



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

PARASOL Zenith
Swegon Group AB



EPD HUB, HUB-3853

Published on 03.07.2026, last updated on 03.07.2026, valid until 02.07.2031

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



Created with One Click LCA



GENERAL INFORMATION

MANUFACTURER

Manufacturer	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 15804:2012+A2:2019/AC:2021 and ISO 14025
PCR	EPD Hub Core PCR Version 1.2, 24 Mar 2025
Sector	Construction product
Category of EPD	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	Heloise Hedbom, Swegon
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☒ External verification
EPD verifier	Yazan Badour 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(s) of raw material origin	Global
Place of production	Arvika, Sweden
Place(s) of installation and use	Global
Period for data	Calendar year 2025
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	+8% / -6%
A1-A3 Specific data (%)	38,8

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg of PARASOL Zenith
Declared unit mass	1 kg
Mass of packaging	0,35 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	3,72
GWP-total, A1-A3 (kgCO ₂ e)	3,22
Secondary material, inputs (%)	99,8
Total energy use, A1-A3 (kWh)	22,4
Net freshwater use, A1-A3 (m ³)	0,13

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.

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. Made from recycled and renewably produced steel, it also underscores a commitment to sustainability and our planet.

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%	Global
Minerals	-	-
Fossil materials	3%	Global
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	-

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	ND	ND	ND	ND	ND	ND	ND	x	x	x	x	x	Recovery	Recycling
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/ demolition	Transport	Waste processing	Disposal	Reuse		

Not declared = ND.

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 Arvika facility operates on electricity sourced from hydropower. A market-based approach is used in modelling the electricity mix utilized in the factory. 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.

The comfort module PARASOL Zenith consists primarily of renewably produced steel with at least 75% recycled content, along with other metals such as aluminium, copper, and smaller amounts of polymer components. The European steel produced in upstream modules is delivered as rolled sheets or coils, which are then pressed, formed, and assembled with the remaining components at Swegon's production facility. 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.

TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurring from the final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions. Transportation to the construction site is calculated based on a weighted average of sales. 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 an average global scenario has been applied for each packaging material, with varying proportions of recycling, incineration and landfill disposal. For the wood pallet, it is assumed that 85% is disposed of in landfill and 15% is recycled. For the cardboard packaging, it is assumed that 66% is recycled, 10% is incinerated, and 24% is disposed of in landfill. For the plastic packaging, it is

assumed that 9% is recycled, 12% is incinerated, and 79% is disposed of in landfill.

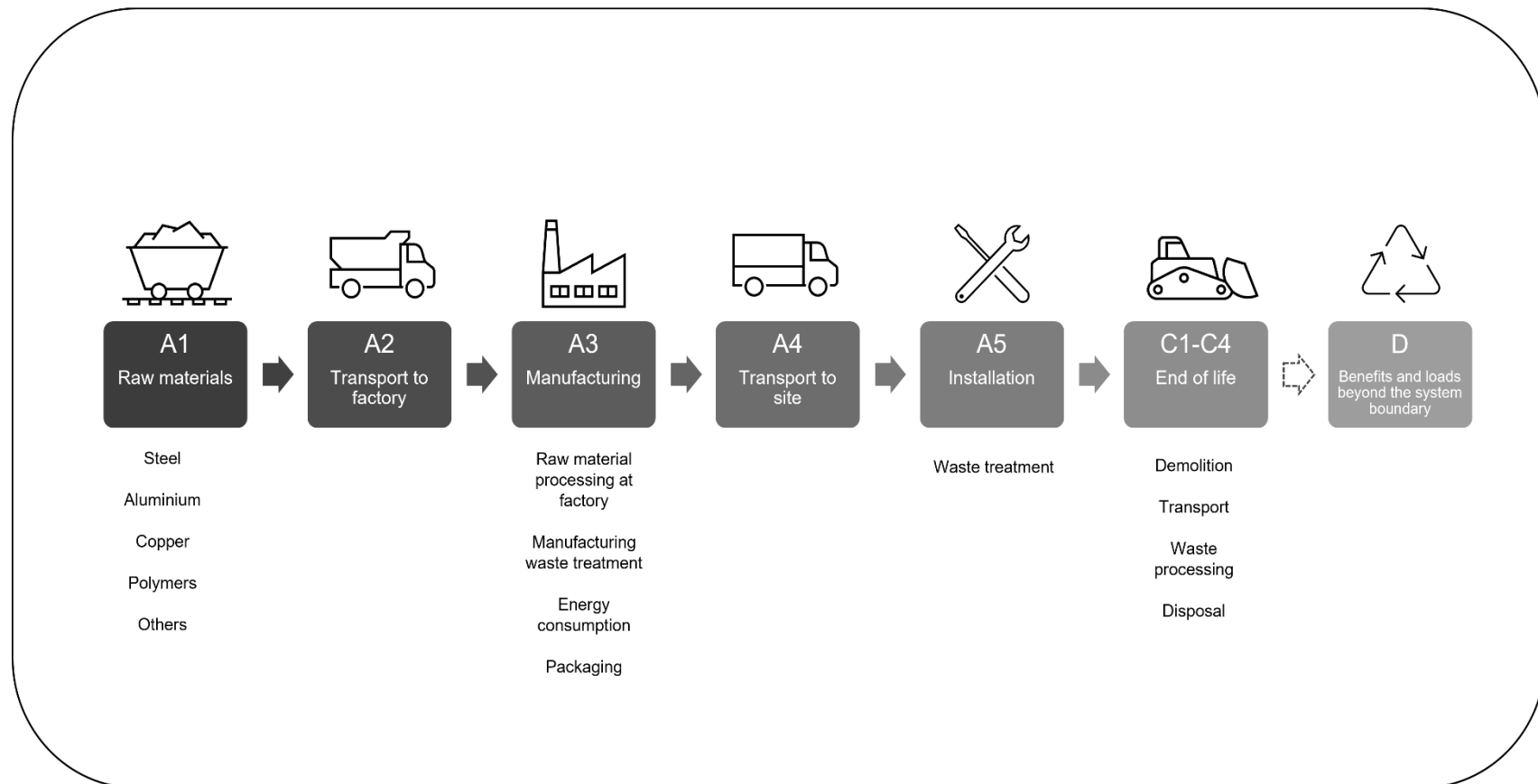
PRODUCT END OF LIFE (C1-C4, D)

At the end of the product's service life, the PARASOL Zenith is assumed to be demolished. The environmental impact of deconstruction (Module C1) is modelled using literature data, assuming an energy consumption per kilogram of product removed. Transport of waste materials to end-of-life treatment facilities (Module C2) is modelled using assumed average distances of 250 km to recycling facilities, 150 km to incineration plants, and 50 km to landfill sites. All transportation is modelled using a 16-32 metric ton freight lorry compliant with EURO 5 standards. It is assumed that materials intended for recycling are collected separately.

Waste processing (Module C3) and final disposal (Module C4) are modelled using literature-based scenarios representing typical end of life treatments. The primary materials considered are steel, aluminium, copper and plastic components. For steel, it is assumed that 85% is recycled and 15% is sent to landfill (World Steel Association). For aluminium 90% is recycled and 10% is landfilled (European aluminium). For copper, it is estimated that 60% is recycled, while the remaining 40% is disposed of in landfill (Copper Alliance). Lastly for polymers, the end-of-life treatment varies depending on the type of plastic: 23% - 27% are recycled, 47-51% are incinerated and between 22-27% are disposed of in landfill (Plastics Europe).

Due to the material and energy recovery potential of the product components, the end-of-life treatment can result in the production of secondary raw materials through recycling or energy recovery through incineration. The potential environmental benefits and burdens associated with these processes beyond the system boundary are accounted for in Module D. The recycled content in the produced product is removed to not double count the benefits.

FLOW DIAGRAM



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.

VALIDATION OF DATA

Data collection for production, transport, and packaging was conducted using time and site-specific information, as defined in the general information section on page 1 and 2. Upstream process calculations rely on generic data as defined in the Bibliography section. Manufacturer-provided specific and generic data were used for the product's manufacturing stage. The analysis was performed in One Click LCA EPD Generator, with the 'Cut-Off, EN 15804+A2' allocation method, and characterization factors according to EN 15804:2012+A2:2019/AC:2021 and JRC EF 3.1.

ALLOCATION, ESTIMATES AND ASSUMPTIONS

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

Data type	Allocation
Raw materials	No allocation
Packaging material	Physical Properties
Ancillary materials	Not applicable
Manufacturing energy and waste	Physical Properties

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	Multiple products
Grouping method	Based on a representative product
Variation in GWP-fossil for A1-A3, %	+8% / -6%

To assess variations in environmental impact, two extreme products were modelled and analysed. The high runner PARASOL Zenith 1192-A-160, was then selected and modelled as the representative product.

The GWP-fossil for modules A1-A3, for the product sizes with the highest and lowest respective impacts included in this EPD, deviates from the representative product by + 8 % and - 6%, respectively. In this EPD the full range of PARASOL Zenith comfort modules, with nominal lengths from 600 mm to 1800 mm are included. Moreover, it includes ceiling width variations from 584 mm to 667 mm. Both A-coils for cooling or heating and supply air and B-coil for cooling, heating and supply air variants are covered. Colour-coated products outside the standard colour range are also included.

For a list of selected included products please see Appendix 1

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator for EPD Hub V3 and EPD Process Certification v3.2.5. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1/3.11 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1/3.11 environmental data sources follow the methodology 'allocation, Cut-off, EN 15804+A2'.

ENVIRONMENTAL IMPACT DATA

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

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

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total ¹⁾	kg CO ₂ e	3,32E+00	1,68E-01	-2,62E-01	3,22E+00	1,48E-01	5,83E-01	ND	ND	ND	ND	ND	ND	ND	7,29E-03	4,07E-02	6,07E-02	2,26E-03	-1,74E+00
GWP – fossil	kg CO ₂ e	3,35E+00	1,68E-01	2,07E-01	3,72E+00	1,48E-01	2,40E-02	ND	ND	ND	ND	ND	ND	ND	7,26E-03	4,07E-02	6,07E-02	2,27E-03	-1,66E+00
GWP – biogenic	kg CO ₂ e	-5,12E-02	7,59E-05	-4,95E-01	-5,46E-01	3,25E-05	5,59E-01	ND	ND	ND	ND	ND	ND	ND	1,10E-05	8,87E-06	-9,02E-05	-1,86E-06	-5,00E-02
GWP – LULUC	kg CO ₂ e	2,15E-02	1,35E-04	2,54E-02	4,71E-02	6,75E-05	1,48E-05	ND	ND	ND	ND	ND	ND	ND	1,44E-05	1,87E-05	2,35E-05	1,16E-06	-2,32E-02
Ozone depletion pot.	kg CFC-11e	1,17E-07	2,97E-09	5,46E-09	1,25E-07	2,19E-09	3,02E-10	ND	ND	ND	ND	ND	ND	ND	5,04E-11	5,74E-10	2,48E-10	3,89E-11	-1,39E-08
Acidification potential	mol H ⁺ e	2,28E-02	8,29E-04	1,21E-03	2,49E-02	5,06E-04	8,99E-05	ND	ND	ND	ND	ND	ND	ND	3,76E-05	1,35E-04	2,24E-04	1,01E-05	-2,44E-02
EP-freshwater ²⁾	kg Pe	1,25E+00	2,95E-05	8,39E-05	1,25E+00	1,13E-05	4,12E-06	ND	ND	ND	ND	ND	ND	ND	3,30E-06	3,15E-06	1,15E-05	1,52E-07	-1,16E-02
EP-marine	kg Ne	3,48E-03	2,78E-04	5,11E-04	4,27E-03	1,20E-04	1,50E-04	ND	ND	ND	ND	ND	ND	ND	7,14E-06	4,39E-05	5,30E-05	1,15E-05	-5,66E-03
EP-terrestrial	mol Ne	3,74E-02	3,01E-03	4,65E-03	4,50E-02	1,32E-03	3,21E-04	ND	ND	ND	ND	ND	ND	ND	7,24E-05	4,78E-04	5,82E-04	4,12E-05	-7,82E-02
POCP (“smog”) ³⁾	kg NMVOCe	1,21E-02	1,07E-03	1,47E-03	1,46E-02	5,91E-04	1,28E-04	ND	ND	ND	ND	ND	ND	ND	2,16E-05	1,89E-04	1,71E-04	1,46E-05	-1,72E-02
ADP-minerals & metals ⁴⁾	kg Sbe	2,33E-02	5,01E-07	8,62E-07	2,33E-02	4,80E-07	7,43E-08	ND	ND	ND	ND	ND	ND	ND	4,15E-08	1,34E-07	1,25E-06	2,85E-09	-2,14E-04
ADP-fossil resources	MJ	3,88E+01	2,45E+00	3,37E+00	4,46E+01	2,07E+00	2,98E-01	ND	ND	ND	ND	ND	ND	ND	9,40E-02	5,70E-01	2,50E-01	3,35E-02	-1,72E+01
Water use ⁵⁾	m ³ e depr.	1,26E+00	2,69E-02	7,75E-01	2,06E+00	9,54E-03	2,37E-03	ND	ND	ND	ND	ND	ND	ND	1,83E-03	2,65E-03	5,85E-03	2,31E-04	-1,09E+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, EF 3.1

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	1,62E-07	1,46E-08	2,25E-08	1,99E-07	1,07E-08	2,21E-09	ND	ND	ND	ND	ND	ND	ND	3,23E-10	3,23E-09	3,05E-09	2,21E-10	-2,47E-07
Ionizing radiation ⁶⁾	kBq 11235e	1,65E-01	1,35E-02	1,95E-02	1,98E-01	1,66E-03	4,13E-04	ND	ND	ND	ND	ND	ND	ND	9,90E-04	4,67E-04	1,72E-03	3,13E-05	-1,29E-01
Ecotoxicity (freshwater)	CTUe	4,96E+01	4,20E-01	1,34E+00	5,14E+01	3,22E-01	3,53E-01	ND	ND	ND	ND	ND	ND	ND	1,93E-02	9,07E-02	1,75E-01	2,48E+00	-1,38E+02
Human toxicity, cancer	CTUh	2,49E-07	3,72E-11	3,20E-10	2,49E-07	2,50E-11	8,78E-12	ND	ND	ND	ND	ND	ND	ND	1,29E-12	6,91E-12	1,88E-11	2,16E-12	-1,60E-09
Human tox. non-cancer	CTUh	1,08E-07	1,46E-09	1,91E-09	1,12E-07	1,27E-09	5,12E-10	ND	ND	ND	ND	ND	ND	ND	6,98E-11	3,57E-10	1,16E-09	1,12E-10	-2,70E-08
SQP ⁷⁾	-	8,84E+00	1,90E+00	4,06E+01	5,14E+01	1,21E+00	2,79E-01	ND	ND	ND	ND	ND	ND	ND	1,69E-02	3,41E-01	4,70E-01	6,61E-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	3,38E+01	1,53E-01	4,35E+00	3,83E+01	2,82E-02	-5,40E+00	ND	ND	ND	ND	ND	ND	ND	1,42E-02	7,87E-03	4,31E-02	4,71E-04	-1,05E+01
Renew. PER as material	MJ	5,35E-01	0,00E+00	4,25E+00	4,78E+00	0,00E+00	-4,78E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	-1,71E-04	-6,17E-05	4,40E-01
Total use of renew. PER	MJ	3,44E+01	1,53E-01	8,60E+00	4,31E+01	2,82E-02	-1,02E+01	ND	ND	ND	ND	ND	ND	ND	1,42E-02	7,87E-03	4,29E-02	4,09E-04	-1,00E+01
Non-re. PER as energy	MJ	3,68E+01	2,45E+00	2,94E+00	4,21E+01	2,07E+00	2,87E-02	ND	ND	ND	ND	ND	ND	ND	9,40E-02	5,70E-01	-6,63E-01	-2,67E-01	-1,73E+01
Non-re. PER as material	MJ	1,16E+00	0,00E+00	4,20E-01	1,58E+00	0,00E+00	-4,55E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	-8,42E-01	-2,81E-01	3,15E-01
Total use of non-re. PER	MJ	3,79E+01	2,45E+00	3,36E+00	4,37E+01	2,07E+00	-4,26E-01	ND	ND	ND	ND	ND	ND	ND	9,40E-02	5,70E-01	-1,50E+00	-5,49E-01	-1,70E+01
Secondary materials	kg	9,98E-01	2,11E-03	1,13E-01	1,11E+00	9,42E-04	1,68E-04	ND	ND	ND	ND	ND	ND	ND	1,35E-05	2,56E-04	3,20E-04	9,66E-06	2,41E-01
Renew. secondary fuels	MJ	3,41E-02	1,15E-05	9,28E-02	1,27E-01	1,16E-05	1,91E-06	ND	ND	ND	ND	ND	ND	ND	8,52E-08	3,26E-06	1,36E-05	1,82E-07	-4,33E-04
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m ³	1,13E-01	7,50E-04	1,80E-02	1,32E-01	2,77E-04	-8,07E-04	ND	ND	ND	ND	ND	ND	ND	5,14E-05	7,56E-05	1,43E-04	-5,57E-05	-2,77E-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	6,89E-01	7,13E-03	1,20E-02	7,09E-01	3,59E-03	1,19E-03	ND	ND	ND	ND	ND	ND	ND	6,32E-04	9,91E-04	2,18E-03	5,88E-03	-4,69E-01
Non-hazardous waste	kg	4,45E+00	1,68E-01	4,56E-01	5,07E+00	6,68E-02	1,18E+00	ND	ND	ND	ND	ND	ND	ND	1,59E-02	1,86E-02	7,39E-02	1,16E-01	-1,49E+00
Radioactive waste	kg	6,56E-04	3,43E-06	4,99E-06	6,64E-04	4,07E-07	1,02E-07	ND	ND	ND	ND	ND	ND	ND	2,42E-07	1,15E-07	4,39E-07	7,65E-09	-2,91E-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	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	3,77E-04	0,00E+00	4,79E-01	4,79E-01	0,00E+00	1,05E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	7,86E-01	0,00E+00	0,00E+00
Materials for energy rec	kg	8,41E-07	0,00E+00	3,60E-02	3,60E-02	0,00E+00	1,10E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	1,53E-02	0,00E+00	0,00E+00
Exported energy	MJ	6,95E+02	0,00E+00	0,00E+00	6,95E+02	0,00E+00	6,91E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	2,00E-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	2,91E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	8,30E-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	4,00E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	1,17E-01	0,00E+00	0,00E+00

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO ₂ e	3,08E+00	1,67E-01	2,37E-01	3,49E+00	1,47E-01	6,32E-02	ND	ND	ND	ND	ND	ND	ND	7,24E-03	4,04E-02	6,07E-02	2,22E-03	-1,67E+00
Ozone depletion Pot.	kg CFC ₁₁ e	9,95E-08	2,38E-09	4,58E-09	1,06E-07	1,75E-09	2,42E-10	ND	ND	ND	ND	ND	ND	ND	4,30E-11	4,59E-10	2,05E-10	3,10E-11	-1,19E-08
Acidification	kg SO ₂ e	1,90E-02	6,31E-04	8,73E-04	2,05E-02	4,07E-04	6,83E-05	ND	ND	ND	ND	ND	ND	ND	3,14E-05	1,04E-04	1,79E-04	7,49E-06	-1,81E-02
Eutrophication	kg PO ₄ ³ e	2,56E-03	1,35E-04	2,65E-03	5,35E-03	7,83E-05	6,09E-05	ND	ND	ND	ND	ND	ND	ND	3,66E-06	2,53E-05	2,70E-05	3,32E-06	-4,33E-03
POCP ("smog")	kg C ₂ H ₄ e	1,39E-03	5,08E-05	1,06E-04	1,55E-03	3,26E-05	1,47E-05	ND	ND	ND	ND	ND	ND	ND	1,71E-06	9,30E-06	1,08E-05	7,94E-07	-1,21E-03
ADP-elements	kg Sbe	3,12E-04	4,89E-07	8,55E-07	3,14E-04	4,68E-07	7,25E-08	ND	ND	ND	ND	ND	ND	ND	4,13E-08	1,30E-07	1,24E-06	2,78E-09	-2,13E-04
ADP-fossil	MJ	3,14E+01	2,22E+00	3,02E+00	3,66E+01	2,04E+00	2,92E-01	ND	ND	ND	ND	ND	ND	ND	7,82E-02	5,63E-01	2,21E-01	3,30E-02	-1,53E+01

ENVIRONMENTAL IMPACTS

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	9,27E-05	8,07E-07	1,18E-06	9,47E-05	1,21E-07	2,96E-08	ND	ND	ND	ND	ND	ND	ND	6,86E-08	3,39E-08	1,11E-07	2,19E-09	-6,68E-06
Radioactive waste, int/low	kg	8,48E-05	2,63E-06	3,81E-06	9,13E-05	2,86E-07	7,20E-08	ND	ND	ND	ND	ND	ND	ND	1,73E-07	8,06E-08	3,27E-07	5,46E-09	-2,25E-05

ADDITIONAL INDICATOR – GWP-GHG

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG ⁹⁾	kg CO ₂ e	3,37E+00	1,68E-01	2,33E-01	3,77E+00	1,48E-01	2,40E-02	ND	ND	ND	ND	ND	ND	ND	7,28E-03	4,07E-02	6,08E-02	2,27E-03	-1,69E+00

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. In addition, the characterisation factors for the flows – CH₄ fossil, CH₄ biogenic and Dinitrogen monoxide – were updated. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterisation factor for biogenic CO₂ is set to zero

SCENARIO DOCUMENTATION

Manufacturing energy scenario documentation

Scenario parameter	Value
Electricity data source and quality	Electricity production, hydro, reservoir, non-alpine region, Sweden, Ecoinvent 3.10.1
Electricity kg CO ₂ e / kWh	0,0506 kg CO ₂ e / kWh
District heating data source and quality	Heat and power co-generation, wood chips, 6667 kW, state-of-the-art 2014. Ecoinvent 3.10.1
District heating kg CO ₂ e / kWh	0,0094 kg CO ₂ e / kWh

Transport scenario documentation A4

Scenario parameter	Value
Fuel and vehicle type. Eg, electric truck, diesel powered truck	Transport, freight, lorry 16-32 metric ton, EURO6 and Transport, freight, sea, container ship
Average transport distance, km	1000 km
Capacity utilization (including empty return) %	50 %
Bulk density of transported products	193
Volume capacity utilization factor	1

Installation scenario documentation A5

Scenario information	Value
Ancillary materials for installation (specified by material)	-
Water use	-
Other resource use	-
Quantitative description of energy type (regional mix) and consumption during the installation process	-
Waste materials on the building site before waste processing, generated by the product's installation (specified by type)	Cardboard packaging: 0,105 kg Plastic packaging: 0,0068 kg Wood pallets: 0,234 kg
Output materials (specified by type) as result of waste processing at the building site e.g. collection for recycling, for energy recovery, disposal (specified by route)	Cardboard packaging: Recycled 66%, Incinerated 10% & Disposed of in landfill 24%. Plastic packaging: Recycled 9%, Incinerated 12% & Disposed of in landfill 79%. Wood pallets: Recycled 15% & Disposed of in landfill 85%.
Direct emissions to ambient air, soil and water	-

End of life scenario documentation

Scenario information	Value
Collection process – kg collected separately	0,79 kg
Collection process – kg collected with mixed construction waste	0,21 kg
Recovery process – kg for re-use	-
Recovery process – kg for recycling	0,79 kg
Recovery process – kg for energy recovery	0,02 kg
Disposal (total) – kg for final deposition	0,16 kg
Scenario assumptions e.g. transportation	Transportation type: Transport, freight, lorry 16-32 metric ton EURO 5. Recycling: 250 km Landfill: 50 km Incineration: 150 km

THIRD-PARTY VERIFICATION STATEMENT

EPD Hub declares that this EPD is verified in accordance with ISO 14025 by an independent, third-party verifier. The project report on the Life Cycle Assessment and the report(s) on features of environmental relevance are filed at EPD Hub. EPD Hub PCR and ECO Platform verification checklist are used.

EPD Hub is not able to identify any unjustified deviations from the PCR and EN 15804+A2 in the Environmental Product Declaration and its project report.

EPD Hub maintains its independence as a third-party body; it was not involved in the execution of the LCA or in the development of the declaration and has no conflicts of interest regarding this verification.

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

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

Verified tools

Tool verifier: Magaly Gonzalez Vazquez

Tool verification validity: 27 March 2025 - 26 March 2028

Yazan Badour as an authorized verifier for EPD Hub Limited 03.07.2026



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-fossil and GWP-GHG results of the climate impact for modules A1-A3 (cradle-to-gate) for selected products are 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 and B-coil configurations are included, as well as the various dimensions of connection sleeves.

The GWP-Fossil and GWP-GHG impacts presented per size have been calculated based on the A1-A3 results shown in this EPD, multiplied by the respective weight.

If your selected version is not listed in the table below, the weights of products not presented can be found on our webpage www.swegon.com on specific product pages.

The environmental impact of a product is calculated by multiplying the product's weight by the relevant Global Warming Potential (GWP) factors:

- **GWP-fossil:** 3,72 kg CO₂e per kg of product
- **GWP-GHG:** 3,77 kg CO₂e per kg of product

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	48,0	48,6
PARASOL Zenith 600-B-125-1/-3	13,0	48,4	49,0
PARASOL Zenith 600-A-160-1/-3	13,5	50,2	50,9
PARASOL Zenith 600-B-160-1/-3	13,6	50,6	51,3
PARASOL Zenith 1200-A-125-1/-2/-3/-4	23,6	87,8	89,0
PARASOL Zenith 1200-B-125-1/-2/-3/-4	23,6	87,8	89,0
PARASOL Zenith 1200-A-160-1/-2/-3/-4	24,4	90,8	92,0
PARASOL Zenith 1200-B-160-1/-2/-3/-4	24,4	90,8	92,0
PARASOL Zenith 1800-A-200-1/-2/-3/-4	35,7	132,8	134,6
PARASOL Zenith 1800-B-200-1/-2/-3/-4	35,7	132,8	134,6