CERÁMICA
A MANO ALZADA

ENVIRONMENTAL PRODUCT DECLARATION:
Stoneware ceramic latticework for exterior walls

DAPcons®.c-008.269

DECLARACIÓN AMBIENTAL DE PRODUCTO
ENVIRONMENTAL PRODUCT DECLARATION

According to the standards:
ISO 14025 and UNE-EN 15804:2012+A2:2020/AC:2021

This declaration has been promoted and developed with funds derived from the agreement signed between the Valencian Regional Government and the Valencia Institute of Building.

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ENVIRONMENTAL PRODUCT DECLARATION

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According to the standards:

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

GENERAL INFORMATION

Product

Stoneware ceramic latticework for exterior walls

Company

CERÁMICA
A MANO ALZADA

Product description

The product in question is an extruded ceramic tile with a natural, unglazed finish in a sand color and a water absorption rate of <3% (which corresponds to the low-absorption group, BIb, in accordance with the standard UNE-EN 14411:2016 Ceramic tiles. Definitions, classification, characteristics, evaluation and verification of performance, and marking). The piece under study, measuring 15x15 cm and 10 cm thick, with an average weight of 98.099 kg/m² and 2.725 kg/unit, represents the average of the VIBRA and TRAMA collections. The latticework, as part of the exterior enclosure, serves primarily as a sun filter, allowing the necessary passage of light and ventilation.

Reference RCP

RCP c-008 Product category rule. Fired clay parts and accessories for unprotected masonry works.

Production plant

GRESAN production plant, C. Estación el Portillo, 1, 44500 Andorra, (Teruel)

CMA distribution plant, Carrer Barranc de Ratils, 6 Nave, 12200 Onda (Castellón)

Validity

From: 02/02/2026 Until: 02/02/2031

The validity of DAPcons®.c-008.269 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

Stoneware ceramic latticework for exterior walls

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
Cerámica a Mano Alzada S.L.
Calle Cervantes 22, 2A 12200 - ONDA (España)
https://ceramicaamanoalzada.com/

Author of the Life cycle assessment:
Instituto Valenciano de la Edificación
Camí de Vera, s/n, Algirós, 46022 València, Valencia, 46022 - VALENCIA, VALENCIA, España
https://www.five.es/

Declared product

Stoneware ceramic latticework for exterior walls

Geographic representation

Production: Spain

Sales and End of Life: Spain

Variability between different products

The variability in the Global Warming Potential impact category for stages A1-A3 of the various products included in this declaration is 31% and therefore does not require compliance with ISO 21930.

Declaration number

DAPcons®.c-008.269

Issue date

10/12/2024

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: **Cerámica a Mano Alzada S.L.**

Programme Administrator Signature

Celestí Ventura Cisternas. President of Cateb

Verifier Signature

HELIOS POMAR BLANCO. tlf: 677098569; mail: hpomar@serviciosqma.com. Verifier accredited by the administrator of the DAPcons® Programme

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ENVIRONMENTAL PRODUCT DECLARATION

1. PRODUCT DESCRIPTION AND USE

The product in question is an extruded ceramic tile with a natural, unglazed finish in a sand color and a water absorption rate of <3% (which corresponds to the low-absorption group, BIb, in accordance with the standard UNE-EN 14411:2016 Ceramic tiles. Definitions, classification, characteristics, evaluation and verification of performance, and marking). The piece under study, measuring 15x15 cm and 10 cm thick, with an average weight of 98.099 kg/m² and 2.725 kg/unit, represents the average of the VIBRA collections manufactured at the GRESAN Andorra plant (Teruel) and distributed from CMA in Onda (Castellón), whose variability exceeds 10% and therefore does not require compliance with ISO 21930.

The latticework, as part of the exterior enclosure, serves the main function of solar filtration, allowing the necessary passage of light and ventilation. It is considered to have a useful life of 50 years.

1.1 Content information

Product components

The composition of the ceramic latticework for exterior wall is:

- Clay: 100%

Packaging materials

The packaging materials are:

Packaging mat 1 - cardboard: 2.29E+00 kg/m²

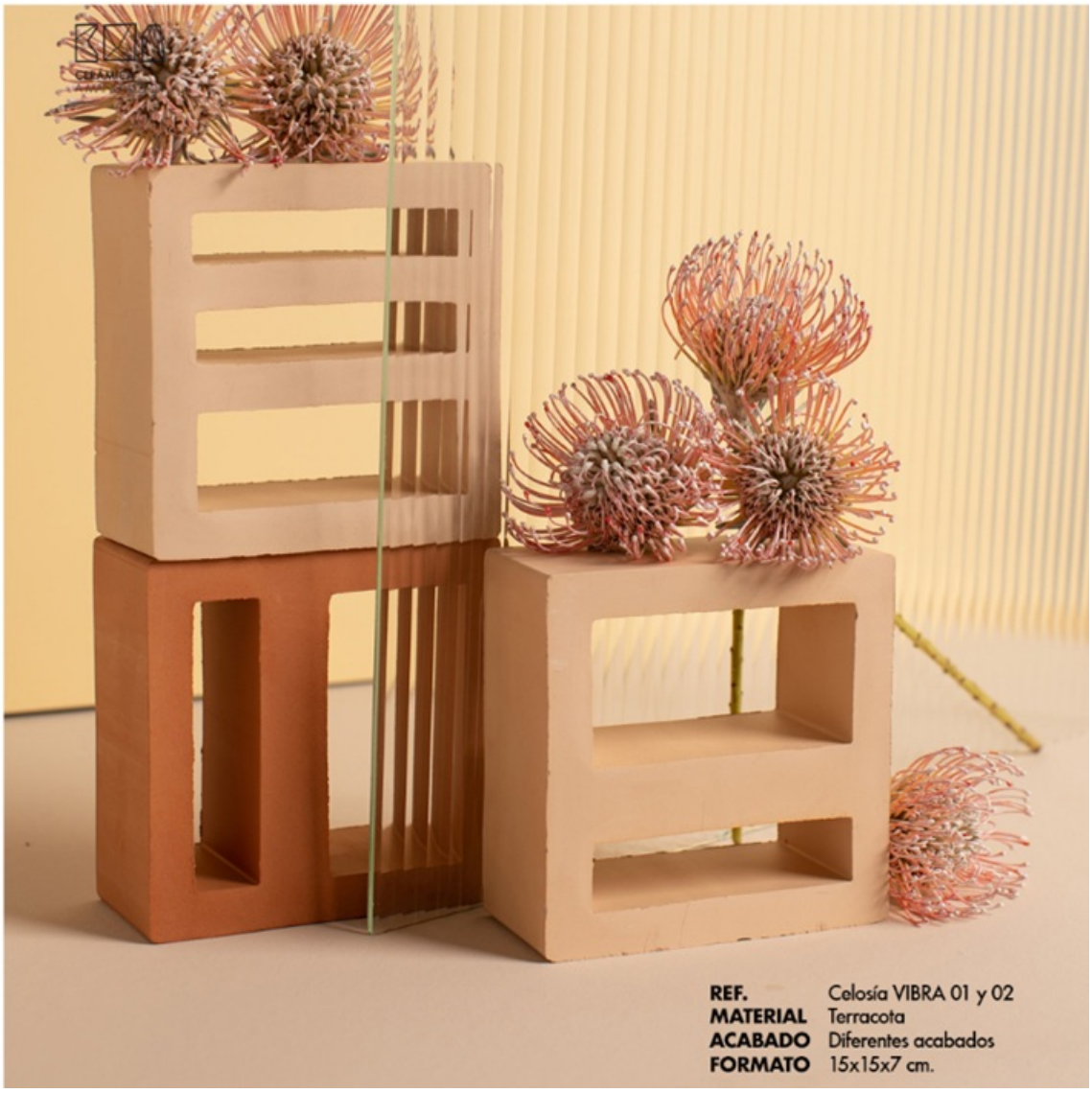
Packaging mat 2 - plastic: 1.85E-01 kg/m²

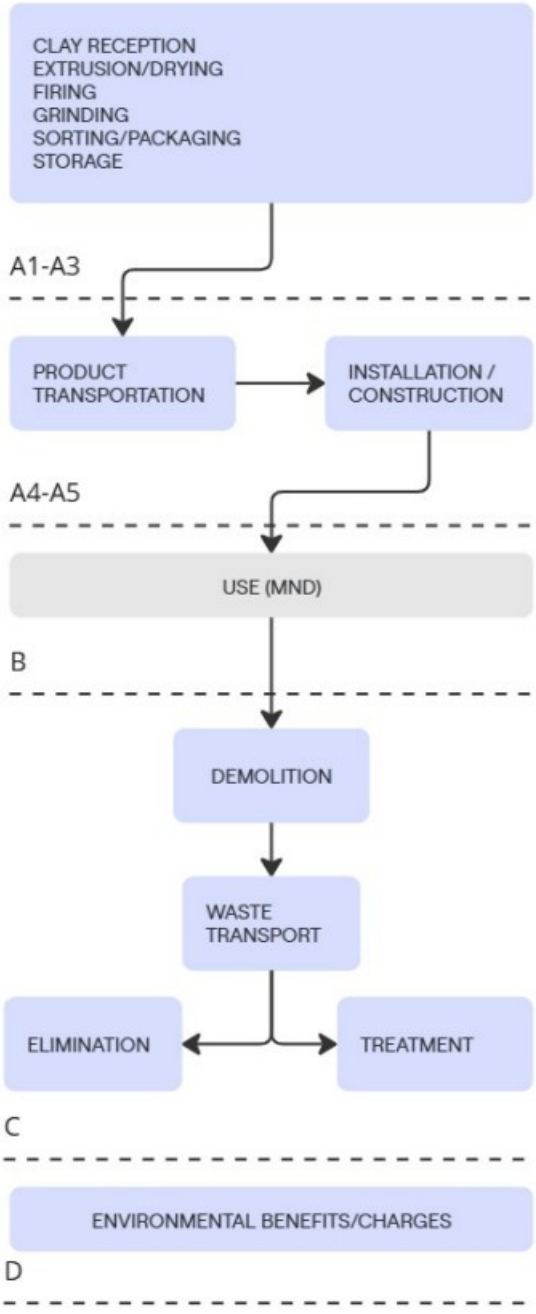
Packaging mat 3 - pallet: 3.42E+00 kg/m²

Name	Value	Unit
Functional unit (thickness 10 cm)	1	m2
Nominal weight	98,099	Kg/m2
Bulk density	980,99	Kg/m3
Functional unit volumen	0,1	m3
Conversion factor to 1kg	0,1*980,99	

Properties and conversion factors of the declared unit

Water absorption EN ISO 10545-3:	<3%
Linear thermal expansion EN ISO 10545-8:2014	4,9x10-6/•c-1
Thermal shock resistance EN ISO 10545-9:2013	Resist
Frost Resistance EN ISO 10545-12:1997	Resist
Resistance to Chemical Agents EN ISO 10545-13:2017	Class A/LA/HA





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 product is composed of clays. The raw materials come from local mines located in Oliete and Gargallo (Teruel).

Raw materials are transported in bulk from the mining sites to the production center, located less than 50 km away. Transportation is carried out using 27-ton Euro VI trucks.

Manufacturing (A3)

Once received at the plant, the clays are measured out and mixed according to the formulation required for each type of product. The resulting mixture undergoes a crushing process in order to reduce the particle size and improve the homogenization of the material. The clay is then ground in a pendulum mill until it reaches the

appropriate particle size and is stored in intermediate silos equipped with dosing systems.
The material is then transported by conveyor belts to the mixer, where water is added to obtain a plastic mass suitable for extrusion molding. The mass is fed into the extruder, equipped with a vacuum system, in order to remove trapped air and form a continuous bar with the geometry of the product. This bar is then cut to define the final dimensions of the pieces.
The shaped pieces are stacked on trolleys and placed in the dryer, where controlled drying curves reduce the moisture content to less than 1%. Once dry, the pieces are loaded onto wagons and fired in batch kilns, using specific thermal curves to achieve the required dimensional and color characteristics.
Once fired, the ceramic pieces are unloaded, palletized, and prepared for packaging. The finished product is temporarily stored in the outdoor area of the plant, awaiting transfer to the logistics warehouse (Onda), where it is conditioned for shipment or order preparation.

2.2. Construction process stage (A4 y A5)

Transport to the building site (A4)

The CMA product is marketed nationally. A 27-ton EURO V truck has been used for road transport. For inter-island transport, a ferry has been estimated, including the weight of land transport. In both cases, models from the Ecoinvent database have been used.

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

Destinations	Type of transport	Percentage	Average km
Spain	Camión EURO V 27 t	98	289.22
	Ferry	2	7.33

Product installation process and construction (A5)

For the assembly stage and according to the documentation provided, the installation includes, in addition to the study parts, RND 5/S triangulated reinforcement mesh 50 mm wide every 3 vertical rows, 6 mm diameter stainless steel rods every 3 horizontal pieces, and 10 mm thick cement mortar joints according to the distribution of parts.
To calculate the yields of the auxiliary materials, the yields proposed by the BDC25 construction database of the Valencian Building Institute have been followed:
- Cement mortar: 1.42E+01 kg
- Tap water: 1.97E+00 kg
- Steel: 3.96E+00 kg
- Ceramic latticework: 2.94E+00 kg (waste)
- Land transport: 870 kgkm
- Sea transport: 22.05 kgkm

Waste scenarios for packaging proposed by RCP-008: Fired clay products used in construction:
- Packaging mat 1 - cardboard: 8.54E-01 kg (recycling 71%; recovery 4%; landfill 25%)
- Packaging mat 2 - plastic: 6.90E-02 kg (recycling 41%; recovery 14%; landfill 45%)
- Packaging mat 3 - pallet: 1.27E+00 kg (recycling 69%; recovery 16%; landfill 15%)
- Ceramic latticework: 2.94E+00 kg (waste) (recycling 75%; landfill 25%)

Residual materials are transported using a EURO V 7.5-16 t truck.

The energy required by mixers, if necessary, is assumed to be negligible.

Regarding product losses at the facility, according to RCP008. 7.2.3 Construction process stage: these will be 3% for the rest of the fired clay products used in construction. This also includes the 3% transport (A4) cost that can be passed on as a result of these losses.

2.3. Product use (B1-B7)

Use (B1)

Undeclared

Maintenance (B2)

Undeclared

Repair (B3)

Undeclared

Replacement (B4)

Undeclared

Refurbishment (B5)

Undeclared

Operational energy use (B6)

Undeclared

Operational water use (B7)

Undeclared

2.4. End of life (C1-C4)

Deconstruction and demolition (C1)

At the end of its useful life, the product will be removed, either as part of a building renovation or during demolition. In the context of building demolition, the impacts attributable to the removal of the product are negligible. Similarly, the removal of the product during renovation has been considered negligible, as the amount of energy required to remove 1 m^2 of ceramic tile is less than 1% of the total amount of energy required throughout the entire life cycle. For all these reasons, the impact of stage C1 Deconstruction, demolition has been estimated to be negligible.

Transport to waste processing (C2)

The transport of waste materials is carried out using a EURO V 7.5-16 t truck, and the average distance from the demolition site to the final destination has been estimated at 50 km. To characterize the end-of-life scenario for ceramic products, RCP-008: Fired clay products used in construction has been used as a basis.

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

It has been estimated that 75% of ceramic waste material is sent for recycling, as indicated by the RCP. Collection costs have been assumed to be negligible.

Disposal (C4)

It has been estimated that 25% of ceramic waste material is sent to landfill, as indicated by the RCP. For steel and cement mortar, 100% has been considered as landfill.

2.5. Reuse/recovery/recycling potential (D)

In this Module D, the existence of environmental charges and credits (i.e., avoided environmental impacts) outside the boundaries of the system due to the reuse, recovery, or recycling of some of the system's output streams is declared. The net impacts resulting from accounting for the impacts of the recycling process are declared and the production impacts of the primary materials or fuels displaced or replaced by the recycled ones are subtracted, taking into account the difference in quality between the primary and secondary material. It has been considered that loads are avoided in manufacturing and thermal and/or electrical energy recovered from waste such as cardboard, film, and pallets, in the installation and at the end of the product's life (recycling or reuse). As indicated in the RCPs and in UNE-EN 15804, the loads and benefits of waste 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 in the Use and End-of-Life stages have been accounted for.

3. LIFE CYCLE ASSESSMENT

This study was conducted using the SimaPro 10.3.0.1 LCA tool from PRé Sustainability, which is based on the UNE-EN ISO 14040-14044 standards and the Ecoinvent v3.11 (2025) database.
Once each of the unit processes described above has been modeled in the SimaPro software, the impact assessment is carried out following the guidelines of the UNE-EN ISO 14044:2006 standard. This LCA has been prepared following the guidelines of RCP-008-AENOR GlobalEPD Revision 2 of June 2024: Fired clay products used in construction and meets the requirements of international standards ISO 14040:2006 and ISO 14044:2006, as well as ISO 21930, ISO 14025, and UNE-EN 15804:2012+A2:2020/AC:2021. The product studied has been considered assignable to the RCP-008 group: Fired clay parts and accessories for unprotected masonry construction.
In accordance with the hierarchy established in ISO 14044 and EN 15804, a mass-based physical allocation procedure (mass allocation) has been applied in this study. As it was not possible to avoid allocation by subdividing processes, all material and energy inputs, as well as emissions and output flows from the manufacturing process, have been distributed proportionally according to this underlying physical relationship.

3.1. Declared Unit

The function of the system under study is to produce a lattice-type ceramic stoneware piece for exterior cladding. The declared unit of the DAP is: “1 m^2 of ceramic lattice for exterior cladding.”

Additional comments

-

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	MND	MND	MND	MND	MND	MND	MND	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	8,80E+01	4,43E+00	1,62E+01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,13E+00	2,99E-01	9,61E-02	1,37E-01
Climate change - fossil (GWP-fossil)	kg CO2 eq	8,91E+01	4,43E+00	1,54E+01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,13E+00	0,00E+00	9,56E-02	-1,66E+00
Climate change - biogenic (GWP-biogenic)	kg CO2 eq	-1,13E+00	9,89E-04	8,26E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,53E-04	2,99E-01	4,60E-04	1,81E+00
Climate change - land use and changes in land use (GWP-luluc)	kg CO2 eq	2,51E-02	7,15E-05	8,14E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,78E-05	0,00E+00	1,24E-05	-1,53E-02
Ozone layer depletion (ODP)	kg CFC 11 eq	6,01E-07	9,99E-08	8,33E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,55E-08	0,00E+00	3,21E-09	-2,77E-08
Acidification (AP)	mol H+ eq	4,07E-01	7,97E-03	6,17E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,38E-03	0,00E+00	1,11E-03	-1,05E-02
Eutrophication of fresh water (EP-freshwater)	kg P eq	2,40E-04	2,75E-06	6,11E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,94E-07	0,00E+00	2,63E-06	-8,53E-05
Eutrophication of sea water (EP-marine)	kg N eq.	1,66E-01	1,86E-03	1,69E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,06E-04	0,00E+00	2,97E-04	-3,61E-03
Terrestrial eutrophication (EP-terrestrial)	mol N eq.	1,85E+00	2,05E-02	1,82E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,35E-03	0,00E+00	3,21E-03	-3,60E-02
Photochemical ozone formation (POCP)	kg NMVOC eq	4,98E-01	1,25E-02	5,75E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,71E-03	0,00E+00	1,14E-03	-9,70E-03
Depletion of abiotic resources - minerals and metals (ADP-minerals&metals)	kg Sb eq	1,73E-06	1,14E-07	5,40E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,93E-08	0,00E+00	2,30E-08	-2,41E-07
Depletion of abiotic resources - fossil fuels (ADP-fossil)	MJ, net calorific value	5,82E+02	5,88E+01	1,39E+02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,49E+01	0,00E+00	2,25E+00	-2,62E+01
Water consumption (WDP)	m3 worldwide eq. private	5,55E+00	1,93E-02	3,82E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,89E-03	0,00E+00	-1,24E+00	-1,78E+00
Eco-toxicity - freshwater (ETP-fw)	CTUe	2,89E+01	2,11E+00	6,50E+01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,98E-01	0,00E+00	1,30E+00	-6,59E+00
Human toxicity, cancer effect (HTP-c)	CTUh	6,13E-09	2,81E-10	1,27E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,41E-11	0,00E+00	3,05E-11	-6,93E-10
Human toxicity, non-cancer effects (HTP-nc)	CTUh	1,32E-07	2,92E-08	1,76E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,31E-09	0,00E+00	2,23E-09	-1,42E-08
The Indicador includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This Indicador is thus equal to the GWP Indicador originally defined in EN 15804:2012+A1:2013. Can be obtained from IPCC characterization factors.																
Global Warming Potential (GHG)	kg CO2 eq	8,92E+01	4,43E+00	1,58E+01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,13E+00	0,00E+00	9,58E-02	-1,69E+00

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

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

Parameter	Unit	Life cycle stage														Module D
		Product stage	Construction Process Stage		Use stage							End of life stage				
		A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	
Use of renewable primary energy excluding renewable primary energy resources used as feedstock	MJ, net calorific value	1,14E+02	1,46E-01	1,50E+01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,73E-02	0,00E+00	3,37E-02	-1,21E+01
Use of renewable primary energy used as raw material	MJ, net calorific value	2,48E+01	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	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	1,38E+02	1,46E-01	1,50E+01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,73E-02	0,00E+00	3,37E-02	-1,21E+01
Non-renewable primary energy use, excluding non-renewable primary energy resources used as feedstock	MJ, net calorific value	6,16E+02	6,25E+01	1,48E+02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,59E+01	0,00E+00	2,39E+00	-2,79E+01
Use of non-renewable primary energy used as raw material	MJ, net calorific value	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	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	6,16E+02	6,25E+01	1,48E+02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,59E+01	0,00E+00	2,39E+00	-2,79E+01
Use of secondary materials	kg	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	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	MND	MND	MND	MND	MND	MND	MND	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	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Net use of freshwater resources	m3	1,16E-01	1,14E-03	1,14E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,89E-04	0,00E+00	-2,68E-02	-5,10E-02
Hazardous waste removed	kg	2,55E-02	3,89E-04	1,54E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,93E-05	0,00E+00	1,48E-05	-1,46E-04
Non-hazardous waste eliminated	kg	2,08E-01	1,96E-03	1,87E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,03E-04	0,00E+00	1,37E+01	-1,16E-02
Radioactive waste disposed of	kg	1,24E-03	3,53E-06	1,30E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,01E-07	0,00E+00	5,64E-07	-6,74E-05
Components for reuse	kg	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	0,00E+00	0,00E+00	1,51E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,36E+01
Materials for energy recovery (energy recovery)	kg	0,00E+00	0,00E+00	2,47E-01	MND	MND	MND	MND	MND	MND	MND	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	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,41E+01
Exported electrical energy (AEE)	MJ	0,00E+00	0,00E+00	0,00E+0	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,78E+00
Exported thermal energy (EET)	MJ	0,00E+00	0,00E+00	0,00E+0	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,33E+00

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

Table 5. Kg of biogenic carbon

Carbon content (biogenic) - packaging	1,35E+00
Carbon content (biogenic) - product	0,00E+00

3.4. Recommendations of this EPD

The comparison of construction products must be made using the same functional unit and at the building level, i.e., including the performance of the product throughout its entire life cycle. Environmental product declarations from different Type III ecolabeling systems are not directly comparable, as the calculation rules may differ. EPDs for construction products (EPDcons®) may not be comparable with other EPDs if they are not based on standard EN 15804+A2:2020/AC:2021.
This declaration represents the average performance of the product m^2 of ceramic latticework for exterior cladding by CMA.

3.5. Cut-off rules

More than 95% of all mass and energy inputs and outputs from the system have been included, excluding, among other things, fugitive emissions from the factory and the production of industrial machinery and equipment.

3.6. Additional environmental information

The product does not release hazardous substances into indoor air, soil, or water during use.
No hazardous substances listed in the Candidate List of Substances of Very High Concern (SVHC) for authorization are used during the product's life cycle.

3.7. Other data

Waste from the ceramics industry is included as “non-hazardous waste” in the European list of waste with code EWC 101201: “Waste from the preparation of mixtures prior to the firing process,” EWC 101208 “Waste from ceramics, bricks, tiles, and construction materials (after the firing process),” and EWC 101299 “Waste not specified in another category” (Decision 2014/955/EU).

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 16-32 t truck Ferry
Distance	Road transport: 289.22 km Sea transport: 7.33 km
Capacity utilization (including empty return)	Road and sea transport: 100% assimilated into the Ecoinvent 3.11 database.
Apparent density of transported product	980,99 kg/m3
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: 14,288 kg Steel: 3,966 kg
Water use	Tap water: 1,973 kg
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)	Wood: 1.27E+00 kg Plastic: 6.89E-02 kg Cardboard: 8.54E-01 kg Inert: 2.94E+00 kg
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)	Recycling Wood: 8.77E-01 kg Plastic: 2.82E-02 kg Cardboard: 6.06E-01 kg Inert: 2.21E+00 kg Incineration Wood: 2.03E-01 kg Plastic: 9.64E-03 kg Cardboard: 3.42E-02 kg
Direct emissions to air, soil and water	Not detected

4.3. Reference life (B1)

Undeclared

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

Maintenance (B2)

Undeclared

Repair (B3)

Undeclared

Replacement (B4)

Undeclared

Refurbishment (B5)

Undeclared

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

Undeclared

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
	98.09	0	73.57	0	24.52
Assumptions for scenario development	Residual materials are transported using a EURO V 7.5-16 t truck. Distance to recycling facility and landfill: 50 km.				

5. ADDITIONAL INFORMATION

Water absorption (UNE-EN ISO 10545-3)
<3%
Linear thermal expansion (UNE-EN ISO 10545-8:2014)
4.9x10-6/•c-1
Thermal shock resistance (UNE - EN ISO 10545-9:2013)
Resistant
Frost resistance (UNE-EN ISO 10545-12:1997)
Resistant
Resistance to chemical agents (UNE-EN ISO 10545-13:2017)

Class A/LA/HA

6. PCR AND VERIFICATION

This statement is based on Document

RCP c-008 Product category rule. Fired clay parts and accessories for unprotected masonry works.

Independent verification of the declaration and data, in accordance with ISO 14025 and IN RCP c-008

☑ External

Third party Verifier

HELIOS POMAR BLANCO
Accredited by the administrator of the DAPcons® Programme

Verification date:

02/02/2026

References

- Product Life Cycle Analysis: Stoneware ceramic latticework for exterior cladding v4. Valencia Institute of Building (IVE). January 2026 (Unpublished)
Standards:
- ISO 14020:2000 Environmental labels and declarations – General principles
- ISO 14025:2006 Environmental labels and declarations – Type III environmental declarations – Principles and procedures
- ISO 14040:2006 Environmental management – Life cycle assessment – Principles and framework
- ISO 14044:2006 Environmental management – Life cycle assessment – Requirements and guidelines
- ISO 21930:2007 Sustainability in building construction – Environmental declaration of building products
- UNE-EN 15804:2012+A2:2020, Sustainability of construction works - Environmental product declarations - Product category rules
- UNE-EN ISO 14067:2019 “Greenhouse gases - Carbon footprint of products - Requirements and guidelines for quantification (ISO 14067:2018)”
- RCP-008-AENOR GlobalEPD Revision 2 of June 2024: Fired clay products used in construction

Databases and characterization factors:
- Ecoinvent v3.11 (2025) Developed by Ecoinvent Centre, More information: http://www.ecoinvent.ch
- EC-JRC characterization factors, available at the following web link: https://eplca.jrc.ec.europa.eu/LCDN/EN15804.xhtml

Programme Manager

Colegio de la Arquitectura Técnica de Barcelona (Cateb)

Bon Pastor, 5 · 08021 Barcelona www.cateb.cat