

COLORKER™ GROUP

Environmental Product Declaration. Wall ceramic tiles.
(BIII classification according to EN 14411:2016)

DAPcons®.NTe.101

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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GENERAL INFORMATION

Product

Wall ceramic tiles (BIII classification according to EN 14411:2016)

Company

COLORKER™
GROUP

Product description

The Wall Tile product includes different families of glazed ceramic products from the BIII water absorption group (dry-pressed, with water absorption > 10%), manufactured by COLORKER GROUP under the brands Colorker, ITT, and Proconcept.

The results presented in this declaration refer to an average product that groups several series. The average product has been calculated by taking into account the weights per m² of the different series included and weighting them according to the production of the period studied. The formats included within the scope of this study have thicknesses ranging from 6.5 mm to 10.40 mm and weights between 11.70 kg/m² and 17.02 kg/m², with an average weight of 15.83 kg/m².

Reference RCP

UNE-EN 17160:2019 Product category rules for ceramic tiles.

Production plant

COLORKER GROUP plant

Partida Els Plans s/n.

12592 Chilches - Castellón – Spain

Validity

From: 07/07/2026 Until: 07/07/2031

The validity of DAPcons®.NTe.101 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

Wall ceramic tiles (BIII classification according to EN 14411:2016)

**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**

COLORKER, S.A
Ctra. Alcora, Km 21'3 12110 - ALCORA, L' (España)
www.colorker.com

**Author of the Life cycle assessment:**

ReMa-Ingeniería, S.L.
Crevillente 1, entlo, 12005 - CASTELLON DE LA PLANA, CASTELLÓ, España

Declared product

Wall ceramic tiles (BIII classification according to EN 14411:2016)

Geographic representation

The raw materials used in the product have a global origin. The product is manufactured at the COLORKER GROUP production plant (Chilches, Castellón – Spain) and is distributed worldwide.

Variability between different products

The variability of the GWP-total impact category in stages A1–A3 among the different products included in this declaration is 29%.

Declaration number

DAPcons®.NTe.101

Version

01 - 20260707

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:
COLORKER, S.A

Programme Administrator Signature

Celestí Ventura Cisternas. President of Cateb

Verifier Signature

Serni Morera Carbonell. Marcel Gómez Consultoria Ambiental, S.L.. Verifier accredited by the administrator of the DAPcons® Programme

ENVIRONMENTAL PRODUCT DECLARATION

1. PRODUCT DESCRIPTION AND USE

The product included is an average Wall Tile that comprises different models of glazed ceramic tiles belonging to the BIII water absorption group according to UNE-EN 14411:2016: dry-pressed with water absorption > 10%.

The formats considered within the scope of this study have thicknesses ranging from 6.5 mm to 10.40 mm and weights between 11.70 kg/m² and 17.02 kg/m², with an average weight of 15.83 kg/m².

The results presented in this declaration refer to an average product that groups several series. The average product has been calculated by taking into account the weights per m² of the different series included and weighting them according to the production of the year studied.

The main recommended use for this product is as wall and façade cladding for indoor applications.

The CPC code of the products is 37310 – Ceramic tiles and slabs, glazed or unglazed.

1.1 Content information

Product components

The components of the BIII tile are:

- Clays: 35–45%
- Feldspar: 4–10%
- Kaolin: 9–15%
- Sands: 15–25%
- Limestone: 10–15%
- Reintroduced raw clay materials: 0–5%
- Reintroduced fired clay materials: 0–5%
- Others: 1–5%
- Glaze: 1–5%

Packaging materials

The packaging materials are:

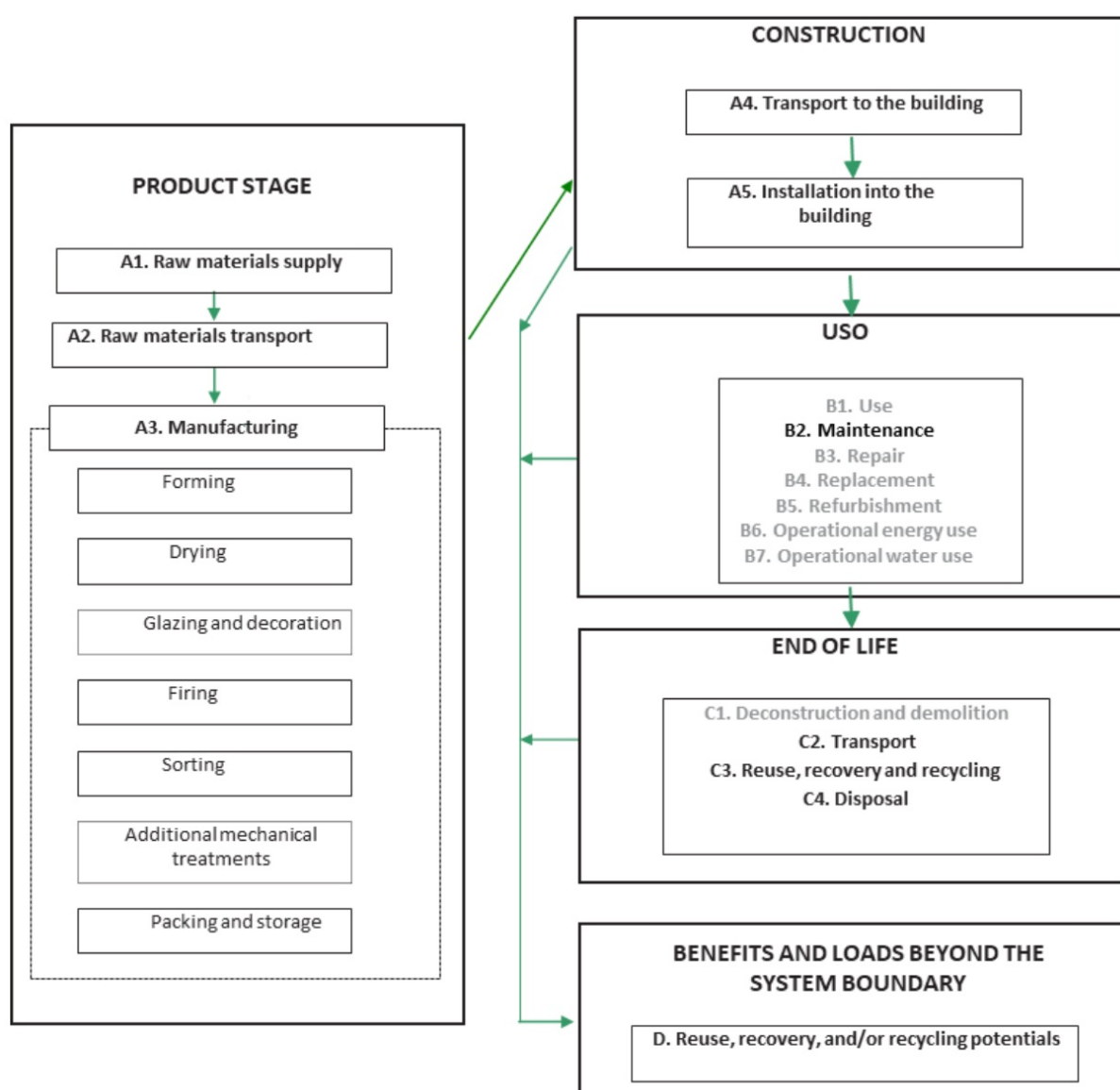
- Cardboard: 1.05E-01 kg/m²
- Plastic: 3.37E-02 kg/m²
- Wood: 9.42E-02 kg/m²



Image - BIII Product

Table of Technical characteristics Product Bill

Essential characteristics	Performance	Harmonised technical specification
Reaction to fire	A1	EN 14411
Released of dangerous substance for: - Cadmium: - Lead:	PND PND	
Breaking strength	PND	EN 14411
Slipperiness:	PND	
Tactility:	PND	
Bond strength / adhesion for: Cementitious Adhesive type C1	> 0,5 N/mm ²	EN 14411
Resistance to thermal shock	Pass	EN 14411
Durability for: - internal use:	Pass	EN 14411
- external use, Frost Resistance	No Pass	EN 14411



2. DESCRIPTION OF THE STAGES OF THE LIFE CYCLE

2.1. Manufacturing (A1, A2 y A3)

Raw Materials and transport (A1 y A2)

The average Wall Tile product is mainly composed of clay, sand, and feldspar, with a glaze layer primarily made

up of feldspar, carbonates, silicates, and kaolin, among other components.

The raw materials used have different origins (national, Turkey, or Italy).

This variation is due to the impossibility of sourcing these raw materials from a single origin. Raw materials coming from outside Spain are transported by cargo ship to the Port of Castellón and then by 24 t EURO VI trucks to the plants. For maritime transport, an average transoceanic cargo ship has been selected, with transport distances varying in each case depending on the origin. All raw materials are transported in bulk.

Manufacturing (A3)

To initiate the process, the raw materials are dosed in the appropriate proportions. Once the mixture is prepared, it is subjected to wet milling processes in a ball mill.

Subsequently, through the atomization process (carried out by external suppliers), excess moisture is removed from the slurry, obtaining a homogeneous mixture of the different components with a defined particle size and conditioning it for the proper shaping of the piece.

Next, the shaping of the piece is carried out. The molding of flat pieces is performed by unidirectional dry pressing in single-effect presses, where pressure is applied only on one surface of the piece. The tile leaving the press is dried, leaving residual moisture, increasing the strength of the green tile, which allows for subsequent processing. The pieces freshly removed from the dryer are coated with one or more layers of glaze. This treatment is carried out to confer a series of technical and aesthetic properties to the surface of the fired product, such as impermeability, gloss and color, surface texture, and mechanical and chemical resistance. The glazes are manufactured by external suppliers and are formulated by selecting the appropriate raw materials, whose chemical composition and mineralogical structure will significantly influence the properties of the final product.

Next, the pieces are introduced into the firing kiln. Firing is the most important stage of the ceramic tile production process, as it is the moment when the pieces undergo a fundamental change in their properties. Once fired, the tiles are transported to the sorting area, where aesthetic (visual) and dimensional control is carried out. Some series are rectified before sorting in order to achieve perfectly straight edges through the use of grinding wheels.

Finally, the finished product is packaged using cardboard, polyethylene, wood, and other materials. Once the pallet is formed, it is stored in the plant's logistics area ready to be transported to the customer.

Throughout the production process, losses of clay materials (raw and fired material) and industrial wastewater are generated, which are reintroduced into the ceramic tile manufacturing process through external managers (atomizers).

To reduce atmospheric emissions, so-called bag filters are used, consisting of a textile membrane permeable to gases that retains dust.

The electricity supplier mix (SHELL) for the year 2024 has been used (0.282 kgCO₂/kWh)

2.2. Construction process stage (A4 y A5)

Transport to the building site (A4)

COLORKER GROUP produces tiles that are marketed both nationally, within Europe, and in the rest of the world. For transcontinental transport, an average transoceanic cargo ship has been assumed. For road transport, the use of a 27 t EURO VI truck has been assumed.

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

Destinations	Type of transport	Percentage	Average km
Spain	Road	41	600
Europe	Road	25	1242
	Sea	16	812
Rest of the world	Road	1	548
	Sea	17	6870

Product installation process and construction (A5)

To characterize the product installation scenario, the provisions indicated in UNE-EN 17160 have been used:

- Auxiliary materials: Table 11. Option 1: Mortar 3.3 kg/m² and water 0.8 l/m².
- Packaging waste management: Table 12. Packaging waste scenarios.

Recycling (%) - Recovery (%) - Landfill (%)

Plastic 37.2 - 31.5 - 31.3

Paper and cardboard 84.6 - 8.3 - 7.1

Wood 36.1 - 30.0 - 33.9

A 3% installation waste has been accounted for, and the same management scenario described in the end-of-life stages has been considered.

2.3. Product use (B1-B7)

Use (B1)

The impact of the product at this stage is zero, as no materials are consumed and no emissions to the environment occur during its service life.

Maintenance (B2)

To characterize the cleaning scenario, the provisions indicated in UNE-EN 17160 have been followed:

Scenario for the maintenance of ceramic wall tiles:

- Residential use: 0.134 ml of detergent and 0.1 l of water are used to clean 1 m² of ceramic tiles once every three months.

Repair (B3)

According to COLORKER GROUP, the reference service life of the product is the same as that of the building in which it is installed, since, when properly installed, it is a durable product. Therefore, it does not require any repair.

Replacement (B4)

The product does not require any replacement.

Refurbishment (B5)

The product does not require any refurbishment.

Operational energy use (B6)

Ceramic products do not consume energy during the use phase of the building. Therefore, the default environmental impacts are zero.

Operational water use (B7)

Ceramic products do not consume water during the use phase of the building. Therefore, the default environmental impacts are zero.

2.4. End of life (C1-C4)

Deconstruction and demolition (C1)

Once its service life has ended, the product will be removed, either as part of a building refurbishment or during its demolition. In the case of building demolition, the impacts attributable to the de-installation of the product are negligible. Therefore, the impact of stage C1 (Deconstruction, demolition) has been considered negligible.

Transport (C2)

The transport of waste materials is carried out using a 27 t EURO VI truck, and an average distance of 50 km has been estimated from the demolition site to the landfill and to the recycling plant, in accordance with the indications set out in the PCRs.

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

It has been estimated that 70% of the residual ceramic material is sent for recycling, in accordance with the indications of the PCRs. Collection loads have been assumed to be negligible.

Disposal (C4)

It has been estimated that 30% of the residual ceramic material is sent to landfill, in accordance with the indications of the PCRs.

100% of the residual mortar is sent to landfill.

2.5. Reuse/recovery/recycling potential (D)

In this Module D, the existence of environmental loads and credits (i.e., avoided environmental impacts) outside the system boundaries due to the reuse, recovery, or recycling of some of the system output flows is declared. The net impacts resulting from accounting for the impacts of recycling and energy recovery processes are reported, and the impacts from the production of primary materials or fuels displaced or substituted by recycled ones are subtracted, taking into account the quality difference between primary and secondary materials.

As indicated in the PCRs and in UNE-EN 15804, the loads and benefits of residual materials destined for recycling generated in stages A1–A3 have not been accounted for in this module. Therefore, the environmental loads and benefits generated by the recycling of waste produced during the installation stage (packaging materials) and the End-of-Life stage have been accounted for.

3. LIFE CYCLE ASSESSMENT

This study has been carried out using the LCA tool SimaPro 10.2.0.3 by PRé Sustainability, the development of which is based on UNE-EN ISO 14040–14044 standards, and the Ecoinvent v3.11 (2024) database.

This LCA is of the “cradle to grave with module D” type, meaning that it covers the product manufacturing, construction, use, and end-of-life stages. Specific data from the COLORKER GROUP plant (Chilches, Castellón) corresponding to the year 2024 have been used to inventory the manufacturing stage.

The study is based on UNE-EN 15804:2012+A2:2020 (and its correction UNE-EN 15804:2012+A2:2020/AC:2021), on UNE-EN 17160:2019 Product Category Rules for ceramic tiles, and the principles of modularity and the “polluter pays” approach have been followed.

Allocation procedures:

-Recyclable waste: The waste is segregated at source, and no pre-treatment or conditioning activities are carried out at the plant; therefore, it is considered to reach 'end-of-waste' status at the manager's gate → only transport is accounted for.

Co-products from stage A1–A3 are not included in Module D.

-External recycled materials (chamotte): In the case of external chamotte, as it is a residual material originating from fired ceramic tiles, an economic value is assigned considering the average price of ceramic tiles and the price of the chamotte itself. Based on this price relationship, the environmental burdens of ceramic tile production are proportionally allocated to the chamotte.

-On-site production: allocation methods

Clay materials: mass allocation.

Energy:

Natural gas: mass allocation.

Electricity: proportional to the m² produced.

Other consumptions

Diesel fuel, packaging: proportional to kg of production.

Water: proportional to m² produced.

Emissions

CO₂ from combustion and other parameters: according to natural gas consumption per product.

Process CO₂ (decarbonation): proportional to the kg of paste produced.

Wastewater and waste: allocated proportionally to the kg produced.

In compliance with EN 15941:2024 standard, the EPD covers the average Wall ceramic tiles (BIII) products from the COLORKER factory in Chilches (Castellón, Spain), which operated during the stable production period from January to December 2024. The products are formed by dry pressing, decorated/glazed, and fired using natural gas. The EPD covers the 'cradle-to-grave and module D' system boundaries.

Background data were obtained from the Ecoinvent 3.11 (2024) database and from the specific ANFFECC (2024) sectorial EPDs for glazes. No fair, poor, or very poor data were found during the evaluation of the relevant data using the EN 15804:2012+A2:2020 standard, Annex E, showing a final data quality rating that ranges between 'Acceptable' and 'Very good'."

3.1. Functional Unit

"Covering 1 m² of a surface (interior wall) of a dwelling for 50 years with BIII ceramic wall tiles."

Additional comments

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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	8,79E+00	1,40E+00	2,29E+00	0,00E+00	8,19E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,44E-01	0,00E+00	2,20E-02	-1,46E-01	
Climate change - fossil (GWP-fossil)	kg CO2 eq	9,84E+00	1,40E+00	1,24E+00	0,00E+00	4,27E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,44E-01	0,00E+00	2,20E-02	-1,44E-01	
Climate change - biogenic (GWP-biogenic)	kg CO2 eq	-1,06E+00	0,00E+00	1,06E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	
Climate change - land use and changes in land use (GWP-luluc)	kg CO2 eq	4,50E-03	1,82E-04	4,46E-04	0,00E+00	3,93E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,61E-06	0,00E+00	1,11E-06	-1,55E-03	
Ozone layer depletion (ODP)	kg CFC 11 eq	1,53E-07	3,16E-08	8,85E-09	0,00E+00	7,46E-10	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,52E-09	0,00E+00	3,16E-10	-2,57E-09	
Acidification (AP)	mol H+ eq	1,42E+00	9,30E-03	4,59E-02	0,00E+00	4,46E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,37E-04	0,00E+00	1,98E-04	-8,43E-04	
Eutrophication of fresh water (EP-freshwater)	kg P eq	1,08E-04	2,19E-06	1,56E-05	0,00E+00	4,09E-06	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,51E-07	0,00E+00	7,22E-08	-8,89E-06	
Eutrophication of sea water (EP-marine)	kg N eq.	1,34E-01	2,38E-03	4,92E-03	0,00E+00	3,88E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,91E-05	0,00E+00	9,01E-05	-3,04E-04	
Terrestrial eutrophication (EP-terrestrial)	mol N eq.	1,47E+00	2,65E-02	5,41E-02	0,00E+00	1,50E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,74E-04	0,00E+00	9,88E-04	-2,92E-03	
Photochemical ozone formation (POCP)	kg NMVOC eq	4,28E-01	9,02E-03	1,57E-02	0,00E+00	2,17E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,39E-04	0,00E+00	3,00E-04	-8,14E-04	
Depletion of abiotic resources - minerals and metals (ADP-minerals&metals)	kg Sb eq	3,15E-05	3,92E-07	1,51E-06	0,00E+00	9,29E-08	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,73E-08	0,00E+00	7,31E-10	-1,98E-08	
Depletion of abiotic resources - fossil fuels (ADP-fossil)	MJ, net calorific value	1,46E+02	1,95E+01	1,01E+01	0,00E+00	4,67E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,05E+00	0,00E+00	2,81E-01	-2,45E+00	
Water consumption (WDP)	m3 worldwide eq. private	2,15E+00	1,90E-02	2,53E-01	0,00E+00	9,31E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,49E-03	0,00E+00	2,46E-04	-7,50E-01	
Eco-toxicity - freshwater (ETP-fw)	CTUe	1,12E+01	7,28E-01	1,64E+00	0,00E+00	8,77E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,38E-02	0,00E+00	1,07E-02	-7,91E-01	
Human toxicity, cancer effect (HTP-c)	CTUh	1,78E-09	9,11E-11	2,07E-10	0,00E+00	6,27E-11	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,69E-12	0,00E+00	1,51E-12	-5,27E-11	
Human toxicity, non-cancer effects (HTP-nc)	CTUh	4,26E-08	2,00E-09	6,22E-09	0,00E+00	1,80E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,57E-10	0,00E+00	2,90E-11	-1,25E-09	
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	9,84E+00	1,40E+00	1,24E+00	0,00E+00	4,27E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,44E-01	0,00E+00	2,20E-02	-1,44E-01	

A1 Raw material supply. A2 Transport. A3 Manufacturing. A4 Transport. 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. 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	5,75E+00	6,59E-02	8,48E-01	0,00E+00	1,60E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,29E-03	0,00E+00	1,32E-03	-9,44E-01	
Use of renewable primary energy used as raw material	MJ, net calorific value	8,26E+00	0,00E+00	-5,83E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	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	1,40E+01	6,59E-02	-4,98E+00	0,00E+00	1,60E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,29E-03	0,00E+00	1,32E-03	-9,44E-01	
Non-renewable primary energy use, excluding non-renewable primary energy resources used as feedstock	MJ, net calorific value	1,58E+02	2,07E+01	1,08E+01	0,00E+00	5,56E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,18E+00	0,00E+00	2,99E-01	-2,62E+00	
Use of non-renewable primary energy used as raw material	MJ, net calorific value	1,43E+00	0,00E+00	-9,70E-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	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	1,59E+02	2,07E+01	9,84E+00	0,00E+00	5,56E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,18E+00	0,00E+00	2,99E-01	-2,62E+00	
Use of secondary materials	kg	8,33E-01	0,00E+00	2,50E-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	4,90E-02	6,27E-04	6,21E-03	0,00E+00	2,34E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,04E-05	0,00E+00	9,50E-06	-1,87E-02	
Hazardous waste removed	kg	2,33E-01	1,27E-04	7,01E-03	0,00E+00	5,32E-06	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,39E-05	0,00E+00	1,86E-06	-2,09E-05	
Non-hazardous waste eliminated	kg	2,35E+00	4,93E-03	3,14E-01	0,00E+00	4,76E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,14E-04	0,00E+00	8,04E+00	-1,37E-03	
Radioactive waste disposed of	kg	3,31E-04	1,16E-06	1,07E-05	0,00E+00	6,34E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,05E-07	0,00E+00	1,59E-08	-4,21E-06	
Components for reuse	kg	4,63E-02	0,00E+00	9,42E-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	
Materials for recycling	kg	5,96E+00	0,00E+00	4,71E-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	1,11E+01	0,00E+00	
Materials for energy recovery (energy recovery)	kg	0,00E+00	0,00E+00	4,90E-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	
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	3,66E-01	
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	1,23E-01	
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	2,43E-01	

A1 Raw material supply. A2 Transport. A3 Manufacturing. A4 Transport. 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. 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	2,88E-01
Carbon content (biogenic) - product	0,00E+00

3.4. Recommendations of this EPD

The comparison of construction products shall be carried out using the same functional unit and at building level, i.e., including the performance of the product throughout its entire life cycle. Environmental Product Declarations from different Type III eco-labelling systems are not directly comparable, as the calculation rules may differ.

EPDs for construction products (DAPcons®) may not be comparable with other EPDs if they are not based on EN 15804+A2:2020/AC:2021.

This declaration represents the performance of the BIII wall tile product manufactured by COLORKER GROUP (brands Colorker, ITT, and Proconcept).

3.5. Cut-off rules

More than 99% of all mass and energy inputs and outputs of the system have been included, leaving out, among others, diffuse emissions at the factory. The excluded data are as follows:

- Diffuse particulate emissions to the atmosphere generated during the transport and storage of raw materials of a powdery nature.
- Channelled atmospheric pollutants generated during combustion stages (spray drying, piece drying, and firing) that are not measured because they are not required by the applicable legislation.
- Auxiliary materials used in ceramic production (kiln rollers, conveyor belts, oil, etc.), as these are negligible quantities when referred to the functional unit, representing less than 1% of the total mass of inputs to the unit process. Therefore, as “complementary materials” according to UNE-EN 17160:2019—defined as materials used in the unit process to manufacture the product but that do not form part of it—they may be neglected as indicated in section 6.3.5 of UNE-EN 17160:2019.
- Auxiliary materials used in the production of spray-dried powders and glazes have also not been taken into account, as these are considered upstream processes over which the manufacturer has no direct control. UNE-EN 17160:2019 allows the use of generic data or conservative estimates in such cases (section 6.3.6), permitting their justified exclusion if they are marginal in terms of energy and mass or if specific supplier data are not available.
- The production of machinery and industrial equipment, as indicated in section 6.3.5 of UNE-EN 17160:2019.

3.6. Additional environmental information

The product included does not release hazardous substances into indoor air, soil, or water during the use phase. The product does not contain substances included in the Candidate List of Substances of Very High Concern for authorisation of the European Chemicals Agency.

3.7. Other data

Waste from the ceramic industry is classified as non-hazardous waste in the European List of Waste under code EWC 10 12 08 “Ceramic waste, bricks, tiles, and construction materials [after the firing process]” and EWC 17 01 07

“Mixtures of concrete, bricks, tiles, and ceramic materials other than those mentioned in EWC code 17 01 06.”

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 27 t: 2.23E-05 kg diesel/kg·km Cargo ship transport, freight, sea, container ship {GLO} market for transport, freight, sea, container ship
Distance	Average based on the distances considered for Spain, Europe, and the rest of the world: 857 km by road 1515 km by sea
Capacity utilization (including empty return)	85% for road transport and 100% for the cargo ship.
Apparent density of transported product	1761 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)	Mortar: 3.3 kg / m ²
Water use	0.8 kg of water / m ²
Use of other resources	Not detected
Quantitative description of the type of energy (regional mix) and consumption during the installation process	Not detected
Waste of materials in the work before the treatment of waste, generated by the installation of the product (specify by type)	Packaging waste: 2.39E-01 kg Waste (losses): 4.7E-01 kg

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)	Cardboard – energy recovery: 8.94E-03 kg Cardboard – recycling: 9.11E-02 kg Cardboard – landfill: 7.65E-03 kg Plastic – energy recovery: 1.09E-02 kg Plastic – recycling: 1.29E-02 kg Plastic – landfill: 1.09E-02 kg Pallet – energy recovery: 2.91E-02 kg Pallet – recycling: 3.50E-02 kg Pallet – landfill: 3.29E-02 kg Waste (losses) – recycling: 0.332 kg Waste (losses) – landfill: 0.142 kg
Direct emissions to air, soil and water	Not detected

4.3. Reference life (B1)

Parameter	Parameter expressed per functional unit
Reference Lifetime (RSL)	50 years
Characteristics and properties of the product	Water absorption > 10%
Requirements (conditions of use, frequency of maintenance, repair, etc.)	1 cleaning per quarter

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	0.134 ml of detergent and 0.1 l of water to clean 1 m ² of ceramic tiles once every three months.
Maintenance cycle	1 cleaning per quarter
Auxiliary materials for the maintenance process (specifying each material)	0.134 ml of detergent once per quarter
Energy inputs for the maintenance process (quantity and type of energy vector)	Not detected
Net consumption of fresh water during maintenance or repair	0.020 m ³
Material waste during maintenance (specifying the type)	Not detected

Repair (B3)

Parameter	Parameter expressed per functional unit
Repair process	Not applicable
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)	Not applicable
Change of worn parts in the product life cycle (specifying each material)	-
Net freshwater consumption	-

Refurbishment (B5)

Parameter	Parameter expressed per functional unit
Rehabilitation process	Not applicable
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	50 years
Declared properties of the product, finishes, etc.	Water absorption Group BIII, E > 10% (UNE-EN 14411)
Application design parameters (manufacturer's instructions)	The installation of ceramic tiles requires qualified personnel with proven experience, as well as appropriate tools and equipment.
Estimation of the quality of execution, when installed according to the manufacturer's instructions	50 years. The information provided on the packaging should be reviewed beforehand, and the manufacturer's recommendations must be strictly followed.
Outdoor environment for outdoor applications. For example, weather, pollutants, UV radiation, temperature, etc.	The product is not suitable for outdoor installation.
Indoor environment for indoor applications. For example, temperature, humidity, chemical exposure	The product is suitable for indoor installation.
Terms of use. For example, frequency of use, mechanical exposure, etc.	Not applicable
Maintenance. For example, the required frequency, etc.	1 cleaning per quarter

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

Parameter	Parameter expressed per functional unit
Auxiliary materials (specified by material)	Not applicable
Type of energy vector. For example, electricity, natural gas, district heating	-

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
	19.13	0	11.08	0	8.05
Assumptions for scenario development	The transport of waste materials is carried out using a EURO VI 20–28 t truck. The distance to the recycling facility and to the landfill is 50 km.				

5. ADDITIONAL INFORMATION

This DAPcons® has been prepared following the mutual recognition process between the INIES programme and the DAPconstrucción programme.

- DECLARATION OF PERFORMANCE No. 05P-03 (Colorker brand)
- DECLARATION OF CONFORMITY No. ITT 01-07-2013 BIII (ITT brand)
- DECLARATION OF PERFORMANCE No. Proconcept 01-07-2013 BIII (Proconcept brand)

The company holds the following certifications:

- UNE-EN ISO 9001:2015 (Certificate No. ES23/00000746)
- UNE-EN ISO 50001:2018 (Certificate No. 13019-EN)

6. PCR AND VERIFICATION

This statement is based on Document

UNE-EN 17160:2019 Product category rules for ceramic tiles. Ceramic tile

Independent verification of the declaration and data, in accordance with ISO 14025 and IN UNE-EN 17160:2019



External

Third party Verifier

Serni Morera Carbonell

Accredited by the administrator of the DAPcons[®]
Programme



**Marcel
Gómez**
Consultoria Ambiental

Verification date:

07/07/2026

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