

Technical Specification

CHARACTERISTIC	STANDARD AS PER ISO13006:2012/ EN14411 Gr.Bla	STANDARD AS PER IS15622:2017 Gr.Bla	MEAN VALUE OF SIMPOLO	TEST METHOD
Regulatory Properties				
Deviation in Length and Width	±0.50 %	±0.10 %	± 0.10 %	ISO 10545-2 & IS 13630-1
Deviation in Thickness	±5.0 %	±5.0 %	± 4.0 %	ISO 10545-2 & IS 13630-1
Straightness in Side	±0.50 %	±0.10 %	± 0.10 %	ISO 10545-2 & IS 13630-1
Rectangularity	±0.60 %	±0.10%	± 0.10 %	ISO 10545-2 & IS 13630-1
Surface Flatness Central Curvature	±0.50 %	±0.50 %	± 0.10 %	ISO 10545-2 & IS 13630-1
Surface Flatness Edge Curvature	±0.50 %	±0.50 %	± 0.10 %	ISO 10545-2 & IS 13630-1
Surface Flatness Warpage	±0.50 %	±0.50 %	± 0.10 %	ISO 10545-2 & IS 13630-1
Surface Quality	>95% defects free	>95% defects free	>95% defects free	ISO 10545-2 & IS 13630-1
Small Color Difference	N.A.	N.A.	N.A.	ISO 10545-16
Glossiness (With Nano Polished)	As per Manufacturer	As per Manufacturer	> 90° **	Gloss Meter 60°
Glossiness (Without Polished)	As per Manufacturer	As per Manufacturer	7°< Gloss <14°***	Gloss Meter 60°
Glossiness (Satin Finished)	As per Manufacturer	As per Manufacturer	15°< Gloss <25°***	Gloss Meter 60°
Structural Properties				
Water Absorption	≤0.50 %	≤0.080 %	≤0.050 %	ISO 10545-3 & IS 13630-2
Bulk Density	>2.00 g/cc	Min. 2.20 g/cc	>2.28 gm/cc	DIN51082 & IS 13630-3
Massive Mechanical Properties				
Modulus of Rupture (For 9mm,10mm & 12mm)	Min. 35.0 N/mm ²	Min. 35.0 N/mm ²	Min. 37.0 N/mm ²	ISO 10545-4 & IS 13630-6
Modulus of Rupture (For 16mm & 20mm)	Min. 35.0 N/mm ²	Min. 35.0 N/mm ²	Min. 42.0 N/mm ²	ISO 10545-4 & IS 13630-6
Breaking Strength Thickness ≥7.5	Min. 1300.0 N	Min. 1300.0 N	Min. 1600 N	ISO 10545-4 & IS 13630-6
Breaking Strength Thickness ≥7.5(For 10mm & 12mm)	Min. 1300.0 N	Min. 1300.0 N	Min. 2000 N	ISO 10545-4 & IS 13630-6
Breaking Strength Thickness ≥7.5(For 16mm & 20mm)	Min. 1300.0 N	Min. 1300.0 N	Min. 7500 N	ISO 10545-4 & IS 13630-6
Surface Mechanical Properties				
MOH'S Hardness	Min. 6	Min. 5	Min. 7***	EN 101 & IS 13630-13
Deep Abrasion Resistance	Max. 175 mm ³	Max. 140 mm ³	Max. 132 mm ³	ISO 10545-6 & IS 13630-12
Thermal Hygrometric Properties				
Moisture Expansion	Max. 0.6 mm/m	Max. 0.02 mm/m	NIL	ISO 10545-10 & IS 13630-3
Thermal Expansion(COE) at 100°C	As per Manufacturer	Max. 6.0 x 10 ⁻⁶	Max. 6.0 x 10 ⁻⁶	ISO 10545-8 & IS 13630-4
Thermal Shock Resistance	Min. 10 Cycle	Min. 10 Cycle	Min. 10 Cycle	ISO 10545-9 & IS 13630-5
Impact Resistance(COR)	As per Manufacturer	Min. 0.55	Min. 0.55	ISO 10545-5 & IS 13630-14
Frost Resistance	As per Manufacturer	As per Manufacturer	Frost Proof	ISO10545-12 & IS 13630-10
Chemical Properties				
Resistance to Staining Unglazed	As per Manufacturer	Min Class II	Min.Class 4/Min. Class II	ISO 10545-14 & IS 13630-8
Resistance to Household Chemicals & Swimming PoolSalts Unglazed	Min. Class UB	As per Manufacturer	Min. Class UB/Min. Class A	ISO 10545-13 & IS 13630-7
Resistance to Low Concentrate Acid and AlkalisUnglazed	As per Manufacturer	As per Manufacturer	Min. Class ULB****/ Min. Class A****	ISO 10545-13 & IS 13630-7
Resistance to High Concentrate Acid and AlkalisUnglazed	As per Manufacturer	As per Manufacturer	Min. Class UHB****/ Min. Class A****	ISO 10545-13 & IS 13630-7
Safety Properties				
Skid resistance(DCOF-DRY)	As per Manufacturer	As per Manufacturer	>0.40	ISO 10545-17
Slip resistance(DCOF)(R Value)#	As per Manufacturer	As per Manufacturer	N.A.	ISO 10545-17
Fire Resistance	As per Manufacturer	As per Manufacturer	Fire Proof	N.A.

** Glossiness 90 % with nano technology

*** Without nano technology (Unpolished Vitrified tiles)

Depending on Application area (low or high intensity of traffic)

**** Except Hydrofluoric Acid & it's compound

As per customer requirement

Packing Details

PRODUCT	SIZE	ACTUAL SIZE	THICKNESS	TILES / BOX	COVERAGE AREA / BOX
SIMPOLO TILES	80x240cm	798x2398mm	12mm	1 pcs.	1.92 sq. mtr. 20.66 sq. ft.
	80x160cm	798x1598mm	9mm	2 pcs.	2.55 sq. mtr. 27.45 sq. ft.
	120x120cm	1198x1198cm	9mm	2 pcs.	2.87 sq. mtr. 30.89 sq. ft.
	80x80cm	798x798mm	9mm	3 pcs.	1.92 sq. mtr. 20.66 sq. ft.
	60x120cm	600x1200mm	9mm	2 pcs.	1.44 sq. mtr. 15.50 sq. ft.
	60x60cm	600x600mm	9mm	4 pcs.	1.44 sq. mtr. 15.50 sq. ft.
STEP	60x60cm	600x600mm	20mm	2 pcs.	0.72 sq. mtr. 7.75 sq. ft.
	30x202cm	300x2020mm	12mm	3 pcs.	1.82 sq. mtr. 19.57 sq. ft.
	30x160cm	300x1600mm	12mm	4 pcs.	1.92 sq. mtr. 20.66 sq. ft.
RISER	30x120cm	300x1200mm	12mm	3 pcs.	1.08 sq. mtr. 11.63 sq. ft.
	60x202cm	600x2020mm	12mm	2 pcs.	2.41 sq. mtr. 25.94 sq. ft.
	80x160cm	800x1600mm	12mm	2 pcs.	2.56 sq. mtr. 27.52 sq. ft.
	60x120cm	600x1200mm	9mm	2 pcs.	1.44 sq. mtr. 15.50 sq. ft.
	19x160cm	190x1600mm	12mm	4 pcs.	1.21 sq. mtr. 13.08 sq. ft.