

TECHNICAL SPECIFICATION



CHARACTERISTIC	STANDARD AS PER ISO13006:2018/ EN14411 Gr.BIa	MEAN VALUE OF REY	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)	± 4.00 %	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)	± 0.20 %	ISO 10545-2
Surface flatness edge curvature	± 0.40 % (±1.80mm)	± 0.20 %	ISO 10545-2
Surface flatness warpage	± 0.40 % (±1.80mm)	± 0.10 %	ISO 10545-2
Surface quality	> 95% defects free	> 95% defects free	ISO 10545-2
Small Color Difference(For Plain Color)	ΔE <1.00	ΔE < 0.30	ISO 10545-16
Glossiness (Polished)	as per mfg.	Gloss Value > 90	Glossmeter 60°
Glossiness (Matt)	as per mfg.	3° < GLOSS < 7°	Glossmeter 60°
Glossiness (satin/Posh)	as per mfg.	7° < GLOSS < 18°	Glossmeter 60°
Structural Properties			
Water absorption	< 0.50 %	0.060 % ≤ Ev ≤ 0.50 %	ISO 10545-3
Bulk density	as per mfg.	> 2.28 gm/cc	ISO 10545-3
Massive Mechanical Properties			
Modulus of rupture	Min. 35.0 N/mm ²	Min. 37.0 N/mm ²	ISO 10545-4
Breaking strength thickness ≥7.5	Min. 700.0 N	Min. 1000.0 N	ISO 10545-4
Breaking strength thickness ≥7.5	Min. 1300.0 N	Min. 1350.0 N	ISO 10545-4
Breaking strength thickness ≥7.5(For ≥15mm)	Min. 1300.0 N	Min. 1800.0 N	ISO 10545-4
Surface Mechanical Properties			
MOH'S hardness	as per mfg.	Polished Min 4* / Satin, Posh & Matt Min 6	BS EN 15771
Surface abrasion resistance	as per mfg.	Polish Min. Class 2, Satin & Posh Min. Class 3, & Matt Min. Class 4	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)	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 GLA**	ISO 10545-13
Resistance to high concentrate acid and alkalis unglazed	as per mfg.	Min. Class GHB**	ISO 10545-13
Safety Properties			
Skid resistance (COF-WET PENDULAM) ##	as per mfg.	Glossy P0(<12), Satin, Posh ≥P1 (12-24) Matt ≥P2(25-34)	BS 7976-2
Slip resistance - (Satin / Matt (DCOF) (R value) ##	as per mfg.	R9 to R13**	DIN 51130
Fire resistance	as per mfg.	Fire Proof	N.A.