

# TECHNICAL DETAIL

CHARACTERISTIC	STANDARD AS PER ISO13006:2018/ EN14411 Gr.BIa	STANDARD AS PER IS 15622:2017 Gr.BIa	METHOD OF TESTING	MEAN VALUE OF SIMPOLO
<b>Regulatory Properties</b>				
Deviation in Length and Width	±0.30 % (±1.00 mm)	±0.10 %	ISO 10545-2/IS 13630-1	± 0.10 %
Deviation in Thickness	±5.0 % (± 0.50 mm)	±5.0 %	ISO 10545-2/IS 13630-1	± 5.0 %
Straightness in Side	±0.30 % (± 0.80 mm)	±0.10 %	ISO 10545-2/IS 13630-1	± 0.10 %
Rectangularity	±0.30 % (±1.50 mm)	±0.10%	ISO 10545-2/IS 13630-1	± 0.10 %
Surface Flatness Central Curvature	±0.40 % ( ± 1.80 mm)	±0.50 %	ISO 10545-2/IS 13630-1	± 0.20 %
Surface Flatness Edge Curvature	±0.40 % ( ± 1.80 mm)	±0.50 %	ISO 10545-2/IS 13630-1	± 0.20 %
Surface Flatness Warpage	±0.40 % (± 1.80 mm)	±0.50 %	ISO 10545-2/IS 13630-1	± 0.10 %
Surface Quality	>95% defects free	>95% defects free	ISO 10545-2/IS 13630-1	>95% defects free
Small Color Difference (For Plain Colour)	ΔE <1.00	N.A.	ISO 10545-16	ΔE <0.80
Glossiness ( Polished)	As per Manufacturer	As per Manufacturer	Gloss Meter 60°	≥ 90
Glossiness (Satin/Posh)	As per Manufacturer	As per Manufacturer	Gloss Meter 60°	15 ≤ Gloss Value ≤ 25
Glossiness (Matt/CRV)	As per Manufacturer	As per Manufacturer	Gloss Meter 60°	7 ≤ Gloss Value ≤ 18
Glossiness @ Value)##	As per Manufacturer	As per Manufacturer	Gloss Meter 60°	≤ 7
<b>Structural Properties</b>				
Water Absorption	≤0.50 %	≤0.080 %	ISO 10545-3/IS 13630-2	≤0.080 %
Bulk Density	As per Manufacturer	Min 2.20 g/cc	ISO 10545-3/IS 13630-2	> 2.28 gm/cc
<b>Massive Mechanical Properties</b>				
Modulus of Rupture	Min. 35.0 N/mm <sup>2</sup>	Min. 35.0 N/mm <sup>2</sup>	ISO 10545-4/IS 13630-6	Min. 37.0 N/mm <sup>2</sup>
Breaking Strength Thickness ≥7.5 mm	Min 1300.0 N	Min 1300.0 N	ISO 10545-4/IS 13630-6	Min 1500.0 N
<b>Surface Mechanical Properties</b>				
MOH'S Hardness #	As per Manufacturer	Min. 5	BS EN 15771/IS 13630-13	Polished Min 4**/Satin, Posh & Matt,CRV Min 6
Surface Abrasion Resistance #	As per Manufacturer	Min. Class II	ISO 10545-7/IS 13630-11	Polished Min II**/Satin, Posh & Matt,CRV Min III
<b>Thermal Hygrometric Properties</b>				
Moisture Expansion	Max 0.06% (0.6 mm/m)	Max 0.02 mm/m	ISO 10545-10/IS 13630-3	Max 0.02 mm/m
Thermal Expansion(COE) at 100°C	As per Manufacturer	Max. 6.0 x 10 <sup>-6</sup>	ISO 10545-8/IS 13630-4	Max. 6.0 x 10 <sup>-6</sup>
Thermal Shock Resistance	Min 10 Cycle	Min 10 Cycle	ISO 10545-9/IS 13630-5	Min 10 Cycle
Impact Resistance(COR) #	Min. 0.55	Min 0.55	ISO 10545-5/IS 13630-14	Min 0.55
Frost Resistance	As per Manufacturer	As per Manufacturer	ISO 10545-12/IS 13630-10	Frost Proof
Crazing Resistance at 7.5 bar	4 Cycle	4 Cycle	ISO 10545-11/IS 13630-9	4 Cycle
<b>Chemical Properties</b>				
Resistance to Staining Glazed	Min. Class 3	Min Class 1	ISO 10545-14/IS 13630-8	Min. Class 4/Min. Class 1
Resistance to Household Chemicals & Swimming Pool Salts Glazed	Min Class GB	Min Class AA	ISO 10545-13/IS 13630-8	Min Class GB/Min Class AA
Resistance to Low Concentrate Acid and Alkalis Glazed	As per Manufacturer	As per Manufacturer	ISO-10545-13/IS 13630-8	Min Class GLB***/ Min Class A***
Resistance to High Concentrate Acid and Alkalis Glazed	As per Manufacturer	As per Manufacturer	ISO-10545-13/IS 13630-7	Min Class GHB***/ Min Class A***
<b>Safety Properties</b>				
Skid Resistance -(DCOF-WET PENDULUM)##	As per Manufacturer	As per Manufacturer	BS 7976-2	Glossy ≥P0, Satin, Posh ≥P1 Matt/CRV ≥P2
Slip Resistance -Satin/Posh/ Matt/CRV (DCOF- R Value )##	As per Manufacturer	As per Manufacturer	DIN 51130	R9 to R13
Lead and Cadmium release	As per Manufacturer	N.A.	ISO-10545-15	Does not yield Pb & Cd

\* Whichever is Lower

\*\* With nano technology (Polished Vitrified tiles) Depending on Application area (low or high intensity of traffic)

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

# Tiles Intended for use on floor

## For Floor tiles,as per customer requirement

# PACKING DETAIL

PRODUCT	SIZE	ACTULE SIZE	THICKNESS	TILES / BOX	COVERAGE AREA / BOX	
<b>SUPRA &amp; INTRA</b>	120x180cm	1200x1800mm	9mm	2 pcs.	4.32 sq. mtr.	46.50 sq. ft.
	80x160cm	798x1598mm	8.5mm	2 pcs.	2.55 sq. mtr.	27.45 sq. ft.