WARP Floor

COLOURED BODY PORCELAIN TILES
COLOURED BODY PORCELAIN TILES
Compliant with EN 14411 (ISO 13006) Appendix G group Bla
Compliant with EN 14411 (ISO 13006) Appendix G group Bla

Sizes Sizes	**60x60 cm** 23 5/8"x23 5/8" 9mm	**30x60 cm** 11 3/4"x23 5/8" 9mm	

		Characteristics	Test Method	Requirements for nominal size N			WARP FLOOR	
				7 cm ≤ N < 15 cm	N ≥ 15 cm		Matt	Matt rectified
				(mm)	(%)	(mm)		
Regularity characteristics		**Length and width**	ISO 10545-2	± 0,9 (*)	± 0,6 (*)	± 2,0 (*)	Suitable for	± 0.3% ±1.0 mm
		Thickness		± 0,5 (**)	± 5 (**)	± 0,5 (**)	± 5.0% ±0.5 mm	± 5.0% ±0.5 mm
		Straightness of sides		± 0,75 (***)	± 0,5 (***)	± 1,5 (***)	Suitable for	± 0.3% ±0.8 mm
		Rectangularity (Measurement only on short edges when L/l ≥ 3)		± 0,75 (****)	± 0,5 (****)	± 2,0 (****)	Suitable for	± 0.3% ±1.5 mm
		Surface flatness		c.c. ± 0,75	c.c. ± 0,5	c.c. ± 2,0	± 0.4% ±1.8 mm	± 0.4% ±1.8 mm
				e.c. ± 0,75	e.c. ± 0,5	e.c. ± 2,0		
				w. ± 0,75	w. ± 0,5	w. ± 2,0		
Structural features		**Water absorption level (in% by mass)**	ISO 10545-3	E_B ≤ 0,5% Individual Maximum 0,6% - Individual Maximum 0,6%			≤ 0.1%	≤ 0.1%
			ASTM C373-18	Requirement ANSI A137.1-2017 Water Absorption Max < 0,5%				
Bulk mechanical features		**Breaking strength**	ISO 10545-4	S ≥ 700N (per spessore < 7,5mm - for thickness < 7,5mm) S ≥ 1300N (per spessore ≥ 7,5mm - for thickness ≥ 7,5mm)			S ≥ 1500 N	S ≥ 1500 N
		Modulus of Rupture		R ≥ 35 N/mm2			R ≥ 40 N/mm^2	R ≥ 40 N/mm^2
		Bending Strength and Breaking Load	EN 1339 Annex F	-				
		Impact resistance, as coeffi cient of restitution	ISO 10545-5	**Declared value** Declared value			≥ 0.55	≥ 0.55
Surface mechanical features		**Mohs hardness**	EN 101	-			Conforme	Conforme
		Resistance to deep abrasion of unglazed tiles (removed volume)	ISO 10545-6	≤ 175 mm3			≤150mm^3	≤150mm^3
Thermo-igrometric features		**Coefficient of linear thermal expansion**	ISO 10545-8	**Declared value** Declared value			≤7 1/mk	≤7 1/mk
		Thermal shock resistance	ISO 10545-9	**Pass according to EN ISO 10545-1** Pass according to EN ISO 10545-1			Resiste	Resiste
		Moisture expansion (in mm/m)	ISO 10545-10	**Declared value** Declared value			≤ 0.01% (0.1 mm/m)	≤ 0.01% (0.1 mm/m)
		Frost resistance	ISO 10545-12	**Pass according to EN ISO 10545-1** Pass according to EN ISO 10545-1			Resiste	Resiste
Physical properties		**Bond strength/adhesion for improved cementitious adhesives**	EN 1348	**Declared value** 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 or $A1_{fl}$** Class A1 or $A1_{fl}$			A1 - $A1_{fl}$	A1 - $A1_{fl}$
Chemical features		**Resistance to household chemicals and swimming pool salts**	ISO 10545-13	**Minimum Class B** Minimum Class B			UA	UA
		Resistance to low concentrations of acids and alkalis		**Declared Class** Declared Class			ULA	ULA
		Resistance to high concentrations of acids and alkalis		**Declared Class** Declared Class			UHA	UHA
		Resistance to staining for glazed tiles	ISO 10545-14	**Declared Class** Declared Class			5	5
Safety characteristics		**Shod Ramp Test**	DIN 51130	**Declared Class** Declared Class			R09	R09
		Barefoot Ramp Test	DIN 51097	**Declared value** Declared value			A	A
		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** Declared value			Class 1 PTV > 36 Dry PTV < 25 Wet	Class 1 PTV > 36 Dry PTV = 25Ã·35 Wet
		Coefficient of friction (COF)	B.C.R.A. Rep. CEC/81	D. M. 236/89 del 14/06/89 μ >0,40 per elemento scivolante cuoio su pavimentazione asciutta μ >0,40 per elemento scivolante gomma dura su pavimentazione bagnata			>0.40 Asciutto >0.40 Bagnato	>0.40 Asciutto >0.40 Bagnato
		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

* Deviazione ammissibile, in % oppure mm, della dimensione media di ogni piastrella (2 oppure 4 lati) dalla dimensione di fabbricazione (W).
The permissible deviation, in % or mm, of the average size for each tile (2 or 4 sides) from work size (W).

** Deviazione ammissibile, in % oppure mm, dello spessore medio di ogni piastrella dallo spessore riportato nella dimensione di fabbricazione (W).
The permissible deviation, in % or mm, of the average thickness for each tile from the work size thickness (W).

*** Deviazione massima ammissibile di rettilineità, in % oppure mm, in rapporto alle dimensione di fabbricazione (W) corrispondenti.
The maximum permissible deviation from straightness, in % or mm, related to the corresponding work sizes (W).

**** Deviazione massima ammissibile di ortogonalità, in % oppure mm, in rapporto alle dimensione di fabbricazione (W) corrispondenti.
The maximum permissible deviation from rectangularity, in % or mm, related to the corresponding work sizes (W).

c.c. Deviazione massima ammissibile della curvatura del centro, in % oppure mm, in rapporto alla diagonale calcolata secondo le dimensioni di fabbricazione (W).
The maximum permissible deviation from centre curvature, in % or mm, related to diagonal calculated from the work sizes (W).

e.c. Deviazione massima ammissibile della curvatura dello spigolo, in % oppure mm, in rapporto alle dimensioni di fabbricazione (W) corrispondenti.
The maximum permissible deviation from edge curvature, in % or mm, related to the corresponding work sizes (W).

w. Deviazione massima ammissibile dello svergolamento, in % oppure mm, in rapporto alla diagonale calcolata secondo le dimensioni di fabbricazione (W).
The maximum permissible deviation from warpage, in % or mm, related to diagonal calculated from the work sizes (W).

(1) Determinazione della resistenza allo scivolamento delle superfici pedonabili; non si applica alle pavimentazioni sportive ed alle pavimentazioni stradali veicolari.
Determination of slip resistance of pedestrian surfaces; it does not cover sports surfaces and road surfaces for vehicles (skid resistance).

(2) Le prestazioni anti-slip vengono garantite al momento della consegna del prodotto.
Anti-slip performance is guaranteed at the time of delivery of 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 outdoor design general catalogue.

(5) Only for products with 20 mm thickness.