



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

CFS-NVB E120 Cavity Barrier (Non-ventilated)
Hilti AG



EPD HUB, HUB-4173

Published on 17.10.2025, last updated on 17.10.2025, valid until 17.10.2030

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



Created with One Click LCA



GENERAL INFORMATION

MANUFACTURER

Manufacturer	Hilti AG
Address	Feldkircherstrasse 100, FL-9494, Schaan, 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 15804:2012+A2:2019/AC:2021 and ISO 14025
PCR	EPD Hub Core PCR Version 1.2, 24 Mar 2025
Sector	Construction product
Category of EPD	Sister EPD
Parent EPD number	HUB-3953
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Siti Nur Syaza Abdul Rahman, Hilti AG
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal verification <input checked="" type="checkbox"/> External verification
EPD verifier	Imane Uald Lamkaddam as an authorized verifier for EPD Hub

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

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

PRODUCT

Product name	CFS-NVB E120 Cavity Barrier (Non-ventilated)
Additional labels	
Product reference	2395767; 2395768; 2395769; 2395770; 2395771; 2395772; 2395773; 2395774
Place(s) of raw material origin	Poland, Germany
Place of production	Wielkopolskie and/or Śląsk, Poland (city: commercially sensitive)
Place(s) of installation and use	Global market
Period for data	Calendar year 2024
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	+/- 16.40
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	77,8

ENVIRONMENTAL DATA SUMMARY

Declared unit	1kg of CFS-NVB E120
Declared unit mass	1 kg
Mass of packaging	kg
GWP-fossil, A1-A3 (kgCO _{2e})	1,52
GWP-total, A1-A3 (kgCO _{2e})	0,05
Secondary material, inputs (%)	21
Secondary material, outputs (%)	0
Total energy use, A1-A3 (kWh)	6,65
Net freshwater use, A1-A3 (m ³)	0,01

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 34,000 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

Pre-formed fire cavity barrier for non-ventilated façade applications with 120 minutes of fire integrity.

Approvals: EN 13501-1, EN 1366-4

Length: 1200 mm

Height: 100 mm

Density: 70kg/m³

Applications:

- 1) Sealing building envelope cavities to better prevent the spread of fire via the façade.
- 2) Firestopping ventilated rainscreen cladding vertically.
- 3) Firestopping non-ventilated rainscreen cladding vertically and horizontally.

Verified fire resistance for 120 minutes integrity and 30 minutes insulation according to European Standard (EN) 1366-4.

The product is available in widths of 100mm, 150mm, 200mm, 250mm, 300mm, 350mm, 400mm and full board (width: 1000mm with no foil finishing).

The product has been tested for Volatile Organic Compound (VOC) Emissions and fulfills requirements according to:

Low emitting insulation in credit EQc2 of the LEEDv4 & LEEDv4.1 rating system.

BREEAM International New Construction 2018, Emissions from construction products for "Ceiling, wall and acoustic and thermal insulation materials.

Ausschuss für die gesundheitliche Bewertung von Bauprodukten (Stand:2021).

Class A French VOC Labelling Regulation.

Belgian Royal Decree establishing threshold levels for the emission to the indoor environment from construction products for specific purposes.

Further information can be found at www.hilti.group

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	-	-
Minerals	99	Poland
Fossil materials	1	Germany
Bio-based materials	-	-

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0,04733
Biogenic carbon content in packaging, kg C	0,37041

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1kg of CFS-NVB E120
Mass per declared unit	1 kg
Functional unit	-
Reference service life	-

SUBSTANCES, REACH - VERY HIGH CONCERN

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

PRODUCT LIFE-CYCLE

SYSTEM BOUNDARY

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

Product stage	Assembly stage		Use stage							End of life stage			Beyond the system boundaries							
	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	Reuse	Recovery	Recycling
	x	x	x	x	x	ND	ND	ND	ND	ND	ND	ND	x	x	x	x	D			

Not declared = ND. 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 product is a pre-formed fire cavity barrier designed for non-ventilated façade applications, offering 120 minutes of fire integrity. Raw materials are sourced from various locations across Germany and Poland, with transportation distances estimated between 400 and 900 km by truck. These materials are then delivered to Hilti's production facilities in Poland, where the primary manufacturing processes including assembly and packaging are carried out. The raw material composition, manufacturing procedures, and production sites are consistent across all product variants, except for one item: CFS-NVB E120 FB, which is supplied uncut and without foil finishing. The process assumes no production or energy losses. Once completed, the product is wrapped in plastic, boxed, palletted and shipped to the distributor in Liechtenstein, before being forwarded to the installation site. In terms of waste management, A3 stage waste is assumed to be recycled as follows: 9% plastic packaging, 83% cardboard, and 15% wooden pallets. Any remaining waste is incinerated or landfilled, in line with global standard assumptions for construction product life cycle assessments within 50 - 250 km distances.

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.

Transportation distance is defined according to the PCR. A4 is based on a sales-weighted average transport distance from the production plant in Poland to the distributor in Liechtenstein, estimated to be about 500 km by truck, followed by shipment to the representative place of installation in the sales region (equating to 956km by truck and 6052.5km by container ship for this product due to its global distribution). Vehicle capacity utilization volume factor is assumed to be 1 which means full load. In reality, it 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 products are packaged properly. Also, volume capacity utilization factor is assumed to be 1 for the nested packaged products. Disposal of the packaging, including some residual product within, is accounted for in A5. Emissions due to installation are assumed to be negligible as they are typically performed using simple manual tools which do not consume energy.

PRODUCT USE AND MAINTENANCE (B1-B7)

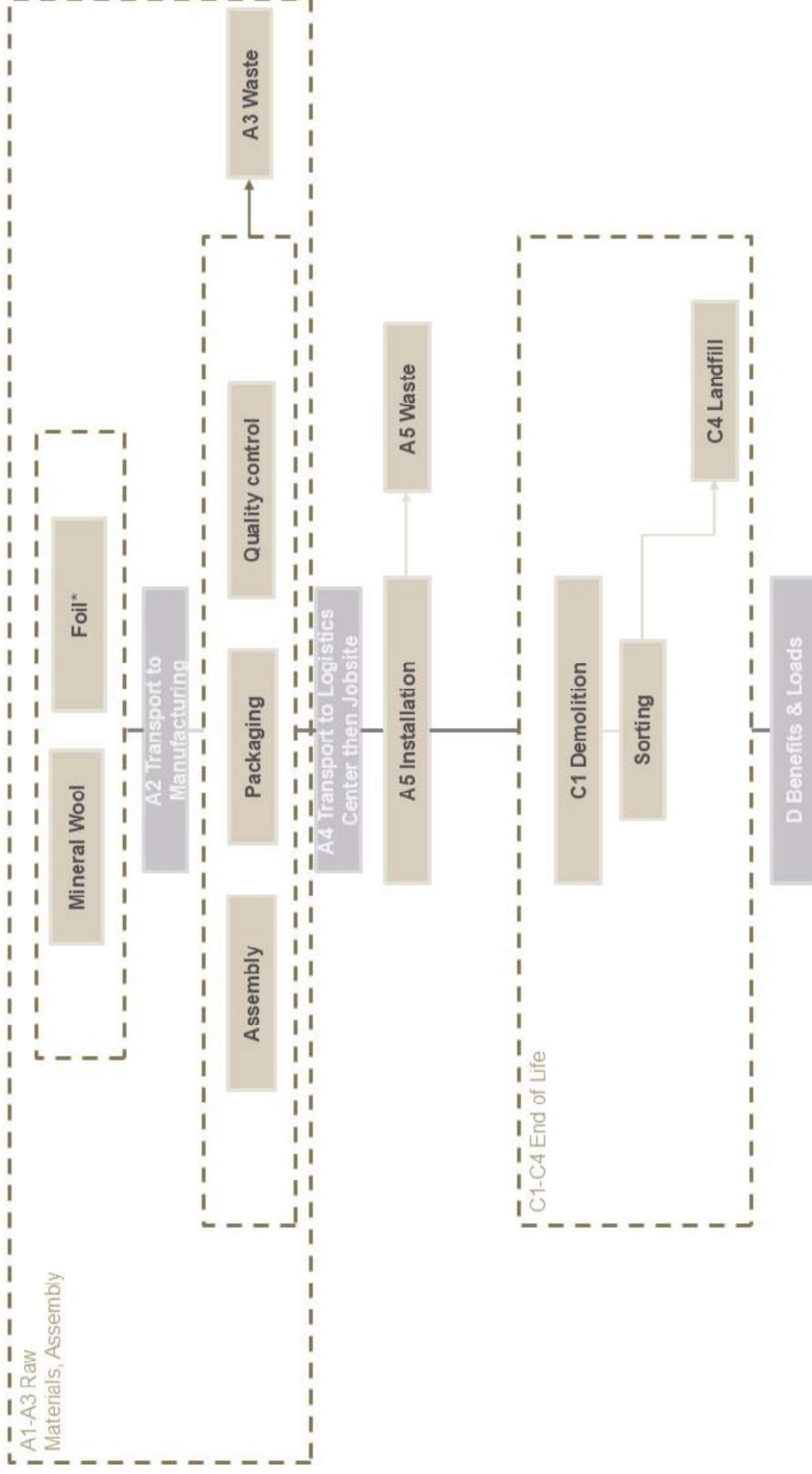
This EPD does not cover the use phase.

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

PRODUCT END OF LIFE (C1-C4, D)

Consumption of energy and natural resources in demolition process is assumed to be negligible. As a barrier that cannot be economically separated into its constituent parts, it is assumed that 100% of the product must be disposed of entirely in landfill. Transportation distance to landfill is assumed as 50 km and the transportation method is assumed to be lorry (C2). The benefits and environmental impacts of packaging recycling are accounted for in Model D, based on global standard recycling assumptions. This includes approximately 9% plastic packaging, 83% cardboard, and 15% wooden pallets.

MANUFACTURING PROCESS



*Not applicable for item number 2395774



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, and emission flows, and end-of-life processing of product. All industrial processes from raw material acquisition, pre-processing, production, product distribution, installation and end-of-life management are included. Due to lack of data, no ancillary materials data are included in the model. 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, 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	Not applicable
Manufacturing energy and waste	Allocated by mass or volume

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	Multiple products
Grouping method	Based on average results of product group - by total mass
Variation in GWP-fossil for A1-A3, %	+/- 16.40

CFS-NVB E120 is available in 2 versions in several sizes (refer appendix). The raw material formulation, manufacturing processes, and production locations

are consistent across all products, with the exception of one item (CFS-NVB E120 FB) that remains uncut and does not feature foil finishing. The version averaging by total mass as the representative product where all variants for CFS-NVB E120 are defined together for this EPD as it accounts for the mixture of the product, and the variability in GWP-fossil for A1-A3 is within the allowed range. All product variants were assessed separately and in full in order to document this.

LCA SOFTWARE AND BIBLIOGRAPHY

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

ENVIRONMENTAL IMPACT DATA

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

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

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total ¹⁾	kg CO ₂ e	1,00E+00	7,61E-02	-1,03E+00	5,19E-02	3,93E-01	1,40E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,39E-03	0,00E+00	1,79E-02	-1,17E-03
GWP – fossil	kg CO ₂ e	1,11E+00	7,60E-02	3,28E-01	1,52E+00	3,93E-01	4,48E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,38E-03	0,00E+00	1,79E-02	-1,20E-03
GWP – biogenic	kg CO ₂ e	-1,09E-01	1,03E-05	-1,36E+00	-1,47E+00	8,11E-05	1,36E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,22E-06	0,00E+00	-4,87E-06	-6,31E-07
GWP – LULUC	kg CO ₂ e	2,15E-04	3,40E-05	3,07E-03	3,32E-03	1,86E-04	2,91E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,41E-06	0,00E+00	4,65E-05	3,24E-05
Ozone depletion pot.	kg CFC-11e	2,30E-10	1,12E-09	9,49E-09	1,08E-08	5,75E-09	5,35E-10	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,95E-11	0,00E+00	3,73E-10	-1,21E-11
Acidification potential	mol H ⁺ e	4,85E-03	2,59E-04	1,61E-03	6,72E-03	4,23E-03	1,47E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,84E-05	0,00E+00	9,75E-05	1,03E-06
EP-freshwater ²⁾	kg Pe	2,54E-06	5,92E-06	1,24E-04	1,32E-04	2,54E-05	8,22E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,19E-07	0,00E+00	1,47E-06	-4,34E-06
EP-marine	kg Ne	6,12E-04	8,52E-05	4,92E-04	1,19E-03	1,13E-03	2,72E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,03E-06	0,00E+00	3,71E-05	8,97E-08
EP-terrestrial	mol Ne	9,72E-03	9,27E-04	4,89E-03	1,55E-02	1,25E-02	5,51E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,56E-05	0,00E+00	4,02E-04	8,17E-06
POCP ("smog" ³⁾)	kg NMVOCe	1,80E-03	3,82E-04	2,13E-03	4,32E-03	3,86E-03	2,15E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,70E-05	0,00E+00	1,41E-04	-1,05E-06
ADP-minerals & metals ⁴⁾	kg Sbe	2,25E-07	2,12E-07	1,86E-06	2,29E-06	8,93E-07	9,53E-08	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,50E-08	0,00E+00	4,75E-08	-5,88E-09
ADP-fossil resources	MJ	9,30E+00	1,10E+00	6,44E+00	1,68E+01	5,45E+00	5,02E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,81E-02	0,00E+00	3,19E-01	-1,62E-02
Water use ⁵⁾	m ³ e depr.	1,76E-02	5,45E-03	1,94E-01	2,17E-01	2,40E-02	3,58E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,86E-04	0,00E+00	1,28E-03	3,12E-03

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	1,47E-07	7,61E-09	2,61E-08	1,81E-07	3,15E-08	3,47E-09	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,39E-10	0,00E+00	2,15E-09	2,48E-10
Ionizing radiation ⁶⁾	kBq	1,13E-02	9,61E-04	4,41E-02	5,64E-02	4,17E-03	8,47E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,80E-05	0,00E+00	2,41E-04	3,36E-04
Ecotoxicity (freshwater)	11236 CTUe	1,85E+00	1,56E-01	1,59E+00	3,59E+00	6,78E-01	2,19E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,10E-02	0,00E+00	7,69E-02	-1,13E-02
Human toxicity, cancer	CTUh	1,68E-09	1,25E-11	1,24E-09	2,93E-09	7,01E-11	9,14E-12	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,88E-13	0,00E+00	4,02E-12	-5,05E-13
Human tox. non-cancer	CTUh	1,01E-07	7,14E-10	3,42E-09	1,05E-07	2,98E-09	5,05E-10	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,06E-11	0,00E+00	1,45E-10	-9,76E-12
SQP ⁷⁾	-	1,68E+01	1,11E+00	1,04E+02	1,21E+02	4,22E+00	6,77E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,87E-02	0,00E+00	4,33E-01	-5,98E-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	2,87E+00	1,51E-02	7,30E+00	1,02E+01	6,64E-02	-1,23E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,07E-03	0,00E+00	3,96E-03	9,95E-01
Renew. PER as material	MJ	1,24E+00	0,00E+00	1,20E+01	1,32E+01	0,00E+00	-1,20E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	-1,24E+00	1,03E+00
Total use of renew. PER	MJ	4,11E+00	1,51E-02	1,93E+01	2,34E+01	6,64E-02	-2,43E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,07E-03	0,00E+00	-1,24E+00	2,03E+00
Non-re. PER as energy	MJ	7,76E+00	1,10E+00	4,53E+00	1,34E+01	5,45E+00	-5,95E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,81E-02	0,00E+00	3,20E-01	-1,70E-02
Non-re. PER as material	MJ	1,52E+00	0,00E+00	1,93E+00	3,45E+00	0,00E+00	-1,93E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	-1,52E+00	1,23E-02
Total use of non-re. PER	MJ	9,28E+00	1,10E+00	6,45E+00	1,68E+01	5,45E+00	-2,52E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,81E-02	0,00E+00	-1,20E+00	-4,72E-03
Secondary materials	kg	2,10E-01	4,70E-04	1,00E-01	3,11E-01	2,39E-03	2,52E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,32E-05	0,00E+00	1,13E-04	3,63E-03
Renew. secondary fuels	MJ	8,19E-05	5,96E-06	3,81E-01	3,82E-01	2,35E-05	3,23E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,22E-07	0,00E+00	1,74E-06	-5,69E-07
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m ³	9,68E-04	1,63E-04	4,67E-03	5,80E-03	6,96E-04	-2,25E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,15E-05	0,00E+00	1,85E-04	7,83E-05

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	4,96E-04	1,87E-03	2,12E-02	2,36E-02	8,72E-03	1,43E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,32E-04	0,00E+00	4,72E-04	2,12E-05
Non-hazardous waste	kg	2,39E-01	3,46E-02	1,03E+00	1,30E+00	1,52E-01	3,15E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,45E-03	0,00E+00	9,45E-03	-1,32E-02
Radioactive waste	kg	7,92E-05	2,35E-07	1,14E-05	9,08E-05	1,02E-06	2,10E-07	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,67E-08	0,00E+00	5,88E-08	8,74E-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	ND	ND	ND	ND	ND	ND	ND	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	1,68E-01	ND	ND	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND	ND	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	7,60E-02	ND	ND	ND	ND	ND	ND	ND	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	3,20E-02	ND	ND	ND	ND	ND	ND	ND	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	4,40E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML

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	1,10E+00	7,56E-02	3,31E-01	1,50E+00	3,91E-01	8,58E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,35E-03	0,00E+00	1,78E-02	-1,15E-03
Ozone depletion Pot.	kg CFC ₁₁ e	7,23E-09	8,96E-10	7,86E-09	1,60E-08	4,58E-09	4,28E-10	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,34E-11	0,00E+00	2,97E-10	-9,78E-12
Acidification	kg SO ₂ e	6,81E-03	1,98E-04	1,24E-03	8,25E-03	3,35E-03	1,11E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,40E-05	0,00E+00	7,23E-05	1,33E-06
Eutrophication	kg PO ₄ ³⁻ e	2,69E-02	4,82E-05	9,66E-03	3,66E-02	4,65E-04	5,60E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,41E-06	0,00E+00	2,23E-05	-1,02E-05
POCP ("smog")	kg C ₂ H ₄ e	4,10E-04	1,76E-05	1,92E-04	6,20E-04	1,95E-04	1,87E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,25E-06	0,00E+00	6,42E-06	-6,73E-07
ADP-elements	kg Sbe	6,04E-06	2,07E-07	1,82E-06	8,07E-06	8,73E-07	9,29E-08	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,46E-08	0,00E+00	4,64E-08	-6,19E-09
ADP-fossil	MJ	1,19E+01	1,09E+00	5,66E+00	1,86E+01	5,38E+00	4,88E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,70E-02	0,00E+00	3,15E-01	-2,23E-02

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	1,11E+00	7,61E-02	3,31E-01	1,52E+00	3,93E-01	4,48E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,38E-03	0,00E+00	1,79E-02	-1,16E-03

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.

SCENARIO DOCUMENTATION

Manufacturing energy scenario documentation

Scenario parameter	Value
Electricity data source and quality	Electricity, Poland, residual mix, direct GWP only, 2023 (Association of Issuing Bodies)
Electricity CO2e / kWh	0,79
District heating data source and quality	-
District heating CO2e / kWh	-

Transport scenario documentation A4

Scenario parameter	Value
Fuel and vehicle type. Eg, electric truck, diesel powered truck	Diesel powered truck and container ship
Average transport distance, km	1456 km diesel powered truck and 6052,5 km container ship
Capacity utilization (including empty return) %	50
Bulk density of transported products	-
Volume capacity utilization factor	1

Installation scenario documentation A5

Scenario information	Value
Ancillary materials for installation (specified by material) / kg or other units as appropriate	-
Water use / m ³	-
Other resource use / kg	-
Quantitative description of energy type (regional mix) and consumption during the installation process / kWh or MJ	-
Waste materials on the building site before waste processing, generated by the product's installation (specified by type) / kg	Wood: 0.70 kg Cardboard: 0.07 kg Plastic: 0.03 kg
Output materials (specified by type) as result of waste processing at the building site e.g. collection for recycling, for energy recovery, disposal (specified by route) / kg	% are for recycling, incinerated w. energy recovery, landfill respectively. Wood: 15%, 0%, 85% Cardboard: 83%, 8%, 9% Plastic: 9%, 12%, 79%
Direct emissions to ambient air, soil and water / kg	-

End of life scenario documentation

Scenario information	Value
Collection process – kg collected separately	1
Collection process – kg collected with mixed construction waste	-
Recovery process – kg for re-use	-
Recovery process – kg for recycling	-
Recovery process – kg for energy recovery	-
Disposal (total) – kg for final deposition	1
Scenario assumptions e.g. transportation	Transported 50 km by truck to local recycling station

THIRD-PARTY VERIFICATION STATEMENT

EPD Hub declares that this EPD is verified in accordance with ISO 14025 by an independent, third-party verifier. 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 from the PCR and EN 15802+A2 in the Environmental Product Declaration and its project report.

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.

The company-specific data and upstream and downstream data have been examined as regards plausibility and consistency. The publisher is responsible for ensuring the factual integrity and legal compliance of this declaration.

The software used in creation of this LCA and EPD is verified by EPD Hub to conform to the procedural and methodological requirements outlined in ISO 14025:2010, ISO 14040/14044, EN 15804+A2, and EPD Hub Core Product Category Rules and General Program Instructions.

Verified tools

Tool verifier: Magaly Gonzalez Vazquez

Tool verification validity: 27 March 2025 - 26 March 2028

Imane Uaid Lamkaddam as an authorized verifier for EPD Hub Limited
17.10.2025



APPENDIX

PRODUCT PORTFOLIO INCLUDED IN SCOPE

The following list of products are included in the scope of this declaration, as represented by averaging the CFS-NVB E120.

Item number	Item designation	Weight [kg]
2395767	CFS-NVB E120 100	0.906594
2395768	CFS-NVB E120 150	1.351794
2395769	CFS-NVB E120 200	1.771794
2395770	CFS-NVB E120 250	2.191794
2395771	CFS-NVB E120 300	2.611794
2395772	CFS-NVB E120 350	3.031794
2395773	CFS-NVB E120 400	3.451794
2395774	CFS-NVB FB	8.407794