



# **ENVIRONMENTAL PRODUCT DECLARATION**

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

IO Wall Elements
VILPE Oy

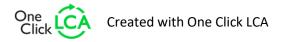




## **EPD HUB, HUB-3320**

Published on 16.05.2025, last updated on 16.05.2025, 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)









## **GENERAL INFORMATION**

### **MANUFACTURER**

Manufacturer	VILPE Oy
Address	Kauppatie 9, FI-65610 Mustasaari
Contact details	sales@vilpe.com
Website	https://www.vilpe.com/

### **EPD STANDARDS, SCOPE AND VERIFICATION**

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								
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D								
EPD author	Milja Sarapaa, VILPE Oy								
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.

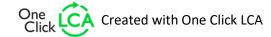
### **PRODUCT**

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Product name	IO Wall Elements
Additional labels	-
Product reference	-
Place(s) of raw material origin	-
Place of production	Mustasaari, Finland
Place(s) of installation and use	-
Period for data	01/01/2024-31/12/2024
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	-1,8% +2,3%
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-

### **ENVIRONMENTAL DATA SUMMARY**

Declared unit	1 kg
Declared unit mass	1 kg
GWP-fossil, A1-A3 (kgCO₂e)	3,90E+00
GWP-total, A1-A3 (kgCO₂e)	2,07E+00
Secondary material, inputs (%)	8,83
Secondary material, outputs (%)	99,3
Total energy use, A1-A3 (kWh)	24,7
Net freshwater use, A1-A3 (m³)	0,03







## PRODUCT AND MANUFACTURER

#### **ABOUT THE MANUFACTURER**

VILPE Oy is a Finnish family-owned company that develops and manufactures ventilation and roofing solutions for the construction industry. The company's operations are based on customer-oriented and innovative product development. Our high quality VILPE® products bring better indoor air quality, energy efficiency and longevity of structures to all spaces and thus improve people's quality of life. VILPE represents safe construction and living, which reinforces the company's commitment to quality and reliability.

### PRODUCT DESCRIPTION

VILPE's wall elements offer an all-in-one air intake and exhaust vent, designed to be mounted onto the wall of a building.

IO 125, 160, 200 & 250 Wall Element: Exterior wall-mounted product with contraction attachment, enabling the same product to be used for different apartment sizes. The VILPE IO's air impeller can be adapted to both left- and right-sided air intakes and exhaust air outlets.

IO 125/160 & 200/250 Intake Wall Elements: Exterior wall-mounted product which directs intake air through the exterior wall, either into a ventilation unit or as an air inlet for basement spaces. Thanks to the ambidextrous design of the product, the same unit can be adapted to both left- and right-sided air intake configurations.

Further information can be found at https://www.vilpe.com/.

### PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	16,67	China
Minerals	-	-
Fossil materials	83,33	EU, Turkey
Bio-based materials	-	-

### **BIOGENIC CARBON CONTENT**

Product's biogenic carbon content at the factory gate

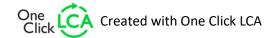
Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	0,505

#### **FUNCTIONAL UNIT AND SERVICE LIFE**

Declared unit	1 kg
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.

Pro	duct st	tage		mbly ige		Use stage End o						End of life stage				Beyond the system boundaries		1
<b>A1</b>	A2	А3	A4	A5	B1	B2	В3	В4	В5	В6	В7	<b>C1</b>	C2	СЗ	C4		D	
×	×	×	×	×	MND	MND	MND	MND	MND	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 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.

IO Wall Elements of VILPE Oy are manufactured at the Mustasaari site in Finland. The production process consists of raw material delivery, injection

molding, quality inspection, and packaging. During injection molding, the raw material is plasticized, injected into the mold, cooled, and removed from the mold. Some assembly is automated. Production requires electricity, heat, and water. Slightly less than 10% of the electricity comes from the production facility's own solar power plant, and the rest is from nuclear electricity. The waste heat from the machines is directed to a heat recovery center and used for building heating. The cooling water is in a closed loop. The material requirement and generated waste vary depending on the size of the product. Plastic waste is reutilized within the process, and as the proportion of plastic directed to the energy fraction is less than 1%, it has been excluded from the calculations.

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)

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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 average distribution distance is calculated as a weighted average of the significant sales volumes. Products are transported in full pallets. During installation, the disposal of packaging material is included in the estimate. IO Wall Elements are packed in cardboard boxes. The amount of packaging material varies slightly depending on the type and size of the IO Wall Element. After installation, the packaging material is transported by truck to a recycling facility. The average distance to a recycling facility in Finland has been used. Scenario estimates have employed average recycling methods and practices. There is no material waste during installation. The energy consumption during installation, mainly consisting of the use of a drill, has been excluded





from the calculations as it is assumed to be insignificant per examined product unit.

## **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)

The end-of-life stage consists of the following modules:

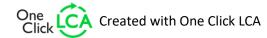
C1: Deconstruction of the product

C2: Transportation of the discarded product

C3: Waste processing

C4: Disposal

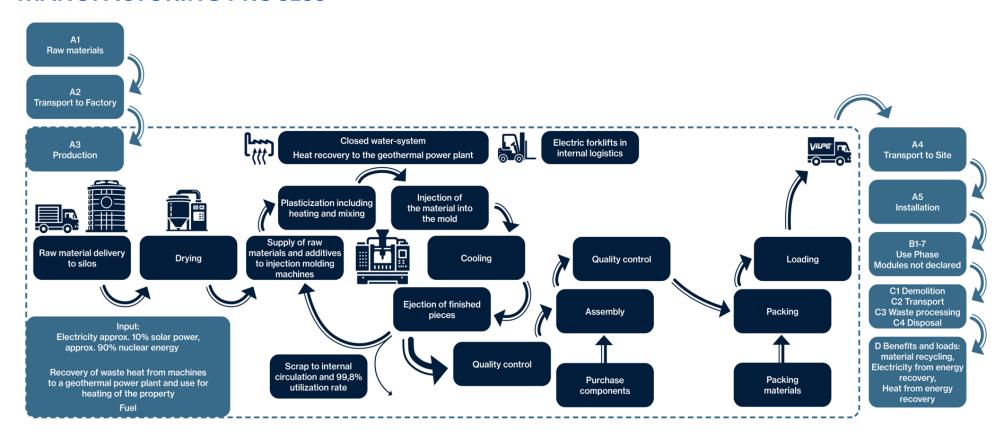
At the end of the product's life cycle, it can be disassembled from its installation environment. The plastic and metal components can be further separated and processed in accordance with local waste management regulations. Plastic components may be recycled as industrial plastic or allocated to the energy recovery stream, while metal components are suitable for metal recycling. The scenario used in the calculation represents the most likely option in Finland. The average distance to waste treatment facilities in Finland has been used for waste transportation distance. After disposal, it is assumed that the polypropylene and TPE from wall element will be incinerated (100%). Approximately 85% of steel is assumed to be recycled and the remaining 15% of steel is taken to landfill for final disposal (Source: World Stainless, 2024). Due to the energy usage possibilities of the product and packaging, recycled raw material leads to the avoidance of virgin material while energy recovery at the incineration plant displaces electricity and heat production.







## **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.

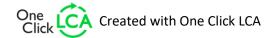
#### **VALIDATION OF DATA**

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







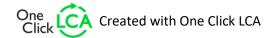
#### **AVERAGES AND VARIABILITY**

Type of average	Multiple products
Averaging method	Representative product
Variation in GWP-fossil for A1-A3 (%)	-1,8% +2,3%

The average was calculated for 6 similar products, and to ensure adequate precision in the range of variation, 3 products were selected for the analysis. These products represent different size categories and the extremes in terms of packaging content scope. The product that most accurately reflected the average characteristics was designated as the representative product. The primary material is comparable across the products, with the most significant differences arising in size, weight, and packaging materials. The intended use of the products is consistent, aligning with the requirements of the averaging methodology. The transportable mass, including packaging materials, varies across the products due to differences in their dimensions. While the end-of-life stages are broadly similar, variations occur based on the quantity of packaging material, product size, and specific components included with the products. The analysis concluded that all products fall within the same average range for A1–A3 Global Warming Potential (GWP).

### 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'.





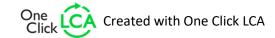


## **ENVIRONMENTAL IMPACT DATA**

## CORE ENVIRONMENTAL IMPACT INDICATORS - EN 15804+A2, PEF

Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	C1	C2	С3	C4	D
GWP – total <sup>1)</sup>	kg CO₂e	2,78E+00	5,19E-01	-1,23E+00	2,07E+00	1,11E-01	1,87E+00	0,00E+00	6,13E-03	2,22E+00	5,18E-05	2,46E+00
GWP – fossil	kg CO₂e	2,78E+00	5,19E-01	6,04E-01	3,90E+00	1,11E-01	2,64E-02	0,00E+00	6,13E-03	2,22E+00	5,18E-05	1,85E+00
GWP – biogenic	kg CO₂e	0,00E+00	0,00E+00	-1,85E+00	-1,85E+00	0,00E+00	1,85E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,14E-01
GWP – LULUC	kg CO₂e	1,77E-03	2,35E-04	1,63E-02	1,83E-02	4,99E-05	1,83E-05	0,00E+00	2,73E-06	1,14E-05	2,96E-08	-3,53E-03
Ozone depletion pot.	kg CFC-11e	9,45E-08	7,65E-09	1,66E-08	1,19E-07	1,65E-09	3,46E-10	0,00E+00	8,92E-11	3,84E-10	1,50E-12	1,84E-09
Acidification potential	mol H⁺e	9,48E-03	2,60E-03	2,95E-03	1,50E-02	3,87E-04	1,48E-04	0,00E+00	2,08E-05	3,28E-04	3,67E-07	-3,19E-04
EP-freshwater <sup>2)</sup>	kg Pe	6,46E-04	3,89E-05	2,71E-04	9,56E-04	8,66E-06	9,22E-06	0,00E+00	4,77E-07	5,58E-06	4,26E-09	-9,10E-05
EP-marine	kg Ne	1,94E-03	7,80E-04	1,31E-03	4,03E-03	1,26E-04	2,19E-04	0,00E+00	6,80E-06	1,46E-04	1,40E-07	-5,66E-05
EP-terrestrial	mol Ne	1,99E-02	8,55E-03	1,00E-02	3,85E-02	1,38E-03	5,62E-04	0,00E+00	7,40E-05	1,55E-03	1,53E-06	-6,30E-04
POCP ("smog") <sup>3</sup> )	kg NMVOCe	1,34E-02	3,15E-03	3,33E-03	1,98E-02	5,64E-04	1,92E-04	0,00E+00	3,02E-05	3,91E-04	5,48E-07	3,38E-05
ADP-minerals & metals <sup>4</sup> )	kg Sbe	2,33E-05	1,39E-06	4,36E-06	2,91E-05	3,10E-07	1,14E-07	0,00E+00	1,79E-08	3,22E-07	8,23E-11	-2,08E-07
ADP-fossil resources	MJ	7,15E+01	7,46E+00	2,82E+01	1,07E+02	1,62E+00	3,36E-01	0,00E+00	8,81E-02	2,75E-01	1,27E-03	-3,67E+00
Water use <sup>5)</sup>	m³e depr.	7,83E-01	3,60E-02	5,40E-01	1,36E+00	7,98E-03	1,53E-02	0,00E+00	4,28E-04	6,25E-02	3,67E-06	-5,39E-02

<sup>1)</sup> 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

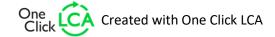
Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	C1	C2	С3	C4	D
Particulate matter	Incidence	1,19E-07	4,97E-08	4,26E-08	2,12E-07	1,11E-08	2,28E-09	0,00E+00	5,79E-10	2,05E-09	8,36E-12	-5,51E-09
Ionizing radiation <sup>6)</sup>	kBq U235e	1,76E-01	6,33E-03	1,09E+00	1,27E+00	1,41E-03	2,14E-03	0,00E+00	7,53E-05	7,42E-04	7,99E-07	-3,55E-01
Ecotoxicity (freshwater)	CTUe	9,06E+00	1,03E+00	4,61E+00	1,47E+01	2,28E-01	1,60E+00	0,00E+00	1,29E-02	7,24E-01	1,07E-04	5,37E-01
Human toxicity, cancer	CTUh	1,19E-09	8,72E-11	1,37E-09	2,65E-09	1,84E-11	1,93E-11	0,00E+00	1,02E-12	6,52E-11	9,55E-15	2,44E-11
Human tox. non-cancer	CTUh	2,79E-08	4,67E-09	5,97E-09	3,85E-08	1,05E-09	1,18E-09	0,00E+00	5,66E-11	3,15E-09	2,19E-13	1,94E-09
SQP <sup>7)</sup>	-	8,95E+00	7,15E+00	1,18E+02	1,34E+02	1,63E+00	3,75E-01	0,00E+00	7,93E-02	1,57E-01	2,50E-03	-5,45E+01

6) EN 15804+A2 disclaimer for lonizing 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	C1	C2	С3	C4	D
Renew. PER as energy <sup>8)</sup>	MJ	2,44E+00	9,98E-02	6,41E+00	8,95E+00	2,21E-02	-1,65E+01	0,00E+00	1,21E-03	1,55E-02	1,23E-05	-1,44E+01
Renew. PER as material	MJ	0,00E+00	0,00E+00	1,60E+01	1,60E+01	0,00E+00	-1,60E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,56E+00
Total use of renew. PER	MJ	2,44E+00	9,98E-02	2,25E+01	2,50E+01	2,21E-02	-3,25E+01	0,00E+00	1,21E-03	1,55E-02	1,23E-05	-1,28E+01
Non-re. PER as energy	MJ	4,46E+01	7,46E+00	2,75E+01	7,96E+01	1,62E+00	3,36E-01	0,00E+00	8,81E-02	-3,13E+01	1,27E-03	-3,52E+01
Non-re. PER as material	MJ	2,69E+01	0,00E+00	7,66E-01	2,77E+01	0,00E+00	-7,66E-01	0,00E+00	0,00E+00	-2,69E+01	0,00E+00	3,16E+01
Total use of non-re. PER	MJ	7,15E+01	7,46E+00	2,83E+01	1,07E+02	1,62E+00	-4,30E-01	0,00E+00	8,81E-02	-5,83E+01	1,27E-03	-3,68E+00
Secondary materials	kg	8,83E-02	3,20E-03	4,02E-01	4,94E-01	6,88E-04	3,57E-04	0,00E+00	3,81E-05	4,27E-04	3,20E-07	1,14E-01
Renew. secondary fuels	MJ	9,90E-04	3,86E-05	4,17E-01	4,18E-01	8,73E-06	2,28E-06	0,00E+00	4,84E-07	5,11E-06	6,62E-09	1,19E-04
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m³	1,74E-02	1,07E-03	1,25E-02	3,10E-02	2,39E-04	-1,22E-03	0,00E+00	1,27E-05	5,76E-04	1,32E-06	-3,18E-03

8) PER = Primary energy resources.







### **END OF LIFE – WASTE**

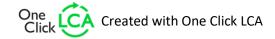
Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	C1	C2	С3	C4	D
Hazardous waste	kg	2,76E-01	1,25E-02	4,17E-02	3,30E-01	2,74E-03	3,66E-03	0,00E+00	1,50E-04	2,28E-02	1,40E-06	-5,00E-02
Non-hazardous waste	kg	1,85E+01	2,29E-01	1,00E+00	1,98E+01	5,06E-02	2,24E+00	0,00E+00	2,79E-03	8,93E-01	3,21E-05	8,43E-01
Radioactive waste	kg	4,45E-05	1,55E-06	2,60E-04	3,06E-04	3,44E-07	5,45E-07	0,00E+00	1,84E-08	1,89E-07	1,95E-10	-7,55E-05

## **END OF LIFE – OUTPUT FLOWS**

Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00										
Materials for recycling	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,79E-01	0,00E+00	0,00E+00	1,60E-01	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	8,33E-01	0,00E+00	0,00E+00							
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,21E+00	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	6,35E-01	0,00E+00	0,00E+00	2,96E+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	3,58E+00	0,00E+00	0,00E+00	1,67E+01	0,00E+00	0,00E+00

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

Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	C1	C2	С3	C4	D
Global Warming Pot.	kg CO₂e	2,77E+00	5,16E-01	6,24E-01	3,91E+00	1,11E-01	9,27E-02	0,00E+00	6,10E-03	2,22E+00	5,13E-05	1,84E+00
Ozone depletion Pot.	kg CFC-11e	7,65E-08	6,10E-09	1,38E-08	9,64E-08	1,31E-09	2,82E-10	0,00E+00	7,12E-11	3,22E-10	1,19E-12	1,10E-09
Acidification	kg SO₂e	7,80E-03	2,02E-03	2,18E-03	1,20E-02	2,96E-04	1,10E-04	0,00E+00	1,59E-05	2,34E-04	2,72E-07	-2,52E-04
Eutrophication	kg PO <sub>4</sub> ³e	3,46E-03	3,92E-04	1,04E-02	1,43E-02	7,12E-05	8,13E-05	0,00E+00	3,87E-06	7,03E-05	8,64E-08	1,23E-03
POCP ("smog")	kg C <sub>2</sub> H <sub>4</sub> e	8,60E-04	1,50E-04	2,70E-04	1,28E-03	2,61E-05	2,38E-05	0,00E+00	1,42E-06	1,50E-05	2,57E-08	-1,02E-04
ADP-elements	kg Sbe	2,30E-05	1,36E-06	4,39E-06	2,88E-05	3,03E-07	1,11E-07	0,00E+00	1,75E-08	3,05E-07	8,07E-11	-2,36E-07
ADP-fossil	MJ	6,85E+01	7,36E+00	8,29E+00	8,42E+01	1,59E+00	2,99E-01	0,00E+00	8,70E-02	2,63E-01	1,26E-03	1,28E+00







### **ENVIRONMENTAL IMPACTS – GWP-GHG - THE INTERNATIONAL EPD SYSTEM**

Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-GHG <sup>9)</sup>	kg CO₂e	2,78E+00	5,19E-01	6,20E-01	3,92E+00	1,11E-01	2,64E-02	0,00E+00	6,13E-03	2,22E+00	5,18E-05	1,84E+00

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





## **VERIFICATION STATEMENT**

### **VERIFICATION PROCESS FOR THIS EPD**

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliancy with reference standard, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The digital background data for this EPD

Why does verification transparency matter? Read more online This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

### THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried out, the presentation of environmental data in the EPD, and other additional environmental information, as present with respect to the procedural and methodological requirements in ISO 14025:2010 and reference standard.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

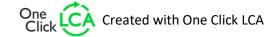
I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

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











# **APPENDIX**

## PRODUCT PORTFOLIO INCLUDED IN SCOPE

The following list of products are included in the scope of declaration.

Product number	Product name
370000, 370002, 370007,	IO 125 Wall Flement
370008, 370009	10 125 Wall Element
370100, 370102, 370107,	IO 160 Wall Element
370108, 370109	10 160 Wall Element
370200, 370202, 370207,	IO 200 Wall Flement
370208, 370209	10 200 Wall Element
370300, 370302, 370307,	IO 250 Wall Element
370308, 370309	10 250 Wall Element
370120, 370122, 370127,	IO 125/160 Intake Wall Element
370128, 370129	10 125/160 IIItake Wall Element
370130, 370132, 370137,	IO 200/250 Intake Wall Element
370138, 370139	10 200/250 intake Wall Element

