



Sizes Formate	30x60 cm 11 3/4"x23 5/8" ± 9mm
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TECHNICAL FEATURES / CARATTERISTICHE TECNICHE				Requirements for nominal size N Requisiti per dimensione nominale N			BLOCK IN
				7 cm ≤ N < 15 cm (mm)	N ≥ 15 cm (%) (mm)		
Regularity features	 Length and width Länge und Breite Thickness Stärke Straightness of sides Geradlinigkeit der Kanten Rectangularity (Measurement only on short edges when L/l ≥ 3) Ortogonalità (Misurazione da condurre solo sui lati corti quando ≥ L/l 3)	ISO 10545-2	± 0,9 (*)	± 0,6 (*)	± 2,0 (*)	Suitable for	
			± 0,5 (**)	± 5 (**)	± 0,5 (**)	± 5.0% ± 0.5 mm	
			± 0,75 (***)	± 0,5 (***)	± 1,5 (***)	Suitable for	
			± 0,75 (****)	± 0,5 (****)	± 2,0 (****)	Suitable for	
	 Surface flatness Ebenflächigkeit			c.c. ± 0,75	c.c. ± 0,5	c.c. ± 2,0	± 0.4% ± 1.8mm
			e.c. ± 0,75	e.c. ± 0,5	e.c. ± 2,0		
			w. ± 0,75	w. ± 0,5	w. ± 2,0		
			EN 14411 annex G (Group Bla) EN 14411 appendice G (Gruppo Bla)	ISO 13006 annex G (Group Bla) ISO 13006 appendice G (Gruppo Bla)			
Structural features	 Water absorption level (in% by mass) Wasseraufnahme (come % della massa)	ISO 10545-3	E _B ≤ 0,5% Individual max 0,6% E _B ≤ 0,5% Valore max singolo 0,6%			≤ 0.1%	
Bulk mechanical features	 Breaking strength Bruchlast	ISO 10545-4	S ≥ 1300 N			S ≥ 1500 N	
	 Modulus of Rupture Biegefestigkeit		R ≥ 35 N/mm ²			R ≥ 40 N/mm ²	
	 Impact resistance, as coefficient of restitution Resistenza all'impatto, espresso come coefficiente di restituzione	ISO 10545-5	Declare a value Dichiarare un valore	Test method available Metodo di prova disponibile		≥ 0.55	
Surface mechanical features	 Mohs hardness Ritzhärte nach Mohs	EN 101 ⁽¹⁾	-			MOHS 7	
	 Resistance to deep abrasion of unglazed tiles (removed volume) Resistenza all'abrasione profonda delle piastrelle non smaltate (volume materiale asportato)	ISO 10545-6	≤ 175 mm ³			≤ 150mm ³	
Thermo-igrometric features	 Linear Thermal Expansion Coefficient Wärmeausdehnungskoeffizient	ISO 10545-8	Declare a value Dichiarare un valore	Test method available Metodo di prova disponibile		≤ 7 1/mk	
	 Thermal shock resistance Temperaturwechselbeständigkeit	ISO 10545-9	Pass according to EN ISO 10545-1 Test superato in accordo con ISO 10545-1	Test method available Metodo di prova disponibile		Resiste	
	 Expansion due to humidity (mm/m) Dilatazione all'umidità (in mm/m)	ISO 10545-10	Declare a value Dichiarare un valore	Test method available Metodo di prova disponibile		≤ 0.01% (0.1 mm/m)	
	 Frost resistance Frostbeständigkeit	ISO 10545-12	Pass according to EN ISO 10545-1 Test superato in accordo con ISO 10545-1	Required Metodo di prova richiesto		Resiste	
Physical properties	 Bond strength/adhesion for improved cementitious adhesives Haftfestigkeit	EN 1348	Declare a value Dichiarare un valore	-		≥ 1.0 N/mm ² (Class C2 - EN 12004)	
	 Reaction to fire Brandverhalten	-	Class A1 or A1 _{fl} Classe A1 oppure A1 _{fl}	-		A1 - A1 _{fl}	
Chemical features	 Resistance to household chemicals and swimming pool salts Beständigkeit gegen Haushaltschemikalien und Zusatzstoffe für Schwimmbäder	ISO 10545-13	Minimum Class B (UB for unglazed tiles) Classe minima B (UB per piastrelle non smaltate)			UA	
	 Resistance to low concentrations of acids and alkalis Beständigkeit gegen niedrigkonzentrierte Säuren und Laugen		Declare a class Dichiarare una classe	Manufacturer is to state classification Secondo la classificazione indicata dal fabbricante		ULA	
	 Resistance to high concentrations of acids and alkalis Beständigkeit gegen hochkonzentrierte Säuren und Laugen		Declare a class Dichiarare una classe	Test method available Metodo di prova disponibile		UHA	
	 Resistance to staining for glazed tiles Resistenza alle macchie piastrelle smaltate	ISO 10545-14	Declare a class Dichiarare una classe	Test method available Metodo di prova disponibile		UA	
Safety features	 Barefoot Ramp Test Rampenmethode barfuß	DIN 51097	Declare a value Dichiarare un valore	-		A+B	
	 Shod Ramp Test Rampenmethode mit Schuhen	DIN 51130	Declare a value Dichiarare un valore	-		R10	
	 Pendulum Friction Test Pendelmethode	UNE-ENV 12633 BS 7976-2002	Declare a value Dichiarare un valore	-		Class 2 PTV > 36 Dry PTV > 36 Wet	
Safety features		Coefficient of friction (COF) Coefficiente di attrito	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	
		Dynamic Coefficient of Friction Dynamischer Reibungskoeffizient	ANSI A137.1 - 2012	ANSI A.137.1 Requires a minimum value of 0.42 for commercial areas that are likely to be wet.			> 0.42 Wet
		Static Coefficient of Friction Statischer Reibungskoeffizient	ASTM C1028 - 2007	The Ceramic Tiles Institute Identifies Tile Slip Resistant when SCOF ≥ 0,60			≥ 0.60 Dry ≥ 0.60 Wet
		Pendulum Friction Test Pendelmethode	AS/NZS 4586 - 2013	Declared Classification of the pedestrian surface materials according to the Wet Pendulum Test			Class P3

(*) The permissible deviation, in % or mm, of the average size for each tile (2 or 4 sides) from work size (W).
 (**) The permissible deviation, in % or mm, of the average thickness for each tile from the work size thickness (W).
 (***) The maximum permissible deviation from straightness, in % or mm, related to the corresponding work sizes (W).
 (****) The maximum permissible deviation from rectangularity, in % or mm, related to the corresponding work sizes (W).
 c.c. The maximum permissible deviation from centre curvature, in % or mm, related to diagonal calculated from the work sizes (W).
 e.c. The maximum permissible deviation from edge curvature, in % or mm, related to the corresponding work sizes (W).
 w The maximum permissible deviation from warpage, in % or mm, related to diagonal calculated from the work sizes (W).
 (1) Requirements european standard EN 176.
 (2) Determination of slip resistance of pedestrian surfaces; it does not cover sports surfaces and road surfaces for vehicles (skid resistance).
 Anti-slip performance is guaranteed at the time of delivery of the product