

## Technical Specification

**WALL  
TILES**

CHARACTERISTICS	Requirement as per ISO 13006:2018 Gr BIII E >10.0%	Requirement as per IS 15622:2017 Gr BIII E >10.0%	Value	Test Method
<b>(A) DIMENSION &amp; SURFACE QUALITY</b>				
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>(B) PHYSICAL &amp; THERMAL PROPERTIES</b>				
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 <sup>2</sup>	Min. 15	Min. 15	≥ 15 N/mm <sup>2</sup>	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 Liner 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 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
<b>(C) CHEMICAL PROPERTIES</b>				
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 ( Digital Wall & Floor )

Type	Size (mm)	Thickness (mm)	Weight (Kg.)	No. of Tiles / Set	Area Sq. mtr./ Box
Special Effects	600x300mm	09 mm	16.5 Kg.	06 pcs.	1.08m <sup>2</sup>
Wall Decor	600x300mm	09 mm	16.5 Kg.	06 pcs.	1.08m <sup>2</sup>
	450x300mm	8.2 mm	11.5 Kg.	06 pcs.	0.81m <sup>2</sup>
Wall Tiles	600x300mm	09 mm	17.5 Kg.	06 pcs.	1.08m <sup>2</sup>
	450x300mm	8.2 mm	11.5 Kg.	06 pcs.	0.81m <sup>2</sup>
	300x300mm	8.2 mm	15.5 Kg.	12 pcs.	1.08m <sup>2</sup>

\* if you require technical parameters, please ask to avail it separately.

## Technical Specification

**HD  
TECH**  
Polish Porcelain  
TILES

**HD  
TECH**  
Matt Porcelain  
TILES

CHARACTERISTICS	Requirement as per ISO 13006:2018 Gr BIIb 0.5% ≤ E ≤ 3.0%	Requirement as per IS 15622:2017 Gr BIIb 0.08% ≤ E ≤ 3.0	Value	Test Method
<b>(A) DIMENSION &amp; SURFACE QUALITY</b>				
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
Glossiness*	-	-	> 85	Glossmeter
<b>(B) PHYSICAL &amp; THERMAL PROPERTIES</b>				
Water Absorption % By Wt.	0.5 ≤ E ≤ 3.0, Ind. 3.3 Max.	0.08 ≤ E ≤ 3.0, Ind. 3.3 Max.	2.0-3.0%	ISO 10545 Part-3 IS 13630 Part-2
Flexural Strength (MOR) In N/mm <sup>2</sup>	Avr. 30, Ind. Min. 27	Avr. 30, Ind. Min. 27	≥ 32 N/mm <sup>2</sup>	ISO 10545 Part-4 IS 13630 Part-6
Breaking Strength in N	1100 N Min.	1100 N Min.	> 1500 N	ISO 10545 Part-4 IS 13630 Part-6
Bulk Density (gm/cc)	2.0 Min.	2.0 Min.	≥ 2.1	ISO 10545 Part-3 IS 13630 Part-2
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 Liner Thermal Expansion from ambient temp to 100°C (K-1)	9x10 <sup>-6</sup> Max.	7x10 <sup>-6</sup> Max.	≤ 6x10 <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	0.02 Max.	Nil	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
Frost Resistance	Resistance	Resistance	Resistance	ISO 10545 Part-12 IS 13630 Part-10
Moh'S Scratch Hardness	Min. 5	Min. 5	≤ 5	EN 101 IS 13630 Part-13
<b>(C) CHEMICAL PROPERTIES</b>				
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	Resistance	ISO 10545 Part-14 IS 13630 Part-8

\* PPT Finish

## Packing Specification

Size (mm)	Thickness (mm)	Weight (Kg.)	No. of Tiles / Box	Area Sq. mtr./ Box
1200x600mm	9.5 mm	31.0 Kg.	02 pcs.	1.44m <sup>2</sup>