



Sizes	60x60 cm 23% <sup>*</sup> x23% <sup>*</sup> <sup>±</sup> 20mm
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	Technical features	Test method	Requisites for nominal size N			Landstone
			7 cm ≤ N < 15 cm	N ≥ 15 cm		Matte rectified
			(mm)	(%)	(mm)	
Regularity features	 Length and width Thickness Straightness of sides Perpendicularity	ISO 10545-2	± 0,9 (*)	± 0,6 (*)	± 2,0 (*)	±0.3% ±1.0mm
			± 0,9 (*)	± 5 (**)	± 0,5 (**)	±5.0% ±0.5mm
			± 0,75 (***)	± 0,5 (***)	± 1,5 (***)	±0.3% ±0.8mm
			± 0,75 (****)	± 0,5 (****)	± 2,0 (****)	±0.3% ±1.5mm
	 Surface flatness		c.c. ± 0,75	c.c. ± 0,5	c.c. ± 2,0	±0.4% ±1.8mm
			e.c. ± 0,75	e.c. ± 0,5	e.c. ± 2,0	
Structural features	 Water absorption	ISO 10545-3	E <sub>B</sub> ≤ 0,5%			≤0.1%
		ASTM C373-18	Requirement ANSI A137.1-2017 Water Absorption Max < 0,5%			
Bulk mechanical features	 Breaking strenght Bending resistance	ISO 10545-4	S ≥ 700N (for thickness < 7,5mm) S ≥ 1300N (for thickness ≥ 7,5mm)			S ≥ 10000 N
			EN 1339 Annex F	R ≥ 35 N/mm <sup>2</sup>		
	 Bending and breaking load resistance		-			
Surface mechanical features	 Impact resistance	ISO 10545-5	Declared value			≥0.55
	 Mohs hardness	EN 101	-			MOHS 8
Thermo-igrometric features	 Deep abrasion resistance of unglazed tiles	ISO 10545-6	≤ 175 mm <sup>3</sup>			≤150mm <sup>3</sup>
	 Coefficient of linear thermal expansion	ISO 10545-8	Declared value			≤7MK-1
Thermo-igrometric features	 Thermal shock resistance	ISO 10545-9	Test passed in accordance with ISO 10545-1			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

\* 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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			(mm)	(%)		
Physical properties	Bond strenght	EN 1348	Declared value			≥1.0 N/mm <sup>2</sup> (Class C2 - EN 12004)
	Reaction to fire	-	Class A1 or A1 <sub>fl</sub>			A1 - A1 <sub>fl</sub>
Chemical features	Resistance to household chemicals and swimming pool salts	ISO 10545-13	Minimum B class			UA
	Resistance to low concentrations of acids and alkalis		Declared class			ULA
	Resistance to high concentrations of acids and alkalis		Declared class			UHA
	Stain resistance	ISO 10545-14	Declared class			5
Safety characteristics	Booted ramp test	DIN 51130	Declared class			R11
	Barefoot Ramp test	DIN 51097	Declared value			A+B+C
	Pendulum friction Test	BS 7976	PTV ≥ 36 classifies the surface as "low slip risk"			
		AS 4586	Declared Classification of the new pedestrian surface materials according to the Pendulum Test			
		UNE-ENV 12633	Declared value			
	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 coefficient of friction (DCOF)	ANSI A.137.1	ANSI A.137.1-2017 Requires a minimum value of 0.42 for level interior space expected to be walked upon when wet. (3)			> 0.42 Wet	

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