



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

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE				Requirements for nominal size N Requisiti per dimensione nominale N			MARVEL EDGE			
				7 cm ≤ N < 15 cm		N ≥ 15 cm		Polished	Matt	
				(mm)	(%)	(mm)	(mm)			
Regularity features	Length and width Longueur et largeur	Thickness Épaisseur	Straightness of sides Straightness of sides	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 (*)	±0.3% ±1.0mm	±0.3% ±1.0mm
						± 0,5 (**)	± 5 (**)	± 0,5 (**)	±5.0% ±0.5mm	±5.0% ±0.5mm
						± 0,75 (***)	± 0,5 (***)	± 1,5 (***)	±0.3% ±0.8mm	±0.3% ±0.8mm
						± 0,75 (****)	± 0,5 (****)	± 2,0 (****)	±0.3% ±1.5mm	±0.3% ±1.5mm
	Surface flatness Planimétrie						c.c. ± 0,75	c.c. ± 0,5	c.c. ± 2,0	±0.3% ±1.5mm
						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) Masse d'eau absorbée (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%	≤0.1%		
Bulk mechanical features	Breaking strength Force de rupture		ISO 10545-4	S ≥ 1300 N			S ≥ 1500 N	S ≥ 1500 N		
	Modulus of Rupture Résistance à La Flexion			R ≥ 35 N/mm ²			R ≥ 40 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	≥0.55			
Surface mechanical features	Mohs hardness Dureté Mohs		EN 101 ⁽¹⁾	-			MOHS 5	MOHS 6		
	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	≤150mm ³		
Thermo-igrometric features	Linear Thermal Expansion Coefficient Coefficient de dilatation thermique linéique		ISO 10545-8	Declare a value Dichiarare un valore	Test method available Metodo di prova disponibile	≤7 1/mk	≤7 1/mk			
	Thermal shock resistance Résistance aux écarts de température		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	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% (0.1mm/m)	≤0.01% (0.1mm/m)			
	Frost resistance Résistance au gel		ISO 10545-12	Pass according to EN ISO 10545-1 Test superato in accordo con ISO 10545-1	Required Metodo di prova richiesto	Resiste	Resiste			
Physical properties	Bond strength/adhesion for improved cementitious adhesives Effort de cohésion		EN 1348	Declare a value Dichiarare un valore	-	≥1.0 N/mm ² (Class C2 - EN 12004)	≥1.0 N/mm ² (Class C2 - EN 12004)			
	Reaction to fire Réaction au feu		-	Class A1 or A1 _{fl} Classe A1 oppure A1 _{fl}	-	A1 - A1 _{fl}	A1 - A1 _{fl}			
Chemical features	Resistance to household chemicals and swimming pool salts Résistance aux produits chimiques à usage domestique et aux adjuvants pour piscine		ISO 10545-13	Minimum Class B (UB for unglazed tiles) Classe minima B (UB per piastrelle non smaltate)			UA	UA		
	Resistance to low concentrations of acids and alkalis Résistance aux acides et aux alcalis à basse concentration			Declare a class Dichiarare una classe	Manufacturer is to state classification Secondo la classificazione indicata dal fabbricante	ULA	ULA			
	Resistance to high concentrations of acids and alkalis Résistance aux acides et aux alcalis à haute concentration			Declare a class Dichiarare una classe	Test method available Metodo di prova disponibile	0	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	5	5			
Safety features	Barefoot Ramp Test Test de la rampe à pieds nus		DIN 51097	Declare a value Dichiarare un valore	-	0	A			
	Shod Ramp Test Test de la rampe « chaussé »		DIN 51130	Declare a value Dichiarare un valore	-	NC	R9			
	Pendulum Friction Test Méthode du Pendule		UNE-ENV 12633 BS 7976-2002	Declare a value Dichiarare un valore	-	Class 0	Class 1			
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			>0.40Asciutto <0.40Bagnato	>0.40Asciutto <0.40Bagnato		
	Dynamic Coefficient of Friction Coefficient de frottement dynamique		ANSI A137.1 - 2012	ANSI A.137.1 Requires a minimum value of 0.42 for commercial areas that are likely to be wet.			<0.42Wet	<0.42Wet		
	Static Coefficient of Friction Coefficient de frottement statique		ASTM C1028 - 2007	The Ceramic Tiles Institute Identifies Tile Slip Resistant when SCOF ≥ 0,60			≥0.60Dry 0.50/0.60Wet	≥0.60Dry 0.50/0.60Wet		
	Pendulum Friction Test Méthode du Pendule		AS/NZS 4586 - 2013	Declared Classification of the pedestrian surface materials according to the Wet Pendulum Test			Class P3 on demand	Class P3 on demand		

(*) 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