





Sizes	19%"×47 ¼" █ 8.5mm	15 /4"x31 /2" ■ 8.5mm

			Requisites for nominal size N				
		Technical features	Test method	7 cm ≤ N < 15 cm N≥ 15 cm		Marvel Stone	
		Toolinida Toditares		(mm)	(%)	(mm)	Shiny rectified
Regularity features		Length and width	ISO 10545-2	± 0,4 (*) Rect.	± 0,3 (*) Rect.	± 1,0 (*) Rect.	Suitable for
	( Const	Thickness		± 0,5 (**)	± 10 (**)	± 0,5 (**)	Suitable for
		Straightness of sides		± 0,4 (***) Rect.	± 0,3 (***) Rect.	± 0,8 (***) Rect.	Suitable for
		Perpendicularity		± 0,4 (***) Rect.	± 0,3 (***) Rect.	± 1,5 (***) Rect.	Suitable for
		Surface flatness		c.c. ± 0,6 Rect.	c.c. ± 0,4 Rect.	c.c. ± 1,8 Rect	Suitable for
				e.c. ± 0,6 Rect	e.c. ± 0,4 Rect	e.c. ± 1,8 Rect	
				w. ± 0,6 Rect.	w. ± 0,4 Rect.	w. ± 1,8 Rect.	
Structural features	$\left(\begin{array}{c} \left(\begin{array}{c} \left(\right) \right)} \right) \\ \left( \left(\begin{array}{c} \left(\begin{array}{c} \left(\begin{array}{c} \left(\begin{array}{c} \left(\right) \right) \\ (c) \end{array} \right) \end{array} \right) \end{array} \right) \end{array} \right) \end{array}\right) \end{array}\right)$	Water absorption level (in% by mass)	ISO 10545-3	Average >10% indica	10% <ev≤20%< td=""></ev≤20%<>		
Bulk mechanical features		Breaking strenght		S ≥ 600N			S ≥600 N
	$\left  \left( \begin{array}{c} \downarrow \\ \uparrow \uparrow \end{array} \right) \right $	Bending resistance	ISO 10545-4	R ≥ 12 N/mm²			R ≥15 N/mm²
Thermo-igrometric features	(« <b>)</b> »	Coefficient of linear thermal expansion	ISO 10545-8	Declared value			≤7MK <sup>-1</sup>
	*	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			≤0.06% (0.6mm/m)
	(FE)	Crazing resistance: glazed tiles	ISO 10545-11	Test passed in accordance with ISO 10545-1			Resistant
Physical properties		Bond strenght	EN 1348	Declared value			≥1.0 N/mm² (Class C2 - EN 12004)
		Reaction to fire	-	Class A1			A1
Chemical features		Resistance to household chemicals and swimming pool salts	ISO 10545-13	Minimum B class			А
		Resistance to low concentrations of acids and alkalis		Declared class			LA
		Resistance to high concentrations of acids and alkalis		Declared class			HA
		Stain resistance of glazed tiles	ISO 10545-14	Minimum Class 3			5
	(0°°°)	Release of dangerous substances: Cadmium (in mg/dm2) and Lead (in mg/dm2)	ISO 10545-15	Declared value			≤0.01mg/dm2 Cd ≤0.1mg/dm2 Pb

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

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

 $<sup>^{***} \</sup> Maximum \ permitted \ straightness \ deviation, in \% \ or \ mm, \ with \ respect \ to \ the \ corresponding \ manufacturing \ sizes \ (W).$ 

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

<sup>\*\*\*\*</sup> 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).

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

 $<sup>(1) \ \</sup> Determining \ the \ slip \ resistance \ of \ pedestrian \ surfaces; \ not \ applicable \ to \ sports \ flooring \ or \ road \ traffic \ flooring.$ 

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

<sup>(3)</sup> 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."

<sup>(4)</sup> For further details, please refer to the outdoor design general catalogue.

<sup>(5)</sup> Only for products with 20 mm thickness