



Sizes	50x110 cm 19 5/8"x43 1/4" ± 8.5mm	30.5x91.5 cm 12"x36" ± 8.5mm	30.5x56 cm 12"x22" ± 8.5mm	
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TECHNICAL FEATURES / TECHNICAL FEATURES				Requirements for nominal size N			MARVEL WALL
				Requirements for nominal size N			
				7 cm ≤ N < 15 cm	N ≥ 15 cm		Shiny
				(mm)	(%)	(mm)	
Regularity features		<b>Length and width</b> Length and width	ISO 10545-2	± 0,75 (*)	± 0,5 (*)	± 2,0 (*)	±0.3% ±1.0mm
		<b>Thickness</b> Thickness		± 0,5 (**)	± 10 (**)	± 0,5 (**)	±10.0% ±0.5mm
		<b>Straightness of sides</b> Straightness of sides		± 0,5 (***)	± 0,3 (***)	± 1,5 (***)	±0.3% ±0.8mm
		<b>Rectangularity</b> Rectangularity		± 0,75 (****)	± 0,5 (****)	± 2,0 (****)	±0.3% ±1.5mm
		<b>Surface flatness</b> Surface flatness		c.c. + 0,75 - 0,50	c.c. + 0,5 - 0,3	c.c. + 2,0 - 1,5	±0.3% ±1.5mm
e.c. + 0,75 - 0,50	e.c. + 0,5 - 0,3	e.c. + 2,0 - 1,5					
w. ± 0,75	w. ± 0,5	w. ± 2,0					
				EN 14411 annex L (Group BIII) EN 14411 annex L (Group BIII)	ISO 13006 annex L (Group BIII) ISO 13006 annex L (Group BIII)		
Structural features		<b>Water absorption level (in% by mass)</b> Water absorption level (in% by mass)	ISO 10545-3	<b>Average &gt;10%. When the average &gt; 20%, this shall be indicated. Individual value &gt; 9%</b> Average >10%. When the average > 20%, this shall be indicated. Individual value > 9%			10%<EB≤20%
Bulk mechanical features		<b>Breaking strength</b> Breaking strength	ISO 10545-4	S ≥ 600 N			S ≥ 600 N
		<b>Modulus of Rupture</b> Modulus of Rupture		R ≥ 15 N/mm <sup>2</sup>			R ≥ 15 N/mm <sup>2</sup>
Thermo-igrometric features		<b>Linear Thermal Expansion Coefficient</b> Linear Thermal Expansion Coefficient	ISO 10545-8	<b>Declare a value</b> Declare a value	<b>Test method available</b> Test method available		≤7 1/mk
		<b>Thermal shock resistance</b> Thermal shock resistance	ISO 10545-9	<b>Pass according to EN ISO 10545-1</b> Pass according to EN ISO 10545-1	<b>Test method available</b> Test method available		Resiste
		<b>Expansion due to humidity (mm/m)</b> Expansion due to humidity (mm/m)	ISO 10545-10	<b>Declare a value</b> Declare a value	<b>Test method available</b> Test method available		≤0.06% (0.6mm/m)
		<b>Frost resistance</b> Frost resistance	ISO 10545-12	<b>Pass according to EN ISO 10545-1</b> Pass according to EN ISO 10545-1	<b>Required</b> Required		0
Physical properties		<b>Bond strength/adhesion for improved cementitious adhesives</b> Bond strength/adhesion for improved cementitious adhesives	EN 1348	<b>Declare a value</b> Declare a value	-		≥1.0 N/mm <sup>2</sup> (Class C2 - EN 12004)
		<b>Reaction to fire</b> Reaction to fire	-	<b>Class A1 or A1<sub>fl</sub></b> Class A1 or A1 <sub>fl</sub>	-		A1
Chemical features		<b>Resistance to household chemicals and swimming pool salts</b> Resistance to household chemicals and swimming pool salts	ISO 10545-13	<b>Minimum Class B (GB for unglazed tiles)</b> Minimum Class B (GB for unglazed tiles)			GA
		<b>Resistance to low concentrations of acids and alkalis</b> Resistance to low concentrations of acids and alkalis		<b>Declare a class</b> Declare a class	<b>Test method available</b> Test method available		GLA
		<b>Resistance to high concentrations of acids and alkalis</b> Resistance to high concentrations of acids and alkalis		<b>Declare a class</b> Declare a class	<b>Test method available</b> Test method available		GHA
		<b>Resistance to staining for glazed tiles</b> Resistance to staining for glazed tiles	ISO 10545-14	<b>Minimum Class 3</b> Minimum Class 3			GA

(\*) 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

