



Technical Specification

CHARACTERISTICS	Requirement as per ISO 13006:2018 Gr Bla E ≤ 0.5%	Requirement as per IS 15622:2017 Gr Bla E ≤ 0.08%	AGL Value	Test Method
(A) DIMENSION & SURFACE QUALITY				
Deviation In Length & Width	± 0.3%, ± 1.0mm	± 0.1%	± 0.1%	ISO 10545 Part-2 IS 13630 Part-1
Deviation In Thickness	± 5.0%, ± 0.5mm	± 5.0%	± 3.0%	ISO 10545 Part-2 IS 13630 Part-1
Straightness of Edge	± 0.3%, ± 0.8mm	± 0.1%	± 0.1%	ISO 10545 Part-2 IS 13630 Part-1
Rectangularity	± 0.3%, ± 1.5mm	± 0.1%	± 0.1%	ISO 10545 Part-2 IS 13630 Part-1
Surface Flatness	± 0.4%, ± 1.8mm	± 0.5%	± 0.2%	ISO 10545 Part-2 IS 13630 Part-1
Surface Quality	Min. 95% of Tiles shall be free from visible defects that would impair the appearance of a major area of the tiles	Min. 95% of Tiles shall be free from visible defects that would impair the appearance of a major area of the tiles	Min. 95% of Tiles shall be free from visible defects that would impair the appearance of a major area of the tiles	ISO 10545 Part-2 IS 13630 Part-1
(B) PHYSICAL & THERMAL PROPERTIES				
Water Absorption % By Wt.	≤ 0.5, Ind. 0.6 Max.	≤ 0.08, Ind. 0.1 Max.	≤ 0.05%	ISO 10545 Part-3 IS 13630 Part-2
Flexural Strength (MOR) In N/mm ²	Avr. 35, Ind. Min. 32	Avr. 35, Ind. Min. 32	≥ 40 N/mm ²	ISO 10545 Part-4 IS 13630 Part-6
Breaking Strength in N	1300 N Min.	1300 N Min.	> 2000 N (600x1200mm) > 2000 N (10mm) > 6000 N (16mm)	ISO 10545 Part-4 IS 13630 Part-6
Bulk Density (gm/cc)	2.0 Min.	2.2 Min.	≥ 2.3	ISO 10545 Part-3 IS 13630 Part-2
Impact Resistance	> 0.40	> 0.55	> 0.55 (10mm) > 0.80 (16mm)	ISO 10545 Part-5 IS 13630 Part-14
Resistance to Surface Abrasion	Manufacturer to State Class	PEI II Min.	PEI II Min.	ISO 10545 Part-7 IS 13630 Part-11
Co-efficient of Linear Thermal Expansion from ambient temp to 100°C (K ⁻¹)	9x10 ⁻⁶ Max.	6x10 ⁻⁶ Max.	≤ 6x10 ⁻⁶	ISO 10545 Part-8 IS 13630 Part-4
Thermal Shock Resistance	10 Cycles Min.	10 Cycles Min.	No Damage after 10 Cycles	ISO 10545 Part-9 IS 13630 Part-5
Moisture Expansion in mm/M	Test Method Available	0.02 Max.	Nil	ISO 10545 Part-10 IS 13630 Part-3
Cracking Resistance	Required	4 Cycles at 7.5 bar Min.	Resistance	ISO 10545 Part-11 IS 13630 Part-9
Frost Resistance	Resistance	Resistance	Resistance	ISO 10545 Part-12 IS 13630 Part-10
Moh'S Scratch Hardness	Min. 5	Min. 5	Min. 6	EN 101 IS 13630 Part-13
(C) CHEMICAL PROPERTIES				
Resistance To Household Chemicals	No Damage	Min. Class AA	Class AA	ISO 10545 Part-13 IS 13630 Part-8
Resistance To Acids & Alkalis (Except HF Acid)	No Damage	Min. Class AA	Class AA	ISO 10545 Part-13 IS 13630 Part-8
Stain Resistance	Min. Class 3	Min. Class 1	Class 1	ISO 10545 Part-14 IS 13630 Part-8

Packing Specification

Size (mm)	Thickness (mm)	Weight (Kg.)	No. of Tiles / Set	Area Sq. mtr./ Box
600x600mm	16 mm	25.5 kgs.	02 pcs.	0.72m ²
600x600mm	10 mm	32.5 kgs.	04 pcs.	1.44m ²
1200x600mm	9.3 mm	31.0 kgs.	02 pcs.	1.44m ²