

THROUGH-BODY PORCELAIN TILE TECHNICAL FEATURES - COMPLIANT WITH STANDARDS EN 14411 (ISO 13006) ANNEX G GROUP BIa



Sizes	60x60 cm 23%"x23%" ₩ 9mm				30x60 cm 11¾"x23%" ₩ 9mm							
					Req	Mark						
		Technical features	Test method		7 cm ≤ N < 15 cm							
					(mm)	(%)	(mm)	rectified				
Regularity features		Length and width			± 0,9 (*) Non-rect. ± 0,4 (*) Rect.	± 0,6 (*) Non-rect. ± 0,3 (*) Rect.	± 2,0 (*) Non-rect. ± 1,0 (*) Rect.	Suitable for				
	(2-2)	Thickness			± 0,5 (**)	± 5 (**)	± 0,5 (**)	Suitable for				
	A P	Straightness of sides			± 0,8 (***) Non-rect. ± 0,4 (***) Rect.	± 0,5 (***) Non-rect. ± 0,3 (***) Rect.	± 1,5 (***) Non-rect. ± 0,8 (***) Rect.	Suitable for				
		Perpendicularity (Measurement only on short edges when L/I \geq 3)	ISO 10	545-2	± 0,8 (***) Non-rect. ± 0,4 (***) Rect.	± 0,5 (***) Non-rect. ± 0,3 (***) Rect.	± 2,0 (***) Non-rect. ± 1,5 (***) Rect.	Suitable for				
		Surface flatness			c.c. ± 0,8 Non-rect. c.c. ± 0,6 Rect.	c.c. ± 0,5 Non-rect. c.c. ± 0,4 Rect.	c.c. ± 2,0 Non-rect. c.c. ± 1,8 Rect.	Suitable for				
					e.c. ± 0,8 Non-rect. e.c. ± 0,6 Rect.	e.c. ± 0,5 Non-rect. e.c. ± 0,4 Rect.	e.c. ± 2,0 Non-rect. e.c. ± 1,8 Rect.					
					w. ± 0,8 Non-rect. w. ± 0,6 Rect.	w. ± 0,5 Non-rect. w. ± 0,4 Rect.	w. ± 2,0 Non-rect. w. ± 1,8 Rect.					
		Water absorption level (in% by mass)	ISO 10	545-3	E≤ 0,5% Individual Maximum 0,6%		m 0,6%	≤0.1%				
Structural features			ASTM C	373-18	Requirement ANSI A137.1-2017 Water Absorption Max < 0,5%		r Absorption Max <	≤0.5%				
Bulk mechanical features		Breaking strenght	150,10		S ≥ 700N (for thickness < 7,5mm) S ≥ 1300N (for thickness ≥ 7,5mm)			S≥1500 N				
	$\left(\underbrace{\uparrow \uparrow} \uparrow \right)$	Bending resistance	ISO 10545-4			R ≥40 N/mm²						
	s	Bending and breaking load resistance ⁽⁴⁾⁽⁵⁾	EN 1339	Annex F	·F -							
		Impact resistance	ISO 10	545-5	Declared value			≥0.55				
Surface mechanical features		Mohs hardness	EN 1	101	-			MOHS 6				
		Deep abrasion resistance of unglazed tiles	ISO 10	545-6	≤ 175 mm³			≤150mm³				

* Permitted deviation, in % or mm, from the average size of each tile (2 or 4 sides) with respect to the manufacturing size (W).

** Permitted deviation, in % or mm, from the average thickness of each tile with respect to the cited manufacturing thickness (W).

*** Maximum permitted straightness deviation, in % or mm, with respect to the corresponding manufacturing sizes (W).

**** Maximum permitted perpendicularity deviation, in % or mm, with respect to the corresponding manufacturing sizes (W).

**** Maximum permitted centre curvature deviation, in % or mm, with respect to the diagonal calculated according to manufacturing sizes (W).

e.c. Maximum permitted corner curvature deviation, in % or mm, with respect to the corresponding manufacturing sizes (W).

w. Maximum permitted bending deviation, in % or mm, with respect to the diagonal calculated according to manufacturing sizes (W).

(1) Determining the slip resistance of pedestrian surfaces; not applicable to sports flooring or road traffic flooring.

(2) The anti-slip performance is guaranteed at the time of delivering the product.

(3) However, tiles with a DCOF of 0.42 or greater are not necessarily suitable for all projects. The specifier shall determine tiles appropriate for specific project conditions, considering by way of example, but not in limitation, type of use, traffic, expected contaminants, expected maintenance, expected wear, and manufacturers' guidelines and recommendations."
(4) For further details, please refer to the outdoor design general catalogue.

(5) Only for products with 20 mm thickness





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Sizes		60x60 cm 23%"x2 ₩ 9mm	35%"	30x60 cm 11¾"x23%" ₩ 9mm				
				Requisites for noming	Mark			
		Technical features	Test method	7 cm ≤ N < 15 cm	N ≥ 15 cm			
				(mm)	(%) (mm)	Matte rectified		
Thermo-igrometric features		Coefficient of linear thermal expansion	ISO 10545-8	Declared value	≤7MK ⁻¹			
		Thermal shock resistance	ISO 10545-9	Test passed in accordance w	Resistant			
		Moisture expansion (in mm/m)	ISO 10545-10	Declared valu	≤0.01% (0.1mm/m)			
		Frost resistance	ISO 10545-12	Test passed in accordance w	Resistant			
Physical properties		Bond strenght	EN 1348	Declared value	≥1.0 N/mm² (Class C2 - EN 12004)			
		Reaction to fire -		Class A1 or A1	A1 - A1 _{fl}			
Chemical features		Resistance to household chemicals and swimming pool salts		Minimum B cla	А			
		Resistance to low concentrations of acids and alkalis	ISO 10545-13	Declared class	LA			
		Resistance to high concentrations of acids and alkalis		Declared class	HA			
		Stain resistance	ISO 10545-14	Declared class	5			
Safety characteristics ⁽¹⁾⁽²⁾		Booted ramp test	DIN 51130	Declared class	S	R10		
		Barefoot Ramp test	DIN 51097	Declared value	А			
		Pendulum friction Test	BS 7976	PTV ≥ 36 classifies the surface	≥36Dry ≥36Wet			
			AS 4586	Declared Classification of the new peo according to the Pendu	Class P3			
			UNE-ENV 12633 UNE 41901:2017 EX	Declared valu	C2 on demand			
		Coefficient of friction	B.C.R.A. Rep. CEC/81	Min. Dec. 236/89 of 1 μ >0.40 for a sliding leather element μ >0.40 for a sliding hard rubber e	>0.40Asciutto >0.40Bagnato			
		Dynamic coefficent of friction (DCOF)	ANSI A.137.1	ANSI A.137.1-20 Requires a minimum value of 0.42 for le to be walked upon whe	> 0.42 Wet			

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