

GRES PORCELLANATO TECHNICAL FEATURES - COMPLIANT WITH STANDARDS EN 14411 (ISO 13006) ANNEX G GROUP BIQ



Sizes	60x120 cm 235%"x47 /₄"	60x60 cm 23%"x23%"	45x90 cm 17¾"x35%"	30x60 cm 11¾"x235%"		
	₩ 9mm	😫 8mm	₩ 20mm	😫 8mm		

		Requisites for nominal siz				ze N	Impact				
				7 cm ≤ N < 15 cm	N ≥ 1		Matte				
		Technical features	Test method	(mm)	(%)	(mm)	Matte rectified 8mm	rectified 9mm 60x120 cm	Grip rectified	Outdoor rectified	
		Length and width	ISO 10545-2	± 0,9 (*) Non-rect. ± 0,4 (*) Rect.	± 0,6 (*) Non-rect. ± 0,3 (*) Rect.	± 2,0 (*) Non-rect. ± 1,0 (*) Rect.	Suitable for	Suitable for	Suitable for	Suitable for	
		Thickness		± 0,5 (**)	± 5 (**) ± 0,5 (**)		Suitable for	Suitable for	Suitable for	Suitable for	
		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	Suitable for	Suitable for	Suitable for	
Regularity features		Perpendicularity (Measurement only on short edges when L/I ≥ 3)		± 0,8 (***) Non-rect. ± 0,4 (***) Rect.	± 0,5 (***) Non-rect. ± 0,3 (***) Rect.	± 2,0 (***) Non-rect. ± 1,5 (***) Rect.	Suitable for	Suitable for	Suitable for	Suitable for	
	$\begin{pmatrix} \uparrow \uparrow \\ \downarrow \uparrow \\ \downarrow \uparrow \\ \downarrow \uparrow \end{pmatrix}$	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	Suitable for	Not applicable to "strong" structures	
				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.	Suitable for				
				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.					
Structural		Water absorption level (in% by - mass)	ISO 10545-3	E≤ 0,59	≤0.1%	≤0.1%	≤0.1%	≤0.1%			
features			ASTM C373-18	Requirement ANSI	≤0.5%	≤0.5%	≤0.5%	≤0.5%			
	$(\overrightarrow{\uparrow}\uparrow)$	Breaking strenght	ISO 10545-4	S≥70 S≥13	S≥1500 N	S≥1500 N	S≥1500 N	S ≥10000 N			
Bulk		Bending resistance	130 10545-4		R ≥40 N/mm²	R ≥40 N/mm²	R ≥40 N/mm²	R ≥45 N/mm²			
mechanical features		Bending and breaking load resistance ⁽⁴⁾⁽⁵⁾	EN 1339 Annex F					≥U4 45x90			
		Impact resistance	ISO 10545-5		Declared value	≥0.55	≥0.55	≥0.55	≥0.55		
Surface mechanical features		Deep abrasion resistance of unglazed tiles	ISO 10545-6	≤ 175 mm³				≤150mm³	≤150mm³	≤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



60x120 cm 235///x47 //"

GRES PORCELLANATO TECHNICAL FEATURES - COMPLIANT WITH STANDARDS EN 14411 (ISO 13006) ANNEX G GROUP BIG

45×90 cm 1734"×3534"

60x60 cm 235/ "x235/"



30x60 cm 1134"x2354"

Sizes	60	60x120 cm 23%"x47 ⁄4"	60x60 cm 23%"x23%" ₩ 8mm		45	45x90 cm 17¾"x35%" ₩ 20mm			30x60 cm 11¾"x23%" ₩ 8mm			
			Requisites for nominal size N		Impact							
		Technical fostures	Test math ad	7 cm ≤ N < 15 cn		≥ 15 cm		Matta rectified	1			
		Technical features	Test method	(mm)	(%)	(mm)	Matte rectified 8mm	9mm 60x120 cm	Grip rectified	Outdoor rectified		
Thermo- igrometric features		Coefficient of linear thermal expansion	ISO 10545-8	Declared value			≤7MK ⁻¹	≤7MK ⁻¹	≤7MK ⁻¹	≤7MK ⁻¹		
		Thermal shock resistance	ISO 10545-9	Test passed in accordance with ISO 10545-1			Resistant	Resistant	Resistant	Resistant		
		Moisture expansion (in mm/m)	ISO 10545-10	Declared value			≤0.01% (0.1mm/m)	≤0.01% (0.1mm/m)	≤0.01% (0.1mm/m)	≤0.01% (0.1mm/m)		
		Frost resistance	ISO 10545-12	Test passed in accordance with ISO 10545-1			Resistant	Resistant	Resistant	Resistant		
Physical		Bond strenght	EN 1348	Declared value			≥1.0 N/mm² (Class C2 - EN 12004)					
properties		Reaction to fire	_	Class A1 or A1 _{fi}			A1 - A1 _{fl}					
		Resistance to household chemicals and swimming pool salts		Minimum B class			А	А	А	А		
Chemical		Resistance to low concentrations of acids and alkalis	ISO 10545-13	Declared class			LA	LA	LA	LA		
features		Resistance to high concentrations of acids and alkalis		Declared class			HA	HA	HA	НА		
		Stain resistance	ISO 10545-14	Declared class			5	5	5	5		
		Booted ramp test	DIN EN 16165 ANNEX B (EX DIN 51130)	Declared class			R10	R10	R11	R11		
		Barefoot Ramp test	DIN EN 16165 ANNEX A (EX DIN 51097)	Decla	Declared value			A+B	A+B+C	A+B+C		
			BS EN 16165 ANNEX C (EX BS 7976)	PTV ≥ 36 classifies the surface as "low slip risk"		≥36Dry ≥36Wet ≥36Wet		≥36Dry ≥36Wet	≥36Dry ≥36Wet			
Safety characteristics (1)(2)		Pendulum friction Test	AS 4586	Declared Classification of the new pedestrian surface materials according to the Pendulum Test			Class P3	Class P3	Class P4	Class P4		
			UNE 41901 EX:2017	Declared value		Class C2	Class C2	Class C3	Class C3			
		Coefficient of friction	B.C.R.A. Rep. CEC/81	Min. Dec. 236/89 of 14/06/89 μ >0.40 for a sliding leather element on a dry fl ^{0Or} μ >0.40 for a sliding hard rubber element on a wet fl ^{0Or}			>0.40Asciutto >0.40Bagnato	>0.40Asciutto >0.40Bagnato		>0.40Asciutto >0.40Bagnato		
		Dynamic coefficent of friction (DCOF)	ANSI A 326.3	-		Wet DCOF ≥ 0.50	Wet DCOF ≥ 0.50	Wet DCOF ≥ 0.55	Wet DCOF ≥ 0.55			

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