



Formatos Sizes	120x278 cm 47 1/4"x109 1/2" ± 6mm	120x240 cm 47 1/4"x94 1/2" ± 9mm	75x150 cm 29 1/2"x59" ± 9.5mm	75x150 cm 29 1/2"x59" ± 9.5mm	120x120 cm 47 1/4"x47 1/4" ± 9mm	45x90 cm 17 3/4"x35 3/8" ± 9mm	75x75 cm 29 1/2"x29 1/2" ± 9.5mm	75x75 cm 29 1/2"x29 1/2" ± 9.5mm	60x60 cm 23 5/8"x23 5/8" ± 9mm	30x60 cm 11 3/4"x23 5/8" ± 9mm	45x90 cm 17 3/4"x35 3/8" Lastra 20mm ± 20mm	60x60 cm 60x60 cm Lastra 20mm ± 20mm
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	Caratteristica tecnica Characteristics	Método de ensayo Test Method	Requisitos por tamaño nominal Requirements for nominal size N			KONE					
			7 cm ≤ N < 15 cm		N ≥ 15 cm	Matt rectified	Matt rectified ± 9.5mm 75x150 cm	Matt rectified ± 6mm 120x278 cm	Polished rectified	Grip 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	±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	±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	±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	±0.3% ±1.5mm
	planaridad Surface flatness	c.c. ± 0,75		c.c. ± 0,5	c.c. ± 2,0	±0.4% ±1.8mm	Not Applicable	±0.4% ±1.8mm	±0.3% ±1.5mm	±0.4% ±1.8mm	
		e.c. ± 0,75	e.c. ± 0,5	e.c. ± 2,0							
Características estructurales Structural features	Absorción de agua (como % de la masa) (come % della massa) Water absorption level (in% by mass)	ISO 10545-3	$E_B \leq 0,5\%$ Valore massimo 0,6% - Individual Maximum 0,6%			≤0.1%	≤0.1%	≤0.1%	≤0.1%	≤0.1%	
		ASTM C373-18	Requirement ANSI A137.1-2017 Water Absorption Max < 0,5%			≤0.5%	≤0.5%	≤0.5%	≤0.5%	≤0.5%	
Características mecánicas de masa Bulk mechanical features	Resistencia de rotura Breaking strength	ISO 10545-4	$S \geq 700N$ (per spessore < 7,5mm - for thickness < 7,5mm) $S \geq 1300N$ (per spessore ≥ 7,5mm - for thickness ≥ 7,5mm)			$S \geq 1500 N$	$S \geq 1500 N$	$S \geq 1000 N$	$S \geq 1500 N$	$S \geq 1500 N$	
			Resistencia a la Flexión Modulus of Rupture	$R \geq 35 N/mm^2$			$R \geq 40 N/mm^2$	$R \geq 40 N/mm^2$	$R \geq 40 N/mm^2$	$R \geq 40 N/mm^2$	$R \geq 40 N/mm^2$
	Resistenza a Flessione ed al Carico di Rottura Bending Strength and Breaking Load	EN 1339 Annex F		-			-	-	-	-	-
		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	≥0.55	≥0.55
Características mecánicas superficiales Surface mechanical features	Dureza Mohs Mohs hardness		EN 101	-			MOHS 6	MOHS 6	MOHS 6	MOHS 5	MOHS 7
		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	≤150mm ³	≤150mm ³
Caratteristiche Termogrametriche Thermo-igrometric features	Coefficiente 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	≤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	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	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)	≥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}	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	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	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	-
	Resistenza alle macchie piastrelle smaltate Resistance to staining for glazed tiles	ISO 10545-14	Clase declarada Declared Class			5	5	5	5	5	
Características de seguridad Safety characteristics		Método de la rampa "calzado" Shod Ramp Test	DIN 51130	Clase declarada Declared Class			R10	R10	R9	N.C.	R11
	Método de la rampa a pies descalzos Barefoot Ramp Test		DIN 51097	Declared value Valore dichiarato			A	A	A	0	A+B
		Método del péndulo Pendulum Friction Test	BS 7976	PTV 36 classifies the surface as "low slip risk"			≥36Dry ≥36Wet	≥36Dry ≥36Wet	PTV ≥ 36 Wet on demand / su richiesta	≥36Dry ≤24Wet	≥36Dry ≥36Wet
	AS 4586		Declared Classification of the new pedestrian surface materials according to the Pendulum Test			Class P3	Class P3	P3 on demand	-	Class P4	
	UNE-ENV 12633		Valore dichiarato Declared value			C2 on demand	C2 on demand	C2 on demand	-	Class C3	
	Coefficiente de fricción 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			>0.40Asciutto >0.40Bagnato	>0.40Asciutto >0.40Bagnato	>0.40Asciutto >0.40Bagnato	>0.40Asciutto >0.40Bagnato	>0.40Asciutto >0.40Bagnato	
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	>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 curvatures, 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 curvatures, 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).
- (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.
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."
- (4) For further details, please refer to outdoor design general catalogue.
- (5) Only for products with 20 mm thickness.