



Sizes	19 7/8" x 47 1/4" 8.5mm	15 1/4" x 31 1/2" 8.5mm
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	Technical features	Test method	Requisites for nominal size N			Marvel Shine	
			7 cm ≤ N < 15 cm	N ≥ 15 cm		Shiny rectified	Silk rectified
			(mm)	(%)	(mm)		
Regularity features 	Length and width	ISO 10545-2	± 0,4 (*) Rect.	± 0,3 (*) Rect.	± 1,0 (*) Rect.	Suitable for	Suitable for
	Thickness		± 0,5 (**)	± 10 (**)	± 0,5 (**)	Suitable for	Suitable for
	Straightness of sides		± 0,4 (***) Rect.	± 0,3 (***) Rect.	± 0,8 (***) Rect.	Suitable for	Suitable for
	Perpendicularity		± 0,4 (***) Rect.	± 0,3 (***) Rect.	± 1,5 (***) Rect.	Suitable for	Suitable for
	Surface flatness		c.c. ± 0,6 Rect.	c.c. ± 0,4 Rect.	c.c. ± 1,8 Rect.	Suitable for	Suitable for
	e.c. ± 0,6 Rect.	e.c. ± 0,4 Rect.	e.c. ± 1,8 Rect.				
Structural features	Water absorption level (in% by mass)	ISO 10545-3	Average >10%. If this value > 20%, it must be indicated. Single value > 9%			10%<Ev≤20%	10%<Ev≤20%
Bulk mechanical features	Breaking strenght	ISO 10545-4	S ≥ 600N			S ≥600 N	S ≥600 N
	Bending resistance		R ≥ 12 N/mm ²			R ≥15 N/mm ²	R ≥15 N/mm ²
Thermo-igrometric features	Coefficient of linear thermal expansion	ISO 10545-8	Declared value			≤7MK ⁻¹	≤7MK ⁻¹
	Thermal shock resistance	ISO 10545-9	Test passed in accordance with ISO 10545-1			Resistant	Resistant
	Moisture expansion (in mm/m)	ISO 10545-10	Declared value			≤0.06% (0.6mm/m)	≤0.06% (0.6mm/m)
	Crazing resistance: glazed tiles	ISO 10545-11	Test passed in accordance with ISO 10545-1			Resistant	Resistant
Physical properties	Bond strenght	EN 1348	Declared value			≥1.0 N/mm ² (Class C2 - EN 12004)	≥1.0 N/mm ² (Class C2 - EN 12004)
	Reaction to fire	-	Class A1			A1	A1
Chemical features	Resistance to household chemicals and swimming pool salts	ISO 10545-13	Minimum B class			A	A
	Resistance to low concentrations of acids and alkalis		Declared class			LA	LA
	Resistance to high concentrations of acids and alkalis		Declared class			HA	HA
	Stain resistance of glazed tiles	ISO 10545-14	Minimum Class 3			5	5
	Release of dangerous substances: Cadmium (in mg/dm ²) and Lead (in mg/dm ²)	ISO 10545-15	Declared value			≤0.01mg/dm ² Cd ≤0.1mg/dm ² Pb	≤0.01mg/dm ² Cd ≤0.1mg/dm ² Pb

- * 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