



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Collated Drywall and Sidelap Screws

Hilti AG



EPD HUB, HUB-2537

Published on 14.02.2025, last updated on 28.07.2025, valid until 14.02.2030

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.



Created with One Click LCA



GENERAL INFORMATION

MANUFACTURER

Manufacturer	Hilti AG
Address	Feldkircher Strasse 100, 9494 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 1.1, 5 Dec 2023
Sector	Construction product
Category of EPD	Third party verified EPD
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Elise Janssen, 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	#VERIFIER#

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	Collated Drywall and Sidelap Screws
Additional labels	See appendix
Product reference	2134608
Place(s) of raw material origin	Taiwan
Place of production	Tainan, Taiwan
Place(s) of installation and use	Worldwide
Period for data	2023
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	-6 to +4
A1-A3 Specific data (%)	20,2

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg
Declared unit mass	1,273677 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	3,46E+00
GWP-total, A1-A3 (kgCO ₂ e)	3,22E+00
Secondary material, inputs (%)	14,2
Secondary material, outputs (%)	66,6
Total energy use, A1-A3 (kWh)	12,1
Net freshwater use, A1-A3 (m ³)	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

The Hilti Collated Drywall and Sidelap Screw portfolio includes a variety of screws designed for various board fastening and sidelap applications. The portfolio features fine thread stitch tip screws that are dark grey phosphated. Typical applications for these drywall screws include fastening boards to metal substructures. Typical applications for these sidelap screws include sidelap and frame fastening. The representative product is the Drywall screw S-DS01B 3,5x25 M1 which is a stitch-tip screw with black phosphate coating that comes in a collated strip.

Further information can be found at:
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	
Biogenic carbon content in packaging, kg C	0,066

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 kg
Mass per declared unit	1,273677 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 phosphate steel screw is made from low-carbon steel. The referenced product is S-DS01B 35x55 dry wall screw, which is a fine thread stitch tip screws, used for connection of drywall boards to metal substructures. The steel is BF-EAF with 21% post-consumer and 23.5% pre-consumer recycled content. The steel supplier provided a carbon footprint for the exact steel used for these products. 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 phosphate 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 market places.

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.

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.

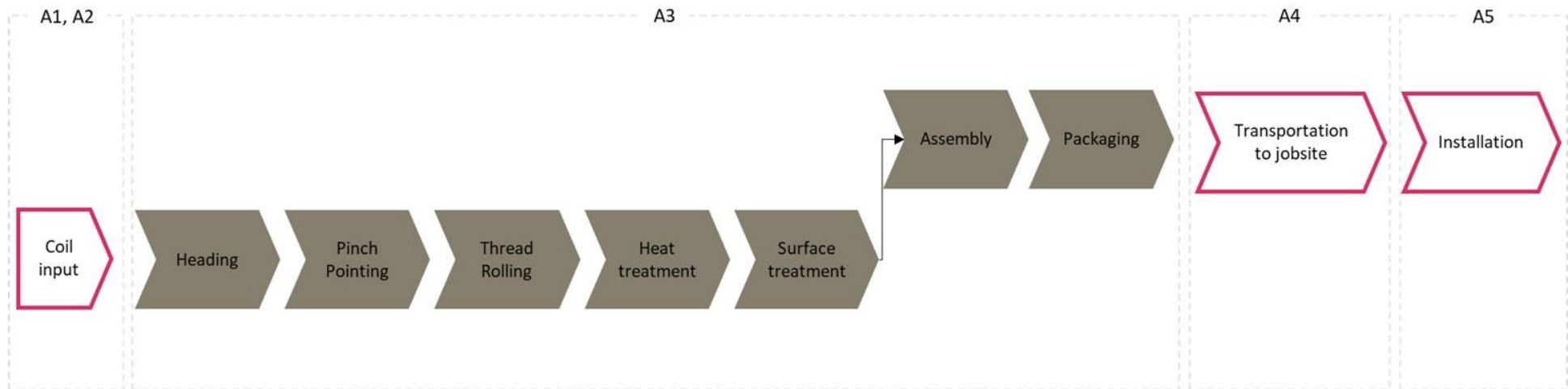
Air, soil, and water impacts during the use phase have not been studied.

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.

The production of capital equipment, construction activities, and infrastructure, maintenance and operation of capital equipment, personnel-related activities, energy and water use related to company management and sales activities are excluded.

This LCA study includes the provision of all materials, transportation, energy and emission flows, and end of life processing of product. All industrial processes from raw material acquisition and pre-processing, production, product distribution and installation and end-of-life management are included. Due to lack of data, some ancillary materials are excluded but they do not exceed the 1% cut-off criteria. These include materials which are used in the product manufacturing only in very small amounts and have a negligible impact on the emissions of the product.

The production of capital equipment, construction activities, and infrastructure, maintenance and operation of capital equipment, personnel-related activities, energy and water use related to company management and sales activities are excluded.

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/AC:2021 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	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

All estimations and assumptions regarding the cut off criteria and the allocation are declared in the part "Cut-off Criteria except the estimations/assumptions below:

Proxy data is used for certain materials due to their unavailability in the database.

materials.

is assumed to be 1 which means full load. It may vary but as the role of

transportation emission 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.

- Module A4: Transportation does not cause losses as products are packaged properly. Also, volume capacity utilization factor is assumed to be 1 for the nested packaged products. Additionally, transportation distances are assumed based on the lorry shipment distance from supplier to market warehouses.

- Module C2: Transportation distance to waste handling facility is estimated as 100 km and the transportation method is assumed as lorry.

- Module C3, C4, D: The product undergoes separate collection and a certain percentage of each material is assumed to be recycled, incinerated and landfilled. Ash from incineration processes is assumed negligible. The recycled end-of-life materials are assumed to serve as secondary raw materials in manufacturing while the materials incinerated displace electricity and heat production.

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	Multiple products
Grouping method	Representative product
Variation in GWP-fossil for A1-A3, %	-6 to +4

The representative product is the Drywall screw S-DS01B 3,5x35 which is a stitch-tip screw with black phosphate coating. The products included in the averaging are also dry wall screws, with phosphate coating but different screw lengths. They share the function of connecting drywall boards to metal substructures.

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, 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 ¹⁾	kg CO ₂ e	2,43E+00	2,73E-03	7,91E-01	3,22E+00	1,25E-01	2,60E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,07E-02	2,31E-02	9,31E-04	-1,95E+00
GWP – fossil	kg CO ₂ e	2,42E+00	2,73E-03	1,04E+00	3,46E+00	1,25E-01	8,81E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,07E-02	2,30E-02	9,30E-04	-1,95E+00
GWP – biogenic	kg CO ₂ e	1,68E-03	4,59E-07	-2,50E-01	-2,49E-01	0,00E+00	2,51E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP – LULUC	kg CO ₂ e	1,50E-03	1,21E-06	3,42E-03	4,92E-03	8,06E-05	7,58E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,80E-06	2,71E-05	5,32E-07	-1,68E-03
Ozone depletion pot.	kg CFC-11e	1,77E-08	3,91E-11	1,51E-08	3,28E-08	1,78E-09	7,90E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,58E-10	2,48E-10	2,69E-11	-1,24E-08
Acidification potential	mol H ⁺ e	9,68E-03	1,32E-05	5,04E-03	1,47E-02	3,03E-03	4,80E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,66E-05	2,47E-04	6,59E-06	-9,01E-03
EP-freshwater ²⁾	kg Pe	8,59E-04	2,12E-07	4,01E-04	1,26E-03	5,06E-06	2,68E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,35E-07	1,25E-05	7,65E-08	-2,04E-03
EP-marine	kg Ne	2,10E-03	5,09E-06	1,07E-03	3,17E-03	6,94E-04	2,39E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,20E-05	5,48E-05	2,51E-06	-1,83E-03
EP-terrestrial	mol Ne	2,25E-02	5,55E-05	1,05E-02	3,30E-02	7,72E-03	1,80E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,31E-04	6,17E-04	2,75E-05	-1,71E-02
POCP (“smog”) ³⁾	kg NMVOCe	7,95E-03	1,88E-05	3,96E-03	1,19E-02	2,16E-03	5,78E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,39E-05	1,82E-04	9,83E-06	-6,38E-03
ADP-minerals & metals ⁴⁾	kg Sbe	1,41E-05	8,45E-09	5,90E-06	2,00E-05	1,64E-07	6,69E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,99E-08	1,36E-06	1,48E-09	-2,95E-06
ADP-fossil resources	MJ	2,51E+01	3,89E-02	1,68E+01	4,19E+01	1,55E+00	9,15E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,56E-01	2,72E-01	2,28E-02	-2,63E+01
Water use ⁵⁾	m ³ e depr.	1,12E+00	1,84E-04	3,46E-01	1,47E+00	5,28E-03	3,93E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,69E-04	4,30E-03	6,59E-05	-6,74E-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	2,02E-07	2,84E-10	5,46E-08	2,57E-07	4,43E-09	3,15E-09	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,07E-09	3,44E-09	1,50E-10	-1,71E-07
Ionizing radiation ⁶⁾	kBq 11235a	6,80E-02	3,23E-05	1,20E-01	1,88E-01	8,79E-04	3,79E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,36E-04	9,77E-04	1,43E-05	-1,21E-01
Ecotoxicity (freshwater)	CTUe	7,34E+00	5,90E-03	3,88E+00	1,12E+01	1,33E-01	1,32E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,20E-02	1,58E-01	1,91E-03	-1,26E+01
Human toxicity, cancer	CTUh	2,41E-09	8,12E-13	3,83E-10	2,80E-09	2,75E-11	2,60E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,77E-12	1,85E-11	1,71E-13	-3,66E-09
Human tox. non-cancer	CTUh	1,86E-08	2,87E-11	1,10E-08	2,96E-08	4,61E-10	4,72E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,01E-10	1,18E-09	3,94E-12	-2,54E-08
SQP ⁷⁾	-	7,09E+00	2,91E-02	2,09E+01	2,80E+01	2,69E-01	1,18E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,57E-01	5,15E-01	4,49E-02	-1,16E+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	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy ⁸⁾	MJ	2,20E+00	5,31E-04	2,80E+00	5,01E+00	1,48E-02	-2,55E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,13E-03	4,23E-02	2,20E-04	-3,33E+00
Renew. PER as material	MJ	0,00E+00	0,00E+00	2,10E+00	2,10E+00	0,00E+00	-2,10E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,27E+00
Total use of renew. PER	MJ	2,20E+00	5,31E-04	4,91E+00	7,11E+00	1,48E-02	-4,65E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,13E-03	4,23E-02	2,20E-04	-2,06E+00
Non-re. PER as energy	MJ	2,51E+01	3,89E-02	1,36E+01	3,87E+01	1,55E+00	-3,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,56E-01	2,72E-01	2,28E-02	-2,63E+01
Non-re. PER as material	MJ	0,00E+00	0,00E+00	3,18E+00	3,18E+00	0,00E+00	-3,18E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-8,14E-03
Total use of non-re. PER	MJ	2,51E+01	3,89E-02	1,67E+01	4,18E+01	1,55E+00	-6,18E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,56E-01	2,72E-01	2,28E-02	-2,63E+01
Secondary materials	kg	1,81E-01	1,71E-05	5,04E-02	2,32E-01	8,59E-04	2,62E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,63E-05	3,15E-04	5,74E-06	-1,11E-01
Renew. secondary fuels	MJ	2,28E-04	2,17E-07	5,09E-02	5,11E-02	2,51E-06	2,29E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,42E-07	1,43E-05	1,19E-07	-7,39E-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 ³	2,54E-02	5,36E-06	8,99E-03	3,44E-02	1,31E-04	4,53E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,30E-05	1,19E-04	2,37E-05	-1,68E-02

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	8,50E-01	6,69E-05	7,97E-02	9,30E-01	2,44E-03	1,27E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,64E-04	2,12E-03	2,52E-05	-6,93E-01
Non-hazardous waste	kg	4,75E+00	1,25E-03	3,25E+00	8,00E+00	3,43E-02	9,92E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,88E-03	5,97E-02	5,76E-04	-1,76E+01
Radioactive waste	kg	1,67E-05	7,90E-09	2,92E-05	4,59E-05	2,15E-07	8,92E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,32E-08	2,40E-07	3,50E-09	-3,41E-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	8,48E-03	8,48E-03	0,00E+00	7,65E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	8,48E-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	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	1,93E+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	2,90E+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 – Heat	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,64E+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 CO ₂ e	2,41E+00	2,71E-03	1,04E+00	3,45E+00	1,24E-01	1,57E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,07E-02	2,30E-02	9,22E-04	-1,93E+00
Ozone depletion Pot.	kg CFC-11e	1,82E-08	3,12E-11	1,37E-08	3,19E-08	1,42E-09	6,51E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,26E-10	2,05E-10	2,14E-11	-1,28E-08
Acidification	kg SO ₂ e	7,86E-03	9,72E-06	4,06E-03	1,19E-02	2,44E-03	3,61E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,79E-05	1,98E-04	4,88E-06	-7,41E-03
Eutrophication	kg PO ₄ ³ e	1,35E-03	2,39E-06	4,55E-03	5,91E-03	2,51E-04	1,69E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,81E-06	2,82E-05	1,55E-06	-1,78E-03
POCP (“smog”)	kg C ₂ H ₄ e	9,58E-04	8,09E-07	3,57E-04	1,32E-03	1,22E-04	7,10E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,49E-06	1,17E-05	4,61E-07	-1,21E-03
ADP-elements	kg Sbe	1,39E-05	8,25E-09	5,85E-06	1,98E-05	1,62E-07	6,58E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,92E-08	1,35E-06	1,45E-09	-2,74E-06
ADP-fossil	MJ	2,40E+01	3,84E-02	1,48E+01	3,89E+01	1,53E+00	8,57E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,54E-01	2,57E-01	2,26E-02	-2,41E+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 ⁹⁾	kg CO ₂ e	2,42E+00	2,73E-03	1,04E+00	3,47E+00	1,25E-01	8,82E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,07E-02	2,31E-02	9,31E-04	-1,95E+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 – CH₄ fossil, CH₄ 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 CO₂ is set to zero.

THIRD-PARTY VERIFICATION STATEMENT

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
28.07.2025



APPENDIX

Item number	item description	weight (kg)
2007245	Drywall screw S-DS01B 3,5x25	0.001324
2007246	Drywall screw S-DS01B 3,5x35	0.001758
2070967	Drywall screw 6x1 1/4" PBH S M1	0.001848
2007779	Drywall screw S-DS01B 3,5x25 M	0.001572
2007780	Drywall screw S-DS01B 3,5x35 M	0.002000
2070965	Drywall screw 6x1 1/4" PBH SD Z M1	0.002064
2070963	Drywall screw 6x1 1/4" PBH SD M1	0.001932
2134608	Drywall screw S-DS01B 3,5x25 M1	0.001550
2070969	Drywall screw 6x1 1/4" PBH S CRS M1	0.001867
2232903	Drywall screw S-DS01B 3,5x25 M1 L	0.001525
2007794	Drywall screw S-DS03B 4,0x35 M	0.002140
2134609	Drywall screw S-DS01B 3,5x35 M1	0.001926
2204309	Sidelap connector S-SLC 01 M9	0.004200
2071046	Drywall screw S-DS01B 3,5x25 M1 (10')	0.001522
2007753	Drywall screw S-DD01B 3,5x35	0.001868
2133717	Drywall screw 6x1 1/4" PBH S HI/LO M1	0.001909
2204301	Self-drill screw S-MS 01Z 4,8x20 M9	0.004240
2204310	Sidelap connector S-SLC 02 M9	0.004762
2070966	Drywall screw 6x1 1/8" PBH S M1	0.001628
2232819	Drywall screw 6x1 1/4 PBH S M1 L	0.001832
2007248	Drywall screw S-DS01B 3,5x45	0.002106
2132339	Drywall screw 6x1 7/8" PBH SD M1	0.002871
2131084	Drywall screw 6x2 PBH S M1	0.002803
2007598	Drywall screw S-DD01B 3,5x35 M	0.002100
2071047	Drywall screw S-DS01B 3,5x35 M1 (10')	0.001897
2007781	Drywall screw S-DS01B 3,5x41 M	0.002300
2007752	Drywall screw S-DD01B 3,5x25	0.001460
2007782	Drywall screw S-DS01B 3,5x45 M	0.002342
2065473	Drywall screw S-DS20B 3,9x35	0.001893
2071040	Drywall screw 6x1 1/4" PBH SD CRC M1	0.001979
2131083	Drywall screw 6x1 5/8" PBH S M1	0.003302

Item number	item description	weight (kg)
2133714	Drywall screw 6x1 5/8" PBH S CRS M1	0.002275
2232904	Drywall screw S-DS01B 3,5x35 M1 L	0.001952
2133723	Drywall screw S-DS03B 4,0x30 M1	0.001798
2133712	Drywall screw 6x1 7/8" PBH SD Z M1	0.002945
2247545	Drywall screw S-DS22B 3,9x37 M	0.002100
2232900	Drywall screw 6x1 1/4 PBH S CRS M1 L	0.001853
2007793	Drywall screw S-DS03B 4,0x30 M	0.001818
2131086	Drywall screw 6x2 PBH S CRS M1	0.003863
2247542	Drywall screw S-DS22B 3,9x37	0.001940
2232901	Drywall screw 6x1 1/4 PBH SD M1 L	0.001931
2131087	Drywall screw S-DS01B 3,5x41 M1	0.002232
2204312	Self-drill screw S-MD12-24x7/8" HWH4 M9	0.004720
2133731	Drywall screw S-DD01B 3,5x35 M1	0.002092
2247399	Drywall screw S-DS22B 3,9x37 M1	0.002210
2007597	Drywall screw S-DD01B 3,5x25 M	0.001670
2007795	Drywall screw S-DS03B 4,0x45 M	0.002500
2204311	Self-drill screw S-MD10-16x3/4" HWH3 M9	0.007800
2007247	Drywall screw S-DS01B 3,5x41	0.002014
2007770	Drywall screw S-DD01B 3,5x45 M	0.002500
2125877	Drywall screw S-DD03Z 4,8x17 LH	0.001480
2007249	Drywall screw S-DS01B 3,5x55	0.002804
2232902	Drywall screw 6x1 1/4 PBH SD Z M1 L	0.002046
2007754	Drywall screw S-DD01B 3,5x45	0.002380
2131182	Drywall screw S-DS03B 4,0x35 M1	0.002012
2293826	Wood screw S-WS13B 3,9x30 M1	0.002058
2007792	Drywall screw S-DS03B 4,0x25 M	0.001700
2007728	Drywall screw S-DS03B 4,0x35	0.001890
2007783	Drywall screw S-DS01B 3,5x55 M	0.002912
2007802	Drywall screw S-DS10Z 3,9x25 M	0.001562
2007796	Drywall screw S-DS03B 4,0x55 M	0.003000
2229873	Self-drill screw S-MD 03Z 4,8x19 M9	0.004440
2131088	Drywall screw S-DS01B 3,5x45 M1	0.002436
2293823	Wood screw S-WS13B 3,9x30 M	0.002000

Item number	item description	weight (kg)
2247544	Drywall screw S-DS22B 3,9x25 M	0.001600
2007805	Drywall screw S-DS14B 4,0x25 M	0.001825
2007747	Drywall screw S-DS14B 4,0x35	0.002078
2007804	Drywall screw S-DS10Z 3,9x41 M	0.002200
2131188	Drywall screw S-DS02Z 3,9x41 M1	0.002468
2133724	Drywall screw S-DS03B 4,0x41 M1	0.002446
2086227	Drywall screw 6x1 PBH S M1	0.001506
2007806	Drywall screw S-DS14B 4,0x30 M	0.001902
2011723	Drywall screw S-DD01B 3,5x55 M	0.003200
2247547	Drywall screw S-DS22B 3,9x25 M1	0.001560
2065476	Drywall screw S-DS20B 3,9x35 M	0.002100
2007746	Drywall screw S-DS14B 4,0x30	0.001830
2276737	Drywall screw 6x1-1/8 PBH S M1 ZN	0.001652
2133710	Drywall screw 6x2 PBH SD M1	0.003028
2007731	Drywall screw S-DS03B 4,0x55	0.002868
2247541	Drywall screw S-DS22B 3,9x25	0.001334
2133730	Drywall screw S-DD01B 3,5x25 M1	0.001668
2133725	Drywall screw S-DS03B 4,0x45 M1	0.002606
2133740	Drywall screw S-DS02Z 3,9x32 M1	0.002026
2065472	Drywall screw S-DS20B 3,9x25	0.001410
2131085	Drywall screw 6x2 PBH SD Z M1	0.003111
2131089	Drywall screw S-DS01B 3,5x51 M1	0.002786
2133737	Drywall screw S-DS14B 4,0x25 M1	0.001780
2293825	Wood screw S-WS13B 3,9x25 M1	0.001764
2007599	Drywall screw S-DD01B 3,5x41 M	0.002282
2007730	Drywall screw S-DS03B 4,0x45	0.002314
2007756	Drywall screw S-DD01B 3,5x55	0.003004
2007710	Drywall screw S-DS01B 4,2x70	0.004433
2007737	Drywall screw S-DS04B 5,5x38	0.003104
2133713	Drywall screw 6x1 7/8" PBH SD CRC M1	0.002956
2293822	Wood screw S-WS13B 3,9x25 M	0.001800
2232905	Drywall screw S-DS03B 4,0x35 M1 L	0.002001
2007745	Drywall screw S-DS14B 4,0x25	0.001410

Item number	item description	weight (kg)
2247540	Drywall screw S-DS22B 3,9x49 M1	0.002782
2131183	Drywall screw S-DS03B 4,0x51 M1	0.002812
2131187	Drywall screw S-DS14B 4,0x35 M1	0.002290
2133719	Drywall screw 6x2 PBH S HI/LO M1	0.002905
2031583	Drywall screw S-DS03B 4,0x41 M	0.002400
2133744	Wood screw S-WS12Z 4,2x32 M1	0.002326
2133742	Wood screw S-WS08Z 4,2x32 M1	0.002296
2007727	Drywall screw S-DS03B 4,0x30	0.001554
2070962	Drywall screw 6x1 1/8" PBH SD M1	0.001787
2070964	Drywall screw 6x1 1/8" PBH SD Z M1	0.001787
2007807	Drywall screw S-DS14B 4,0x45 M	0.002800
2065475	Drywall screw S-DS20B 3,9x25 M	0.001624
2133715	Drywall screw 6x2 PBH S CRS KCOTE M1	0.002807
2247543	Drywall screw S-DS22B 3,9x49	0.002612
2204308	Self-drill screw S-MDU 21Z 6,3x22 M9	0.007280
2101575	Drywall screw S-DS02Z 3,9x32 M	0.002000
2133738	Drywall screw S-DS14B 4,0x45 M1	0.002924
2156350	Drywall screw S-DS16B 3,5x30	0.001378
2293824	Wood screw S-WS13B 3,9x41 M	0.002600
2133711	Drywall screw 6x1 5/8 PBH SD Z M1	0.002466
2007748	Drywall screw S-DS14B 4,0x45	0.002380
2247546	Drywall screw S-DS22B 3,9x49 M	0.002700
2200902	Self-drill screw S-AD 01 LSS 5,5x25	0.004856
2007738	Drywall screw S-DS06Z 4,2x13	0.001842
2065474	Drywall screw S-DS20B 3,9x45	0.002390
2007719	Drywall screw S-DS01Z 3,5x35	0.001680
2131185	Drywall screw S-DD01B 3,5x45 M1	0.002616
2125878	Drywall screw S-DD03Z 4,2x15 LH	0.001150
2007788	Drywall screw S-DS01Z 3,5x25 M	0.001462
2007803	Drywall screw S-DS10Z 3,9x32 M	0.001800
2133721	Drywall screw S-DS01Z 3,5x41 M1	0.002302
2071048	Drywall screw S-DS03B 4,0x35 M1 (10')	0.001972
2007732	Drywall screw S-DS03B 4,3x70	0.004740

Item number	item description	weight (kg)
2293827	Wood screw S-WS13B 3,9x41 M1	0.002620
2133733	Drywall screw S-DD01Z 3,5x25 M1	0.001664
2007776	Drywall screw S-DD01Z 3,5x41 M	0.002282
2007726	Drywall screw S-DS03B 4,0x25	0.001240
2007799	Drywall screw S-DS03Z 4,0x35 M	0.002100
2127477	Self-drill screw S-AD01LHSS 4,8x17	0.001732
2131184	Drywall screw S-DD01B 3,5x41 M1	0.002422
2007741	Drywall screw S-DS10Z 3,9x32	0.001670
2007789	Drywall screw S-DS01Z 3,5x35 M	0.002000
2101576	Drywall screw S-DS02Z 3,9x41 M	0.002282
2065477	Drywall screw S-DS20B 3,9x45 M	0.002582
2133718	Drywall screw 6x1 5/8" PBH S HI/LO M1	0.002376
2204302	Self-drill screw S-MD 01Z 4,8x19 M9	0.004468
2135877	Drywall screw S-DS20B 3,9x35 M1	0.002106
2007790	Drywall screw S-DS01Z 3,5x45 M	0.002314
2007729	Drywall screw S-DS03B 4,0x41	0.002108
2007808	Drywall screw S-DS14B 4,0x35 M	0.002102
2130995	Wood screw S-WS08Z 4,2x41 M1	0.002730
2133732	Drywall screw S-DD01B 3,5x51 M1	0.003030
2133741	Drywall screw S-DS02Z 3,9x51 M1	0.002910
2133743	Wood screw S-WS08Z 4,2x51 M1	0.003282
2204306	Self-drill screw S-MD 23Z 5,5x22 M9	0.006712
2200903	Self-drill screw S-AD 01 LPSS 5,5x25	0.004284
2007735	Drywall screw S-DS03Z 4,0x41	0.001970
2130996	Wood screw S-WS12Z 4,2x41 M1	0.002808
2134179	Drywall screw S-DS10Z 3,9x25 M1	0.001640
2135878	Drywall screw S-DS20B 3,9x45 M1	0.002646
2296797	Drywall screw S-DD01 CRC 3,5x25 M1	0.001676
2229872	Self-drill screw S-MS 01S 4,8x20 M9	0.004680
2204304	Self-drill screw S-MD 03Z 5,5x25 M9	0.005796
2007718	Drywall screw S-DS01Z 3,5x25	0.001356
2007733	Drywall screw S-DS03B 4,3x90	0.005730
2007740	Drywall screw S-DS10Z 3,9x25	0.001360

Item number	item description	weight (kg)
2007757	Drywall screw S-DD01Z 3,5x25	0.001230
2007759	Drywall screw S-DD01Z 3,5x35	0.001680
2133722	Drywall screw S-DS01Z 3,5x51 M1	0.002822
2133727	Drywall screw S-DS03Z 4,0x41 M1	0.002380
2244771	Drywall screw S-DS01B 3,5x38 M1	0.002132
2007711	Drywall screw S-DS01B 4,2x80	0.004850
2007791	Drywall screw S-DS01Z 3,5x55 M	0.002832
2007712	Drywall screw S-DS01B 4,8x90	0.008208
2007742	Drywall screw S-DS10Z 3,9x41	0.002016
2007760	Drywall screw S-DD01Z 3,5x45	0.002352
2071050	Drywall screw S-DD01B 3,5x35 M1 (10')	0.002026
2095777	Drywall screw S-DS01B 3,5x38 M	0.002000
2135876	Drywall screw S-DS20B 3,9x25 M1	0.001690
2273320	Drywall screw S-DD01 CRC 3,5x25 M	0.001800
2007762	Drywall screw S-DD01Z 4,2x65	0.004693
2135879	Wood screw S-WD11Z 3,9x32 M1	0.002730
2007721	Drywall screw S-DS01Z 3,5x55	0.002836
2007736	Drywall screw S-DS03Z 4,0x55	0.002600
2007739	Drywall screw S-DS06Z 4,2x32	0.003078
2007777	Drywall screw S-DD01Z 3,5x50 M	0.002922
2133735	Drywall screw S-DD01Z 3,5x41 M1	0.002412
2133739	Drywall screw S-DS14B 4,0x51 M1	0.003156
2135950	Wood screw S-WD11Z 3,9x41 M1	0.003102
2134301	Drywall screw S-DS10Z 3,9x41 M1	0.002430
2229874	Self-drill screw S-MD 25Z 5,5x40 M9	0.009000
2422178	Self-drill screw S-MS41S 4,8x25 M9	0.005200
2007713	Drywall screw S-DS01B 4,8x100	0.009280
2007715	Drywall screw S-DS01B 4,8x120	0.011040
2007717	Drywall screw S-DS01B 4,8x140	0.012480