

Technical Specification

CHARACTERISTIC	STANDARD AS PER ISO13006:2018/ EN14411 Gr.Bla	MEAN VALUE OF RAMIRRO	TEST METHOD
Regulatory Properties			
Deviation in Length and Width	± 0.30 % (±1.00mm)	± 0.10 %	ISO 10545-2
Deviation in Thickness	± 5.00 % (±0.50mm)	± 5.00 %	ISO 10545-2
Straightness in Side	± 0.30 % (±0.80mm)	± 0.10 %	ISO 10545-2
Rectangularity	± 0.30 % (±1.50mm)	± 0.10%	ISO 10545-2
Surface Flatness Central Curvature	± 0.40 % (±1.80mm)	± 0.50 %	ISO 10545-2
Surface Flatness Edge Curvature	± 0.40 % (±1.80mm)	± 0.50 %	ISO 10545-2
Surface Flatness Warpage	± 0.40 % (±1.80mm)	± 0.50 %	ISO 10545-2
Surface Quality	> 95% defects free	> 95% defects free	ISO 10545-2
Small Color Difference(for Plain Colour)	ΔE < 1.00	ΔE < 0.30	ISO 10545-16
Glossiness (Polished)	as per mfg.	Gloss Value> 90	Gloss Meter 60°
Glossiness (Matt)	as per mfg.	3 <Gloss Value<7	Gloss Meter 60°
Glossiness (Satin/Posh)	as per mfg.	7<Gloss Value<18	Gloss Meter 60°
Structural Properties			
Water absorption	≤ 0.50 %	≤ 0.060 %	ISO 10545-3
Bulk density	as per mfg.	Min. 2.28 g/cc	ISO 10545-3
Massive Mechanical Properties			
Modulus of rupture	Min. 35.0 N/mm ²	Min. 42.0 N/mm ²	ISO 10545-4
Breaking strength thickness <7.5	Min. 7000.0 N	Min. 10000.0 N	ISO 10545-4
Breaking strength thickness ≥7.5	Min. 13000.0 N	Min. 18000.0 N	ISO 10545-4
Breaking strength thickness ≥7.5 (15mm)	Min. 13000.0 N	Min. 75000.0 N	ISO 10545-4
Surface Mechanical Properties			
MOH'S hardness #	as per mfg.	Glossy Min. 4*/ Posh Min. 6	BS EN 15771
Surface abrasion resistance #	as per mfg.	Glossy Min. 2/ Posh Min. 3	ISO 10545-7
Deep abrasion resistance #	Max. 175mm ³	Max. 132mm ³	ISO 10545-6
Thermal Hydrometric Properties			
Moisture expansion	Max. 0.06%(0.6mm/m)	Max. 0.02mm/m	ISO 10545-10
Thermal expansion(COE) at 100°C	as per mfg.	Max. 6.0 x 10 ⁻⁶	ISO 10545-8
Thermal shock resistance	Min. 10 Cycle	Min. 10 Cycle	ISO 10545-9
Impact resistance(COR) #	Min. 0.55	Min. 0.55	ISO 10545-5
Frost resistance	as per mfg.	Frost Proof	ISO 10545-12
Chemical Properties			
Resistance to staining glazed	Min. Class 3	Min. Class 4	ISO 10545-14
Resistance to household chemicals & swimming pool salts glazed	Min. Class GB	Min. Class GA	ISO 10545-13
Resistance to low concentrate acid and alkalis glazed	as per mfg.	Min. Class GLB**	ISO 10545-13
Resistance to high concentrate acid and alkalis glazed	as per mfg.	Min. Class GHB**	ISO 10545-13
Safety Properties			
Skid resistance(DCOF-DRY) ##	as per mfg.	Glossy P0(¹²) / Posh ≥P ¹⁽¹²⁻²⁴⁾	BS 7976-2
Slip resistance(DCOF)(R value) ##	as per mfg.	R9 to R ¹³	DIN 51130
Fire resistance	as per mfg.	Fire Proof	N.A.

* With Nano polished

** Except Hydrofluoric Acid & it's compound

Tiles Intended for use on floor

As per customer requirement