ENVIRONMENTAL PRODUCT DECLARATION

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

Iris Damper EKO-SI, Ekovent AB

EPD of multiple products, based on the results of a representative product

EPD HUB, HUB-2572

Published on 07.02.2025, last updated on 07.02.2025, valid until 06.02.2030

Created with One Click LCA

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Ekovent AB
Address	Mejselgatan 7, Vellinge, Sweden
Contact details	info@ekovent.se
Website	www.ekovent.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
Scope of the EPD	Cradle to gate with modules C1-C4, D
EPD author	Van Dong
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ External verification
EPD verifier	Haiha Nguyen, as an authorized verifier acting for EPD Hub Limited

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	EKO-SI
Additional labels	Appendix 1
Product reference	-
Place of production	Vellinge, Sweden
Period for data	2023
Averaging in EPD	No averaging
Variation in GWP-fossil for A1-A3	N/A

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg of EKO-SI-125
Declared unit mass	1 kg
GWP-fossil, A1-A3 ($kgCO_2e$)	4,87E+00
GWP-total, A1-A3 ($kgCO_2e$)	4,83E+00
Secondary material, inputs (%)	27.6
Secondary material, outputs (%)	82.2
Total energy use, A1-A3 (kWh)	17
Net freshwater use, A1-A3 (m^3)	0.03

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

EKOVENT is one of Sweden's leading companies and has for more than 50 years developed, manufactured, and marketed products for ventilation and fire protection.

PRODUCT DESCRIPTION

The EKO-SI Iris Damper is designed for precise airflow regulation in circular ventilation ducts. Its construction ensures high measurement accuracy and complies with tightness class C. The standard design is made of galvanized steel with regulation plates and equipped with a rubber sealing gasket. The EKO-SI is available in sizes ranging from Ø80 mm to Ø800 mm.

This EPD covers multiple product sizes in the EKO-SI series. See the table for details on product names, GTIN numbers, and weights. GWP-total, GWP-GHG, and GWP-fossil values for all sizes, are presented in Appendix 1.

The data used in this EPD are calculated based on one kilogram of the representative product, EKO-SI-125.

Further information can be found at www.ekovent.se.

PRODUCT IDENTIFICATION

Article	GTIN	Article weight [kg/piece]
EKO-SI-80	07350139874724	0,5
EKO-SI-100	07350139874731	0,7
EKO-SI-125	07350139874748	0,8
EKO-SI-160	07350139874755	1,0
EKO-SI-200	07350139874762	1,7
EKO-SI-250	07350139874779	2,3
EKO-SI-315	07350139874786	2,9
EKO-SI-400	07350139874793	5,0
EKO-SI-500	07350139874809	8,4
EKO-SI-630	07350139874816	11,9
EKO-SI-800	07350139874823	29,8

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	94,7	Asia
Minerals		
Fossil materials	5,3	Asia
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	0.104

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 kg of BSV
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 product stage (A1-A3) evaluates the environmental impact associated with raw materials, packaging, and assembly. This includes the sourcing and processing of steel, plastics and rubber for purchased components, as well as transportation and energy use. As all components are pre-manufactured by external suppliers, no waste is generated during the assembly process at our facility.

A1 covers the extraction of raw materials and the production of semi-finished components, which are fully manufactured by external suppliers. A2 includes the transportation of these components to the assembly site in Vellinge.

At this site, the final product is assembled by hand. A3 includes the use of 100% wind energy for electricity and biogas for heating. The finished product is packed in a manner appropriate for its specific size, using materials such as wooden pallets and cardboard.

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.

A4 includes the transportation of the product and its packaging, shipped on pallets, to the installation site. An average transportation distance of 425 km is assumed. A5 covers the installation of the product, which is assumed to be done by hand without any complex procedures. No material losses are expected during the installation process. Waste management of the packaging is also included, where the cardboard is assumed to be 90% recycled and 10% sent to landfill, while the wooden pallet is incinerated with energy recovery.

PRODUCT USE AND MAINTENANCE (B1-B7)

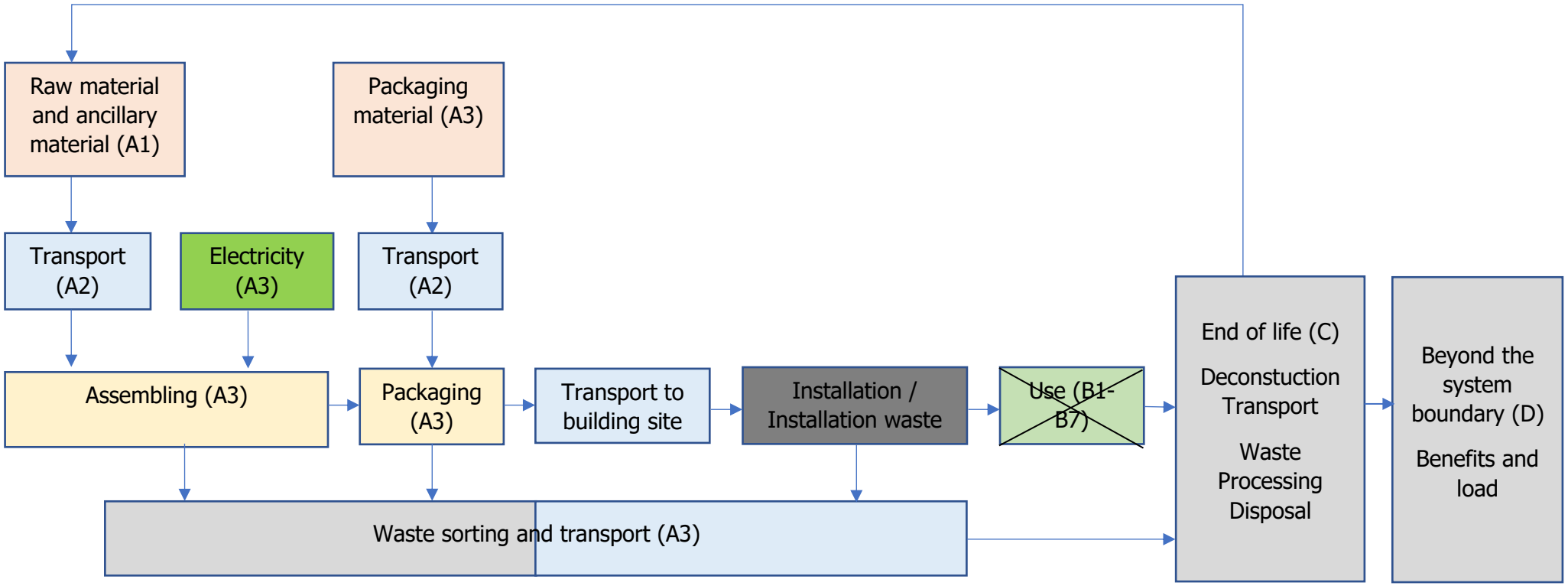
This EPD does not cover the use phase.
Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-C4, D)

The deconstruction/demolition of the product is considered negligible as it can be performed manually. For transportation to a local recycling center, a distance of 50 km is assumed, with transport carried out by lorry as specified in C2

The recycling process for steel is covered in C3 and C4, with an assumed recycling rate of 85% and a landfill rate of 15%. Module D includes the environmental impacts of steel recycling. For plastics and rubber, it is assumed that 70% is incinerated, while the remaining 30% is recycled. The benefits and loads from energy recovery processes for packaging materials are included in Module D.

MANUFACTURING PROCESS AND SYSTEM BOUNDARY



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	Allocated by mass or volume
Ancillary materials	Not applicable
Manufacturing energy and waste	Allocated by mass or volume

AVERAGES AND VARIABILITY

Type of average	No averaging
Averaging method	Not applicable
Variation in GWP-fossil for A1-A3	N/A

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

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10 and One Click LCA databases as sources of environmental data.

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_2e	4,61E+00	2,48E-01	-2,52E-01	4,61E+00	9,84E-02	3,23E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,47E-03	6,95E-02	9,37E-04	-1,40E+00
GWP – fossil	kg CO_2e	4,61E+00	2,48E-01	6,48E-02	4,92E+00	9,84E-02	5,62E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,47E-03	6,95E-02	9,36E-04	-1,40E+00
GWP – biogenic	kg CO_2e	0,00E+00	0,00E+00	-3,17E-01	-3,17E-01	0,00E+00	3,17E-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_2e	3,62E-03	1,27E-04	3,79E-04	4,13E-03	3,53E-05	1,88E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,40E-06	2,39E-05	5,35E-07	2,09E-04
Ozone depletion pot.	kg $CFC\text{-}_{11}$e	3,88E-08	3,64E-09	1,39E-09	4,39E-08	1,96E-09	7,87E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,88E-10	2,68E-10	2,71E-11	-7,22E-09
Acidification potential	mol H^+e	2,58E-02	5,83E-03	3,71E-04	3,20E-02	2,05E-04	3,80E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,97E-05	2,31E-04	6,64E-06	-6,20E-03
EP-freshwater[2)]	kg Pe	1,61E-03	1,02E-05	2,78E-05	1,65E-03	6,62E-06	1,59E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,38E-07	1,23E-05	7,70E-08	-5,97E-04
EP-marine	kg Ne	4,36E-03	1,46E-03	1,08E-04	5,93E-03	4,92E-05	1,88E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,74E-06	5,31E-05	2,53E-06	-1,39E-03
EP-terrestrial	mol Ne	7,23E-02	1,62E-02	1,15E-03	8,96E-02	5,30E-04	1,79E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,12E-05	5,91E-04	2,76E-05	-1,65E-02
POCP ("smog")[3)]	kg NMVOCe	1,97E-02	4,48E-03	4,69E-04	2,46E-02	3,40E-04	4,97E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,28E-05	1,74E-04	9,90E-06	-5,10E-03
ADP-minerals & metals[4)]	kg Sbe	7,18E-05	3,71E-07	6,18E-07	7,27E-05	3,27E-07	1,72E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,15E-08	1,33E-06	1,49E-09	-1,33E-05
ADP-fossil resources	MJ	5,18E+01	3,14E+00	1,05E+00	5,60E+01	1,38E+00	5,98E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,33E-01	2,61E-01	2,30E-02	-1,28E+01
Water use[5)]	m^3e depr.	1,46E+00	1,03E-02	3,80E-02	1,51E+00	6,88E-03	6,76E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,62E-04	7,11E-03	6,63E-05	-2,44E-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	4,03E-07	1,00E-08	6,28E-09	4,19E-07	7,25E-09	5,31E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,98E-10	3,08E-09	1,51E-10	-1,01E-07
Ionizing radiation[6)]	kBq U235e	1,82E-01	1,80E-03	6,70E-03	1,90E-01	1,78E-03	1,07E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,72E-04	2,18E-03	1,44E-05	4,60E-02
Ecotoxicity (freshwater)	CTUe	2,37E+01	2,91E-01	3,32E-01	2,44E+01	1,84E-01	2,82E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,77E-02	2,24E-01	1,93E-03	-3,44E+00
Human toxicity, cancer	CTUh	4,15E-09	5,03E-11	2,90E-10	4,49E-09	1,65E-11	6,41E-12	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,59E-12	1,79E-11	1,73E-13	-2,77E-10
Human tox. non-cancer	CTUh	4,69E-08	1,06E-09	1,01E-09	4,90E-08	8,75E-10	4,17E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,43E-11	1,16E-09	3,97E-12	-1,28E-08
SQP[7)]	-	1,69E+01	6,50E-01	2,56E+01	4,32E+01	8,36E-01	2,79E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,06E-02	4,96E-01	4,52E-02	-1,96E+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	4,41E+00	2,96E-02	4,40E+00	8,83E+00	2,42E-02	-3,69E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,33E-03	4,75E-02	2,22E-04	-4,47E+00
Renew. PER as material	MJ	2,94E-01	0,00E+00	2,82E+00	3,12E+00	0,00E+00	-2,82E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-2,94E-01	0,00E+00	0,00E+00
Total use of renew. PER	MJ	4,70E+00	2,96E-02	7,22E+00	1,20E+01	2,42E-02	-6,51E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,33E-03	-2,46E-01	2,22E-04	-4,47E+00
Non-re. PER as energy	MJ	5,17E+01	3,14E+00	8,87E-01	5,57E+01	1,38E+00	5,98E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,33E-01	-4,95E-01	2,30E-02	-1,28E+01
Non-re. PER as material	MJ	9,27E-02	0,00E+00	1,66E-01	2,59E-01	0,00E+00	-1,66E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-9,27E-02	0,00E+00	0,00E+00
Total use of non-re. PER	MJ	5,18E+01	3,14E+00	1,05E+00	5,60E+01	1,38E+00	-1,06E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,33E-01	-5,87E-01	2,30E-02	-1,28E+01
Secondary materials	kg	2,81E-01	1,48E-03	1,55E-02	2,98E-01	6,42E-04	8,71E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,18E-05	3,36E-04	5,78E-06	7,65E-01
Renew. secondary fuels	MJ	5,47E-03	6,94E-06	8,49E-02	9,04E-02	8,12E-06	3,64E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,82E-07	1,46E-05	1,20E-07	1,36E-03
Non-ren. secondary fuels	MJ	4,60E-23	0,00E+00	0,00E+00	4,60E-23	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	2,91E-02	2,64E-04	8,92E-04	3,02E-02	1,89E-04	4,63E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,82E-05	1,79E-04	2,39E-05	-3,17E-03

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	1,18E+00	4,41E-03	6,69E-03	1,19E+00	2,01E-03	1,38E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,94E-04	3,13E-03	2,54E-05	-4,54E-01
Non-hazardous waste	kg	1,44E+01	6,72E-02	1,33E-01	1,46E+01	4,24E-02	2,08E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,09E-03	7,95E-02	5,80E-04	-3,57E+00
Radioactive waste	kg	9,09E-05	4,47E-07	1,73E-06	9,31E-05	4,46E-07	2,71E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,29E-08	5,59E-07	3,58E-09	1,21E-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	3,07E-07	0,00E+00	0,00E+00	3,07E-07	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	1,60E-02	0,00E+00	0,00E+00	1,60E-02	0,00E+00	1,70E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	8,41E-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	2,20E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	4,12E-02	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_2e	4,66E+00	2,47E-01	6,51E-02	4,97E+00	9,77E-02	5,73E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,41E-03	6,95E-02	9,28E-04	-1,39E+00
Ozone depletion Pot.	kg CFC_{-11}e	3,44E-08	2,89E-09	1,14E-09	3,85E-08	1,56E-09	6,39E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,50E-10	2,21E-10	2,15E-11	-8,30E-09
Acidification	kg SO_2e	1,91E-02	4,65E-03	2,86E-04	2,41E-02	1,64E-04	2,72E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,58E-05	1,85E-04	4,91E-06	-4,88E-03
Eutrophication	kg PO_4^3e	5,81E-03	5,28E-04	2,18E-03	8,51E-03	4,15E-05	9,92E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,00E-06	2,76E-05	1,56E-06	-9,58E-04
POCP (“smog”)	kg C_2H_4e	1,64E-03	2,36E-04	4,35E-05	1,92E-03	1,74E-05	2,34E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,68E-06	1,11E-05	4,65E-07	-7,34E-04
ADP-elements	kg Sbe	7,03E-05	3,64E-07	6,04E-07	7,13E-05	3,20E-07	1,59E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,08E-08	1,33E-06	1,46E-09	-1,33E-05
ADP-fossil	MJ	4,86E+01	3,11E+00	9,35E-01	5,27E+01	1,35E+00	5,80E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,30E-01	2,23E-01	2,28E-02	-1,36E+01

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_2e	4,61E+00	2,48E-01	6,51E-02	4,92E+00	9,84E-02	5,62E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,47E-03	6,95E-02	9,37E-04	-1,40E+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.

APPENDIX 1. ADDITIONAL ENVIRONMENTAL INFORMATION

CLIMATE IMPACT VARIATION IN EKO-SI SERIES (MODULES A1-A3)

The table below presents the total climate impact results for modules A1-A3 (Cradle-to-gate) for all sizes in the EKO-SI series. Variation in impact is due to differences in material composition and size. The differences in GWP-Total, GWP-Fossil, and GWP-GHG are all less than 10%, and these values are measured per kilogram of iris damper.

RESULTS GWP-TOTAL FOR ALL DIMENSIONS

Article	Dimension	GWP-Total (A1-A3) [kg CO2-eq/kg]	Article weight [kg/piece]	GWP-Total (A1-A3) [kg CO2-eq per 1 piece]
EKO-SI	80	4,86	0,5	2,43
EKO-SI	100	4,82	0,7	3,28
EKO-SI	125	4,83	0,8	3,96
EKO-SI	160	4,82	1,0	4,82
EKO-SI	200	4,81	1,7	8,18
EKO-SI	250	4,8	2,3	11,23
EKO-SI	315	4,79	2,9	13,89
EKO-SI	400	4,79	5,0	23,95
EKO-SI	500	4,79	8,4	40,24
EKO-SI	630	4,79	11,9	57,00
EKO-SI	800	4,78	29,8	142,44

RESULTS GWP-FOSSIL FOR ALL DIMENSIONS

Article	Dimension	GWP-Fossil (A1-A3) [kg CO2-eq/kg]	Article weight [kg/piece]	GWP-Fossil (A1-A3) [kg CO2-eq per 1 piece]
EKO-SI	80	4,9	0,5	2,45
EKO-SI	100	4,86	0,7	3,30
EKO-SI	125	4,87	0,8	3,99
EKO-SI	160	4,86	1,0	4,86
EKO-SI	200	4,85	1,7	8,25
EKO-SI	250	4,84	2,3	11,33
EKO-SI	315	4,83	2,9	14,01
EKO-SI	400	4,83	5,0	24,15
EKO-SI	500	4,83	8,4	40,57
EKO-SI	630	4,83	11,9	57,48
EKO-SI	800	4,82	29,8	143,64

RESULTS GWP-GHG FOR ALL DIMENSIONS

Article	Dimension	GWP-GHG (A1-A3) [kg CO2-eq/kg]	Article weight [kg/piece]	GWP-GHG (A1-A3) [kg CO2-eq per 1 piece]
EKO-SI	80	4,9	0,5	2,45
EKO-SI	100	4,87	0,7	3,31
EKO-SI	125	4,87	0,8	3,99
EKO-SI	160	4,87	1,0	4,87
EKO-SI	200	4,86	1,7	8,26
EKO-SI	250	4,85	2,3	11,35
EKO-SI	315	4,84	2,9	14,04
EKO-SI	400	4,83	5,0	24,15
EKO-SI	500	4,83	8,4	40,57
EKO-SI	630	4,83	11,9	57,48
EKO-SI	800	4,83	29,8	143,93

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.

HaiHa Nguyen, as an authorized verifier acting for EPD Hub Limited
04.02.2025