



Sizes	63"x126" ±6mm	63"x63" ±6mm	47 1/4"x109 1/2" ±6mm	47 1/4"x94 1/2" ±9mm	47 1/4"x47 1/4" ±9mm	29 1/2"x59" ±9mm	29 1/2"x29 1/2" ±9mm	23 3/4"x47 1/4" ±9mm	23 3/4"x23 3/4" ±9mm	14 3/4"x29 1/2" ±9mm	11 3/4"x23 3/4" ±9mm
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	Technical features	Test method	Requisites for nominal size N			Marvel Shine							
			7 cm ≤ N < 15 cm		N ≥ 15 cm	Polished rectified 6mm	Polished rectified 9mm	Polished rectified 9mm 47 1/4"x47 1/4"	Matte rectified 9mm	Matte rectified 9mm 23 3/4"x23 3/4"	Silk rectified 9mm	Silk rectified 6mm 47 1/4"x109 1/2"	
			(mm)	(%)	(mm)								
Regularity features		Length and width	± 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	Suitable for	Suitable for	Suitable for	
		Thickness	± 0,5 (**)	± 5 (**)	± 0,5 (**)	Suitable for	Suitable for	Suitable for	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	Suitable for	Suitable for	Suitable for	
		Perpendicularity (Measurement only on short edges when L/l ≥ 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	Suitable for	Suitable for	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.	Suitable for	Suitable for	Suitable for	Suitable for	Suitable for	Suitable for	Suitable for	
			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.								
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		Water absorption level (in% by mass)	E ≤ 0,5% Individual Maximum 0,6%			≤0.1%	≤0.1%	≤0.1%	≤0.1%	≤0.1%	≤0.1%	≤0.1%	
			Requirement ANSI A137.1-2017 Water Absorption Max < 0,5%			≤0.5%	≤0.5%	≤0.5%	≤0.5%	≤0.5%	≤0.5%	≤0.5%	
Bulk mechanical features		Breaking strenght	S ≥ 700N (for thickness < 7,5mm) S ≥ 1300N (for thickness ≥ 7,5mm)			S ≥ 1000 N	S ≥ 1500 N	S ≥ 1000 N	S ≥ 1500 N	S ≥ 1500 N	S ≥ 1500 N	S ≥ 1000 N	
		Bending resistance	R ≥ 35 N/mm ²			R ≥ 40 N/mm ²	R ≥ 40 N/mm ²	R ≥ 40 N/mm ²	R ≥ 40 N/mm ²	R ≥ 40 N/mm ²	R ≥ 40 N/mm ²	R ≥ 40 N/mm ²	
		Bending and breaking load resistance (4)(5)	-										
		Impact resistance	Declared value			≥0.55	≥0.55	≥0.55	≥0.55	≥0.55	≥0.55	≥0.55	
Surface mechanical features		Mohs hardness	-			MOHS 5	MOHS 5	MOHS 5	MOHS 6	MOHS 6	MOHS 5	MOHS 5	
		Deep abrasion resistance of unglazed tiles	≤ 175 mm ³			≤150mm ³	≤150mm ³	≤150mm ³	≤150mm ³	≤150mm ³	≤150mm ³	≤150mm ³	

* Permitted deviation, in % or mm, from the average size of each tile (2 or 4 sides) with respect to the manufacturing size (W).
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 *** 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).
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 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)	(%)	(mm)							
Thermo-igrometric features	Coefficient of linear thermal expansion	ISO 10545-8	Declared value			≤7MK ⁻¹	≤7MK ⁻¹	≤7MK ⁻¹	≤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	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)	≤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	Resistant	Resistant	Resistant
Physical properties	Bond strength	EN 1348	Declared value			≥1.0 N/mm ² (Class C2 - EN 12004)	≥1.0 N/mm ² (Class C2 - EN 12004)	≥1.0 N/mm ² (Class C2 - EN 12004)	≥1.0 N/mm ² (Class C2 - EN 12004)	≥1.0 N/mm ² (Class C2 - EN 12004)	≥1.0 N/mm ² (Class C2 - EN 12004)	≥1.0 N/mm ² (Class C2 - EN 12004)
	Reaction to fire	-	Class A1 or A1 _{fl}			A1 - A1 _{fl}	A1 - A1 _{fl}	A1 - A1 _{fl}	A1 - A1 _{fl}	A1 - A1 _{fl}	A1 - A1 _{fl}	A1 - A1 _{fl}
Chemical features	Resistance to household chemicals and swimming pool salts	ISO 10545-13	Minimum B class			A	A	A	A	A	A	A
	Resistance to low concentrations of acids and alkalis		Declared class			LA	LA	LA	LA	LA	LA	LA
	Resistance to high concentrations of acids and alkalis		Declared class						HA	HA	HA	HA
	Stain resistance	ISO 10545-14	Declared class			5	5	5	5	5	5	5
Safety characteristics (1)(2)	Booted ramp test	DIN 51130	Declared class			N.C.	N.C.	N.C.	R9	R10	N.C.	N.C.
	Barefoot Ramp test	DIN 51097	Declared value						A	A+B	A	
	Pendulum friction Test	BS 7976	PTV ≥ 36 classifies the surface as "low slip risk"			≥ 36 Dry ≤ 24 Wet	≥ 36 Dry ≤ 24 Wet	≥ 36 Dry ≤ 24 Wet	PTV ≥ 36 Wet on demand	≥36Dry ≥36Wet	≥36Dry ≤24Wet	≥ 36 Dry ≤ 24 Wet
		AS 4586	Declared Classification of the new pedestrian surface materials according to the Pendulum Test						P3 on demand	Class P3		
		UNE-ENV 12633 UNE 41901:2017 EX	Declared value						C2 on demand	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	>0.40Asciutto <0.40Bagnato	>0.40Asciutto <0.40Bagnato	>0.40Asciutto >0.40Bagnato	>0.40Asciutto >0.40Bagnato	<0.40Asciutto >0.40Bagnato	>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	< 0.42 Wet	< 0.42 Wet	> 0.42 Wet	> 0.42 Wet	> 0.42 Wet	< 0.42 Wet

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