# materials platform



# CERAMIC PRODUCTS ARGENTA CERÁMICA

Medium Stoneware Tile

THIS INCLUDES DIFFERENT MODELS OF DRY-PRESSED STONEWARE TILES: ABSORPTION GROUP BIA WITH WATER ABSORPTION GROUP BIA WITH WATER ABSORPTION GROUP BIA WITH WATER ABSORPTION BETWEEN 0.5% AND ≤3%

CERAMIC FLOOR AND WALL TILES - ARGENTA STONEWARE TILES

## CERAMIC PRODUCTS ARGENTA CERÁMICA





## **Medium Stoneware Tile**

Dry-pressed stoneware tiles. This includes different models:

Absorption group BIa with water absorption  $\leq 0.5\%$ , and Absorption group BIb with water absorption between 0.5% and  $\leq 3\%$ .

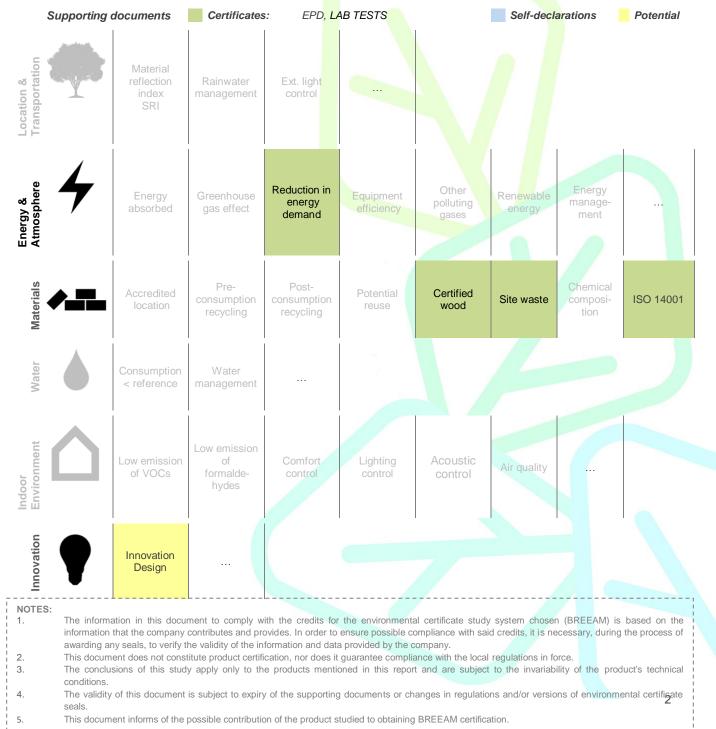
#### Ceramic floor and wall tiles

#### **Contact details**

Argenta Cerámic, S.L. www.argentaceramica.com Pol. Ind. Vall d'Alba, Vall d'Alba (Castellón) Telephone: 964324003 argenta@argentaceramica.com

### Issue date: May 2018

Summary table: Environmental parameters to which the material makes a specific contribution. Detailed in the BREEAM environmental certification sheet



## **Table of contents**

Table of contents	3
SUMMARY OF BREEAM CREDITS	4
MANAGEMENT	6
GST3, Construction site impacts	6
ENERGY	7
ENE1, Energy efficiency	7
MATERIALS	
MAT1, Life-cycle impacts	
MATERIALS	9
MAT3, Responsible sourcing of materials	9
INNOVATION	10
Innovation	10
OTHER CONSIDERATIONS	11
Other considerations	11

# SUMMARY OF BREEAM CREDITS





## MANAGEMENT

GST3, Construction site impacts



## ENERGY

ENE1, Energy efficiency



## MATERIALS

MAT1, Life-cycle impacts
 MAT3, Responsible sourcing of materials



## INNOVATION

Innovation

## **BREEAM ES** environmental categories



## **BREEAM ES Certification Standards**

URB	BREEAM ES Urban planning
NC	BREEAM ES New-build

wellbeing

VIV BREEAM ES Housing

USO BREEAM ES In use

ecology







## CATEGORY MANAGEMENT

## GST3, Construction site impacts (Compliance with this requirement may add up to 5 points in BREEAM ES NC 2015)

- Intent To recognise and encourage construction sites managed in an environmentally sound manner in terms of resource use, energy consumption and pollution.
- **Requirements** The pallets used by Argenta Cerámica have an FSC and PEFC custody chain certificate that guarantees that the wood has been legally harvested and traded. They may therefore contribute to compliance with point 8 of the criterion, valued at 1 point in the certificate.

## Assessment Wood harvesting:

N/A

**procedure** Point 8 of the GST3 criterion assesses the legal harvesting of wood. Therefore, confirmation is requested that all of the construction wood used in the project is legally harvested and traded.

Analysis example

Supporting 01\_1-Certificado FSC.pdf documents 01\_2-Certificado PEFC.pdf 01\_3-Carta declaración madera controlada.pdf

Reference	FSC-STD-50-001 (v1.2) EN
standard	FSC-STD-40-005 (v2.1) EN
	FSC-STD-40-004 (v2.1) EN



## CATEGORY **ENERGY**

## ENE1, Energy efficiency

(Compliance with this requirement may add up to 15 points in BREEAM ES NC 2015)

- Intent To recognise and encourage buildings that minimise their operational energy consumption through good design.
- Requirements The products included in the medium stoneware tile group from the company Argenta Cerámica, S.L. have very low thermal conductivities, contributing to efficiency and energy-saving.

The thermal conductivity of the products in group Bia is 1.50 W/mK and that for group Bib is 1.46 W/mK, as described in the certificate issued by the accredited laboratory.

The thermal conductivity and thicknesses of the product can be used to perform the energy simulation of the target building, in accordance with LEED requirements.

NOTE: The final result to determine the total points depends on the design of the building, its location, direction, materials, definition of the envelope and the systems used.

BREEAM ES assesses the energy efficiency of the building compared to the Assessment procedure efficiency of a reference building. The energy performance of the building is calculated through a simulation with a computer program approved by the Ministry of Industry, Energy and Tourism.

> BREEAM ES calculates the energy efficiency coefficient with the BREEAM ES assessment tool and the relevant score is given based on said coefficient.

> The energy efficiency coefficient takes into account operational energy demand, consumption of primary energy and total CO<sub>2</sub> emissions.

Exemplary level:

- "Positive Energy Balance Building (EB+)" in terms of total operational energy consumption
- Building with zero net CO<sub>2</sub> emissions
- Covering part of consumption with generation with carbon neutral facilities or accredited external renewables

Analysis example	N/A
Supporting documents	02_1-Certificado conductividad térmica grupo Bla.pdf 02_2-Certificado conductividad térmica grupo Blb.pdf
Reference	ASTM D7984-16

standard





## MAT1, Life-cycle impacts

(Compliance with this requirement may add up to 7 points in BREEAM ES NC 2015)

Intent To recognise and encourage the use of robust and appropriate life cycle assessment tools and consequently the specification of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building.

## Requirements OPTION 1:

The products included in the medium stoneware tile group from the company Argenta Cerámica, S.L. have an EPD verified by an independent third party.

#### **OPTION 2:**

The impacts assessed in the EPD may be used to perform the LCA, thus contributing to compliance with option 2. The EPD data are verified and have numerous indicators for environmental impacts, waste generation and energy consumption.

#### Assessment OPTION 1 (1 point):

80% of products with Environmental Product Declarations (EPD) have been specified in at least 30% of the 9 categories specified by BREEAM, including ceramics.

### **OPTION 2 (1 to 6 points):**

The project uses a life cycle analysis (LCA) tool in accordance with the BREEAM specifications to measure the environmental life cycle impact of the building's elements.

The analysis must include at least facades, windows, indoor flooring, ceiling frames, interior vertical partitions, party walls and roofs.

The score obtained for this criterion depends on the robustness of the lifecycle analysis in terms of the quality of the calculator/assessment method, as well as the data and scope included in the assessment (in relation to the construction elements).

### **EXEMPLARY LEVEL (1 extra point):**

For robust LCAs that include the majority of the building's elements.

Analysis example

procedure

e

N/A

## Supporting 03\_1-DAP-Gres Porcelánico Medio EN-Argenta.pdf

documents 03\_1-DAP-Gres Porcelánico Medio ESP-Argenta.pdf

 
 Reference
 ISO 14021-1999 / ISO 14025-2006 / ISO 14040-2006 / ISO 14044-2006 / une-en 15804+A1





## MAT3, Responsible sourcing of materials

(Compliance with this requirement may add up to 3 points in BREEAM ES NC 2015)

- Intent To recognise and encourage the specification of responsibly sourced materials for key building elements.
- **Requirements** The company Argenta Cerámica, S.L. has an environmental management system EMS to develop and implement its environmental policy through ISO 14001 certification.

Assessment procedure In order to grant points for any specific construction element, at least 80% of the materials in said element must be responsibly sourced (i.e. with a certification level between 1 and 4 according to tables 34 and 35). The certification level is determined based on the robustness of the responsible sourcing proven by the suppliers/manufacturers of each material/element (through the responsible sourcing certification systems).

### EXEMPLARY LEVEL (1 extra point):

When 70% of the responsible sourcing points have been achieved.

Analysis example

- Supporting04\_1-Certificación AENOR ISO 14001-Argenta.pdfdocuments04\_2-Certificación IQNET-Argenta.pdf
- Reference ISO 14001-2004

N/A

standard



CATEGORY

## Innovation

(Up to a maximum of 10 innovation points can be obtained in **BREEAM ES NC** 2015)

Intent	To support innovation within the construction industry through the recognition
	of sustainability related benefits which are not rewarded by standard BREEAM
	issue.

- **Requirements** The products included in the medium stoneware tile group from the company Argenta Cerámica, S.L. may contribute to exemplary performance of the requirement:
  - MAT1, Life-cycle impacts
- **Assessment** They can be obtained through a combination of the following options:
- procedure

#### Exemplary level in existing requirements

Some BREEAM credits offer the option of obtaining extra points for demonstrating exemplary efficiency through the achievement of the exemplary level criteria defined in said credits.

### **Approved innovations**

An extra point may be obtained for each innovation request approved by BREEAM ES, provided the criteria defined in an approved innovation request form are complied with.

Analysis example

N/A

- **Supporting** See exemplary level criteria in the relevant requirement. **documents**
- **Reference** See exemplary level criteria in the relevant requirement. **standard**

## **OTHER CONSIDERATIONS**

## Other considerations

Description	There is other evidence not included in the categories for the BREEAM baseline but that may be used by the assessment technician. These are:
Supporting documents	05_1-Certificado IRS KURSAAL_SLATE.pdf 05_2-Certificado IRS TANUM_PLOMO.pdf 05_3-Certificado IRS CRYSTAL_WHITE.pdf 05_4-Certificado IRS FOSTER_WHITE.pdf 06_1-Autodeclaracion ambiental del producto Bla (BPE) EN-Argenta.pdf 06_1-Autodeclaracion ambiental del producto Bla (BPE) ESP-Argenta.pdf 06_2-Autodeclaracion ambiental del producto materia prima-Argenta.pdf 06_2-Autodeclaracion ambiental del producto materia prima-Argenta.pdf 07_1-Declaración material local.pdf 08_1-Declaración plan de demolioción.pdf 09_1-Declaración residuos.pdf 10_1-Carta REACH a clientes-Argenta.pdf 10_2-Guía REACH sector cerámico-Argenta.pdf 11_1-Certificación AENOR ISO 9001-Argenta.pdf 11_2-Certificación IQNET ISO 9001-Argenta.pdf 12_1-Certificación CSTB Porcelánico Bla-Argenta.pdf
Reference standard	ASTM E1980-11 FSC-STD-50-001 (v1.2) EN FSC-STD-40-005 (v2.1) EN FSC-STD-40-004 (v2.1) EN ISO 9001-2008 EN 14411