



ENVIRONMENTAL PRODUCT DECLARATION

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

Insulation sleeve 30/60/100

Svenska Westaflex AB



EPD HUB, EPD number HUB-3273

Published on 04.05.2025, last updated on 04.05.2025, valid until 03.05.2030

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.



Created with One Click LCA



GENERAL INFORMATION

MANUFACTURER

Manufacturer	Svenska Westaflex AB
Address	Kärragatan 4, 431 53 Mölndal SE
Contact details	info@westaflex.se
Website	https://www.westaflex.se/

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804+A2:2019 and ISO 14025
PCR	EPD Hub Core PCR Version 1.1, 5 Dec 2023
Sector	Construction product
Category of EPD	Third party verified EPD
Parent EPD number	-
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Oscar Ternstrom
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	Insulation sleeve 30/60/100
Additional labels	Isolerstrumpa
Product reference	
Place(s) of raw material origin	
Place of production	Mölndal, Sweden
Place(s) of installation and use	Sweden
Period for data	2023
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	9.8 % to 12 %

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg of ventilation products
Declared unit mass	1 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	1,38E+00
GWP-total, A1-A3 (kgCO ₂ e)	1,32E+00
Secondary material, inputs (%)	65,9
Secondary material, outputs (%)	87,3
Total energy use, A1-A3 (kWh)	5,2
Net freshwater use, A1-A3 (m ³)	0,01

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Controlling every aspect of production enables us to offer quick adjustments, customized solutions, reliable quality, and very high delivery dependability. Today, we are proud developers of a wide range of our own duct solutions for factories, homes, cars, and boats throughout the Nordic region.

PRODUCT DESCRIPTION

Our insulating sleeve – a Swedish quality product manufactured in Mölndal with Swedish-made insulation. It is used for ventilation ducts requiring effective condensation protection or thermal insulation.

Our sleeve is diffusion-tight, flexible, and age-resistant, featuring non-combustible glass wool that is VIM-approved for your peace of mind.

It is conveniently supplied rolled up in a standard length of three meters and comes in several insulating thicknesses—25 mm, 50 mm, or 100 mm—to suit your specific needs.

Further information can be found at <https://www.westaflex.se/>.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals		
Minerals	64%	Sweden
Fossil materials	36%	Finland
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	0,016

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 kg of ventilation products
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		
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.

The material arrives at the factory in Mölndal, primarily from western Sweden, though some inputs also come from northern Europe. The products

are produced in fixed standard dimensions, and the incoming material is adapted accordingly, making production losses in assembly negligible. The products are assembled, packed on pallets, and transported to the warehouse by electric forklift.

No water is used in the process, and the entire operation—including forklifts and heating—runs on electricity.

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 distance is defined according to the PCR. Average distance of transportation from production plant to building site is assumed as 100 km and the transportation method is assumed to be lorry. Vehicle capacity utilization is assumed to be 100 % 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. Empty returns are not taken into account as it is assumed that return trip is used by the transportation company to serve the needs of other clients. Transportation does not cause losses as product are packaged properly. Also, volume capacity utilisation factor is assumed to be 100 % for the nested packaged products.

PRODUCT USE AND MAINTENANCE (B1-B7)

This EPD does not cover the use phase.

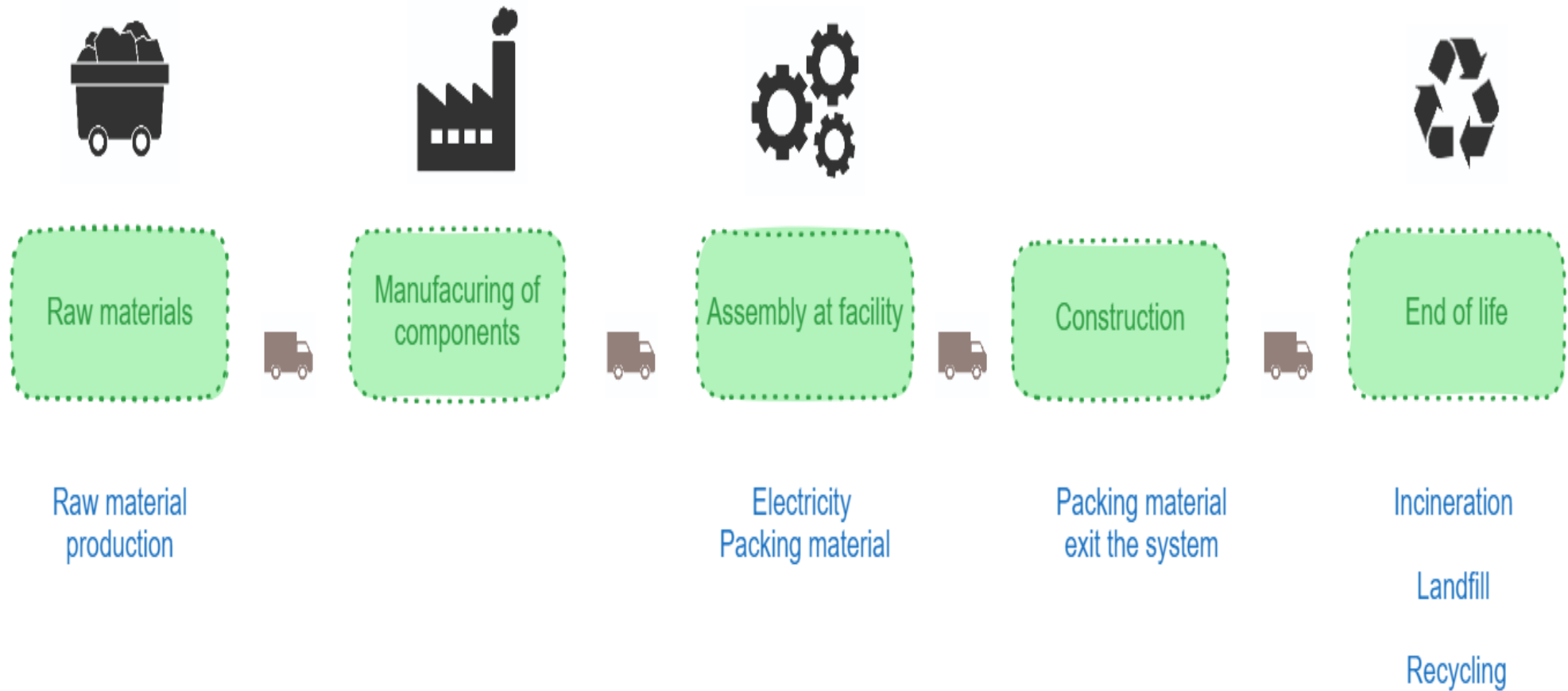
Air, soil, and water impacts during the use phase have not been studied.

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

PRODUCT END OF LIFE (C1-C4, D)

The insulations is assumed to be landfilled, and the plastic in the product is assumed to be handled in line with european standards. The distance to the waste management facility is assumed to be 50 km.

MANUFACTURING PROCESS



LIFE-CYCLE ASSESSMENT

CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	No allocation
Packaging material	No allocation
Ancillary materials	No allocation
Manufacturing energy and waste	Allocated by revenue

AVERAGES AND VARIABILITY

Type of average	Multiple products
Averaging method	Representative product
Variation in GWP-fossil for A1-A3 (%)	9.8 % to 12 %

This EPD covers the insulation sleeve segment. The process is the same, and there is only one production site. The EPD is based on the most sold product in the segment, and the reference products is then the largest and the smallest variants in the segment. This EPD covers diameters ranging from 50 mm to 315 mm. The sleeves are 3 meters long. This EPD also cover PE 30, 60 and 100.

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

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total ¹⁾	kg CO ₂ e	1,25E+00	1,24E-01	-4,68E-02	1,32E+00	1,11E-02	5,71E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,85E-03	2,82E-01	1,54E-02	-1,31E+00
GWP – fossil	kg CO ₂ e	1,25E+00	1,24E-01	9,53E-03	1,38E+00	1,11E-02	7,20E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,84E-03	2,82E-01	1,54E-02	-1,31E+00
GWP – biogenic	kg CO ₂ e	1,51E-04	0,00E+00	-5,64E-02	-5,63E-02	2,51E-06	5,64E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,28E-04
GWP – LULUC	kg CO ₂ e	8,68E-04	5,55E-05	9,75E-05	1,02E-03	4,96E-06	4,30E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,96E-06	1,44E-05	3,03E-07	-5,92E-04
Ozone depletion pot.	kg CFC-11e	6,00E-07	1,83E-09	2,37E-10	6,02E-07	1,64E-10	8,11E-12	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,31E-10	1,02E-10	4,35E-11	-2,49E-08
Acidification potential	mol H ⁺ e	5,11E-03	4,23E-04	5,16E-05	5,58E-03	3,78E-05	4,43E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,01E-05	7,19E-05	8,54E-06	-8,91E-03
EP-freshwater ²⁾	kg Pe	2,54E-04	9,66E-06	3,24E-06	2,67E-04	8,63E-07	2,36E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,88E-07	2,88E-06	8,81E-08	-3,51E-04
EP-marine	kg Ne	1,30E-03	1,39E-04	1,55E-05	1,46E-03	1,24E-05	2,65E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,91E-06	4,08E-05	3,40E-05	-1,02E-03
EP-terrestrial	mol Ne	1,39E-02	1,51E-03	1,72E-04	1,56E-02	1,35E-04	2,00E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,08E-04	2,91E-04	3,86E-05	-1,55E-02
POCP (“smog”) ³⁾	kg NMVOce	5,12E-03	6,24E-04	7,46E-05	5,81E-03	5,57E-05	5,53E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,44E-05	7,87E-05	1,86E-05	-5,06E-03
ADP-minerals & metals ⁴⁾	kg Sbe	7,54E-06	3,46E-07	6,16E-08	7,94E-06	3,09E-08	1,43E-09	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,47E-08	9,61E-08	2,92E-09	-8,19E-06
ADP-fossil resources	MJ	2,62E+01	1,80E+00	2,27E-01	2,82E+01	1,61E-01	7,76E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,28E-01	1,00E-01	3,04E-02	-2,26E+01
Water use ⁵⁾	m ³ e depr.	4,51E-01	8,89E-03	9,36E-03	4,69E-01	7,95E-04	7,21E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,34E-04	9,47E-03	2,00E-04	-4,04E-01

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO₄e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	4,85E-05	1,24E-08	9,21E-10	4,85E-05	1,11E-09	5,97E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,85E-10	5,54E-09	2,10E-10	-5,99E-08
Ionizing radiation ⁶⁾	kBq 11235a	1,02E-01	1,57E-03	5,53E-03	1,09E-01	1,40E-04	5,76E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,12E-04	6,79E-04	4,55E-05	-7,89E-02
Ecotoxicity (freshwater)	CTUe	2,18E+01	2,55E-01	4,65E-02	2,21E+01	2,28E-02	2,95E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,82E-02	1,31E-01	6,18E-03	-5,30E+00
Human toxicity, cancer	CTUh	7,33E-10	2,05E-11	5,41E-11	8,08E-10	1,83E-12	6,44E-13	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,46E-12	1,91E-11	3,27E-13	-1,05E-09
Human tox. non-cancer	CTUh	9,68E-09	1,17E-09	1,15E-10	1,10E-08	1,04E-10	4,21E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,31E-11	5,67E-10	4,66E-11	-9,41E-09
SQP ⁷⁾	-	9,10E+00	1,81E+00	4,53E+00	1,54E+01	1,62E-01	4,84E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,29E-01	1,50E-01	7,40E-02	-5,72E+00

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	6,56E+00	2,47E-02	3,81E-01	6,97E+00	2,20E-03	-3,67E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,76E-03	1,06E-02	8,55E-04	-1,45E+00
Renew. PER as material	MJ	4,78E-01	0,00E+00	4,94E-01	9,71E-01	0,00E+00	-4,94E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-4,78E-01	0,00E+00	0,00E+00
Total use of renew. PER	MJ	7,04E+00	2,47E-02	8,75E-01	7,94E+00	2,20E-03	-8,61E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,76E-03	-4,67E-01	8,55E-04	-1,45E+00
Non-re. PER as energy	MJ	9,73E+00	1,80E+00	1,88E-01	1,17E+01	1,61E-01	1,64E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,28E-01	-9,52E+00	-5,06E+00	-2,26E+01
Non-re. PER as material	MJ	1,65E+01	0,00E+00	3,90E-02	1,65E+01	0,00E+00	-3,90E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-1,08E+01	-5,66E+00	0,00E+00
Total use of non-re. PER	MJ	2,62E+01	1,80E+00	2,27E-01	2,82E+01	1,61E-01	-3,73E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,28E-01	-2,03E+01	-1,07E+01	-2,26E+01
Secondary materials	kg	6,59E-01	7,66E-04	1,85E-03	6,62E-01	6,85E-05	8,77E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,46E-05	5,38E-04	1,21E-05	1,54E-01
Renew. secondary fuels	MJ	4,77E-03	9,73E-06	1,67E-02	2,14E-02	8,70E-07	3,55E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,94E-07	4,23E-06	2,05E-07	-1,43E-04
Non-ren. secondary fuels	MJ	6,95E-24	0,00E+00	0,00E+00	6,95E-24	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	1,14E-02	2,66E-04	2,19E-04	1,19E-02	2,38E-05	-5,28E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,90E-05	1,00E-04	-5,84E-04	-1,05E-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	4,26E-02	3,05E-03	7,22E-04	4,63E-02	2,73E-04	1,42E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,17E-04	3,68E-03	4,54E-05	-8,15E-02
Non-hazardous waste	kg	2,62E+00	5,64E-02	2,07E-02	2,70E+00	5,04E-03	2,98E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,02E-03	1,37E-01	7,51E-01	-3,41E+00
Radioactive waste	kg	5,88E-05	3,84E-07	1,22E-06	6,04E-05	3,43E-08	1,47E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,74E-08	1,73E-07	1,06E-08	-1,90E-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	6,40E-01	0,00E+00	0,00E+00
Materials for recycling	kg	5,53E-03	0,00E+00	0,00E+00	5,53E-03	0,00E+00	1,21E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	1,50E-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	2,00E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	8,30E-02	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,00E-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	4,92E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	4,10E-01	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	3,51E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	2,94E+00	0,00E+00	0,00E+00

ENVIRONMENTAL IMPACTS – GWP-GHG - THE INTERNATIONAL EPD SYSTEM

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	1,25E+00	1,24E-01	9,63E-03	1,38E+00	1,11E-02	7,21E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,85E-03	2,82E-01	1,54E-02	-1,31E+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

VERIFICATION PROCESS FOR THIS EPD

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

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

Why does verification transparency matter? [Read more online](#)

This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

THIRD-PARTY VERIFICATION STATEMENT

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

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

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

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

Imane Uald Lamkaddam as an authorized verifier for EPD Hub Limited
04.05.2025



APPENDIX A

The products listed below are represented and covered by the result of this EPD.

Isolerstrumpa Pe 30 Dimensions	Isolerstrumpa Pe 60 Dimensions	Isolerstrumpa Pe100 Dimensions
Ø50-60mm	Ø100mm	Ø100mm
Ø65-80mm	Ø125mm	Ø125mm
Ø90-100mm	Ø160mm	Ø160mm
Ø125mm	Ø200mm	Ø200mm
Ø160mm	Ø250mm	
Ø200mm		
Ø250mm		
Ø315mm		