

PORCELAIN TILES
TECHNICAL – SPECIFICATIONS

PRODUCT :GLAZED VITRIFIED TILES

STANDARD : INTERNATIONAL STANDARD- ISO 13006-2018

Test Description	Standard Test Method	Length & Width	Length & Width
Dimensional & Surface Quality			
Length & Width	BS EN ISO 10545 – 2	Max. + 0.6 %	Max. + 0.1%
Thickness	BS EN ISO 10545 – 2	Max. + 5.0 %	Max. + 3.0 %
Straightness Of Sides	BS EN ISO 10545 – 2	Max. + 0.5 %	Max. + 0.15%
Rectangularity	BS EN ISO 10545 – 2	Max. + 0.6 %	Max. + 0.2%
Surface Flatness Edge Curvature Center Curvature Warpage	BS EN ISO 10545 – 2	Max. + 0.5%	Max. + 0.2%
SURFACE QUALITY	BS EN ISO 10545 – 2	Minimum 95% of the tiles shall be free from visible defects that would impair the appearance of a major area of tiles	Minimum 95% of the tiles shall be free from visible defects that would impair the appearance of a major area of tiles

Test Description	Standard Test Method	Length & Width	Length & Width
Physical Properties			
Water Absorption	BS EN ISO 10545 – 3	Ave. ≤ 0.5%	Ave. ≤ 0.5%
Breaking Strength	BS EN ISO 10545 – 4	Min. 1300 N	Min. 1600 N
Modulus Of Rupture	BS EN ISO 10545 – 4	Min. 35 N/mm ²	Min 40 N/mm ²
Resistance to Surface abrasion	BS EN ISO 10545 – 7	Manufacturer to state Abrasion class	PEI Class 3-4
Coefficient of linear thermal expansion From ambient temperature to 100 0C (K-1)	BS EN ISO 10545 – 8	Manufacturer to state value	6 x 10 -6 k-1
Resistance To Thermal Shock	BS EN ISO 10545 – 9	No Visible Defect	No Visible Defect
Crazing Resistance	BS EN ISO 10545 – 11	No Crazing	No Crazing
Frost Resistance	BS EN ISO 10545 – 12	No Visible Damage	No Visible Damage

Test Description	Standard Test Method	Length & Width	Length & Width
Chemical Properties			
Resistance To House Hold Chemicals & Swimming Pool Salts	BS EN ISO 10545 – 13	Min. Class GB	Class GA
Resistance To Low Concentration Acids & Alkalis	BS EN ISO 10545 – 13	No Visible defect	No Visible defect
Resistance To High Concentration Acids & Alkalis	BS EN ISO 10545 – 13	No Visible defect	No Visible defect
Resistance To Staining	BS EN ISO 10545 – 14	Manufacturer To State Classification	Class 4
Scratch Resistance MATT	EN 101	Manufacturer to state Classification	8.5
Scratch Resistance HONED	EN 101	Manufacturer to state Classification	8.0
Scratch Resistance SATIN	EN 101	Manufacturer to state Classification	5.5
Scratch Resistance HD-DIGITAL	EN 101	Manufacturer to state Classification	5.0
Scratch Resistance POLISH,GLOSSY,CRYSTAL POLISH	EN 101	Manufacturer to state Classification	5.0

Note: The tiles tested comply with the specific requirements of standard ISO 13006: 2018
Shade variation across the batches is inherent to the manufacturing process and the pre-laying colour comparison is recommended.

R- RATING AND GLOSINESS TABLE

Description	Standard Test	Matt	Honed Matt	Satin	HD Digital	Glossy	Polish	Crystal Polish
Finish	DIN51130	R9	R8	R6	NA	NA	NA	NA
Glossiness(@60° Gloss meter)		5-7	5-7	20-25	90-95	95-98	98-100	100-105

Note:

Reference may be made to this International Standard for information regarding requirements which are non compulsory, but which are listed as “test method available”.

- 1.Determination of linear thermal expansion. Most ceramic tiles have low levels of linear thermal expansion.This test is indented for tiles that are installed in conditions of high thermal variations.
- 2.Certain decorative effects may tend to craze. They shall be identified by the manufacturer, in which case the crazing test given in ISO 10545 -11 is not applicable.
3. Determination of lead and cadmium given off glazed tiles. This test is intended for glazed tiles when used on worktops and on wall surfaces where food preparation takes place and food may be in direct contact with the glazed tiles.