



Formatos Sizes	75x150 cm 29 1/2"x59" ± 9,5mm	90x90 cm 35 3/8"x35 3/8" ± 20mm	45x90 cm 17 3/4"x35 3/8" ± 20mm	75x75 cm 29 1/2"x29 1/2" ± 9,5mm	37.5x75 cm 14 3/4" x 29 1/2" ± 9,5mm	60x60 cm 23 5/8"x23 5/8" ± 20mm
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	Caratteristica tecnica Characteristics	Método de ensayo Test Method	Requisitos por tamaño nominal Requirements for nominal size N			KLIF		
			7 cm ≤ N < 15 cm		N ≥ 15 cm	Matt rectified	Grip rectified	Textured rectified
			(mm)	(%)	(mm)			
Características de tamaño Regularity characteristics	Longitud y anchura Length and width	ISO 10545-2	± 0,9 (*)	± 0,6 (*)	± 2,0 (*)	±0.3% ±1.0mm	±0.3% ±1.0mm	±0.3% ±1.0mm
	Grosor Thickness		± 0,5 (**)	± 5 (**)	± 0,5 (**)	±5.0% ±0.5mm	±5.0% ±0.5mm	±5.0% ±0.5mm
	Rectitud de los cantos Straightness of sides		± 0,75 (***)	± 0,5 (***)	± 1,5 (***)	±0.3% ±0.8mm	±0.3% ±0.8mm	±0.3% ±0.8mm
	Ortogonalità (Misurazione da condurre solo sui lati corti quando L/l ≥ 3) Rectangularity (Measurement only on short edges when L/l ≥ 3)		± 0,75 (****)	± 0,5 (****)	± 2,0 (****)	±0.3% ±1.5mm	±0.3% ±1.5mm	±0.3% ±1.5mm
Características estructurales Structural features	planaridad Surface flatness	ISO 10545-3	c.c. ± 0,75	c.c. ± 0,5	c.c. ± 2,0	Not Applicable	Not applicable	Not Applicable
	Absorción de agua (como % de la masa) (come % della massa) Water absorption level (in% by mass)		e.c. ± 0,75	e.c. ± 0,5	e.c. ± 2,0			
			w. ± 0,75	w. ± 0,5	w. ± 2,0			
Características mecánicas de masa Bulk mechanical features	Resistencia de rotura 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	S ≥ 10000 N
	Resistencia a la Flexión Modulus of Rupture		R ≥ 35 N/mm2			R ≥ 40 N/mm ²	R ≥ 40 N/mm ²	R ≥ 45 N/mm ²
	Resistencia a Flessione ed al Carico di Rottura Bending Strength and Breaking Load	EN 1339 Annex F	-			-	-	≥T11 60x60 90X90 ≥U4 45X90
	Resistencia al impacto, expresado como coeficiente de restitución Impact resistance, as coefficient of restitution	ISO 10545-5	Valore dichiarato Declared value			≥0.55	≥0.55	≥0.55
Características mecánicas superficiales Surface mechanical features	Dureza Mohs Mohs hardness	EN 101	-			MOHS 7	MOHS 8	MOHS 8
	Resistance to deep abrasion of unglazed tiles (removed volume) Resistance to deep abrasion of unglazed tiles (removed volume)	ISO 10545-6	≤ 175 mm ³			≤150mm ³	≤150mm ³	≤150mm ³
Caratteristiche Termo-igrometriche Thermo-igrometric features	Coeficiente de dilatación térmica lineal Coefficient of linear thermal expansion	ISO 10545-8	Valore dichiarato Declared value			≤7 1/mk	≤7 1/mk	≤7 1/mk
	Resistencia al choque térmico Thermal shock resistance	ISO 10545-9	Supera el ensayo de acuerdo con ISO 10545-1 Pass according to EN ISO 10545-1			Resiste	Resiste	Resiste
	Dilatazione all'umidità (in mm/m) Moisture expansion (in mm/m)	ISO 10545-10	Valore dichiarato Declared value			≤0.01% (0.1mm/m)	≤0.01% (0.1mm/m)	≤0.01% (0.1mm/m)
	Resistencia a las heladas Frost resistance	ISO 10545-12	Supera el ensayo de acuerdo con ISO 10545-1 Pass according to EN ISO 10545-1			Resiste	Resiste	Resiste
Características físicas Physical properties	Resistencia a la tracción de los adhesivos cementosos Bond strength/adhesion for improved cementitious adhesives	EN 1348	Valore dichiarato 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)
	Reacción al fuego Reaction to fire	-	Clase A1 oppure A1_{fl} Class A1 or A1 _{fl}			A1 - A1 _{fl}	A1 - A1 _{fl}	A1 - A1 _{fl}
Características químicas Chemical features	Resistencia a los productos químicos de uso doméstico y a los aditivos para piscinas Resistance to household chemicals and swimming pool salts	ISO 10545-13	Clase mínima B Minimum Class B			A	A	A
	Resistencia a los ácidos y bases de baja concentración Resistance to low concentrations of acids and alkalis		Clase declarada Declared Class			LA	LA	LA
	Resistencia a los ácidos y bases de alta concentración Resistance to high concentrations of acids and alkalis		Clase declarada Declared Class			HA	HA	HA
Características de seguridad Safety characteristics	Resistenza alle macchie piastrelle smaltate Resistance to staining for glazed tiles	ISO 10545-14	Clase declarada Declared Class			5	5	5
	Método de la rampa "calzado" Shod Ramp Test	DIN 51130	Clase declarada Declared Class			R10	R11	R11
	Método de la rampa a pies descalzos Barefoot Ramp Test	DIN 51097	Declared value Valore dichiarato			A+B	A+B+C	A+B+C
	Método del péndulo Pendulum Friction Test	BS 7976	PTV 36 classifies the surface as "low slip risk"			≥36Dry ≥36Wet	≥36Dry ≥36Wet	≥36Dry ≥36Wet
		AS 4586	Declared Classification of the new pedestrian surface materials according to the Pendulum Test			Class P3	Class P4	Class P4
	Coeficiente de fricción Coefficient of friction (COF)	UNE-ENV 12633	Valore dichiarato Declared value			Class C2	Class C3	Class C3
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			>0.40Asciutto >0.40Bagnato	>0.40Asciutto >0.40Bagnato	>0.40Asciutto >0.40Bagnato	
Coeficiente de fricción estática 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)			>0.42Wet	>0.42Wet	>0.42Wet	

* 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 dimensioni 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 dimensioni 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).

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

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

However, tiles with a DCOF of 0.42 or greater are not necessarily suitable for all projects.
(3) 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."

For further details, please refer to outdoor design general catalogue.
(4)

Only for products with 20 mm thickness.
(5)