



















CERAMIC TILES

CHARACTERISTICS	Requirement as per ISO 13006:2018 Gr BIII E >10.0% (Rectified)	Requirement as per IS 15622:2017 Gr BIII E >10.0% (Rectified)	AGL Value (Rectified)	Test Method
(A) DIMENSION & SURFACE QUALITY				
 Deviation In Length & Width	± 0.3%, ± 1.0 mm	± 0.2%	± 0.1%	ISO 10545 Part-2 IS 13630 Part-1
 Deviation In Thickness	± 10.0%, ± 0.5 mm	± 5.0%	± 3.0%	ISO 10545 Part-2 IS 13630 Part-1
 Straightness of Edge	± 0.3%, ± 0.8 mm	± 0.15%	± 0.15%	ISO 10545 Part-2 IS 13630 Part-1
 Rectangularity	± 0.3%, ± 1.5 mm	± 0.20%	± 0.15%	ISO 10545 Part-2 IS 13630 Part-1
 Surface Flatness	± 0.4%, ± 1.8 mm	± 0.3%	± 0.22%	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.	> 10.0%, Ind. 9.0% Min.	> 10.0, Ind. 9.0 Min.	15 - 20%	ISO 10545 Part-3 IS 13630 Part-2
 Flexural Strength (MOR) In N/mm ²	Min. 12 for thickness ≥ 7.5mm Min. 15 for thickness < 7.5mm	Min. 12 for thickness ≥ 7.5mm Min. 15 for thickness < 7.5mm	> 16 N/mm ²	ISO 10545 Part-4 IS 13630 Part-6
 Breaking Strength in N	600 N Min.	600 N Min.	> 700 N	ISO 10545 Part-4 IS 13630 Part-6
 Resistance to Surface Abrasion	Manufacturer to State Class	PEI II Min.	Min. PEI III	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.	9x10 ⁻⁶ Max.	≤ 9x10 ⁻⁶	ISO 10545 Part-8 IS 13630 Part-4
 Thermal Shock Resistance	10 Cycle Min.	10 Cycle Min.	No Damage after 10 Cycles	ISO 10545 Part-9 IS 13630 Part-5
 Moisture Expansion in mm/M	Test Method Available	0.04 Max.	0.02 Max.	ISO 10545 Part-10 IS 13630 Part-3
 Craze Resistance	Required	4 Cycles at 7.5 bar Min.	Resistance	ISO 10545 Part-11 IS 13630 Part-9
 Moh'S Scratch Hardness	Min. 3	Min. 3	≥ 3	EN 101 IS 13630 Part-13
(C) CHEMICAL PROPERTIES				
 Resistance To House hold 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 (Ceramic Tiles)

Type	Size (mm)	Thickness (mm)	Weight (Kg.)	No. of Tiles / Set	Area Sq. mtr./ Box
Wall & Matching Floor Tiles	600x300mm	8.8 mm	14 kg	5 pcs	0.90 m ²
	300x300mm	8.0 mm	13 kg	10 pcs	0.90 m ²
	450x300mm	7.4 mm	10.5 kg	6 pcs	0.81 m ²
	300x300mm	7.4 mm	10.5 kg	9 pcs	0.81 m ²