



Krion

PORCELANOSA Grupo

DAPcons®.100.119

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

FITWALL®

Company



Product description

Fitwall® is a large-format flexible decorative panel made from a unique combination of different raw materials, both mineral and organic. The main mineral component is ATH (Alumina Trihydrate), providing the panel with fireproof performance, while the organic binder is a resin that incorporates recycled PET (polyethylene terephthalate) in its composition using EPUPR technology and certified by SCS.

Reference RCP

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

Production plant

Ctra. Vila-real - Puebla de Arenoso (CV-20) km 1 - 12540 VILA-REAL (Castelló) Spain

Validity

From: 13/06/2022 Until: 13/06/2027

The validity of DAPcons®.100.119 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

FITWALL®

**DAPconstruction® PROGRAMME**

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

**Programme Manager**

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

**Declaration Holder**

KRION SOLID SURFACE S.A.U.
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**Statement made by:**

Marcel Gómez Consultoria Ambiental
Torrent de Vallmora 24-26 1º 2ª, 08320 - BARCELONA, España

Declared product

FITWALL®

Geographic representation

Global.

Variability between different products

This document states the results of each of the outputs individually.

Declaration number

DAPcons®.100.119

Registration date

17/11/2022

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: **KRION SOLID SURFACE S.A.U.**

Programme Administrator Signature

Celestí Ventura Cisternas. President of Cateb

Programme Verifier Signature

Lucas Pedro Berman. Verifier accredited by the administrator of the DAPcons® Programme

ENVIRONMENTAL PRODUCT DECLARATION

1. DESCRIPTION OF THE PRODUCT AND ITS USE

Fitwall® is a large-format flexible decorative panel made from a unique combination of different raw materials, both mineral and organic. The main mineral component is ATH, providing the panel with fire retardant properties, while the organic binder is a resin that incorporates recycled PET in its composition using EPUPR technology and certified by SCS. Its application on walls, ceilings and furniture coverings for commercial and residential environments, recreates natural textures such as wood, rustic, stone, cement-based surfaces or finishes. It is of modern and innovative design. Offering sustainable, durable and resistant solutions.

This EPD includes three types of panels, and they present an environmental performance with differences of less than 10 % in their impacts:

- >Integrated color panels.
- >Panels with enamel.
- >Panels with dye.

Below are the main technical characteristics of the product and an image of Fitwall® Shades, Fitwall® Doghe and Fitwall® Mantonella.



Table 6: Mechanical, structural and safety properties

PROPERTY	REGULATION	RESULT
Density (g/cm³)	UNE-EN 12467+A2	1,807
Brinell hardness (N/mm²)	UNE-EN ISO 19712-2	372
Rockwell hardness	UNE-EN ISO 19712-2	75
Barcol hardness	UNE-EN ISO 19712-2	55
Charpy impact (kJ/m²)	UNE-EN ISO 179-1	22,4
Bending strength (N/mm²)	UNE-EN ISO 178	45,8
Modulus of elasticity in bending (N/mm²)	UNE-EN ISO 178	3170
Elongation at break (%)	UNE-EN ISO 178	2,2
Surface wear resistance (PI) cycles	UNE-EN 438-2 + A1	< 25 cycles
Dimensional variation (%) Parallel direction	UNE-EN 12467+ A2	0,11
Dimensional variation (%) Perpendicular direction	UNE-EN 12467+ A2	0,10

Table 7: Physical, serviceability and durability properties

PROPERTY	REGULATION	RESULT
Average CLTE linear expansion coefficient (-20° C to 80° C) (° C-1) Longitudinal	ISO 11359-2	4,8×10 ⁻¹
Average CLTE linear expansion coefficient (-20° C to 80° C) (° C-1) Crosswise	ISO 11359-2	4,5×10 ⁻¹
Water impermeability	UNE-EN 12467 +A2	No traces of moisture or droplet formation on the underside of the plate.
Resistance to immersion-drying R	UNE-EN 12467 +A2	0,69
Resistance to immersion-drying R _i	UNE-EN 12467 +A2	0,66
Thermal conductivity	UNE-EN 12467	(0-40)° C 0,052-0,072 W/m · K

Table 3: Hygienic, maintenance and sustainability properties

PROPERTY	REGULATION	RESULT
Determination of BPA content	AIDIMME criteria	Bisphenol A (Not detected)
Reach Compliance	European Regulation 1907/2006	SVHC are ≤ 0,1% (w/w)
Volatile Organic Compound emission	UL 2818	Greenguard gold
French VOC legislation	ISO 14000-6:2006	A+
Crystalline silica content	DRX INS-IT36	Quartz, Tridymite and Cristobalite < 2%.
Determination of metal migration	UNE-EN 12149	(Antimony, Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium) < 2,4 mg/kg
Determination of vinyl chloride migration	UNE-EN 12149	MCV < 0,2 mg/Kg

Table 4: Flame retardant properties

PROPERTY	REGULATION	RESULT
Reaction to fire of building materials	UNE 23721	M1
Classification of the fire performance of building materials (Euroclasses)	UNE-EN 13501	B s2 d0
Surface combustion of building materials	ASTM E84	(FSI) = 25 (SDI) = 135
	NFPA 101	Class A
Classification of the fire performance of building materials. China	GB8624	B1 (B s2 d0)

2. DESCRIPTION OF THE STAGES OF THE LIFE CYCLE

2.1. Manufacturing (A1, A2 y A3)

Raw Materials (A1 y A2)

Module A1 includes the supply of raw materials.

The main mineral component is ATH (Alumina Trihydrate), providing the panel with fire retardant properties, while the organic binder is a resin that incorporates recycled PET (polyethylene terephthalate).

Module A2 refers to the transport of the raw material from the suppliers to the factory, located in Spain. For this, the distance and the type of transport for each raw material have been taken into account.

Manufacturing (A3)

The manufacture of Fitwall® panels starts with the preparation of a mold where, in the case of panels with printed color, the pigment is sprinkled so that it adheres to the mold. If the panel has a stain or enamel finish, no type of pigment is sprinkled.

Next, the resin (PET+ MINERAL LOADS) is applied to the surface of the mold by means of a projection with a robot that also incorporates fiberglass.

After the application of the resin (PET + MINERAL LOADS) a compaction and curing process is carried out at low temperature.

Subsequently, the panel is unmoulded by flipping and rectifying the sides by means of a pressurized water jet cut.

Depending on the finish, a series of processes are carried out, such as tinting, painting or protective coating. Once the panel is finished, a quality control is carried out to see that all the characteristics are correct and it is packed.

2.2. Building (A4 y A5)

Transport of the product to the work (A4)

To calculate the distances, the weighted average of global sales has been considered.

Fitwall® is shipped to multiple countries from the production center. It is distributed in Spain, France, the USA, Italy, the United Kingdom, Portugal, Mexico, Hong Kong, China, Morocco, the Russian Federation, the Netherlands, Germany, the United Arab Emirates, Poland, Chile, Belgium, Malta, Algeria, Canada, Ireland, Czech Republic, Israel, Romania, Argentina, Costa Rica, Bulgaria, Sweden, India, Vietnam, Dominican Republic, Colombia, Ecuador, Kuwait, Bangladesh, Turkey, Gibraltar, Tunisia, Hungary, San Marino, Albania, Qatar, Brazil, Peru, Bahrain, Slovenia, Iran, Ukraine, Serbia, Nigeia, Iraq, Segenal, Greece, Panama, Taiwan, Ethiopia, Australia, Cayman Islands, Croatia, Denmark, Estonia, Andorra, Uzbekistan, among others.

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

Destinations	Type of transport	Percentage	Average km
Spain	EURO VI Truck >32	34	360.00
Europe	EURO VI Truck >32	40	1474.00
Rest of the world	Transoceanic ship	26	10333.54
		Total 100%	

Product installation process and construction (A5)

For the installation of Fitwall® products there are different components such as putties to adhere the different union joints, and screws used in the fixing system. For the present study, 15 screws per 4 m2 of panel and 160 grams of putty have been considered. Additionally, losses of 5 % have been estimated.

Transport to the corresponding manager has also been taken into account, where a distance of 50 km is considered.

2.3. Product use (B1-B7)

Use (B1)

The performance of the product allows us to assume a useful life of 50 years, which is equivalent to the useful life of the building. Therefore, the impacts generated in the modules of Use (B1), Maintenance (B2), Repair (B3), Replacement (B4), Rehabilitation (B5), Use of energy in service (B6) and, Use of water in service (B7) are considered negligible.

Maintenance (B2)

The performance of the product allows us to assume a useful life of 50 years, which is equivalent to the useful life of the building. Therefore, the impacts generated in the modules of Use (B1), Maintenance (B2), Repair (B3), Replacement (B4), Rehabilitation (B5), Use of energy in service (B6) and, Use of water in service (B7) are considered negligible.

Repair (B3)

The performance of the product allows us to assume a useful life of 50 years, which is equivalent to the useful life of the building. Therefore, the impacts generated in the modules of Use (B1), Maintenance (B2), Repair (B3), Replacement (B4), Rehabilitation (B5), Use of energy in service (B6) and, Use of water in service (B7) are considered negligible.

Substitution (B4)

The performance of the product allows us to assume a useful life of 50 years, which is equivalent to the useful life of the building. Therefore, the impacts generated in the modules of Use (B1), Maintenance (B2), Repair (B3), Replacement (B4), Rehabilitation (B5), Use of energy in service (B6) and, Use of water in service (B7) are considered negligible.

Rehabilitation (B5)

The performance of the product allows us to assume a useful life of 50 years, which is equivalent to the useful life of the building. Therefore, the impacts generated in the modules of Use (B1), Maintenance (B2), Repair (B3), Replacement (B4), Rehabilitation (B5), Use of energy in service (B6) and, Use of water in service (B7) are considered negligible.

Operational energy use (B6)

The performance of the product allows us to assume a useful life of 50 years, which is equivalent to the useful life of the building. Therefore, the impacts generated in the modules of Use (B1), Maintenance (B2), Repair (B3), Replacement (B4), Rehabilitation (B5), Use of energy in service (B6) and, Use of water in service (B7) are considered negligible.

Operational water use (B7)

The performance of the product allows us to assume a useful life of 50 years, which is equivalent to the useful life of the building. Therefore, the impacts generated in the modules of Use (B1), Maintenance (B2), Repair (B3), Replacement (B4), Rehabilitation (B5), Use of energy in service (B6) and, Use of water in service (B7) are considered negligible.

2.4. End of life (C1-C4)

Deconstruction and demolition (C1)

- C1: Deconstruction/Demolition: this process will be combined with the demolition of the building, for this reason it is not included in this study.

Transportation (C2)

- C2: Transport: it will be considered that the waste will be transported in a EURO VI truck attached to the demolition waste to a treatment plant located 50 km away.

Waste management for reuse, recovery and recycling (C3)

- C3: Waste management for reuse, recovery and recycling: the materials are not separated from the 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: the waste generated goes to landfill.

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

Since it has been considered that 100 % of the product at the end of its useful life is landfilled, the value of the module D is zero.

3. LIFE CYCLE ANALYSIS

This EPD has been carried out following the ISO 14040, ISO 14044 and RCP100 standards - Construction products in general – V.3 (2021), from the cradle to the grave and module D (A,B,C and D).

It has been carried out using the SimaPro 9.2 software together with the ECOINVENT3.6 database. For the basic indicators of environmental impact, the EF Method (adapted) V3.00 / Global (2019) has been used, for the other indicators the CML-IA (baseline) v4.07 and EDIP 2003 (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, supplier and product transport - correspond to factory data in 2020. The polluter pays and modularity principles have been followed. Wherever necessary, mass-based load allocation has been made. To represent the electricity consumption in the factory, the supplier's electricity mix has been used, which in this case has been Iberdrola 2020.

3.1. Functional Unit

The Functional Unit is 1 m² of Fitwall® panel installed in a building, taking into account a useful life of 50 years in a global geographic environment. Additionally, it should be taken into account that the surface density of the product varies from 5.9 to 6.4 kg/m², and the typical thickness is 5 mm.

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 = 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	2,64E+01	5,33E-01	1,56E+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	4,97E-02	0,00E+00	1,54E-02	0,00E+00	
Climate change - fossil (GWP-fossil)	kg CO2 eq	2,82E+01	5,32E-01	1,65E+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	4,97E-02	0,00E+00	1,54E-02	0,00E+00	
Climate change - biogenic (GWP-biogenic)	kg CO2 eq	-2,05E+00	3,87E-04	-1,01E-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	4,53E-05	0,00E+00	8,86E-06	0,00E+00	
Climate change - land use and changes in land use (GWP-luluc)	kg CO2 eq	2,28E-01	2,54E-04	1,16E-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	1,99E-05	0,00E+00	5,24E-07	0,00E+00	
Ozone layer depletion (ODP)	kg CFC 11 eq	6,31E-06	2,05E-08	5,74E-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	1,89E-09	0,00E+00	5,24E-10	0,00E+00	
Acidification (AP)	mol H+ eq	1,77E-01	1,02E-03	1,67E-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	2,31E-05	0,00E+00	2,60E-05	0,00E+00	
Eutrophication of fresh water (EP-freshwater)	kg P eq	7,93E-04	3,25E-06	4,77E-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	3,54E-07	0,00E+00	5,47E-08	0,00E+00	
Eutrophication of sea water (EP-marine)	kg N eq.	3,39E-02	1,50E-03	1,95E-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	2,80E-05	0,00E+00	6,89E-05	0,00E+00	
Terrestrial eutrophication (EP-terrestrial)	mol N eq.	3,56E-01	1,66E-02	2,07E-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	3,12E-04	0,00E+00	7,56E-04	0,00E+00	
Photochemical ozone formation (POCP)	kg NMVOC eq	1,13E-01	4,71E-03	6,64E-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	1,20E-04	0,00E+00	2,10E-04	0,00E+00	
Depletion of abiotic resources - minerals and metals (ADP-minerals&metals)	kg Sb eq	2,18E-04	1,12E-06	1,40E-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	1,76E-07	0,00E+00	7,42E-10	0,00E+00	
Depletion of abiotic resources - fossil fuels (ADP-fossil)	MJ, net calorific value	4,17E+02	8,12E+00	2,51E+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	7,53E-01	0,00E+00	2,05E-01	0,00E+00	
Water consumption (WDP)	m3 worldwide eq. private	1,59E+01	2,45E-02	8,96E-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	2,29E-03	0,00E+00	8,29E-05	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	2,76E+01	5,28E-01	1,62E+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	4,93E-02	0,00E+00	1,51E-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	5,98E+01	9,15E-02	3,21E+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	1,08E-02	0,00E+00	8,58E-04	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
Total use of renewable primary energy (primary energy and renewable primary energy resources used as feedstock)	MJ, net calorific value	5,98E+01	9,15E-02	3,21E+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	1,08E-02	0,00E+00	8,58E-04	0,00E+00
Non-renewable primary energy use, excluding non-renewable primary energy resources used as feedstock	MJ, net calorific value	4,48E+02	8,62E+00	2,69E+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	7,99E-01	0,00E+00	2,18E-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
Total use of non-renewable primary energy (primary energy and renewable primary energy resources used as feedstock)	MJ, net calorific value	4,48E+02	8,62E+00	2,69E+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	7,99E-01	0,00E+00	2,18E-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
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	3,89E-01	8,46E-04	2,23E-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	8,52E-05	0,00E+00	4,38E-06	0,00E+00
Hazardous waste removed	kg	8,05E+00	5,80E-01	7,72E-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	3,94E-02	0,00E+00	6,09E+00	0,00E+00
Non-hazardous waste eliminated	kg	5,39E-04	1,67E-05	3,04E-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	1,97E-06	0,00E+00	5,17E-07	0,00E+00
Radioactive waste disposed of	kg	9,43E-04	5,53E-05	5,85E-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	5,09E-06	0,00E+00	1,42E-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
Materials for recycling	kg	1,26E-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
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

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

Packaging	7,75E-01
Product	0,00E+00

3.4. Recommendations of this DAP

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

3.5. Cutting rules

At least 99 % of the total matter and energy of the life cycle has 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 goods.
- 2) Transportation of personnel to the plant.
- 3) Transportation of personnel within the plant.
- 4) Research and development activities.
- 5) Long-term emissions.

3.6. Additional environmental information

The product does not contain, in a percentage greater than 0.1 % by weight of the product, dangerous substances included in the "Candidate List of Substances of Very High Concern for Authorisation" of the European Agency for Chemical Substances and Preparations.

3.7. Other data

During the manufacturing process, there are some losses due to the excess of resin on the mold, and in the cut, due to the deburring.

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	EURO VI Truck 16-32 ton
Distance	Average distance: Truck 712 km (Europe and Spain). Ship: 2686 km (Europe, Rest of the world)
Capacity utilization (including empty return)	Percentage assimilated in the Ecoinvent database
Apparent density of transported product	6,10 kg/m ²
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)	For installation, 15 screws per 4 m ² of panel and 160 grams of putty are used.
Water use	Not required
Use of other resources	Not required
Quantitative description of the type of energy (regional mix) and consumption during the installation process	Not required
Waste of materials in the work before the treatment of waste, generated by the installation of the product (specify by type)	Losses of 5 % during the installation process
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)	The final destination of the waste is landfill disposal.
Direct emissions to air, soil and water	No emissions during product installation

4.3. Reference life (B1)

Parameter	Parameter expressed per functional unit
Reference Lifetime (RSL)	The reference service life of the product is 50 years
Characteristics and properties of the product	Decorative panels for different sectors (homes, offices, shops, restaurants, kitchens, bathrooms)
Requirements (conditions of use, frequency of maintenance, repair, etc.)	No emissions during product installation

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	Use a damp soapy cloth or brush for cleaning. Do not use solvents or corrosive products. It is considered negligible
Maintenance cycle	To customer's evaluation
Auxiliary materials for the maintenance process (specifying each material)	Detergent and water. It is considered negligible
Energy inputs for the maintenance process (quantity and type of energy vector)	It is considered negligible
Net consumption of fresh water during maintenance or repair	Not required
Material waste during maintenance (specifying the type)	Not required

Repair (B3)

Parameter	Parameter expressed per functional unit
Repair process	Not required
Proceso de inspección	Not required
Repair cycle	Not required
Auxiliary materials (specifying each material], for example lubricant	Not required
Interchange of parts during the product life cycle	Not required
Energy inputs during maintenance, type of energy, example: electricity, and quantity	Not required
Energy input during the repair, renovation, replacement process if applicable and relevant (quantity and type of energy vector)	Not required
Material waste during repair (specifying each material)	Not required
Consumo neto de agua dulce	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)	Not required
Change of worn parts in the product life cycle (specifying each material)	Not required
Net freshwater consumption	Not required

Rehabilitation (B5)

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

4.5. Reference life

Parameter	Parameter expressed per functional unit
Reference life	50 years
Declared properties of the product, finishes, etc.	Decorative panel based on alumina trihydrate presented in three versions: Printed Color - Enamel - Tint.
Application design parameters (manufacturer's instructions)	Fitwall® panels can be installed over wood, brick or plasterboard. For more information, consult the installation manual at www.krion.com
Estimation of the quality of execution, when installed according to the manufacturer's instructions	Reduced installation time. Fitwall® panels have been designed to achieve a change in appearance through quick installation and with little interruption in the work cycle. It does not need works.
Outdoor environment for outdoor applications. For example, weather, pollutants, UV radiation, temperature, etc.	The analyzed panels are for interior use
Indoor environment for indoor applications. For example, temperature, humidity, chemical exposure	Temperature: -20° to 80°
Terms of use. For example, frequency of use, mechanical exposure, etc.	Single use
Maintenance. For example, the required frequency, etc.	Not required

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

Parameter	Parameter expressed per functional unit
Auxiliary materials (specified by material)	Not required
Type of energy vector. For example, electricity, natural gas, district heating	Not required
Equipment output power	Not required
Net freshwater consumption	Not required
Characteristic features (energy efficiency, emissions, etc.)	Not required
Other scenario development assumptions. For example, transportation	Not required

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
	0	0	6.10
Assumptions for scenario development	Together with the inert materials on which it is applied. 100 % deposit in controlled landfill. 50 km of transport from the construction site to the landfill.		

5. ADDITIONAL INFORMATION

Fitwall® is a material with high aesthetic and functional features, with fire resistance Euroclass B s2 d0 (251.I.2111.092.ES.02 EXAP & 251.C.2111.091.ES.01) in accordance with the UNE-EN standard 13501; Class A (201126001SHF-001) according to ASTM E84 standard; and a reaction to fire classification M1 by UNE 23727:90 (251.Z.2006.047.ES.02). It is also classified as B1 (B s2 d0) according to GB8624.

The Fitwall® material complies with the REACH Regulation (T32020230320SC), has a low emission of volatile organic compounds according to the A+ classification under the French standard (56094-001-FVO-L) and with GREENGUARDGOLD (249726-420) by UL2818. Transparency is provided by the health product declaration (HPD) and it is free of Bisphenol A.

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

Lucas Pedro Berman

Accredited by the administrator of the DAPcons®
Programme



Verification date:

13/06/2022

References

- Underlying life cycle analysis (2020).
- General rules of the DAP® construction program.
- RCP 100 (version 3 - 27/05/2021) Construction products in general.
- UNE-EN 15804:2012+A2:2020 Sustainability in construction. Environmental Product Declarations.
- ISO 14040:2006 Environmental management – Life cycle analysis - Principles and framework.
- ISO 14044:2006 Environmental management - Life cycle analysis - Requirements and guidelines.
- ISO 14025:2006 Environmental labels and declarations - Type III environmental declarations - Principles and procedures.
- ISO 14020:2000 Environmental labels and declarations - General principles.
- ISO 21930:2017 Sustainability in building construction. Environmental declaration of construction products and services.

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