DAPcons®.100.283

DECLARACIÓN AMBIENTAL DE PRODUCTO
ENVIRONMENTAL PRODUCT DECLARATION

EPD of multiple products

According to the standards:

ISO 14025 and UNE-EN 15804:2012+A2:2020/AC:2021

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ECO PLATFORM
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dapcons®

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GENERAL INFORMATION

Product

ARCOWALL 5613 and ARCOPLUS 5511

Company

Product description

ARCOWALL 5613 and ARCOPLUS 5511 are modular systems made up of co-extruded cellular polycarbonate panels, aluminum profiles and accessories. The results shown in the EPD correspond to product ARCOWALL 5613 which is the most representative

Reference RCP

RCP 100 (version 3.2 - 21/12/2023) Construction products in general

Production plant

DOTT. GALLINA S.R.L.
Strada Carignano 104
10040 La Loggia (Torino, Italy)

Validity

From: 04/05/2026 Until: 04/05/2031

The validity of DAPcons®.100.283 is subject to the conditions of the regulation DAPcons®. The current edition of this DAPcons® is the one that appears in the registry maintained by Cateb; for informational purposes, it is included on the Program website www.dapcons.com

EXECUTIVE SUMMARY

ARCOWALL 5613 and ARCOPLUS 5511

	DAPconstruction® Programme Operator Environmental Product Declarations in the Construction sector www.dapcons.com
	Programme Manager Colegio de la Arquitectura Técnica de Barcelona (Cateb) Bon Pastor, 5 · 08021 Barcelona www.cateb.cat
	Owner of the declaration DOTT. GALLINA S.R.L. Corso Galileo Ferraris, 70 10129 - Torino (Italia) https://www.gallina.it
	Author of the Life cycle assessment: LEADER ENGINEERING AND CONSULTING SLU C/ Beethoven 15, 4ª planta, 08021 - BARCELONA, BARCELONA, España

Declared product

ARCOWALL 5613 and ARCOPLUS 5511

Geographic representation

Production: Europe

Distribution and End of Life: Europe

Variability between different products

In the present document, the results of the arcoWall 5613 product are hereby reported. Variability between the results of both products: (-18%).

Declaration number

DAPcons®.100.283

Issue date

16/04/2026

Validity

This verified declaration authorizes its holder to carry the logo of the operator of the ecolabelling program DAPconstruction®. The declaration is applicable exclusively to the mentioned product and for five years from the date of registration. The information contained in this statement was provided under the responsibility of: **DOTT. GALLINA S.R.L.**

Programme Administrator Signature

Celestí Ventura Cisternas. President of Cateb

Verifier Signature

Ferran Pérez Ibáñez. ITeC - Institut de Tecnologia de la Construcció de Catalunya. Verifier accredited by the administrator of the DAPcons® Programme

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ENVIRONMENTAL PRODUCT DECLARATION

1. PRODUCT DESCRIPTION AND USE

ArcoWall 5613 and arcoPlus 5511 are modular systems made up of co-extruded cellular polycarbonate panels, aluminum profiles, and accessories. The design is suitable for use in vertical enclosures and façades. They stand out for their lightness, light transmission, thermal insulation, and ease of installation. They offer high resistance to ultraviolet radiation, hail, and impacts in general.

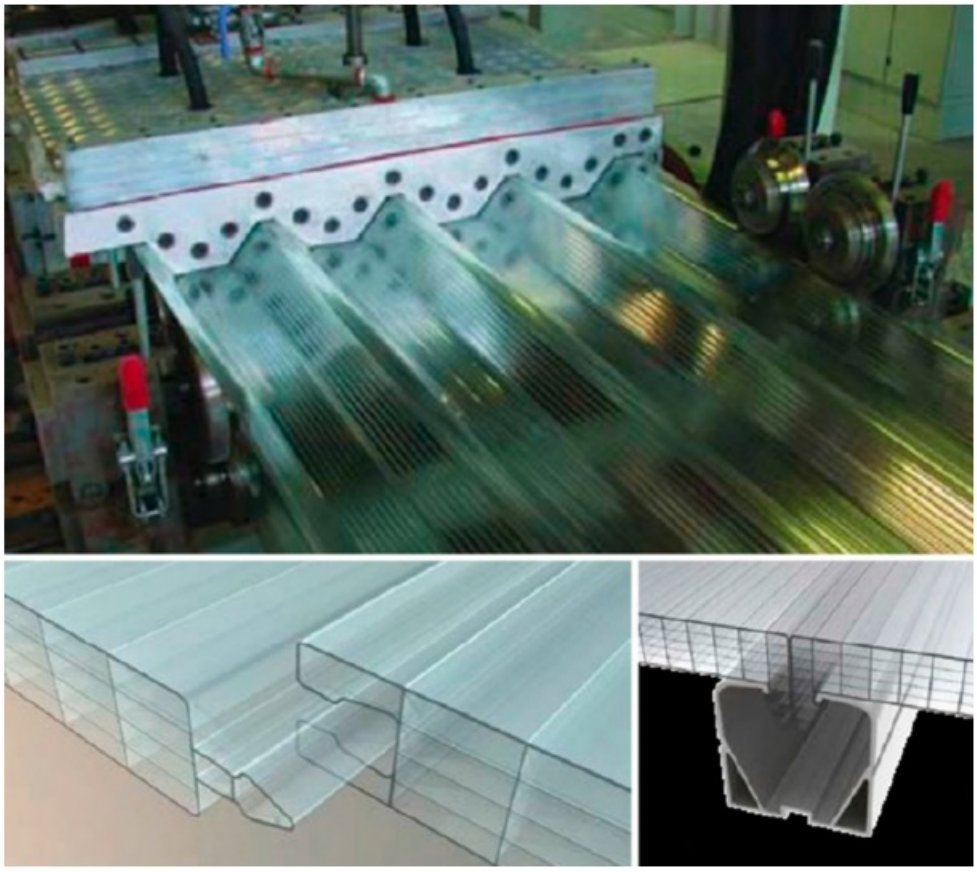
1.1 Content information

Product components

For the production of cellular polycarbonate, the following components have been considered: polycarbonate granules, pigments, standard UV additives, and polyethylene. The auxiliary materials considered are aluminum profiles and rubber seals.

Packaging materials

Cardboard, polyethylene, and wooden pallets are used for packaging.



2. DESCRIPTION OF THE STAGES OF THE LIFE CYCLE

2.1. Manufacturing (A1, A2 y A3)

Raw Materials and transport (A1 y A2)

Module A1 includes the supply of raw materials and auxiliary materials. Cellular polycarbonate is produced at the factory owned by DOTT. GALLINA S.R.L. in La Loggia (Torino, Italy). For its production, the following components are considered: polycarbonate granules, pigments, standard UV additives, and polyethylene. The auxiliary materials considered are aluminum profiles and rubber seals, which are produced externally.

Module A2 includes the transport of raw materials and auxiliary materials to the DOTT. GALLINA S.R.L. factory located in La Loggia (Torino, Italy). The distance and type of truck for each raw material and auxiliary material have been defined.

Manufacturing (A3)

The multiwall cellular polycarbonate panel is manufactured through an extrusion process, which begins with polycarbonate granules in a hopper. A heating chamber softens the thermoplastic polymers, causing them to flow through a helical screw in a continuous process toward the discharge nozzle, where a die gives the panel its shape. A second extruder, coupled to the main one, ensures the co-extrusion of ultraviolet protection on the outer surface. Once the panel exits the die, a calibration system provides the final dimensions while simultaneously cooling it, giving it solidity and stability. Finally, a protective film is applied and the panel is cut to the required size using a hot blade shear. The sealing of the cells is carried out by thermal fusion or with micro-perforated aluminum adhesive tape. For packaging, cardboard, polyethylene, and wooden pallets are used.

2.2. Construction process stage (A4 y A5)

Transport to the building site (A4)

The product is transported from the DOTT. GALLINA S.R.L. factory located in La Loggia (Torino, Italy) to the construction site, where it will be installed.

Table 1. Basic of a scenario with the parameters described in the following table

Destinations	Type of transport	Percentage	Average km
Europe	EURO VI truck (16-32t), diesel fuel, consumption of 25 L/100 km	100	1146

Product installation process and construction (A5)

The installation of the product is carried out manually. It includes stainless steel fasteners and the energy used for installation. The management of product losses (1.5%) and packaging waste (100%) generated during the process is taken into account.

Product losses: Polycarbonate (Plastic Europe 2024): 40% recycling, 34% energy recovery, and 26% landfill; Aluminum (EPD AEA): 95% recycling and 5% landfill; Rubber: 100% landfill.

Packaging waste: Plastic waste (Plastic Europe 2024): 50% recycling, 16% energy recovery, and 34% landfill; Cardboard (assumed the same as plastic waste); Wood: 100% recycling. Transport is also considered: an average distance of 50 km to the corresponding waste manager using a EURO VI truck powered by diesel fuel.

2.3. Product use (B1-B7)

Use (B1)

The impacts of the product in module B1-Use are zero over the 50-year reference period of the study.

Maintenance (B2)

The impacts of the product in module B2-Maintenance are zero over the 50-year reference period of the study.

Repair (B3)

The impacts of the product in module B3-Repair are zero over the 50-year reference period of the study.

Replacement (B4)

B4-Replacement. One replacement will be required during the 50-year reference period of the study.

Refurbishment (B5)

The impacts of the product in module B5-Refurbishment are zero over the 50-year reference period of the study.

Operational energy use (B6)

The impacts of the product in module B6-Operational energy use are zero over the 50-year reference period of the study.

Operational water use (B7)

The impacts of the product in module B7-Operational water use are zero over the 50-year reference period of the study.

2.4. End of life (C1-C4)

Deconstruction and demolition (C1)

Once the product's service life has ended, it will be removed either as part of a replacement, a building refurbishment, or its demolition. In the case of replacement, the associated impacts are considered in B4. In the case of building refurbishment or demolition, the impacts attributable to the product's removal are considered equivalent to those of installation and are accounted for separately at this stage for the final waste management process.

Transport to waste processing (C2)

Transport of the waste generated at the end of life from the construction site to the waste manager using a EURO VI truck, with an estimated average distance of 50 km.

Waste processing for reuse, recovery and/or recycling (C3)

- Recycling: 40% of polycarbonate (Plastic Europe 2024), 95% of aluminum (EPD AEA), and 100% of stainless steel. Considered in C1.
- Energy recovery: 34% of polycarbonate (Plastic Europe 2024). Considered in C4.

Disposal (C4)

- Controlled landfill: 26% of polycarbonate (Plastic Europe 2024), 5% of aluminum (EPD AEA), and 100% of rubber.

2.5. Reuse/recovery/recycling potential (D)

The environmental burdens and benefits generated by the recycling and energy recovery of packaging waste produced during the installation stage have been accounted for. The environmental burdens and benefits generated by the recycling and energy recovery of cellular polycarbonate waste and aluminum profiles during the installation, use, and end-of-life stages have also been accounted for.

3. LIFE CYCLE ASSESSMENT

The Life Cycle Assessment (LCA) of this declaration is based on ISO 14040:2006 and ISO 14044:2006 standards and complies with the requirements of UNE-EN 15804:2012 + A2:2020 and the PCR 100 – General construction products, version 3.2 – 21/12/2023 of the DAPconstruction program. It follows a "cradle-to-grave" approach, covering the manufacturing, construction, use, and end-of-life stages of the product. SimaPro 10.2 LCA software was used together with the EF 3.1 impact model. Specific data from the DOTT. GALLINA S.R.L. plant in La Loggia (Torino, Italy) 2024 were used for the manufacturing stage inventory. For the remaining stages, data provided by AISLUX S.A. and generic data from the internationally recognized Ecoinvent database version 3.11 were used.

3.1. Functional Unit

The functional unit is "1 m^2 of translucent multiwall cellular polycarbonate enclosure installed in a building, considering a building service life of 50 years in a European geographical and technological context (2025)".

Additional comments

The results presented in the EPD correspond to the arcoWall 5613 product, which is the most representative. Variability between both products included in the EPD: (-18%).

3.2. Scope and modules that are declared

Table 2. Declared modules

Product stage			Construction Process Stage		Use stage							End of life stage				Benefits and loads beyond the system boundaries
Raw materials supply	Transport	Manufacturing	Transport	Construction - Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction	Transport	Waste processing	Disposal	Reuse, recovery, recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

X = Declared module **MND** = Undeclared module

3.3. LCA results of potential environmental impact referred to the declared unit (ACV)

Table 3. Parameters of environmental impact

Parameter	Unit	Life cycle stage														Module D
		Product stage	Construction Process Stage		Use stage							End of life stage				
		A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	
Climate change - total (GWP-total)	kg CO2 eq	4,48E+01	1,49E+00	2,31E+00	0,00E+00	0,00E+00	0,00E+00	3,64E+01	0,00E+00	0,00E+00	0,00E+00	5,72E-02	6,47E-02	0,00E+00	7,83E-01	-9,38E+00
Climate change - fossil (GWP-fossil)	kg CO2 eq	4,60E+01	1,49E+00	8,36E-01	0,00E+00	0,00E+00	0,00E+00	3,64E+01	0,00E+00	0,00E+00	0,00E+00	5,72E-02	6,47E-02	0,00E+00	7,83E-01	-9,35E+00
Climate change - biogenic (GWP-biogenic)	kg CO2 eq	-1,37E+00	2,88E-04	1,47E+00	0,00E+00	0,00E+00	0,00E+00	2,01E-02	0,00E+00	0,00E+00	0,00E+00	3,42E-06	1,25E-05	0,00E+00	5,93E-05	-8,38E-03
Climate change - land use and changes in land use (GWP-luluc)	kg CO2 eq	2,10E-01	5,00E-04	3,17E-03	0,00E+00	0,00E+00	0,00E+00	1,63E-02	0,00E+00	0,00E+00	0,00E+00	3,57E-06	2,18E-05	0,00E+00	2,35E-05	-2,84E-02
Ozone layer depletion (ODP)	kg CFC 11 eq	1,46E-06	3,24E-08	2,36E-08	0,00E+00	0,00E+00	0,00E+00	1,33E-06	0,00E+00	0,00E+00	0,00E+00	8,70E-10	1,41E-09	0,00E+00	2,25E-09	-3,90E-07
Acidification (AP)	mol H+ eq	1,82E-01	3,19E-03	3,45E-03	0,00E+00	0,00E+00	0,00E+00	1,13E-01	0,00E+00	0,00E+00	0,00E+00	5,26E-04	1,39E-04	0,00E+00	9,67E-04	-2,92E-02
Eutrophication of fresh water (EP-freshwater)	kg P eq	1,43E-03	1,11E-05	2,31E-05	0,00E+00	0,00E+00	0,00E+00	8,43E-04	0,00E+00	0,00E+00	0,00E+00	9,38E-08	4,81E-07	0,00E+00	1,50E-06	-2,39E-04
Eutrophication of sea water (EP-marine)	kg N eq.	2,87E-02	7,50E-04	7,44E-04	0,00E+00	0,00E+00	0,00E+00	2,09E-02	0,00E+00	0,00E+00	0,00E+00	2,48E-04	3,26E-05	0,00E+00	6,07E-04	-5,00E-03
Terrestrial eutrophication (EP-terrestrial)	mol N eq.	3,10E-01	8,30E-03	7,97E-03	0,00E+00	0,00E+00	0,00E+00	2,26E-01	0,00E+00	0,00E+00	0,00E+00	2,71E-03	3,61E-04	0,00E+00	4,31E-03	-5,38E-02
Photochemical ozone formation (POCP)	kg NMVOC eq	1,61E-01	5,06E-03	3,46E-03	0,00E+00	0,00E+00	0,00E+00	1,29E-01	0,00E+00	0,00E+00	0,00E+00	8,10E-04	2,20E-04	0,00E+00	1,17E-03	-3,55E-02
Depletion of abiotic resources - minerals and metals (ADP-minerals&metals)	kg Sb eq	2,91E-04	5,10E-06	4,57E-06	0,00E+00	0,00E+00	0,00E+00	2,82E-04	0,00E+00	0,00E+00	0,00E+00	2,02E-09	2,22E-07	0,00E+00	1,56E-07	-3,81E-07
Depletion of abiotic resources - fossil fuels (ADP-fossil)	MJ, net calorific value	1,91E+02	1,68E+00	3,06E+00	0,00E+00	0,00E+00	0,00E+00	1,02E+02	0,00E+00	0,00E+00	0,00E+00	1,43E-02	7,33E-02	0,00E+00	1,25E-01	-3,18E+01
Water consumption (WDP)	m3 worldwide eq. private	9,40E+00	8,30E-02	1,17E-01	0,00E+00	0,00E+00	0,00E+00	8,38E+00	0,00E+00	0,00E+00	0,00E+00	6,41E-04	3,61E-03	0,00E+00	-1,16E-01	-1,37E+00
Eco-toxicity - freshwater (ETP-fw)	CTUe	5,92E+02	4,67E+00	9,91E+00	0,00E+00	0,00E+00	0,00E+00	5,37E+02	0,00E+00	0,00E+00	0,00E+00	4,22E-02	2,03E-01	0,00E+00	5,63E+00	-8,59E+01
Human toxicity, cancer effect (HTP-c)	CTUh	4,56E-08	2,48E-10	7,41E-10	0,00E+00	0,00E+00	0,00E+00	2,86E-08	0,00E+00	0,00E+00	0,00E+00	3,08E-12	1,08E-11	0,00E+00	4,07E-10	-1,12E-08
Human toxicity, non-cancer effects (HTP-nc)	CTUh	3,79E-07	1,33E-08	7,26E-09	0,00E+00	0,00E+00	0,00E+00	2,95E-07	0,00E+00	0,00E+00	0,00E+00	5,79E-11	5,77E-10	0,00E+00	1,71E-08	-3,42E-08
The Indicador includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This Indicador is thus equal to the GWP Indicador originally defined in EN 15804:2012+A1:2013. Can be obtained from IPCC characterization factors.																
Global Warming Potential (GHG)	kg CO2 eq	4,63E+01	1,49E+00	8,41E-01	0,00E+00	0,00E+00	0,00E+00	3,64E+01	0,00E+00	0,00E+00	0,00E+00	5,72E-02	6,47E-02	0,00E+00	7,83E-01	-9,38E+00

A1 Supply of raw materials. **A2** Transport to waste processing. **A3** Manufacturing. **A4** Transport to waste processing. **A5** Installation and construction processes. **B1** Use. **B2** Maintenance. **B3** Repair. **B4** Replacement. **B5** Refurbishment. **B6** Operational energy use. **B7** Operational water use. **C1** Deconstruction and demolition. **C2** Transport to waste processing. **C3** Waste management for reuse, recovery and recycling. **C4** Fine removal. **D** Environmental benefits and burdens beyond the system boundary. **MND** Undeclared module.

Table 4. Parameters for the use of resources, waste and output material flows

Parameter	Unit	Life cycle stage														Module D
		Product stage	Construction Process Stage		Use stage							End of life stage				
		A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	
Use of renewable primary energy excluding renewable primary energy resources used as feedstock	MJ, net calorific value	6,90E+01	3,48E-01	1,39E+00	0,00E+00	0,00E+00	0,00E+00	3,00E+01	0,00E+00	0,00E+00	0,00E+00	4,20E-03	1,52E-02	0,00E+00	2,77E-02	-1,25E+01
Use of renewable primary energy used as raw material	MJ, net calorific value	1,53E+01	0,00E+00	-9,73E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of renewable primary energy (primary energy and renewable primary energy resources used as feedstock)	MJ, net calorific value	8,42E+01	3,48E-01	1,29E+00	0,00E+00	0,00E+00	0,00E+00	3,00E+01	0,00E+00	0,00E+00	0,00E+00	4,20E-03	1,52E-02	0,00E+00	2,77E-02	-1,25E+01
Non-renewable primary energy use, excluding non-renewable primary energy resources used as feedstock	MJ, net calorific value	-6,11E+01	1,76E+00	1,76E+01	0,00E+00	0,00E+00	0,00E+00	1,06E+02	0,00E+00	0,00E+00	0,00E+00	1,48E-02	7,65E-02	1,80E+02	1,31E-01	-3,31E+01
Use of non-renewable primary energy used as raw material	MJ, net calorific value	2,60E+02	0,00E+00	-1,45E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,80E+02	0,00E+00	0,00E+00
Total use of non-renewable primary energy (primary energy and renewable primary energy resources used as feedstock)	MJ, net calorific value	1,99E+02	1,76E+00	3,18E+00	0,00E+00	0,00E+00	0,00E+00	1,06E+02	0,00E+00	0,00E+00	0,00E+00	1,48E-02	7,65E-02	0,00E+00	1,31E-01	-3,31E+01
Use of secondary materials	kg	1,11E+00	0,00E+00	1,66E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable secondary fuels	MJ, net calorific value	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of non-renewable secondary fuels	MJ, net calorific value	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Net use of freshwater resources	m3	5,89E-01	2,67E-03	8,39E-03	0,00E+00	0,00E+00	0,00E+00	2,32E-01	0,00E+00	0,00E+00	0,00E+00	2,83E-05	1,16E-04	0,00E+00	-3,02E-03	-8,55E-02
Hazardous waste removed	kg	1,21E-02	1,44E-04	1,91E-04	0,00E+00	0,00E+00	0,00E+00	1,12E-02	0,00E+00	0,00E+00	0,00E+00	5,11E-06	6,26E-06	0,00E+00	1,03E-05	-3,82E-03
Non-hazardous waste eliminated	kg	2,25E+00	1,03E+00	3,20E-01	0,00E+00	0,00E+00	0,00E+00	4,54E+00	0,00E+00	0,00E+00	0,00E+00	3,20E-05	4,48E-02	0,00E+00	1,64E+00	-4,77E-02
Radioactive waste disposed of	kg	1,24E-03	6,29E-06	1,91E-05	0,00E+00	0,00E+00	0,00E+00	5,97E-04	0,00E+00	0,00E+00	0,00E+00	1,05E-07	2,74E-07	0,00E+00	4,98E-07	-2,39E-04
Components for reuse	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	0,00E+00	0,00E+00	3,37E-01	0,00E+00	0,00E+00	0,00E+00	2,21E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,47E+00	0,00E+00	0,00E+00
Materials for energy recovery (energy recovery)	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ by energy vector	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported electrical energy (AEE)	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported thermal energy (EET)	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

A1 Supply of raw materials. **A2** Transport to waste processing. **A3** Manufacturing. **A4** Transport to waste processing. **A5** Installation and construction processes. **B1** Use. **B2** Maintenance. **B3** Repair. **B4** Replacement. **B5** Refurbishment. **B6** Operational energy use. **B7** Operational water use. **C1** Deconstruction and demolition. **C2** Transport to waste processing. **C3** Waste management for reuse, recovery and recycling. **C4** Fine removal. **D** Environmental benefits and burdens beyond the system boundary. **MND** Undeclared module.

Table 5. Kg of biogenic carbon

Carbon content (biogenic) - packaging	4,01E-01
Carbon content (biogenic) - product	0,00E+00

3.4. Recommendations of this EPD

The comparison of construction products within the same category must be carried out using the same functional unit and including the entire life cycle of the product. Environmental Product Declarations from the same product category but from different programs may not be comparable, as the calculation rules may differ.
Products included in this EPD: ARCOPWALL 5613 Y ARCOPLUS 5511

3.5. Cut-off rules

As a cut-off rule, it is established that inventory data must account for at least 99% of the total material and energy use of the product's life cycle under study, and 95% of the material and energy use per module, excluding, among others, diffuse emissions in the fact

3.6. Additional environmental information

The product does not contain hazardous substances listed in the "Candidate List of Substances of Very High Concern for Authorisation" of the European Chemicals Agency in concentrations greater than 0,1% by weight.

3.7. Other data

The waste generated during the installation, use, and end-of-life phases is classified as non-hazardous in the European Waste List under codes LER 17 04 02 (aluminum) and 17 02 03 (plastic).

4. ADDITIONAL TECHNICAL INFORMATION AND SCENARIOS

4.1. Transport to the building site (A4)

Parameter	Parameter expressed per functional unit
Type and fuel consumption, type of vehicle used for transportation	EURO VI truck (16-32 t). Diesel fuel. Consumption of 25 L/100 km.
Distance	100% Europe: 1146 km
Capacity utilization (including empty return)	% assumed in Ecoinvent version 3.11.
Apparent density of transported product	PC: 1200 kg/m^3; Aluminum: 2700 kg/m^3; Rubber: 900 kg/m^3. Packaging materials not included
Useful capacity factor (1, <1 or >1 for products that are packed compressed or nested)	1

4.2. Installation processes (A5)

Parameter	Parameter expressed per functional unit
Auxiliary materials for construction (specifying each material)	Stainless steel screws: 0,010 kg/m^2
Water use	No water consumption
Use of other resources	Scissor lift platform. Diesel fuel. Consumption: 0,55 MJ/m^2
Quantitative description of the type of energy (regional mix) and consumption during the installation process	Electric energy (European mix, Ecoinvent 3.11). Consumption: 4,7 × 10^{-3} MJ/m^2
Waste of materials in the work before the treatment of waste, generated by the installation of the product (specify by type)	Losses: PC (1.5%) Aluminum (1.5%) Rubber (1.5%) Packaging: Plastic waste: Polyethylene (100%) Polypropylene (100%) Cardboard (100%) Wood (100%)

Parameter	Parameter expressed per functional unit
Material outputs (specified by type) as a result of waste treatment on the building site. For example: collection for recycling, energy recovery, disposal (specified by route)	PC (Plastic Europe 2024): 40% recycling, 34% energy recovery, and 26% landfill. Aluminum (EPD AEA): 95% recycling and 5% landfill. Rubber: 100% landfill. Packaging (100%): Plastic waste (Plastic Europe 2024): 50% recycling, 16% energy recovery, and 34% landfill. Cardboard: same as plastic waste. Wood: 100% recyclable.
Direct emissions to air, soil and water	---

4.3. Reference life (B1)

Parameter	Parameter expressed per functional unit
Reference Lifetime (RSL)	25 years
Characteristics and properties of the product	Density: 1200 kg/m^3 UV protection through co-extrusion
Requirements (conditions of use, frequency of maintenance, repair, etc.)	---

4.4. Maintenance (B2), Repair (B3), Replacement (B4), or Refurbishment (B5)

Maintenance (B2)

Parameter	Parameter expressed per functional unit
Maintenance process, for example; cleaning agent, surfactant type	No maintenance is required.
Maintenance cycle	---
Auxiliary materials for the maintenance process (specifying each material)	---
Energy inputs for the maintenance process (quantity and type of energy vector)	---
Net consumption of fresh water during maintenance or repair	---
Material waste during maintenance (specifying the type)	---

Repair (B3)

Parameter	Parameter expressed per functional unit
Repair process	---
Proceso de inspección	---
Repair cycle	---
Auxiliary materials (specifying each material], for example lubricant	---
Interchange of parts during the product life cycle	---
Energy inputs during maintenance, type of energy, example: electricity, and quantity	---
Energy input during the repair, renovation, replacement process if applicable and relevant (quantity and type of energy vector)	---
Material waste during repair (specifying each material)	---
Consumo neto de agua dulce	---

Replacement (B4)

Parameter	Parameter expressed per functional unit
Energy input during substitution, for example for the use of cranes (quantity and energy vector)	9,4 * 10E-3 MJ/m2
Change of worn parts in the product life cycle (specifying each material)	1200 kg/m3
Net freshwater consumption	---

Refurbishment (B5)

Parameter	Parameter expressed per functional unit
Rehabilitation process	---
Rehabilitation cycle	---

Parameter	Parameter expressed per functional unit
Energy input during rehabilitation, for example for the use of cranes (quantity and energy vector)	---
Input material for rehabilitation, including auxiliary materials (specifying by material)	---
Waste of material during rehabilitation (specifying each material)	---
Other scenario development assumptions	---

4.5. Reference life

Parameter	Parameter expressed per functional unit
Reference life	Polycarbonate: 25 years; other components: 50 years.
Declared properties of the product, finishes, etc.	---
Application design parameters (manufacturer's instructions)	---
Estimation of the quality of execution, when installed according to the manufacturer's instructions	---
Outdoor environment for outdoor applications. For example, weather, pollutants, UV radiation, temperature, etc.	---
Indoor environment for indoor applications. For example, temperature, humidity, chemical exposure	---
Terms of use. For example, frequency of use, mechanical exposure, etc.	---
Maintenance. For example, the required frequency, etc.	---

4.6. Operational energy use (B6) and operational water use (B7)

Parameter	Parameter expressed per functional unit
Auxiliary materials (specified by material)	---
Type of energy vector. For example, electricity, natural gas, district heating	No water or energy is required.

Parameter	Parameter expressed per functional unit
Equipment output power	---
Net freshwater consumption	---
Characteristic features (energy efficiency, emissions, etc.)	---
Other scenario development assumptions. For example, transportation	---

4.7. End of life (C1-C4)

	Process				
	Collection processes (specified by types)	Recovery systems (specified by type)			Elimination
	kg collected with mixed construction waste	kg for reuse	kg for recycling	kg for energy recovery	kg for final disposal
	6.928	0	3.5	1.877	1.583
Assumptions for scenario development	Collection processes: 100% of the product. Recovery systems: Recycling: PC 40%, aluminum 95%, stainless steel screws 100%. Energy recovery: PC 34%. Final disposal: PC 26%, aluminum 5%, rubber 100%.				

5. ADDITIONAL INFORMATION

The product has:

- CE marking in accordance with the harmonized standard EN 16153:2013+A1:2015.

6. PCR AND VERIFICATION

This statement is based on Document

RCP 100 (version 3.2 - 21/12/2023) Construction products in general

Independent verification of the declaration and data, in accordance with ISO 14025 and IN RCP 100 (version 3.2 - 21/12/2023)

☑ External

Third party Verifier

Ferran Pérez Ibáñez
Accredited by the administrator of the DAPcons® Programme

Verification date:

04/05/2026

References

- ISO 14025: 2006 Environmental Labels and declarations - Type iii environmental declarations - Principles and procedures
- ISO 14040: 2006 Environmental management - Life cycle assesment - Principles and framework.
- ISO 14044: 2006 Environmental management - Life cycle assesment - Requirements and guidelines.
- UNE EN 15804:2012 + A2:2020 Sostenibilidad en la construcción - Declaraciones ambientales de producto - RCP.

Programme Manager

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A1-A3

Indicador name and abbreviation (EN)	Unit (EN)		Fabricación				Construcción		Uso							Fin de vida				Módulo D
Tabla parámetros de impacto ambiental	Unidad		Total A1-A3	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Cambio climático - total (GWP-total)	kg CO2 eq.	Climate change	3,45E+01	0,00E+00			1,16E+00	1,85E+00	0,00E+00	0,00E+00	0,00E+00	3,01E+01	0,00E+00	0,00E+00	0,00E+00	5,72E-02	5,04E-02	0,00E+00	6,41E-01	-7,48E+00
Cambio climático - fósil (GWP-fossil)	kg CO2 eq.	Climate change - Fossil	3,55E+01	0,00E+00	0,00E+00	0,00E+00	1,16E+00	6,70E-01	0,00E+00	0,00E+00	0,00E+00	3,01E+01	0,00E+00	0,00E+00	0,00E+00	5,72E-02	5,04E-02	0,00E+00	6,41E-01	-7,46E+00
Cambio climático - biogénico (GWP-biogenic)	kg CO2 eq.	Climate change - Biogenic	-1,11E+00	0,00E+00	0,00E+00	0,00E+00	2,24E-04	1,18E+00	0,00E+00	0,00E+00	0,00E+00	1,67E-02	0,00E+00	0,00E+00	0,00E+00	3,42E-06	9,75E-06	0,00E+00	4,81E-05	-6,00E-03
Cambio climático - uso del suelo y cambios del uso del suelo (GWP-luluc)	kg CO2 eq.	Climate change - Land use and LU change	1,35E-01	0,00E+00	0,00E+00	0,00E+00	3,90E-04	2,05E-03	0,00E+00	0,00E+00	0,00E+00	1,36E-02	0,00E+00	0,00E+00	0,00E+00	3,57E-06	1,70E-05	0,00E+00	1,92E-05	-1,84E-02
Agotamiento de la capa de ozono (ODP)	kg CFC-11 eq.	Ozone depletion	1,17E-06	0,00E+00	0,00E+00	0,00E+00	2,53E-08	1,91E-08	0,00E+00	0,00E+00	0,00E+00	1,09E-06	0,00E+00	0,00E+00	0,00E+00	8,70E-10	1,10E-09	0,00E+00	1,83E-09	-3,16E-07
Acidificación (AP)	mol H+ eq.	Acidification	1,35E-01	0,00E+00	0,00E+00	0,00E+00	2,49E-03	2,74E-03	0,00E+00	0,00E+00	0,00E+00	9,37E-02	0,00E+00	0,00E+00	0,00E+00	5,26E-04	1,08E-04	0,00E+00	7,88E-04	-2,27E-02
Eutrofización del agua dulce (EP-freshwater)	kg P eq.	Eutrophication, freshwater	1,06E-03	0,00E+00	0,00E+00	0,00E+00	8,62E-06	1,75E-05	0,00E+00	0,00E+00	0,00E+00	6,97E-04	0,00E+00	0,00E+00	0,00E+00	9,38E-08	3,75E-07	0,00E+00	1,22E-06	-1,85E-04
Eutrofización del agua marina (EP-marine)	kg N eq.	Eutrophication, marine	2,18E-02	0,00E+00	0,00E+00	0,00E+00	5,85E-04	6,34E-04	0,00E+00	0,00E+00	0,00E+00	1,74E-02	0,00E+00	0,00E+00	0,00E+00	2,48E-04	2,54E-05	0,00E+00	4,96E-04	-3,96E-03
Eutrofización terrestre (EP-terrestrial)	mol N eq.	Eutrophication, terrestrial	2,36E-01	0,00E+00	0,00E+00	0,00E+00	6,47E-03	6,80E-03	0,00E+00	0,00E+00	0,00E+00	1,88E-01	0,00E+00	0,00E+00	0,00E+00	2,71E-03	2,81E-04	0,00E+00	3,52E-03	-4,25E-02
Formación ozono fotoquímico (POCP)	kg NMVOC eq.	Photochemical ozone formation	1,25E-01	0,00E+00	0,00E+00	0,00E+00	3,95E-03	2,90E-03	0,00E+00	0,00E+00	0,00E+00	1,07E-01	0,00E+00	0,00E+00	0,00E+00	8,10E-04	1,72E-04	0,00E+00	9,53E-04	-2,84E-02
Agotamiento de los recursos abióticos - minerales y metales (ADP-minerals&met	kg Sb eq.	Resource use, minerals and metals	2,35E-04	0,00E+00	0,00E+00	0,00E+00	3,98E-06	3,72E-06	0,00E+00	0,00E+00	0,00E+00	2,32E-04	0,00E+00	0,00E+00	0,00E+00	2,02E-09	1,73E-07	0,00E+00	1,28E-07	-2,96E-07
Agotamiento de recursos abióticos - combustibles fósiles (ADP-fossil)	MJ, net calorific value	Resource use, fossils	1,40E+02	0,00E+00	0,00E+00	0,00E+00	1,31E+00	2,29E+00	0,00E+00	0,00E+00	0,00E+00	8,48E+01	0,00E+00	0,00E+00	0,00E+00	1,43E-02	5,71E-02	0,00E+00	1,02E-01	-2,45E+01
Consumo de agua (WDP)	m3 world eq. deprived	Water use	7,61E+00	0,00E+00	0,00E+00	0,00E+00	6,47E-02	9,37E-02	0,00E+00	0,00E+00	0,00E+00	7,00E+00	0,00E+00	0,00E+00	0,00E+00	6,41E-04	2,81E-03	0,00E+00	-9,09E-02	-1,11E+00
Ecotoxicidad - agua dulce (ETP-fw)	CTUe	Ecotoxicity, freshwater	4,73E+02	0,00E+00	0,00E+00	0,00E+00	3,64E+00	8,04E+00	0,00E+00	0,00E+00	0,00E+00	4,42E+02	0,00E+00	0,00E+00	0,00E+00	4,22E-02	1,58E-01	0,00E+00	4,55E+00	-6,93E+01
Toxicidad humana, efectos cancerígenos (HTP-c)	CTUh	Human toxicity, cancer	3,40E-08	0,00E+00	0,00E+00	0,00E+00	1,93E-10	5,63E-10	0,00E+00	0,00E+00	0,00E+00	2,35E-08	0,00E+00	0,00E+00	0,00E+00	3,08E-12	8,42E-12	0,00E+00	3,33E-10	-8,78E-09
Toxicidad humana, efectos no cancerígenos (HTP-nc)	CTUh	Human toxicity, non-cancer	2,89E-07	0,00E+00	0,00E+00	0,00E+00	1,03E-08	5,79E-09	0,00E+00	0,00E+00	0,00E+00	2,43E-07	0,00E+00	0,00E+00	0,00E+00	5,79E-11	4,50E-10	0,00E+00	1,40E-08	-2,59E-08

Potencial de Calentamiento Global (GHG)	kg CO2 eq.	GWP GHG	3,57E+01	0,00E+00	0,00E+00	0,00E+00	1,16E+00	6,73E-01	0,00E+00	0,00E+00	0,00E+00	3,01E+01	0,00E+00	0,00E+00	0,00E+00	5,72E-02	5,04E-02	0,00E+00	6,41E-01	-7,48E+00
Tabla parámetros de uso de recursos, residuos y flujos materiales de sal	Unidad		Total A1-A3	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Uso de energía primaria renovable excluyendo los recursos de energía primaria renovable utilizada como materia prima	MJ, valor calorífico neto	PERE	4,68E+01	0,00E+00	0,00E+00	0,00E+00	2,72E-01	1,00E+00	0,00E+00	0,00E+00	0,00E+00	2,52E+01	0,00E+00	0,00E+00	0,00E+00	4,20E-03	1,18E-02	0,00E+00	2,25E-02	-8,97E+00
Uso de energía primaria renovable utilizada como materia prima	MJ, valor calorífico neto	PERM	1,22E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-8,51E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Uso total de energía primaria renovable (energía primaria y recursos de energía primaria renovable utilizada como materia prima)	MJ, valor calorífico neto	PERT	5,91E+01	0,00E+00	0,00E+00	0,00E+00	2,72E-01	9,15E-01	0,00E+00	0,00E+00	0,00E+00	2,52E+01	0,00E+00	0,00E+00	0,00E+00	4,20E-03	1,18E-02	0,00E+00	2,25E-02	-8,97E+00
Uso de energía primaria no renovable, excluyendo los recursos de energía primaria no renovable utilizada como materia prima	MJ, valor calorífico neto	PENRE	-5,70E+01	0,00E+00	0,00E+00	0,00E+00	1,37E+00	1,58E+01	0,00E+00	0,00E+00	0,00E+00	8,83E+01	0,00E+00	0,00E+00	0,00E+00	1,48E-02	5,96E-02	1,37E+02	1,07E-01	-2,55E+01
Uso de la energía primaria no renovable utilizada como materia prima	MJ, valor calorífico neto	PENRM	2,02E+02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,34E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,37E+02	0,00E+00	0,00E+00
Uso total de la energía primaria no renovable (energía primaria y recursos de energía primaria renovable utilizada como materia prima)	MJ, valor calorífico neto	PENRT	1,45E+02	0,00E+00	0,00E+00	0,00E+00	1,37E+00	2,38E+00	0,00E+00	0,00E+00	0,00E+00	8,83E+01	0,00E+00	0,00E+00	0,00E+00	1,48E-02	5,96E-02	0,00E+00	1,07E-01	-2,55E+01
Uso de materiales secundarios	kg	SM	4,20E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,30E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Uso de combustibles secundarios renovables	MJ, valor calorífico neto		0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Uso de combustibles secundarios no renovables	MJ, valor calorífico neto		0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Uso neto de recursos de agua dulce	m3	Water consumption	4,16E-01	0,00E+00	0,00E+00	0,00E+00	2,08E-03	5,87E-03	0,00E+00	0,00E+00	0,00E+00	1,93E-01	0,00E+00	0,00E+00	0,00E+00	2,83E-05	9,05E-05	0,00E+00	-2,38E-03	-6,13E-02
Residuos peligrosos eliminados	kg	Hazardous waste	9,76E-03	0,00E+00	0,00E+00	0,00E+00	1,12E-04	1,56E-04	0,00E+00	0,00E+00	0,00E+00	9,30E-03	0,00E+00	0,00E+00	0,00E+00	5,11E-06	4,88E-06	0,00E+00	8,38E-06	-3,12E-03
Residuos no peligrosos eliminados	kg	Bulk waste	1,80E+00	0,00E+00	0,00E+00	0,00E+00	8,02E-01	2,80E-01	0,00E+00	0,00E+00	0,00E+00	3,76E+00	0,00E+00	0,00E+00	0,00E+00	3,20E-05	3,49E-02	0,00E+00	1,31E+00	-3,56E-02
Residuos radiactivos eliminados	kg	Radioactive waste	8,97E-04	0,00E+00	0,00E+00	0,00E+00	4,90E-06	1,38E-05	0,00E+00	0,00E+00	0,00E+00	4,94E-04	0,00E+00	0,00E+00	0,00E+00	1,05E-07	2,13E-07	0,00E+00	4,06E-07	-1,81E-04
Componentes para su reutilización	kg		0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materiales para el reciclaje	kg	MFR	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,92E-01	0,00E+00	0,00E+00	0,00E+00	1,69E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,17E+00	0,00E+00	0,00E+00
Materiales para la valorización energética (recuperación de energía)	kg		0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Energía exportada	MJ por vector energético		0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Energía eléctrica exportada (AEE)	MJ, valor calorífico neto		0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Energía térmica exportada (EET)	MJ, valor calorífico neto		0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00