

# TECHNICAL SPECIFICATIONS

## Glazed Vitrified Tiles

### Packing Details

Size (In mm.)	No. of Tiles Per Carton	Covered Area Per Carton	
		(In Sq. Mtr.)	(In Sq. ft.)
600X1200	2	1.44	15.5
600X600	4	1.44	15.5

### Group B Ia as per ISO 13006:2012 and Group B Ib as per IS 15622:2017

Characteristics	Test Methods	Requirement as per ISO 13006 ≤ 0.5 Group B Ia		Requirement as per IS 15622:2017 0.08<E ≤ 3% Group B Ib		OBL Norms
		Unrectified	Rectified	Unrectified	Rectified	
<b>Dimension &amp; Surface Quality</b>						
Deviation in Length & Width		±0.6%	±0.1 %	±0.4%	±0.1 %	± 0.1 %
Deviation in Thickness		±5%	±5.0 %	± 5.0 %	± 5.0 %	± 4 %
Straightness of Sides		±0.5%	± 0.1 %	± 0.3 %	± 0.1 %	± 0.1 %
Rectangularity	IS 13630 (Part 1):2006	±0.5%	± 0.1 %	± 0.3 %	± 0.1 %	± 0.1 %
Surface Flammability		±0.5%	± 0.5 %	± 0.5 %	± 0.5 %	± 0.2 %
Surface Quality		Min. 95 % tiles should be free from visible defects	Min. 95 % tiles should be free from visible defects			Conforms
<b>Physical Properties</b>						
Water Absorption	IS 13630 (Part 2):2006	Avg ≤ 0.5, Individual max. 0.6	Avg ≤ 0.08<E ≤ 3, Individual 3.3, Max			Avg ≤ 0.5, Individual max, 0.6
Modulus of Rupture in [N/mm <sup>2</sup> ]	IS 13630 (Part 6):2006	Minimum 35, Individual 32, Min	Avg 30, Individual 27, Min			Avg 38 Min, Individual 35, Min
Breaking Strength in N	IS 13630 (Part 6):2006	< 7.5 mm thickness: 700, Min ≥ 7.5 mm thickness: 1300, Min	< 7.5 mm thickness: 700, Min ≥ 7.5 mm thickness: 1300, Min			1500, Min
Moisture Expansion in mm/m	IS 13630 (Part 3):2006	Declare Value	0.02, Max			< 0.02
Scratch Hardness of Surface (Moh's Scale)	IS 13630 (Part 1):2006	NA	5, Min			5 to 8 Depending on Design / Surface
Resistance to Surface Abrasion of Glazed Tiles (Class I to V)	IS 13630 (Part 1):2006	Test Method Available	Class II, Min			Class-III to Class-V Depending as per Design / Surface
Co-efficient of Linear Thermal Expansion from Ambient Temperature to 100°C	IS 13630 (Part 4):2006	Test Method Available	7x10 <sup>-6</sup> K <sup>-1</sup> , Max			Conforms
Thermal Shock Resistance	IS 13630 (Part 5):2006	Test Method Available	10 cycles, Min			Passed
Crazing Resistance	IS 13630 (Part 9):2006	Test Method Available	4 Cycles@7.5 bar, Min			4 Cycle@ 7.5 Bar Min
Frost Resistance	IS 13630 (Part 10):2006	Required	Required			Resistance
Bulk Density, in (g/cc)	IS 13630 (Part 12):2006	NA	2.0, Min			> 2.1
Impact Resistance- Coefficient of Restitution	IS 13630 (Part 14):2006	Manufacturer to State	0.55, Min			0.7-0.85
<b>Chemical Properties</b>						
Resistance to Staining of Glazed Tiles		Min, Class 3	Class I, Min			Conforms
Resistance to Household Chemicals		Min, GA	Class AA, Min			Conforms
Resistance to Acids and Alkalis (with exception of hydrofluoric acid and its compounds)	IS 13630 (Part 8):2006	Test Method Available	Required, if agreed			Conforms