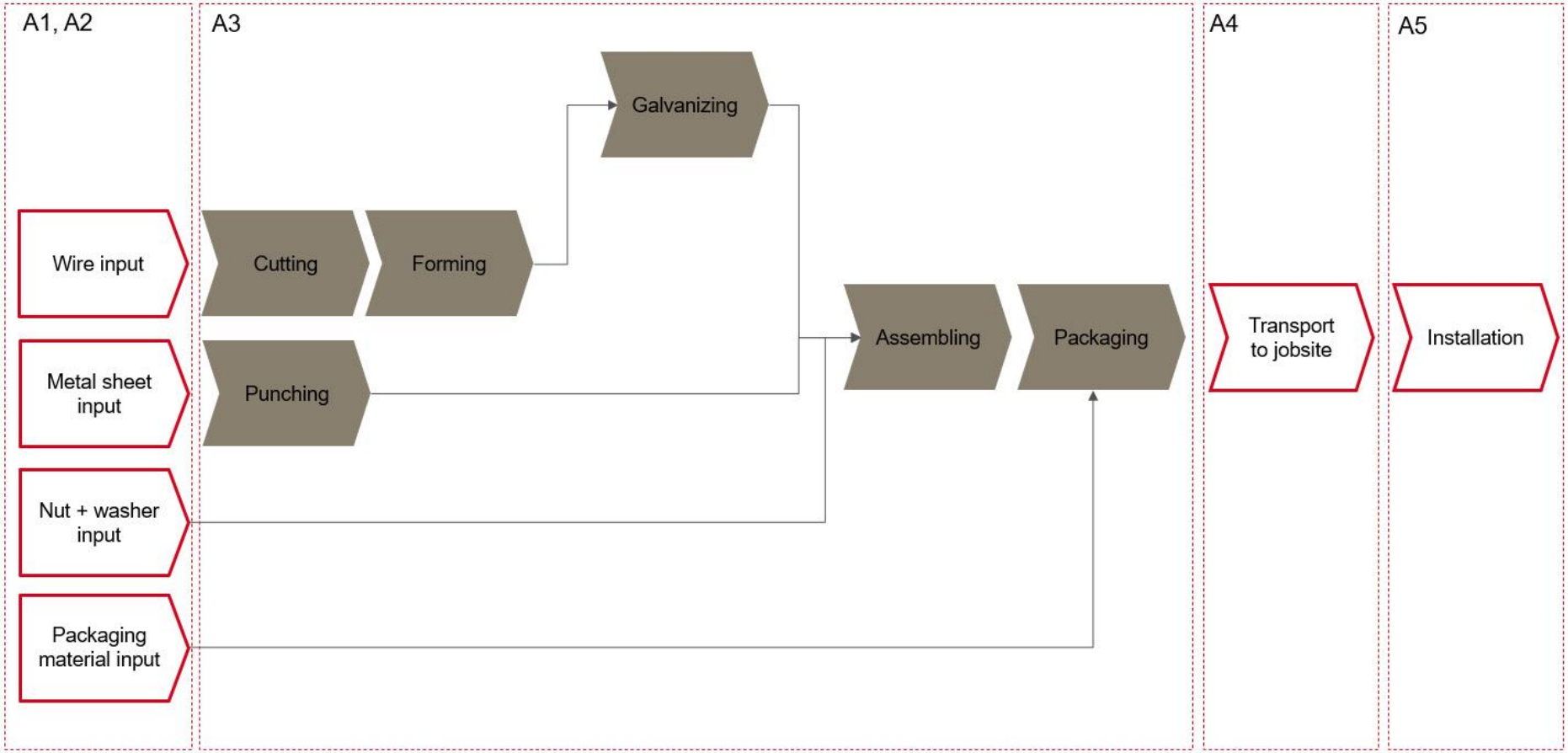
PRODUCT USE AND MAINTENANCE (B1-B7) V

No emissions during lifecycle.
Air, soil, and water impacts during the use phase have not been studied.

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	-0,3% / -3,6 %

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 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 v3.8, Plastics Europe, Federal LCA Commons 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	2,96E+00	9,45E-02	-3,62E-02	3,01E+00	0,00E+00	1,57E-01	MND	MND	MND	MND	MND	MND	MND	MNR	8,69E-03	1,86E-02	7,91E-04	-6,11E-01
GWP – fossil	kg CO_2e	2,95E+00	9,45E-02	1,17E-01	3,16E+00	0,00E+00	3,35E-03	MND	MND	MND	MND	MND	MND	MND	MNR	8,68E-03	1,86E-02	7,90E-04	-6,12E-01
GWP – biogenic	kg CO_2e	0,00E+00	0,00E+00	-1,54E-01	-1,54E-01	0,00E+00	1,54E-01	MND	MND	MND	MND	MND	MND	MND	MNR	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP – LULUC	kg CO_2e	8,90E-03	4,71E-05	5,09E-04	9,46E-03	0,00E+00	4,89E-06	MND	MND	MND	MND	MND	MND	MND	MNR	3,54E-06	2,44E-05	7,46E-07	6,23E-04
Ozone depletion pot.	kg CFC_{-11}e	1,40E-07	2,07E-08	8,67E-09	1,69E-07	0,00E+00	3,80E-10	MND	MND	MND	MND	MND	MND	MND	MNR	1,91E-09	2,30E-09	3,20E-10	-1,75E-08
Acidification potential	mol H^+e	1,61E-02	1,36E-03	6,90E-04	1,81E-02	0,00E+00	2,36E-05	MND	MND	MND	MND	MND	MND	MND	MNR	3,59E-05	2,36E-04	7,43E-06	-2,46E-03
EP-freshwater[2)]	kg Pe	1,64E-04	6,17E-07	6,59E-06	1,71E-04	0,00E+00	4,87E-08	MND	MND	MND	MND	MND	MND	MND	MNR	7,32E-08	9,98E-07	8,28E-09	-6,32E-06
EP-marine	kg Ne	2,61E-03	3,47E-04	1,78E-04	3,14E-03	0,00E+00	9,00E-06	MND	MND	MND	MND	MND	MND	MND	MNR	1,05E-05	4,99E-05	2,57E-06	-5,96E-05
EP-terrestrial	mol Ne	4,26E-02	3,86E-03	1,62E-03	4,80E-02	0,00E+00	1,03E-04	MND	MND	MND	MND	MND	MND	MND	MNR	1,16E-04	5,77E-04	2,83E-05	-6,46E-03
POCP ("smog")[3)]	kg NMVOCe	1,18E-02	1,05E-03	4,49E-04	1,33E-02	0,00E+00	2,77E-05	MND	MND	MND	MND	MND	MND	MND	MNR	3,52E-05	1,59E-04	8,23E-06	-3,40E-03
ADP-minerals & metals[4)]	kg Sbe	5,57E-05	1,89E-07	1,29E-06	5,72E-05	0,00E+00	2,22E-08	MND	MND	MND	MND	MND	MND	MND	MNR	3,02E-08	2,51E-06	1,82E-09	-1,82E-05
ADP-fossil resources	MJ	3,01E+01	1,34E+00	1,63E+00	3,30E+01	0,00E+00	3,26E-02	MND	MND	MND	MND	MND	MND	MND	MNR	1,26E-01	2,52E-01	2,17E-02	-5,13E+00
Water use[5)]	m^3e depr.	1,43E+00	5,33E-03	6,69E-02	1,51E+00	0,00E+00	1,37E-03	MND	MND	MND	MND	MND	MND	MND	MNR	5,50E-04	4,89E-03	6,87E-05	2,26E-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, 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	2,36E-07	8,03E-09	1,19E-08	2,56E-07	0,00E+00	2,88E-10	MND	MND	MND	MND	MND	MND	MND	MNR	7,39E-10	3,09E-09	1,50E-10	-2,42E-08
Ionizing radiation[6)]	kBq U235e	1,53E-01	6,29E-03	1,48E-02	1,74E-01	0,00E+00	2,53E-04	MND	MND	MND	MND	MND	MND	MND	MNR	5,84E-04	2,81E-03	9,80E-05	6,73E-03
Ecotoxicity (freshwater)	CTUe	9,73E+01	1,09E+00	3,77E+00	1,02E+02	0,00E+00	4,93E-02	MND	MND	MND	MND	MND	MND	MND	MNR	1,16E-01	1,14E+00	1,41E-02	-1,55E+01
Human toxicity, cancer	CTUh	2,31E-08	4,04E-11	2,40E-10	2,34E-08	0,00E+00	1,48E-11	MND	MND	MND	MND	MND	MND	MND	MNR	3,25E-12	3,50E-11	3,53E-13	5,61E-09
Human tox. non-cancer	CTUh	7,34E-08	9,82E-10	2,25E-09	7,66E-08	0,00E+00	7,34E-11	MND	MND	MND	MND	MND	MND	MND	MNR	1,08E-10	1,56E-09	9,24E-12	3,45E-08
Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D

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

Renew. PER as energy[8)]	MJ	3,73E+00	1,32E-02	2,12E+00	5,86E+00	0,00E+00	2,77E-03	MND	MND	MND	MND	MND	MND	MND	MNR	1,47E-03	4,47E-02	1,88E-04	-1,03E+00
Renew. PER as material	MJ	0,00E+00	0,00E+00	1,34E+00	1,34E+00	0,00E+00	-1,34E+00	MND	MND	MND	MND	MND	MND	MND	MNR	0,00E+00	0,00E+00	0,00E+00	6,37E-01
Total use of renew. PER	MJ	3,73E+00	1,32E-02	3,46E+00	7,20E+00	0,00E+00	-1,33E+00	MND	MND	MND	MND	MND	MND	MND	MNR	1,47E-03	4,47E-02	1,88E-04	-3,97E-01
Non-re. PER as energy	MJ	3,01E+01	1,34E+00	1,56E+00	3,30E+01	0,00E+00	3,26E-02	MND	MND	MND	MND	MND	MND	MND	MNR	1,26E-01	2,52E-01	2,17E-02	-5,12E+00
Non-re. PER as material	MJ	0,00E+00	0,00E+00	7,05E-02	7,05E-02	0,00E+00	-7,05E-02	MND	MND	MND	MND	MND	MND	MND	MNR	0,00E+00	0,00E+00	0,00E+00	1,57E-02
Total use of non-re. PER	MJ	3,01E+01	1,34E+00	1,63E+00	3,31E+01	0,00E+00	-3,79E-02	MND	MND	MND	MND	MND	MND	MND	MNR	1,26E-01	2,52E-01	2,17E-02	-5,11E+00
Secondary materials	kg	2,53E-01	4,47E-04	2,53E-02	2,78E-01	0,00E+00	4,52E-05	MND	MND	MND	MND	MND	MND	MND	MNR	4,14E-05	2,81E-04	4,55E-06	3,96E-01
Renew. secondary fuels	MJ	4,15E-04	3,07E-06	2,77E-02	2,81E-02	0,00E+00	2,43E-07	MND	MND	MND	MND	MND	MND	MND	MNR	5,36E-07	1,46E-05	1,19E-07	4,20E-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	MNR	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m^3	3,37E-02	1,45E-04	1,62E-03	3,55E-02	0,00E+00	3,18E-05	MND	MND	MND	MND	MND	MND	MND	MNR	1,48E-05	1,48E-04	2,37E-05	-1,62E-02
Renew. PER as energy[8)]	MJ	3,73E+00	1,32E-02	2,12E+00	5,86E+00	0,00E+00	2,77E-03	MND	MND	MND	MND	MND	MND	MND	MNR	1,47E-03	4,47E-02	1,88E-04	-1,03E+00

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	1,43E+00	1,79E-03	9,81E-03	1,44E+00	0,00E+00	1,58E-04	MND	MND	MND	MND	MND	MND	MND	MNR	1,81E-04	1,71E-03	0,00E+00	-3,67E-01
Non-hazardous waste	kg	5,22E+00	2,45E-02	2,17E-01	5,46E+00	0,00E+00	4,35E-02	MND	MND	MND	MND	MND	MND	MND	MNR	2,89E-03	5,47E-02	1,50E-01	-1,27E+00
Radioactive waste	kg	6,43E-05	9,10E-06	5,32E-06	7,87E-05	0,00E+00	1,77E-07	MND	MND	MND	MND	MND	MND	MND	MNR	8,30E-07	1,48E-06	0,00E+00	-5,21E-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	MNR	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	0,00E+00	0,00E+00	1,33E-02	1,33E-02	0,00E+00	6,02E-02	MND	MND	MND	MND	MND	MND	MND	MNR	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	MNR	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	4,53E-01	MND	MND	MND	MND	MND	MND	MND	MNR	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 CO_2e	2,85E+00	9,36E-02	1,17E-01	3,06E+00	0,00E+00	3,32E-03	MND	MND	MND	MND	MND	MND	MND	MNR	8,59E-03	1,83E-02	7,74E-04	-5,69E-01
Ozone depletion Pot.	kg CFC_{-11}e	1,37E-07	1,64E-08	7,30E-09	1,60E-07	0,00E+00	3,09E-10	MND	MND	MND	MND	MND	MND	MND	MNR	1,52E-09	1,86E-09	2,53E-10	-2,43E-08
Acidification	kg SO_2e	1,22E-02	1,08E-03	5,51E-04	1,39E-02	0,00E+00	1,70E-05	MND	MND	MND	MND	MND	MND	MND	MNR	2,80E-05	1,91E-04	5,61E-06	-1,96E-03
Eutrophication	kg PO_4^3e	5,96E-03	1,44E-04	3,06E-04	6,41E-03	0,00E+00	1,48E-05	MND	MND	MND	MND	MND	MND	MND	MNR	6,42E-06	6,30E-05	1,21E-06	-9,69E-04
POCP (“smog”)	kg C_2H_4e	1,18E-03	3,05E-05	3,48E-05	1,25E-03	0,00E+00	7,33E-07	MND	MND	MND	MND	MND	MND	MND	MNR	1,14E-06	7,22E-06	2,35E-07	-4,40E-04
ADP-elements	kg Sbe	5,53E-05	1,83E-07	1,26E-06	5,67E-05	0,00E+00	2,16E-08	MND	MND	MND	MND	MND	MND	MND	MNR	2,95E-08	2,50E-06	1,79E-09	-1,81E-05
ADP-fossil	MJ	3,01E+01	1,33E+00	1,62E+00	3,30E+01	0,00E+00	3,26E-02	MND	MND	MND	MND	MND	MND	MND	MNR	1,26E-01	2,52E-01	2,17E-02	-5,12E+00

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

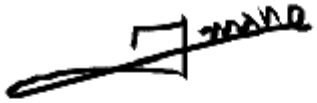
I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried 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 acting for EPD Hub Limited
30.08.2024



APPENDIX

PRODUCT PORTFOLIO INCLUDED IN SCOPE

The following products are included in the scope of this declaration, as represented by HST3 M12x115 40/20 (item number 2105719).

Item number	Item designation	Weight [kg]
2105888	Stud anchor HST3 M8x75 -/10	0,0304
2105889	Stud anchor HST3 M8x95 -/30	0,0364
2105890	Stud anchor HST3 M8x115 -/50	0,0418
2113974	Stud anchor HST3 M10x70 10/-	0,0451
2138683	Stud anchor HST3 M10x70 10/- BW	0,0460
2113975	Stud anchor HST3 M10x80 20/-	0,0497
2105712	Stud anchor HST3 M10x90 30/10	0,0601
2322433	Stud anchor HST3 M10x90 30/10 DN	0,0613
2105713	Stud anchor HST3 M10x100 40/20	0,0643
2105882	Stud anchor HST3 M10x100 40/20 BW	0,0655
2322434	Stud anchor HST3 M10x100 40/20 DN	0,0655
2105714	Stud anchor HST3 M10x110 50/30	0,0696
2105715	Stud anchor HST3 M10x130 70/50	0,0797
2105716	Stud anchor HST3 M10x160 100/80	0,0922
2105717	Stud anchor HST3 M10x200 140/120	0,1089
2113978	Stud anchor HST3 M12x85 10/-	0,0850
2113979	Stud anchor HST3 M12x95 20/-	0,0916
2105718	Stud anchor HST3 M12x105 30/10	0,0982
2322435	Stud anchor HST3 M12x105 30/10 DN	0,1002
2105719	**Stud anchor HST3 M12x115 40/20**	**0,1051**
2105883	Stud anchor HST3 M12x115 40/20 BW	0,1072
2322436	Stud anchor HST3 M12x115 40/20 DN	0,1072

Item number	Item designation	Weight [kg]
2105851	Stud anchor HST3 M12x145 70/50	0,1257
2176712	Stud anchor HST3 M12x145 70/50 BW	0,1282
2105852	Stud anchor HST3 M12x165 90/70	0,1394
2105853	Stud anchor HST3 M12x185 110/90	0,1539
2105854	Stud anchor HST3 M12x215 140/120	0,1746
2105855	Stud anchor HST3 M12x235 160/140	0,1890
2105856	Stud anchor HST3 M12x255 180/160	0,2033
2105857	Stud anchor HST3 M12x295 220/200	0,2316
2114053	Stud anchor HST3 M16x115 15/-	0,1975
2105858	Stud anchor HST3 M16x135 35/15	0,2219
2105859	Stud anchor HST3 M16x145 45/25	0,2351
2105884	Stud anchor HST3 M16x145 45/25 BW	0,2398
2105860	Stud anchor HST3 M16x170 70/50	0,2682
2105861	Stud anchor HST3 M16x220 120/100	0,3324
2105862	Stud anchor HST3 M16x260 160/140	0,3853
2105863	Stud anchor HST3 M16x300 200/180	0,4389
2105891	Stud anchor HST3 M20x170 -/30	0,4131
2105892	Stud anchor HST3 M20x200 -/60	0,4641
2105893	Stud anchor HST3 M20x260 -/120	0,5661
2105894	Stud anchor HST3 M24x200 -/30	0,7236
2105895	Stud anchor HST3 M24x230 -/60	0,8346