

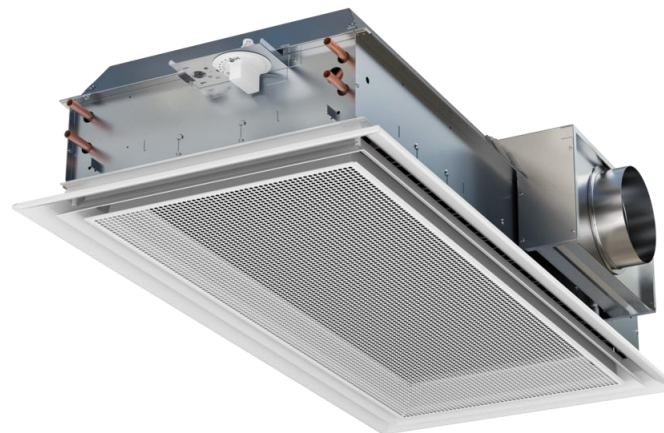


ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

PARASOL Zenith

Swegon Group AB



EPD HUB, HUB-3853

Published on 21.08.2025, last updated on 21.08.2025, valid until 21.08.2030

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.1 and JRC characterization factors EF 3.1.



Created with One Click LCA



GENERAL INFORMATION

MANUFACTURER

Manufacturer	Swegon Group AB
Address	JA Wettergrens gata 7, 421 30, Västra Frölunda, Sweden
Contact details	info@swegon.se
Website	www.swegon.com

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
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	Heloise Hedbom
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☒ 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	PARASOL Zenith
Additional labels	See Appendix 1
Product reference	-
Place of production	Arvika, Sweden
Period for data	2024
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	+ 9 % / - 4,5%

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg of PARASOL Zenith
Declared unit mass	1 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	4,89E+00
GWP-total, A1-A3 (kgCO ₂ e)	4,38E+00
Secondary material, inputs (%)	11,5
Secondary material, outputs (%)	82,4
Total energy use, A1-A3 (kWh)	20,5
Net freshwater use, A1-A3 (m ³)	0,32

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

People spend most of their time indoors, which is why we need a sound indoor climate for our health, well-being and happiness. Swegon's ambition is to achieve the world's best indoor environment with the least possible impact on the external environment. Our business models, services, products and systems are all designed to provide the right solution for each individual project.

Swegon Group AB is a leading supplier in the field of indoor environment, offering solutions for ventilation, heating, cooling and climate optimization, as well as connected services and expert technical support. Swegon has subsidiaries in and distributors all over the world and production plants in Europe, North America and India. The company employs more than 3 300 people.

PRODUCT DESCRIPTION

PARASOL Zenith is part of the PARASOL family of comfort modules designed for efficient cooling, heating, and ventilation in commercial environments. Parasol Zenith is based on the same induction principle as chilled beams but stand out by distributing air in four directions instead of two. This 4-way air discharge maximizes air mixing with room air across a larger ceiling area, enabling high-capacity performance while minimizing the ceiling space required. In heating mode, the system effectively utilizes ceiling space for distributing warm air evenly.

Optimized for modern spaces like offices, classrooms, hotels, healthcare environments, and retail areas. It is available in multiple sizes, air connection dimensions, and colours, with optional accessories including design kit and coanda frame for exposed installations to suit various layout and project needs.

With PARASOL Zenith, high comfort, energy efficiency, and future adaptability are built in—making it the smart choice for modern indoor environments.

For more information, please visit: <https://www.swegon.com/products-and-services/room-units/waterborne-room-units/comfort-modules/parasol/>

Further information can be found at: www.swegon.com

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	97%	Europe, Asia & South America
Minerals	-	-
Fossil materials	3%	Europe, 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	0,152

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 kg of PARASOL Zenith
Mass per declared unit	1 kg
Functional unit	-
Reference service life	25 years

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. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facility 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 comfort module PARASOL Zenith consists primarily of steel and other metals like aluminium and copper with smaller amounts of polymer and rubber components. The steel produced in upstream modules is delivered as rolled sheets, which are then pressed, formed and assembled with the remaining

components at Swegon's production facility in Arvika. Once the final product is assembled, the units are packaged and prepared for delivery.

During the manufacturing process, waste materials such as steel scrap and wood pallets are generated. The steel scrap is sent for recycling, while the single use wood pallets are directed to energy recovery through incineration. Moreover, the electricity demand in the facilities is modelled using the site-specific renewable electricity mix consisting of 100 % hydropower.

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 to the construction site is calculated based on a weighted average of sales for PARASOL Zenith.

The product is sold ready to be installed and no raw material waste is generated from installation (A5). The end-of-life treatment of product packaging is declared and average EU scenario per packaging material has been applied with different ratios of recycling, incineration, and disposal in landfill.

PRODUCT USE AND MAINTENANCE (B1-B7)

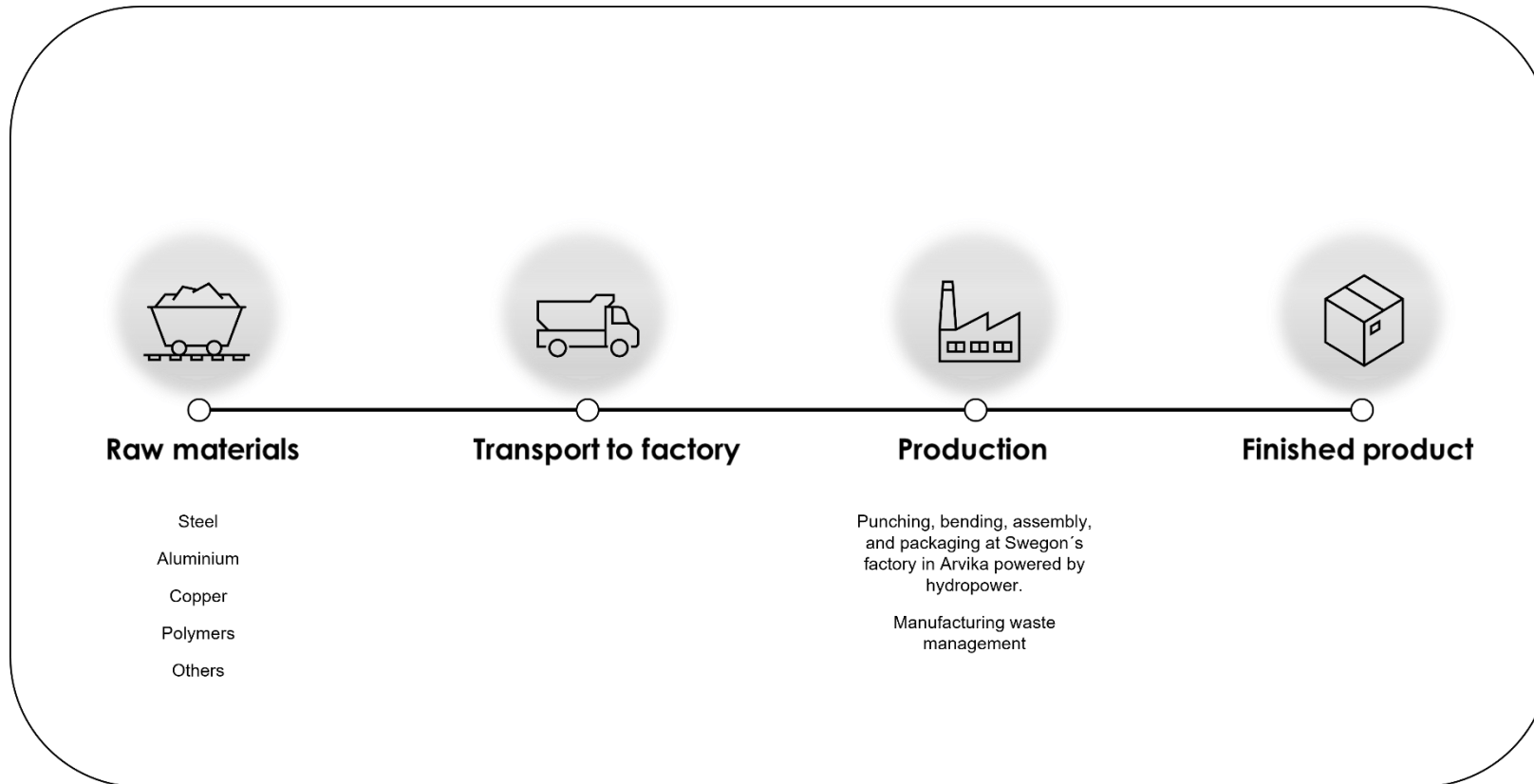
This EPD does not cover the use phase.

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

PRODUCT END OF LIFE (C1-C4, D)

At the end of product life, the PARASOL Zenith is assumed to be demolished. The impact of deconstruction (C1) is modelled based on literature data for energy use in demolition. Waste processing (C3) and disposal (C4) is modelled with consideration to the main markets where the PARASOL Zenith is sold. The applied scenarios, which are based on literature data, include different ratios of material recycling, incineration, and landfill for the included materials.

MANUFACTURING PROCESS



LIFE-CYCLE ASSESSMENT

CUT-OFF CRITERIA

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

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

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 a representative product
Variation in GWP-fossil for A1-A3, %	+9% / -4,5%

To assess variations in environmental impact, two extreme product scenarios were modeled and analyzed. The high runner PARASOL Zenith 1192-A-160, was then selected and modeled as the representative product. The GWP-fossil for modules A1-A3, for the product sizes with the highest respective lowest impacts included in this EPD, deviates from the representative product by +9% and -4,5%, respectively.

This EPD covers the full range of PARASOL Zenith comfort modules without electronic components. The product range includes nominal lengths from 600 mm to 1800 mm, thereby covering widths from 584 mm to 667 mm. Both A-coil variants for cooling and supply air and B-coil variants for cooling, heating, and supply air variants are covered.

For a list of included products please see Appendix 1.

LCA SOFTWARE AND BIBLIOGRAPHY

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

ENVIRONMENTAL IMPACT DATA

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

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2

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	4,38E+00	2,07E-01	-2,13E-01	4,38E+00	1,51E-01	5,75E-01	MND	MND	MND	MND	MND	MND	MND	9,45E-02	3,71E-02	5,20E-02	2,18E-03	-2,96E+00
GWP – fossil	kg CO ₂ e	4,49E+00	2,07E-01	1,86E-01	4,89E+00	1,51E-01	1,66E-02	MND	MND	MND	MND	MND	MND	MND	9,44E-02	3,71E-02	5,21E-02	2,18E-03	-2,94E+00
GWP – biogenic	kg CO ₂ e	-1,44E-01	4,31E-05	-4,04E-01	-5,49E-01	3,32E-05	5,59E-01	MND	MND	MND	MND	MND	MND	MND	3,28E-05	8,14E-06	-1,06E-04	-2,28E-06	1,80E-02
GWP – LULUC	kg CO ₂ e	3,57E-02	9,32E-05	4,78E-03	4,06E-02	6,89E-05	1,10E-05	MND	MND	MND	MND	MND	MND	MND	6,99E-05	1,64E-05	2,43E-05	1,32E-06	-3,37E-02
Ozone depletion pot.	kg CFC-11e	6,44E-08	3,60E-09	5,32E-09	7,33E-08	2,24E-09	2,05E-10	MND	MND	MND	MND	MND	MND	MND	4,99E-10	5,23E-10	2,55E-10	3,80E-11	-2,01E-08
Acidification potential	mol H ⁺ e	2,53E-02	9,68E-04	1,07E-03	2,74E-02	5,18E-04	6,00E-05	MND	MND	MND	MND	MND	MND	MND	5,00E-04	1,24E-04	2,31E-04	1,01E-05	-2,76E-02
EP-freshwater ²⁾	kg Pe	8,20E-01	1,71E-05	8,38E-05	8,20E-01	1,15E-05	3,36E-06	MND	MND	MND	MND	MND	MND	MND	3,49E-05	2,88E-06	1,19E-05	1,68E-07	-8,19E-03
EP-marine	kg Ne	3,95E-03	3,52E-04	4,41E-04	4,74E-03	1,23E-04	1,08E-04	MND	MND	MND	MND	MND	MND	MND	9,97E-05	4,03E-05	5,43E-05	1,70E-05	-5,47E-03
EP-terrestrial	mol Ne	4,18E-02	3,84E-03	3,95E-03	4,96E-02	1,35E-03	2,17E-04	MND	MND	MND	MND	MND	MND	MND	1,03E-03	4,38E-04	5,96E-04	4,08E-05	-6,97E-02
POCP (“smog”) ³⁾	kg NMVOCe	1,44E-02	1,36E-03	1,23E-03	1,69E-02	6,04E-04	8,47E-05	MND	MND	MND	MND	MND	MND	MND	2,91E-04	1,74E-04	1,75E-04	1,42E-05	-1,78E-02
ADP-minerals & metals ⁴⁾	kg Sbe	2,18E-04	6,19E-07	8,50E-07	2,19E-04	4,90E-07	5,03E-08	MND	MND	MND	MND	MND	MND	MND	4,18E-07	1,19E-07	1,29E-06	3,09E-09	-2,03E-04
ADP-fossil resources	MJ	4,95E+01	2,80E+00	3,09E+00	5,54E+01	2,11E+00	1,91E-01	MND	MND	MND	MND	MND	MND	MND	1,03E+00	5,23E-01	2,58E-01	3,30E-02	-2,92E+01
Water use ⁵⁾	m ³ e depr.	1,86E+00	1,63E-02	1,12E-01	1,99E+00	9,75E-03	1,90E-03	MND	MND	MND	MND	MND	MND	MND	1,28E-02	2,45E-03	5,89E-03	2,93E-04	-1,66E+00

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

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	2,51E-07	1,77E-08	1,77E-08	2,87E-07	1,10E-08	1,29E-09	MND	MND	MND	MND	MND	MND	MND	5,08E-09	3,05E-09	3,16E-09	2,16E-10	-3,20E-07
Ionizing radiation ⁶⁾	kBq 11235a	2,74E-01	3,83E-03	1,93E-02	2,97E-01	1,70E-03	4,53E-04	MND	MND	MND	MND	MND	MND	MND	4,62E-03	4,28E-04	1,73E-03	3,56E-05	-1,42E-01
Ecotoxicity (freshwater)	CTUe	2,75E+01	4,34E-01	1,34E+00	2,93E+01	3,29E-01	1,68E-01	MND	MND	MND	MND	MND	MND	MND	2,56E-01	8,13E-02	1,84E-01	3,72E+00	-1,08E+02
Human toxicity, cancer	CTUh	1,09E-07	3,85E-11	3,23E-10	1,10E-07	2,55E-11	5,09E-12	MND	MND	MND	MND	MND	MND	MND	1,47E-11	6,28E-12	1,93E-11	2,27E-12	-2,67E-09
Human tox. non-cancer	CTUh	7,39E-08	1,61E-09	2,09E-09	7,76E-08	1,30E-09	2,77E-10	MND	MND	MND	MND	MND	MND	MND	8,17E-10	3,29E-10	1,19E-09	1,40E-10	-4,36E-08
SQP ⁷⁾	-	1,77E+01	1,67E+00	4,19E+01	6,13E+01	1,24E+00	2,42E-01	MND	MND	MND	MND	MND	MND	MND	2,01E-01	3,44E-01	4,86E-01	6,37E-02	-1,35E+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	1,66E+01	5,90E-02	3,57E+00	2,03E+01	2,89E-02	-5,38E+00	MND	MND	MND	MND	MND	MND	MND	1,12E-01	7,17E-03	4,42E-02	5,31E-04	-1,37E+01
Renew. PER as material	MJ	1,35E+00	0,00E+00	3,43E+00	4,78E+00	0,00E+00	-4,78E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-7,18E-05	-2,66E-05	2,05E-01
Total use of renew. PER	MJ	1,80E+01	5,90E-02	7,00E+00	2,50E+01	2,89E-02	-1,02E+01	MND	MND	MND	MND	MND	MND	MND	1,12E-01	7,17E-03	4,42E-02	5,04E-04	-1,35E+01
Non-re. PER as energy	MJ	4,79E+01	2,80E+00	2,67E+00	5,34E+01	2,11E+00	-7,36E-02	MND	MND	MND	MND	MND	MND	MND	1,03E+00	5,23E-01	-4,96E-01	-2,31E-01	-2,93E+01
Non-re. PER as material	MJ	9,49E-01	0,00E+00	3,62E-01	1,31E+00	0,00E+00	-4,52E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-6,30E-01	-2,30E-01	4,70E-01
Total use of non-re. PER	MJ	4,88E+01	2,80E+00	3,03E+00	5,47E+01	2,11E+00	-5,25E-01	MND	MND	MND	MND	MND	MND	MND	1,03E+00	5,23E-01	-1,13E+00	-4,61E-01	-2,88E+01
Secondary materials	kg	1,15E-01	2,00E-03	1,13E-01	2,30E-01	9,63E-04	1,27E-04	MND	MND	MND	MND	MND	MND	MND	1,38E-04	2,33E-04	3,25E-04	9,94E-06	7,68E-01
Renew. secondary fuels	MJ	4,61E-02	1,54E-05	9,27E-02	1,39E-01	1,19E-05	1,30E-06	MND	MND	MND	MND	MND	MND	MND	9,65E-07	2,97E-06	1,40E-05	1,80E-07	-4,24E-04
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m ³	3,15E-01	4,24E-04	2,54E-03	3,18E-01	2,83E-04	-7,54E-04	MND	MND	MND	MND	MND	MND	MND	3,33E-04	7,04E-05	1,48E-04	-8,28E-05	-3,81E-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	7,84E-01	6,18E-03	1,19E-02	8,02E-01	3,67E-03	9,22E-04	MND	MND	MND	MND	MND	MND	MND	9,06E-03	9,07E-04	2,20E-03	5,90E-03	-9,75E-01
Non-hazardous waste	kg	4,44E+00	1,08E-01	5,04E-01	5,05E+00	6,83E-02	1,09E+00	MND	MND	MND	MND	MND	MND	MND	1,68E-01	1,70E-02	7,26E-02	1,51E-01	-4,76E+00
Radioactive waste	kg	4,71E-04	9,49E-07	4,94E-06	4,76E-04	4,16E-07	1,14E-07	MND	MND	MND	MND	MND	MND	MND	1,14E-06	1,05E-07	4,41E-07	8,71E-09	-3,12E-05

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	0,00E+00	0,00E+00	1,44E-01	1,44E-01	0,00E+00	1,23E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	8,12E-01	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	9,02E-02	9,02E-02	0,00E+00	9,21E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	1,27E-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	5,30E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	2,26E-01	0,00E+00	0,00E+00
Exported energy – Electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,21E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	5,49E-02	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	3,09E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	1,71E-01	0,00E+00	0,00E+00

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

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO ₂ e	4,47E+00	2,06E-01	1,92E-01	4,87E+00	1,50E-01	3,84E-02	MND	MND	MND	MND	MND	MND	MND	9,38E-02	3,69E-02	5,21E-02	2,14E-03	-2,95E+00
Ozone depletion Pot.	kg CFC ₁₁ e	5,76E-08	2,87E-09	4,55E-09	6,50E-08	1,79E-09	1,64E-10	MND	MND	MND	MND	MND	MND	MND	4,34E-10	4,17E-10	2,10E-10	3,03E-11	-1,79E-08
Acidification	kg SO ₂ e	2,22E-02	7,24E-04	7,71E-04	2,37E-02	4,16E-04	4,54E-05	MND	MND	MND	MND	MND	MND	MND	4,14E-04	9,49E-05	1,85E-04	7,49E-06	-2,17E-02
Eutrophication	kg PO ₄ ³ e	3,60E-03	1,65E-04	2,63E-03	6,39E-03	8,01E-05	3,21E-05	MND	MND	MND	MND	MND	MND	MND	4,68E-05	2,31E-05	2,77E-05	3,78E-06	-3,75E-03
POCP (“smog”)	kg C ₂ H ₄ e	2,12E-03	6,10E-05	9,82E-05	2,28E-03	3,33E-05	8,82E-06	MND	MND	MND	MND	MND	MND	MND	2,27E-05	8,49E-06	1,11E-05	7,61E-07	-1,81E-03
ADP-elements	kg Sbe	2,21E-04	6,04E-07	8,44E-07	2,23E-04	4,79E-07	4,92E-08	MND	MND	MND	MND	MND	MND	MND	4,16E-07	1,16E-07	1,29E-06	3,01E-09	-2,02E-04
ADP-fossil	MJ	4,24E+01	2,74E+00	2,74E+00	4,78E+01	2,08E+00	1,84E-01	MND	MND	MND	MND	MND	MND	MND	9,52E-01	5,16E-01	2,29E-01	3,24E-02	-2,72E+01

ENVIRONMENTAL IMPACTS – ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Radioactive waste, high	kg	6,97E-05	2,48E-07	1,17E-06	7,11E-05	1,24E-07	2,94E-08	MND	MND	MND	MND	MND	MND	MND	3,60E-07	3,11E-08	1,13E-07	2,49E-09	-7,61E-06
Radioactive waste, int/low	kg	8,58E-05	7,01E-07	3,77E-06	9,02E-05	2,92E-07	8,44E-08	MND	MND	MND	MND	MND	MND	MND	7,76E-07	7,37E-08	3,28E-07	6,21E-09	-2,36E-05

ENVIRONMENTAL IMPACTS – 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	4,53E+00	2,07E-01	1,91E-01	4,93E+00	1,51E-01	1,66E-02	MND	MND	MND	MND	MND	MND	MND	9,45E-02	3,71E-02	5,21E-02	2,18E-03	-2,98E+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.

THIRD-PARTY 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
21.08.2025



APPENDIX 1

This is an EPD of multiple PARASOL Zenith products, based on the results of a representative product, with 1 kg of PARASOL Zenith 1192-A-160 being the declared unit.

In the table below the calculated GWP-GHG and GWP-fossil results of the climate impact for modules A1-A3 (cradle-to-gate) is presented. These results cover all included sizes and variations of the PARASOL Zenith comfort modules, with nominal lengths ranging from 600 mm to 1800 mm. Both A-coil (cooling and supply air) and B-coil (cooling, heating, and supply air) configurations are included, as well as the different dimensions for connection sleeves.

The GWP-GHG and GWP-fossil impact presented per size has been calculated based on the results for A1-A3 presented in this EPD, multiplied with the respective weight.

Product	Total weight (kg)	GWP-fossil, A1-A3 (kg CO ₂ e/item)	GWP-GHG, A1-A3 (kg CO ₂ e/item)
PARASOL Zenith 600-A-125-1/-3	12,9	63,1	63,6
PARASOL Zenith 600-B-125-1/-3	13,0	63,6	64,1
PARASOL Zenith 600-A-160-1/-3	13,5	66,0	66,6
PARASOL Zenith 600-B-160-1/-3	13,6	66,5	67,0
PARASOL Zenith 1200-A-125-1/-2/-3/-4	23,6	115,4	116,3
PARASOL Zenith 1200-B-125-1/-2/-3/-4	23,6	115,4	116,3
PARASOL Zenith 1200-A-160-1/-2/-3/-4	24,4	119,3	120,3
PARASOL Zenith 1200-B-160-1/-2/-3/-4	24,4	119,3	120,3
PARASOL Zenith 1800-A-200-1/-2/-3/-4	35,7	174,6	176,0
PARASOL Zenith 1800-B-200-1/-2/-3/-4	35,7	174,6	176,0