

			GLAZED PORCELAIN TILES TECHNICAL CHARACTERISTICS	
		PRODUCT NAME: MANAOS POLISHED ALL SIZES	Date:12.01.2021	
Norms	Technical Characteristics		Required Values	Product Declared Values *
EN ISO 10545-2	Dimensions and surface quality	Length and width	±%0,6 (± 2,0 mm)	± % 0,15
		Thickness	± % 5 (± 0,5 mm)	± (% 5) 10,0 mm
		Straightness of sides	±%0,5 (± 1,5 mm)	±%0,3
		Rectangularity	±%0,5 (± 2,0 mm)	±%0,3
		Centre - edge curvature - warpage	±%0,5 (± 2,0 mm)	+%0,2/-%0,1
		Surface quality	% 95	% 95
EN ISO 10545-3	Water absorption %		≤%0,5 (individual max. % 0,6)	≤ % 0,15
EN ISO 10545-4	Breaking strength (N)	thickness ≥ 7,50mm	min. 1300 N	min. 2100 N
		thickness < 7,50mm	min. 700 N	min. 750 N
	Modulus of rupture (N/mm²)		min. 35 N/mm²	min. 40 N/mm²
EN ISO 10545-5	Impact resistance as, coefficient of restitution (cor)		Declared value	Resistant
EN ISO 10545-7	Abrasion resistance		Abrasion class and cycles passed	3
EN ISO 10545-8	Linear thermal expansion		Declared value	6,00 x10 ⁻⁶ - 7,50 x10 ⁻⁶
EN ISO 10545-9	Thermal shock resistance		Required	Resistant
EN ISO 10545-10	Moisture expansion		Declared value	0,01%
EN ISO 10545-11	Crazing resistance		Required	Resistant
EN ISO 10545-12	Frost resistance		Required	Resistant
EN ISO 10545-13	Resistance to low concentrations of acids and alkalis		Declared value	LA - Resistant
	Resistance to high concentrations of acids and alkalis		Declared value	HB - Resistant
	Resistance to household chemicals and swimming pool salts		min. B	A - Resistant
EN ISO 10545-14	Resistance to staining		min. 3.class	5.class
EN ISO 10545-15	Release of dangerous substance Lead - Cadmium		Declared value	Pb < 0,1 Cd < 0,01
ASTM C 1028-96	Static friction coefficient		Declared value	WET:0,34 DRY:0,39
CEN/TS 16165	PENDULUM.		Declared value	----
DIN 51130-51097 CEN/TS 16165	Kayganlık (ramp tayini) Slipperiness		Declared value	----
EN 12004:2007+A1:2012,4,1	Bond strength adhesion	Cementitious adhesives	Declared value	≥ 1,0 N/mm2 Tip C2
EN 12004:2007+A1:2012,4,2		Dispersion adhesives	Declared value	
EN 12004:2007+A1:2012,4,3		Reaction resin adhesives	Declared value	
		Mortar	Declared value	
	Reaction to fire		A1 or A1FL	A1 or A1FL
CEN/TS15209	Tactility		Declare surface description	Declare surface description

Note

* EN 14411 Dry pressed ceramic tiles with low water absorption Ek G (Grup BIa) E < %0,5 glazed (GL)

* The test results refer only to first choice items and they do not regard the trimtiles. The values are based on average production values.