

TECHNICAL SHEET

BRAND	CERAMICAS APARICI, S.A. Ctra. Castellón - Alcora, km 12 12130 San Juan de Moró (Castellón) SPAIN
PRODUCT	NAME: METALLIC BROWN, GREEN, GREY & WHITE NATURAL FORMAT (cm): 59,55x59,55 BRANCH: 02/10/2019
TYPE OF PRODUCT	TYPE: Dry-pressed ceramic tiles, with water absorption $E_b \leq 0,5\%$ PORCELAIN TILE USE: For internal and external walls and floorings GROUP BI_a
REFERENCED RULES	ISO-13006:2012 and UNE EN 14411:2013

Characteristics	Test Method	Requirements	Values Compliance
A) DIMENSIONS AND SURFACE QUALITY			
Length and width			
The work size shall be chosen as follows for:			
a) modular tiles:	EN ISO 10545-2	In order to allow a nominal joint width of between 2 and 5 mm	PASS
b) non-modular tiles:	EN ISO 10545-2	So that the difference between the work size and the nominal size is not more than 2% (maximum 5 mm)	PASS
The permissible deviation of the average size for each tile (2 or 4 sides) from the work size (W) Requirements for nominal size N $7\text{cm} \leq N < 15\text{cm}$ $N \geq 15\text{ cm}$	EN ISO 10545-2	$\pm 0,9\text{ mm}$ $\pm 2,0\text{ mm}$ ó $\pm 0,6\%$	PASS
Thickness			
a) The thickness shall be specified		Declared thickness	SEE BOX
b) The permissible deviation, of the average thickness of each tile from the work size thickness Requirements for nominal size N $7\text{cm} \leq N < 15\text{cm}$ $N \geq 15\text{ cm}$	EN ISO 10545-2	$\pm 0,5\text{ mm}$ $\pm 0,5\text{ mm}$ ó $\pm 5\%$	PASS

Straightness of sides (facial sides)			
The maximum permissible deviation from straightness, related to the corresponding work sizes. Requirements for nominal size N $7\text{cm} \leq N < 15\text{cm}$ $N \geq 15\text{ cm}$	EN ISO 10545-2	$\pm 0,75\text{ mm}$ $\pm 1,5\text{ mm} \text{ ó } \pm 0,5\%$	PASS
Rectangularity			
The maximum permissible deviation from rectangularity, related to the corresponding work sizes. Requirements for nominal size N $7\text{cm} \leq N < 15\text{cm}$ $N \geq 15\text{ cm}$	EN ISO 10545-2	$\pm 0,75\text{ mm}$ $\pm 2,0\text{ mm} \text{ ó } \pm 0,5\%$	PASS
Surface flatness			
The maximum permissible deviation from flatness a) centre curvature, related to diagonal calculated from the work sizes. Requirements for nominal size N $7\text{cm} \leq N < 15\text{cm}$ $N \geq 15\text{ cm}$	EN ISO 10545-2	$\pm 0,75\text{ mm}$ $\pm 2,0\text{ mm} \text{ ó } \pm 0,5\%$	PASS
b) edge curvature, related to the corresponding work sizes. Requirements for nominal size N $7\text{cm} \leq N < 15\text{cm}$ $N \geq 15\text{ cm}$	EN ISO 10545-2	$\pm 0,75\text{ mm}$ $\pm 2,0\text{ mm} \text{ ó } \pm 0,5\%$	PASS
c) warpage, related to diagonal calculated from the work sizes. Requirements for nominal size N $7\text{cm} \leq N < 15\text{cm}$ $N \geq 15\text{ cm}$	EN ISO 10545-2	$\pm 0,75\text{ mm}$ $\pm 2,0\text{ mm} \text{ ó } \pm 0,5\%$	PASS
Surface quality			
	EN ISO 10545-2	A minimum of 95% of the tiles shall be free from visible defects that would impair the appearance of a major area of tiles.	PASS
B) PHYSICAL PROPERTIES			
Water absorption (in % by mass)			
	EN ISO 10545-3	$E_b \leq 0,5\%$ Individual maximum 0,6%	$E_b \leq 0,2\%$
Breaking strength, for:			
Thickness $\geq 7,5\text{ mm}$	EN ISO 10545-4	Not less than 1.300 N	>2.300 N

Flexural tensile strength or modulus of rupture			
	EN ISO 10545-4	Minimum 35 N/mm ² Individual minimum 32 N/mm ²	> 44 N/mm²
Abrasión resistance			
Resistance to surface abrasion of glazed tiles intended for use on floors (PEI)	EN ISO 10545-7	Abrasion class and cycles passed	BROWN CLASS 3 GREEN CLASS 3 GREY CLASS 4 WHITE CLASS 4
Coefficient of linear thermal expansion			
from ambient temperature to 100° C	EN ISO 10545-8	Declared Value	6.1- 6.9 x10⁻⁶ (°C⁻¹)
Thermal shock resistance			
	EN ISO 10545-9	Pass according to EN ISO 10545-9	PASS
Crazing resistance			
Glazed tiles	EN ISO 10545-11	Pass according to EN ISO 10545-11	PASS
Frost resistance			
Interior uses	EN ISO 10545-12	Pass according to EN ISO 10545-12	PASS
Exterior uses			PASS
Bond strength/adhesion , for:			
cementitious adhesives	EN 12004:2007 +A1: 2012, 4.1	Declared Value	Type C2 >1 N/mm²
Reaction to fire			
		Class A1 _{FL} /A1	A1_{FL}/A1
C) CHEMICAL PROPERTIES			
Resistance to chemicals			
Resistance to household chemicals (ammonium Chloride 100 g/l) and swimming pool slats (Sodium hypochlorite 20 mg/l)	EN ISO 10545-13	Minimum GB	GA
Resistance to staining, for:			
Glazed tiles	EN ISO 10545-14	Minimum 3	5