



DAPcons[®].100.132

DECLARACIÓN AMBIENTAL DE PRODUCTO
ENVIRONMENTAL PRODUCT DECLARATION

According to the standards:
ISO 14025 y EN 15804 + A2:2020

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GENERAL INFORMATION

Product

ARBOFLEX®PU LIQUID WATERPROOFING

Company



Product description

ARBOFLEX PU is a single component liquid made from pure polyurethane which, once catalyzed, forms a seamless elastic membrane without any joints, overlapping or any integrated mesh needs. The material properties of ARBOFLEX PU enable it to be air tight and waterproof on a range of substrates.

Reference RCP

RCP 100 (version 3 - 27/05/2021) Construction products in general

Production plant

This Environmental Product Declaration (EPD) corresponds to the products produced for CARLISLE Construction Materials Ltd in Les Franqueses de Valles (Barcelona).

Finlandia 33 · 08520 Les Franqueses de Vallès

Validity

From: 19/12/2022 Until: 19/12/2027

The validity of DAPcons®.100.132 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.csostenible.net

EXECUTIVE SUMMARY

ARBOFLEX® PU SYSTEM - POLYURETHANE WATERPROOFING MEMBRANE



DAPconstruction® PROGRAMME

Environmental Product Declarations in the Construction sector
www.csostenible.net



Programme Manager

Colegio de la Arquitectura Tècnica de Barcelona (Cateb)
Bon Pastor, 5 · 08021 Barcelona www.apabcn.cat



Declaration Holder

CARLISLE® Construction Materials Ltd.
Lancaster house, Mansfield NG19 7DW. United Kingdom



Statement made by:

CIA ESPAÑOLA DE AISLAMIENTOS SA
CALLE COBALTO 95, 08907 - BARCELONA, España

Declared product

ARBOFLEX® PU SYSTEM - POLYURETHANE WATERPROOFING MEMBRANE

Geographic representation

It is considered a geographical and technological environment of the UK.

Variability between different products

In this document the results of each of the products are declared individually.

Declaration number

DAPcons®.100.132

Registration date

28/11/2022

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: **CARLISLE Construction Materials Ltd.**

Programme Administrator Signature

Celestí Ventura Cisternas. President of Cateb

Programme Verifier Signature

Roger González Corsellas. Verifier accredited by the administrator of the DAPcons® Programme

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ENVIRONMENTAL PRODUCT DECLARATION

1. DESCRIPTION OF THE PRODUCT AND ITS USE

ARBOFLEX PU is a membrane of great elasticity and resistance against wear that once applied offers great stability, durability and certified tightness (ETE 10/0121 and BBA 20/5786).

The waterproofing system is EOTA certified based on the 005 guide for use in ETE 10/0121 roof waterproofing, with a useful life of 25 years W3, for a thickness of 1.2 mm, even on a zero slope.

It has the evaluation for the British market BBA 20/5786, for waterproofing roofs and walkable terraces, for a minimum thickness of 1.2 mm, even on a zero slope.

The versatility of ARBOFLEX[®] PU gives it the possibility of adapting on a multitude of surfaces and different materials, it is the ideal product to be applied in irregular areas with shapes of any nature whether curved or square.

It is not necessary to assemble on the surface, only at singular points of encounters with other construction elements.

Application in garden areas, it has the European certificate of resistance to roots according to the EN 13948 standard (ETE 10/0121 and BBA 20/5786).

The traditional application is carried out by applying successive layers of maximum thickness 0.7 mm each (1.2 kg / m²). Dry between coats of approximately 4-6 hours.



2. DESCRIPTION OF THE STAGES OF THE LIFE CYCLE

2.1. Manufacturing (A1, A2 y A3)

Raw Materials (A1 y A2)

- A1 Supply of raw materials: extraction and processing of raw materials and energy that occurs before the manufacturing process. The main raw materials used as an indication are: calcium carbonate and isocyanate.
- A2 Transport of raw materials: transport of the different raw materials from the supplier of raw materials to the factory where the final product is made. The specific distance and type of truck used in each transport have been considered.

Manufacturing (A3)

- A3 Manufacturing: consumption of energy, water and packaging materials used during the manufacturing process of the product. The transportation and management of waste generated at the production site is also included.

The raw materials are mixed according to the master formula in a disperser and then they are arranged in drums.

2.2. Building (A4 y A5)

Transport of the product to the work (A4)

- A4 Construction: This module includes transportation from the factory gate to the site where the product is installed.

For the calculation of transport, a weighted average has been made considering the kilometers to each country, and the percentage of sales over the total. The average number of kilometers has resulted in 550 km for Europe and 2300 km for the rest of the world.

Table 1. Scenarios applied for the transport of the product to the place of installation

Destinations	Type of transport	Percentage	Average km
Spain	.		
Europe	Truck 16-32 Tons	47	550
ROW	Transoceanic Ship - Asia Transoceanic Ship - South America Transoceanic Ship - Africa	53	2300
		Total 100%	

Product installation process and construction (A5)

- A5 Installation: This stage includes all the materials and energy used for the installation of the membrane. Likewise, the transport and management of the waste produced (packaging and wasted product) is also considered.

2.3. Product use (B1-B7)

Use (B1)

The performance of the system allows assuming a reference useful life of 25 years at a minimum thickness of 1.4

mm according to ETE 11/0357.

Once installed, the insulation system does not require maintenance operations or energy or water inputs, so no environmental loads are attributed to this stage.

In this DAP the energy and emission savings derived from the insulating properties of the system have not been accounted for.

Maintenance (B2)

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Repair (B3)

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Substitution (B4)

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Rehabilitation (B5)

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Operational energy use (B6)

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Operational water use (B7)

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2.4. End of life (C1-C4)

Deconstruction and demolition (C1)

- C1 Deconstruction / Demolition: the deconstruction and / or dismantling of the Tecnocoat system is part of the entire demolition of the building. The part of the environmental impact associated with our system is very small, so it can be neglected compared to the overall demolition of the building.

Transportation (C2)

- C2 Transportation: In this case, a 16-32 Tn truck has been considered and a distance of 50 km to the management site.

Waste management for reuse, recovery and recycling (C3)

- C3 Waste management for reuse, recovery and recycling: materials are not separated from other construction products during the end of the building's life, so the impact of this stage is considered to be zero.

Ultimate elimination (C4)

- C4 Waste disposal: It is considered that 100% of the product is deposited in a controlled landfill.

2.5. Potential environmental benefits and burdens beyond the system boundary (D)

- D: In this study, modulus D is considered to have a value of 0.

3. LIFE CYCLE ANALYSIS

This DAP is cradle to door with options, including all life cycle stages (A + B + C + D).

The present LCA study has been carried out using the LCA software SIMAPRO 9.1. together with the ECOINVENT 3.5 database.

The impact methodology used corresponds to CML-IA (baseline) v3.05 and EDIP v1.07 (for the production of waste) and Cumulative Energy Demand v 1.11 (for the consumption of natural resources).

The primary data (consumption of raw materials and energy, waste production, transport from suppliers and product transport) correspond to factory data for 2019.

The polluter pays and modularity principles have been followed.

Wherever it has been necessary, a load assignment has been made based on physical criteria.

To represent the electricity consumption in the factory, the production mix in Spain has been used.

3.1. Functional Unit

The functional unit of the ARBOFLEX® PU system is 1m². The weight of 1m² of ARBOFLEX® PU is 2kg.

3.2. System limits

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

X = Declared module MND = Undeclared module

3.3. Life cycle analysis data (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	9,13E+00	3,70E-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	3,52E-02	0,00E+00	3,53E-02	0,00E+00	
Climate change - fossil (GWP-fossil)	kg CO2 eq	9,09E+00	3,70E-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	3,52E-02	0,00E+00	3,51E-02	0,00E+00	
Climate change - biogenic (GWP-biogenic)	kg CO2 eq	2,82E-02	1,38E-04	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	1,17E-05	0,00E+00	1,25E-04	0,00E+00	
Climate change - land use and changes in land use (GWP-luluc)	kg CO2 eq	9,66E-03	1,27E-04	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	1,24E-05	0,00E+00	1,43E-05	0,00E+00	
Ozone layer depletion (ODP)	kg CFC 11 eq	4,79E-07	6,57E-08	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	6,24E-09	0,00E+00	9,39E-09	0,00E+00	
Acidification (AP)	mol H+ eq	5,27E-02	3,22E-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	1,41E-04	0,00E+00	3,06E-04	0,00E+00	
Eutrophication of fresh water (EP-freshwater)	kg P eq	5,19E-03	2,99E-04	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	1,81E-05	0,00E+00	4,00E-05	0,00E+00	
Eutrophication of sea water (EP-marine)	kg N eq.	1,12E-02	7,41E-04	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	3,93E-05	0,00E+00	9,91E-05	0,00E+00	
Terrestrial eutrophication (EP-terrestrial)	mol N eq.	8,32E-02	8,31E-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	4,40E-04	0,00E+00	1,10E-03	0,00E+00	
Photochemical ozone formation (POCP)	kg NMVOC eq	3,18E-02	2,34E-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	1,34E-04	0,00E+00	3,19E-04	0,00E+00	
Depletion of abiotic resources - minerals and metals (ADP-minerals&metals)	kg Sb eq	1,01E-05	8,80E-07	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	1,39E-07	0,00E+00	4,53E-08	0,00E+00	
Depletion of abiotic resources - fossil fuels (ADP-fossil)	MJ, net calorific value	1,34E+02	5,44E+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	5,18E-01	0,00E+00	8,58E-01	0,00E+00	
Water consumption (WDP)	m3 worldwide eq. private	5,74E+00	3,75E-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	3,67E-03	0,00E+00	3,81E-02	0,00E+00	
The Indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This Indicator is thus equal to the GWP Indicator originally defined in EN 15804:2012+A1:2013. Can be obtained from IPCC characterization factors.																	
Global Warming Potential (GHG)	kg CO2 eq	8,78E+00	3,67E-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	3,49E-02	0,00E+00	3,46E-02	0,00E+00	

A1 Supply of raw materials. A2 Transportation. A3 Manufacturing. A4 Transportation. A5 Installation and construction processes. B1 Use. B2 Maintenance. B3 Repair. B4 Substitution. B5 Rehabilitation. B6 Operational energy use. B7 Operational water use. C1 Deconstruction and demolition. C2 Transportation. 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	7,92E+00	7,28E-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	6,17E-03	0,00E+00	1,37E-02	0,00E+00
Use of renewable primary energy used as raw material	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	0,00E+00
Total use of renewable primary energy (primary energy and renewable primary energy resources used as feedstock)	MJ, net calorific value	7,92E+00	7,28E-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	6,17E-03	0,00E+00	1,37E-02	0,00E+00
Non-renewable primary energy use, excluding non-renewable primary energy resources used as feedstock	MJ, net calorific value	1,64E+02	5,91E+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	5,59E-01	0,00E+00	9,38E-01	0,00E+00
Use of non-renewable primary energy used as raw material	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	0,00E+00
Total use of non-renewable primary energy (primary energy and renewable primary energy resources used as feedstock)	MJ, net calorific value	1,64E+02	5,91E+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	5,59E-01	0,00E+00	9,38E-01	0,00E+00
Use of secondary materials	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
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	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	0,00E+00
Net use of freshwater resources	m3	1,38E-01	1,04E-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	9,82E-05	0,00E+00	9,11E-04	0,00E+00
Hazardous waste removed	kg	4,26E-05	3,46E-06	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	3,77E-07	0,00E+00	6,78E-07	0,00E+00
Non-hazardous waste eliminated	kg	7,14E-01	2,10E-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	0,00E+00	2,05E-02	0,00E+00	3,29E+00	0,00E+00
Radioactive waste disposed of	kg	2,35E-04	3,74E-05	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	3,51E-06	0,00E+00	5,36E-06	0,00E+00
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	0,00E+00
Materials for recycling	kg	1,68E-02	1,68E-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	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	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	9,82E-05	0,00E+00	9,11E-04	0,00E+00

A1 Supply of raw materials. A2 Transportation. A3 Manufacturing. A4 Transportation. A5 Installation and construction processes. B1 Use. B2 Maintenance. B3 Repair. B4 Substitution. B5 Rehabilitation. B6 Operational energy use. B7 Operational water use. C1 Deconstruction and demolition. C2 Transportation. 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

Product	0,00E+00
Packaging	8,20E-03

3.4. Recommendations of this DAP

The comparison of construction products must be done by applying the same functional unit and at the building level, that is, including the behavior of the product throughout its entire life cycle.

This DAP include ARBOFLEX® PU products.

3.5. Cutting rules

At least 99 % of the total life cycle matter and energy have been included, and 95 % of matter and energy per module. It has been excluded because its impact is considered negligible:

- 1) Manufacture of equipment used in production, buildings or any other capital good;
- 2) Transportation of personnel to the plant;
- 3) Transportation of personnel within the plant;
- 4) Research and development activities.

3.6. Additional environmental information

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3.7. Other data

It has CE marking on the basis of a statement made DoP Declaration of Performance (DoP) conforms to the regulations UE305/2011.

It has a European technical approval ETA 10/0121 and BBA 20/5786 (W3: working life 25 years, 1.2mm minimum thickness).

4. ADDITIONAL TECHNICAL INFORMATION AND SCENARIOS

4.1. Transportation from the factory to the construction site (A4)

Parameter	Parameter expressed per functional unit
Type and fuel consumption, type of vehicle used for transportation	Truck 16-32 Tn Euro 5
Distance	550 km
Capacity utilization (including empty return)	Road transport: 85 % Transport by cargo ship: 100 %
Apparent density of transported product	1400 kg/m ³
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)	ARBOFLEX®PU Primer, ARBOFLEX®PU Top Coat, ARBOFLEX®PU SA Primer
Water use	It is not required.
Use of other resources	It is not required.
Quantitative description of the type of energy (regional mix) and consumption during the installation process	It is not required.
Waste of materials in the work before the treatment of waste, generated by the installation of the product (specify by type)	Product losses: 0% Packaging waste. 0.0178 kg of wooden pallet.
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)	Reused pallets for a new reuse center: 0.0178 kg of pallet per m ² of product. 100% recycling. Product wasted: 0%.
Direct emissions to air, soil and water	There is not.

4.3. Reference life (B1)

Parameter	Parameter expressed per functional unit
Reference Lifetime (RSL)	The shelf life of the product is 25 years.
Characteristics and properties of the product	Coating suitable for waterproofing, protection and sealing in general.

Parameter	Parameter expressed per functional unit
Requirements (conditions of use, frequency of maintenance, repair, etc.)	It is not required.

4.4. Maintenance (B2), Repair (B3), Substitution (B4), or Rehabilitation (B5)

Maintenance (B2)

Parameter	Parameter expressed per functional unit
Maintenance process, for example; cleaning agent, surfactant type	It is not required.
Maintenance cycle	It is not required.
Auxiliary materials for the maintenance process (specifying each material)	It is not required.
Energy inputs for the maintenance process (quantity and type of energy vector)	It is not required.
Net consumption of fresh water during maintenance or repair	It is not required.
Material waste during maintenance (specifying the type)	It is not required.

Repair (B3)

Parameter	Parameter expressed per functional unit
Repair process	It is not required.
Proceso de inspección	It is not required.
Repair cycle	It is not required.
Auxiliary materials (specifying each material), for example lubricant	It is not required.
Interchange of parts during the product life cycle	It is not required.
Energy inputs during maintenance, type of energy, example: electricity, and quantity	It is not required.
Energy input during the repair, renovation, replacement process if applicable and relevant (quantity and type of energy vector)	It is not required.

Parameter	Parameter expressed per functional unit
Material waste during repair (specifying each material)	It is not required.
Consumo neto de agua dulce	It is not required.

Substitution (B4)

Parameter	Parameter expressed per functional unit
Energy input during substitution, for example for the use of cranes (quantity and energy vector)	It is not required.
Change of worn parts in the product life cycle (specifying each material)	It is not required.
Net freshwater consumption	It is not required.

Rehabilitation (B5)

Parameter	Parameter expressed per functional unit
Rehabilitation process	It is not required.
Rehabilitation cycle	It is not required.
Energy input during rehabilitation, for example for the use of cranes (quantity and energy vector)	It is not required.
Input material for rehabilitation, including auxiliary materials (specifying by material)	It is not required.
Waste of material during rehabilitation (specifying each material)	It is not required.
Other scenario development assumptions	It is not required.

4.5. Reference life

Parameter	Parameter expressed per functional unit
Reference life	The shelf life of the product is 25 years.
Declared properties of the product, finishes, etc.	Coating suitable for waterproofing, protection and sealing in general.

Parameter	Parameter expressed per functional unit
Application design parameters (manufacturer's instructions)	Open the ARBOFLEX®PU metal tin and stir up to homogenize. Extended the first layer using a short hair roller, a maximum thickness of 0,7 mm. (1,2 kg/m ²). Applying the material without dilution.
Estimation of the quality of execution, when installed according to the manufacturer's instructions	A minimum total applied thickness of 1.5 mm is recommended, with an approximate total consumption of 2.4 kg / m ² (dry film thickness); applied in one or more layers.
Outdoor environment for outdoor applications. For example, weather, pollutants, UV radiation, temperature, etc.	System designed for outdoors.
Indoor environment for indoor applications. For example, temperature, humidity, chemical exposure	Does not apply.
Terms of use. For example, frequency of use, mechanical exposure, etc.	It is not required.
Maintenance. For example, the required frequency, etc.	It is not required.

4.6. Use of energy (B6) and water (B7) in service

Parameter	Parameter expressed per functional unit
Auxiliary materials (specified by material)	It is not required.
Type of energy vector. For example, electricity, natural gas, district heating	Does not apply.
Equipment output power	Does not apply.
Net freshwater consumption	It is not required.
Characteristic features (energy efficiency, emissions, etc.)	Energy reduction in the building use stage.
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	kg for final disposal
	3.29	0	3.29
Assumptions for scenario development	Manual process. 100% to landfill. Product waste is transported by truck that complies with Euro VI regulations, at a distance of 50 km to its final destination.		

5. ADDITIONAL INFORMATION

It has CE marking based on a Declaration of Performance (DoP) prepared in accordance with the regulation UE305 / 2011.

The ARBOFLEX®PU system has ETE 10/0121 certification, with a useful life of 25 years for a minimum thickness of 1.2mm. as well as British BBA 20/5786 certification.

6. RCP AND VERIFICATION

This statement is based on Document

RCP 100 (version 3 - 27/05/2021) Construction products in general

Independent verification of the declaration and data, in accordance with ISO 14025 and IN RCP 100 (version 3 - 27/05/2021)

External

Third party Verifier

Roger González Corsellas

Accredited by the administrator of the DAPcons® Programme



Verification date:

19/10/2021

References

- General rules of the DAP® construction program.
- ISO 14040: 2006 Environmental management - Life cycle analysis - Principles and reference framework.
- ISO 14044: 2006 Environmental management - Life cycle analysis - Requirements and guidelines.
- UNE-EN 15804: 2012 + A1: 2014 Sustainability in construction. Environmental product declarations. Basic product category rules for construction products.
- ISO 14025: 2006 Environmental labels and declarations - Type III environmental declarations - Principles and

procedures.

- Product life cycle modeled with SimaPro 9.1 software.

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