



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

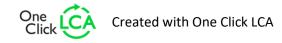
HTR-P Insulation Fastener Portfolio Hilti AG



EPD HUB, HUB-3321

Published on 16.05.2025, last updated on 18.08.2025, valid until 15.05.2030 $\,$

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.1 (5 Dec 2023) and JRC characterization factors EF 3.1.









GENERAL INFORMATION

MANUFACTURER

Manufacturer	Hilti AG
Address	Schaan, 9494 Liechtenstein
Contact details	sustainability@hilti.com
Website	www.hilti.group

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	Sister EPD
Parent EPD number	HUB-3081
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Catarina Carvalho, Hilti AG
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☐ External verification
EPD verifier	Sarah Curpen, as an authorized verifier acting for EPD Hub Limited.

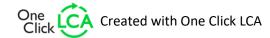
This EPD is intended for business-to-business and/or business-to-consumer communication. The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

PRODUCT

HTD Discolation for the con-
HTR-P Insulation fastener
See appendix
2157164 HTR-P 8x200
Global
Germany (Strass)
-
2023
No averaging
-
-
-

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg
Declared unit mass	1 kg
GWP-fossil, A1-A3 (kgCO₂e)	5,62E+00
GWP-total, A1-A3 (kgCO₂e)	5,30E+00
Secondary material, inputs (%)	1,05
Secondary material, outputs (%)	15,6
Total energy use, A1-A3 (kWh)	24,6
Net freshwater use, A1-A3 (m³)	0,11







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 Hilti Group's purpose is to make construction better, based on a passionate and inclusive global team and a caring and performance-oriented culture.

PRODUCT DESCRIPTION

Hilti HTR-P are insulation fasteners made of polymers, used for fixing all common insulation types and ETICS composite facades to concrete or masonry. The fastener's design virtually eliminates the thermal bridging which can cause heat loss during building operation. Production and packing take place in Germany using raw materials sourced regionally and mainly from neighboring countries.

Further information can be found at www.hilti.group

PRODUCT RAW MATERIAL MAIN COMPOSITION

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

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

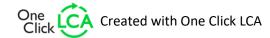
Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	0,163438257

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit VP-011	1 kg
Mass per declared unit VP-012	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.

Pro	duct si	tage		mbly age			U	se sta	ge			E	nd of l	ife sta	ge		Beyond the system boundaries					
A1	A2	А3	A4	A5	B1	В2	В3	В4	В5	В6	В7	C1	C2	СЗ	C4		D					
×	×	×	×	×	N N D	MND	N N	N N	N N	MND	MND	×	×	×	×							
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 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 manufacturing process requires electricity for powering the production equipment, for which green electricity certs are available. A cardboard box is used as packaging for transporting the fastener to the points of sale.

The use of green energy in manufacturing is demonstrated through contractual instruments (GOs, RECs, etc.), and its use is ensured throughout the validity period of this EPD.

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.

Road transport is the main mode. A sales-weighted average transport distance scenario is used to calculate A4 transport emissions. A5 stage includes only packaging.

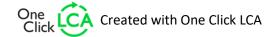
PRODUCT USE AND MAINTENANCE (B1-B7)

Emissions due to installation are excluded as they are considered negligible: a manual hand tool or a handheld cordless power tool is operated for approximately 10 seconds to complete the installation. The product is embedded within the building structure and therefore undergoes no routine maintenance.

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

PRODUCT END OF LIFE (C1-C4, D)

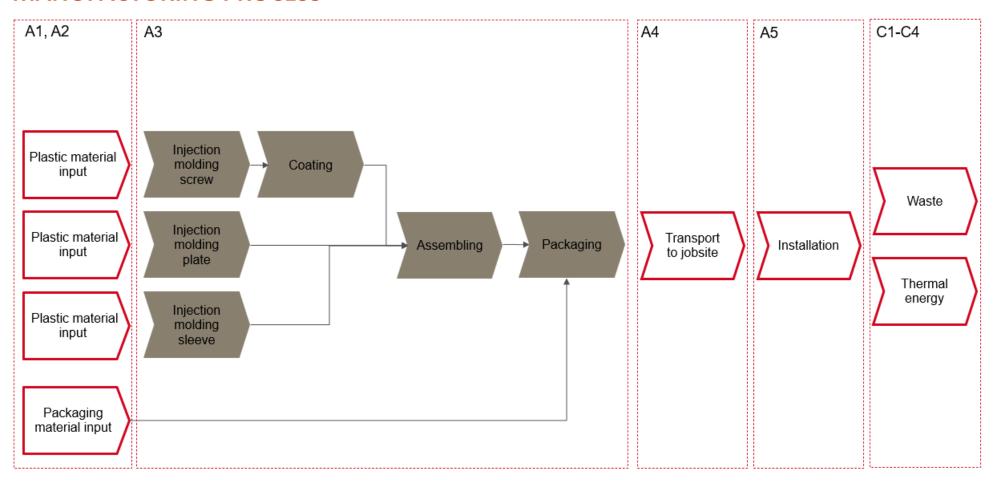
Polymers, which account for the entire product mass, are assumed to be disposed of via incineration (75%) and landfill (25%) in a conservative, global average scenario. Actual recyclability may vary by region. Road transport is the main mode for transportation to the treatment site. The product is embedded within the building structure and therefore no deinstallation is necessary.







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.

VALIDATION OF DATA

Data collection for production, transport, and packaging was conducted using time and site-specific information, as defined in the general information section on page 1 and 2. Upstream process calculations rely on generic data as defined in the Bibliography section. Manufacturer-provided specific and generic data were used for the product's manufacturing stage. The analysis was performed in One Click LCA EPD Generator, with the 'Cut-Off, EN 15804+A2' allocation method, and characterization factors according to EN 15804:2012+A2:2019/AC2021 and JRC EF 3.1.

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	Not applicable
Manufacturing energy and waste	No allocation

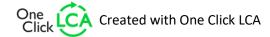
AVERAGES AND VARIABILITY

Type of average	No averaging
Averaging method	Not applicable
Variation in GWP-fossil for A1-A3 (%)	-

This EPD is product and factory specific and does not contain average calculations.

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. Allocation used in Ecoinvent 3.10.1 environmental data sources follow the methodology 'allocation, Cutoff, EN 15804+A2'.





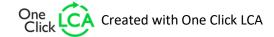


ENVIRONMENTAL IMPACT DATA

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2

Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	B1	B2	В3	B4	В5	В6	В7	C1	C2	С3	C4	D
GWP – total ¹⁾	kg CO₂e	5,35E+00	6,52E-02	-1,15E-01	5,30E+00	6,82E-02	6,24E-01	MND	0,00E+00	2,20E-02	1,12E+00	5,78E-01	-1,78E+00						
GWP – fossil	kg CO₂e	5,35E+00	6,52E-02	2,02E-01	5,62E+00	6,82E-02	7,83E-03	MND	0,00E+00	2,20E-02	1,12E+00	5,78E-01	-1,53E+00						
GWP – biogenic	kg CO₂e	0,00E+00	0,00E+00	-3,27E-01	-3,27E-01	0,00E+00	6,16E-01	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-2,50E-01						
GWP – LULUC	kg CO₂e	1,55E-03	2,92E-05	9,11E-03	1,07E-02	3,05E-05	4,31E-06	MND	0,00E+00	9,74E-06	2,41E-05	4,24E-06	-5,61E-04						
Ozone depletion pot.	kg CFC-11e	8,01E-08	9,63E-10	5,72E-09	8,68E-08	1,01E-09	7,91E-11	MND	0,00E+00	3,08E-10	3,09E-10	1,87E-10	-1,89E-08						
Acidification potential	mol H⁺e	2,07E-02	2,22E-04	9,35E-04	2,18E-02	2,32E-04	3,16E-05	MND	0,00E+00	7,33E-05	2,31E-04	1,10E-04	-9,63E-03						
EP-freshwater ²⁾	kg Pe	5,49E-04	5,08E-06	1,16E-04	6,70E-04	5,31E-06	1,75E-06	MND	0,00E+00	1,71E-06	5,04E-06	1,38E-06	-3,98E-04						
EP-marine	kg Ne	6,16E-03	7,31E-05	5,53E-04	6,79E-03	7,64E-05	5,19E-05	MND	0,00E+00	2,38E-05	1,35E-04	3,67E-04	-1,26E-03						
EP-terrestrial	mol Ne	3,52E-02	7,95E-04	3,25E-03	3,92E-02	8,31E-04	9,99E-05	MND	0,00E+00	2,59E-04	1,06E-03	5,31E-04	-1,50E-02						
POCP ("smog") ³)	kg NMVOCe	1,72E-02	3,28E-04	8,23E-04	1,84E-02	3,43E-04	3,84E-05	MND	0,00E+00	1,02E-04	2,74E-04	1,43E-04	-5,69E-03						
ADP-minerals & metals ⁴)	kg Sbe	2,20E-05	1,82E-07	8,39E-07	2,30E-05	1,90E-07	5,06E-08	MND	0,00E+00	7,23E-08	1,39E-07	2,96E-08	-3,75E-06						
ADP-fossil resources	MJ	1,05E+02	9,46E-01	2,94E+00	1,09E+02	9,89E-01	7,16E-02	MND	0,00E+00	3,09E-01	2,27E-01	1,28E-01	-2,25E+01						
Water use ⁵⁾	m³e depr.	4,47E+00	4,68E-03	1,24E-01	4,60E+00	4,89E-03	1,95E-03	MND	0,00E+00	1,43E-03	4,71E-02	2,26E-02	-2,16E-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

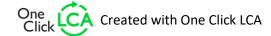
Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	B1	B2	В3	В4	B5	В6	В7	C1	C2	С3	C4	D
Particulate matter	Incidence	2,57E-07	6,53E-09	8,80E-09	2,72E-07	6,83E-09	4,25E-10	MND	0,00E+00	1,75E-09	2,62E-09	8,42E-10	-1,56E-07						
Ionizing radiation ⁶⁾	kBq U235e	2,58E-01	8,24E-04	2,23E-02	2,81E-01	8,62E-04	4,69E-04	MND	0,00E+00	2,50E-04	4,65E-04	1,67E-04	-5,90E-02						
Ecotoxicity (freshwater)	CTUe	7,66E+00	1,34E-01	1,99E+00	9,78E+00	1,40E-01	2,60E-01	MND	0,00E+00	4,88E-02	1,07E+00	1,00E+00	-5,35E+00						
Human toxicity, cancer	CTUh	5,54E-10	1,08E-11	6,30E-11	6,28E-10	1,13E-11	5,64E-12	MND	0,00E+00	3,74E-12	8,04E-11	3,02E-11	-3,21E-10						
Human tox. non-cancer	CTUh	1,67E-08	6,13E-10	1,59E-09	1,89E-08	6,41E-10	3,03E-10	MND	0,00E+00	1,93E-10	2,47E-09	1,51E-09	-1,23E-08						
SQP ⁷⁾	-	7,56E+00	9,53E-01	8,47E+00	1,70E+01	9,96E-01	5,30E-02	MND	0,00E+00	1,84E-01	1,93E-01	1,43E-01	-1,84E+01						

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	А3	A1-A3	A4	A5	B1	B2	В3	B4	B5	В6	В7	C1	C2	С3	C4	D
Renew. PER as energy ⁸⁾	MJ	3,44E+00	1,30E-02	-1,07E+00	2,39E+00	1,36E-02	-3,45E+00	MND	0,00E+00	4,23E-03	1,33E-02	3,36E-03	-4,17E+00						
Renew. PER as material	MJ	0,00E+00	0,00E+00	2,79E+00	2,79E+00	0,00E+00	-2,79E+00	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,17E+00						
Total use of renew. PER	MJ	3,44E+00	1,30E-02	1,72E+00	5,18E+00	1,36E-02	-6,24E+00	MND	0,00E+00	4,23E-03	1,33E-02	3,36E-03	-2,00E+00						
Non-re. PER as energy	MJ	8,39E+01	9,46E-01	1,10E+00	8,60E+01	9,89E-01	7,16E-02	MND	0,00E+00	3,09E-01	-2,23E+01	-1,57E+01	-2,24E+01						
Non-re. PER as material	MJ	2,14E+01	0,00E+00	-1,01E+00	2,04E+01	0,00E+00	-9,13E-03	MND	0,00E+00	0,00E+00	-1,02E+01	-1,02E+01	4,15E+00						
Total use of non-re. PER	MJ	1,05E+02	9,46E-01	9,02E-02	1,06E+02	9,89E-01	6,24E-02	MND	0,00E+00	3,09E-01	-3,25E+01	-2,59E+01	-1,83E+01						
Secondary materials	kg	1,05E-02	4,03E-04	2,15E-01	2,26E-01	4,21E-04	1,18E-04	MND	0,00E+00	1,39E-04	6,70E-04	1,11E-04	2,16E-01						
Renew. secondary fuels	MJ	7,28E-03	5,12E-06	2,02E-02	2,75E-02	5,35E-06	6,65E-07	MND	0,00E+00	1,77E-06	7,04E-06	1,83E-06	-1,72E-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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00						
Use of net fresh water	m³	1,06E-01	1,40E-04	2,78E-03	1,09E-01	1,46E-04	-4,22E-05	MND	0,00E+00	4,09E-05	6,51E-04	-4,79E-04	-5,63E-03						

8) PER = Primary energy resources.







END OF LIFE – WASTE

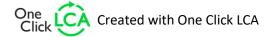
Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	B1	B2	В3	B4	В5	В6	В7	C1	C2	С3	C4	D
Hazardous waste	kg	1,15E-01	1,60E-03	1,19E-02	1,28E-01	1,68E-03	1,20E-03	MND	0,00E+00	5,38E-04	1,44E-02	6,57E-03	-1,10E-01						
Non-hazardous waste	kg	1,33E+01	2,97E-02	5,58E-01	1,39E+01	3,10E-02	1,39E-01	MND	0,00E+00	1,01E-02	4,85E-01	1,28E+00	-3,28E+00						
Radioactive waste	kg	6,59E-05	2,02E-07	5,71E-06	7,18E-05	2,11E-07	1,20E-07	MND	0,00E+00	6,12E-08	1,18E-07	4,17E-08	-1,42E-05						

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	B1	B2	В3	В4	B5	В6	В7	C1	C2	С3	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	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	0,00E+00	0,00E+00	0,00E+00	1,80E-01	MND	0,00E+00	0,00E+00	1,56E-01	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	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	8,50E-02	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	3,50E-02	MND	0,00E+00	0,00E+00	1,27E+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	5,00E-02	MND	0,00E+00	0,00E+00	7,16E+00	0,00E+00	0,00E+00						

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

Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	B1	B2	В3	B4	B5	В6	В7	C1	C2	С3	C4	D
Global Warming Pot.	kg CO₂e	5,30E+00	6,49E-02	2,15E-01	5,58E+00	6,78E-02	3,02E-02	MND	0,00E+00	2,19E-02	1,12E+00	5,77E-01	-1,50E+00						
Ozone depletion Pot.	kg CFC-11e	6,69E-08	7,68E-10	4,68E-09	7,24E-08	8,03E-10	6,47E-11	MND	0,00E+00	2,46E-10	2,67E-10	1,58E-10	-1,68E-08						
Acidification	kg SO₂e	1,74E-02	1,70E-04	6,64E-04	1,83E-02	1,78E-04	2,42E-05	MND	0,00E+00	5,62E-05	1,66E-04	7,79E-05	-8,07E-03						
Eutrophication	kg PO ₄ ³e	6,28E-03	4,14E-05	4,05E-04	6,73E-03	4,32E-05	3,69E-05	MND	0,00E+00	1,37E-05	5,60E-05	4,02E-05	-8,39E-03						
POCP ("smog")	kg C ₂ H ₄ e	1,32E-03	1,51E-05	6,23E-05	1,40E-03	1,58E-05	7,24E-06	MND	0,00E+00	5,03E-06	1,41E-05	8,11E-06	-5,71E-04						
ADP-elements	kg Sbe	1,51E-05	1,77E-07	8,49E-07	1,61E-05	1,85E-07	4,96E-08	MND	0,00E+00	7,05E-08	1,25E-07	2,28E-08	-3,68E-06						
ADP-fossil	MJ	9,54E+01	9,33E-01	2,53E+00	9,89E+01	9,76E-01	6,34E-02	MND	0,00E+00	3,05E-01	2,20E-01	1,25E-01	-2,15E+01						







ENVIRONMENTAL IMPACTS – GWP-GHG

Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	B1	B2	В3	B4	B5	В6	В7	C1	C2	С3	C4	D
GWP-GHG ⁹⁾	kg CO₂e	5,35E+00	6,52E-02	2,12E-01	5,63E+00	6,82E-02	7,84E-03	MND	0,00E+00	2,20E-02	1,12E+00	5,78E-01	-1,53E+00						

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

EPD Hub declares that this EPD is verified in accordance with ISO 14025 by an independent, third-party verifier and has been generated using a pre-verified tool. The project report on the Life Cycle Assessment and the report(s) on features of environmental relevance are filed at EPD Hub. EPD Hub PCR and ECO Platform verification checklist are used.

EPD Hub is not able to identify any unjustified deviations, by the Environmental Product Declaration and by its project report from the requirements outlined in the corresponding product category regulations based on EN 15804+A2.

EPD Hub maintains its independence as a third-party body; it was not involved in the execution of the LCA or in the development of the declaration and has no conflicts of interest regarding this verification. EPD Hub confirms that it possesses sufficient knowledge and experience in construction products and the relevant standards to carry the verification.

The company-specific data and upstream and downstream data have been examined as regards plausibility and consistency; the manufacturer(s) or group of manufacturers are responsible for its factual integrity.

EPD Hub has performed a detailed examination of the pre-verified tool and underlying data to ensure that there are no deviations in the studied Environmental Product Declaration (EPD), its Life Cycle Assessment (LCA), and project report. The tool is implemented according to the procedural and methodological requirements outlined in ISO 14025:2010, ISO 14040/14044, EN 15804+A2, and EPD Hub Core Product Category Rules version 1.1 and General Program Instructions version 1.2.

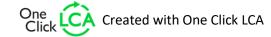
Tool verifier: Hai Ha Nguyen

Tool verification validity: 20 Dec 2024 - 19 Dec 2027

Sarah Curpen, as an authorized verifier acting for EPD Hub Limited. 16.05.2025











APPENDIX

PRODUCT PORTFOLIO INCLUDED IN SCOPE

The following products are included in the scope of this declaration, as represented by HTR-P 8x200 (item number 2157164).

Item number	Item designation	Weight [kg]
2448102	Insulation fastener HTR-P 8x60	0,009
2448103	Insulation fastener HTR-P 8x80	0,010
2157159	Insulation fastener HTR-P 8x100	0,014
2157160	Insulation fastener HTR-P 8x120	0,015
2157161	Insulation fastener HTR-P 8x140	0,016
2157162	Insulation fastener HTR-P 8x160	0,017
2157163	Insulation fastener HTR-P 8x180	0,018
2157164	Insulation fastener HTR-P 8x200	0,019
2157165	Insulation fastener HTR-P 8x220	0,021
2157166	Insulation fastener HTR-P 8x240	0,022
2157167	Insulation fastener HTR-P 8x260	0,023
2157168	Insulation fastener HTR-P 8x280	0,024
2157169	Insulation fastener HTR-P 8x300	0,025
2448104	Insulation fastener HTR-P 8x320	0,030
2448105	Insulation fastener HTR-P 8x340	0,032
2448111	Insulation fastener HTR-P 8x360	0,033
2448046	Insulation fastener HTR-P 8x380	0,034
2448094	Insulation fastener HTR-P 8x400	0,035

