



EXPERIENCE  
**HIGH ABRASION  
RESISTANT TILES**



CHARACTERISTICS	Requirement as per ISO 13006:2018 Gr B1a 3.0 ≤ E ≤ 6.0%	Requirement as per IS 15622:2017 Gr B1a 3.0 ≤ E ≤ 6.0%	AGL Value	Test Method
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**(A) DIMENSION & SURFACE QUALITY**

Deviation In Length & Width	± 0.3%, ± 1.0 mm	± 0.1%	± 0.1%	ISO 10545 Part-2 IS 13630 Part-1
Deviation In Thickness	± 5.0%, ± 0.5 mm	± 5.0%	± 3.0%	ISO 10545 Part-2 IS 13630 Part-1
Straightness of Edge	± 0.3%, ± 0.8 mm	± 0.1%	± 0.1%	ISO 10545 Part-2 IS 13630 Part-1
Rectangularity	± 0.3%, ± 1.5 mm	± 0.1%	± 0.1%	ISO 10545 Part-2 IS 13630 Part-1
Surface Flatness	± 0.4%, ± 1.8 mm	± 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.	3.0 ≤ Eb ≤ 6.0, Ind. 6.5 Max.	3.0 ≤ Eb ≤ 6.0 Ind. 6.2 Max.	4.0-5.5%	ISO 10545 Part-3 IS 13630 Part-2
Flexural Strength (MOR) In N/mm <sup>2</sup>	Avr. 22, Ind. Min. 20	Avr.22, Ind. Min. 20	≥ 27 N/mm <sup>2</sup>	ISO 10545 Part-4 IS 13630 Part-6
Breaking Strength in N	1000 N Min.	1000 N Min.	> 1200 N	ISO 10545 Part-4 IS 13630 Part-6
Resistance to Surface Abrasion	Manufacturer to State Class	PEI II Min.	PEI III (Glossy) PEI IV & IV+(Matt)	ISO 10545 Part-7 IS 13630 Part-11
Co-efficient of Linear Thermal Expansion from ambient temp to 100°C (K-1)	9x10 <sup>-6</sup> Max.	9x10 <sup>-6</sup> Max.	≤ 9X10 <sup>-6</sup>	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	0.03 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. 4	Min. 5	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)	No. of Tiles / Box	Area Sq. mtr./ Box
600x600mm	9.5 mm	04 pcs.	1.44m <sup>2</sup>