









20x120 cm 7⅓"x47 ¼" ₩ 9mm 18,5x150 cm 7 /₄"x59" ₩ 9mm Sizes

			Test method	Reo	Heartwood			
		Technical features		7 cm ≤ N < 15 cm	Matte			
		, sommour routeres		(mm)	N ≥ 15 cm (%) (mm)		rectified	
Regularity features		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	
		Thickness		± 0,5 (**)	± 5 (**)	± 0,5 (**)	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	
		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	
		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.		
				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 features	$\left(\begin{array}{c} \begin{array}{c} \\ \\ \end{array}\right)$	Water absorption level (in% by mass)	ISO 10545-3	E≤ 0,5°	≤0.1%			
			ASTM C373-18	Requirement ANSI	≤0.5%			
Bulk mechanical features		Breaking strenght	ISO 10545-4	S≥70 S≥13	S ≥1500 N			
		Bending resistance	130 10343-4		R ≥40 N/mm²			
		Bending and breaking load resistance (4)(5)	EN 1339 Annex F					
		Impact resistance	ISO 10545-5	Declared value			≥0.55	
Surface mechanical features	(O)	Deep abrasion resistance of unglazed tiles	ISO 10545-6	≤ 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).
- $\ ^{\star\star} \ \mathsf{Permitted} \ \mathsf{deviation}, \mathsf{in} \ \% \ \mathsf{or} \ \mathsf{mm}, \mathsf{from} \ \mathsf{the} \ \mathsf{average} \ \mathsf{thickness} \ \mathsf{of} \ \mathsf{each} \ \mathsf{tile} \ \mathsf{with} \ \mathsf{respect} \ \mathsf{to} \ \mathsf{the} \ \mathsf{cited} \ \mathsf{manufacturing} \ \mathsf{thickness} \ \mathsf{(W)}.$
- *** 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







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



			Test method	Requisites for nominal size N			Heartwood
		Technical features		7 cm ≤ N < 15 cm			Matte rectified
				(mm)	(%)	(mm)	
Thermo-igrometric features	(* <u> </u> *)	Coefficient of linear thermal expansion	ISO 10545-8	Declared value			≤7MK ⁻¹
	(<u>;</u>);	Thermal shock resistance	Thermal shock resistance ISO 10545-9 Test passed in accordance with ISO 10545-1		i45-1	Resistant	
		Moisture expansion (in mm/m)	ISO 10545-10	Declared value			≤0.01% (0.1mm/m)
	*	Frost resistance	ISO 10545-12	Test passed in accordance with ISO 10545-1			Resistant
Physical properties		Bond strenght	EN 1348	Declared value	Declared value		
		Reaction to fire	-	Class A1 or A1 _{fl}		A1 - A1 _{fl}	
Chemical features		Resistance to household chemicals and swimming pool salts		Minimum B class			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			НА
		Stain resistance	ISO 10545-14	Declared class		5	
Safety characteristics ⁽¹⁾⁽²⁾		Booted ramp test	DIN EN 16165 ANNEX B (EX DIN 51130)	Declared class			R10
		Barefoot Ramp test	DIN EN 16165 ANNEX A (EX DIN 51097)	Declared value		A+B	
		Pendulum friction Test	BS EN 16165 ANNEX C (EX BS 7976)	PTV ≥ 36 classifies the surface as "low slip risk"		≥36Dry ≥36Wet	
			AS 4586	Declared Classification of the new pedestrian surface materials according to the Pendulum Test		Class P3	
			UNE 41901 EX:2017	Declared value		Class C2	
		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 floor μ >0.40 for a sliding hard rubber element on a wet floor			>0.40Asciutto >0.40Bagnato
		Dynamic coefficent of friction (DCOF)	Wet DCOF ≥ 0.50				

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- ** 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).
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- **** 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).
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