

TECHNICAL DATA SHEET

Porcelain Tile

TESTING ITEMS	STANDARD	REQUIREMENTS	RESULTS
DIMENSION AND SURFACE QUALITY			
Length	ISO 10545 - 2	± 1mm	Avg +0.00 Avg -0.10
Width	ISO 10545 - 2	± 1mm	Avg +0.00 Avg -0.17
Thickness	ISO 10545 - 2	± 0.5mm	Avg +0.00 Avg -0.03
Straightness of Sides	ISO 10545 - 2	± 0.8mm	Max +0.12 Max -0.14
Rectangularity	ISO 10545 - 2	± 0.8mm	Max +0.14 Max -0.16
Surface Flatness	ISO 10545 - 2	Centre Curvature - ± 0.8mm	Max +0.12 Max -0.00
	ISO 10545 - 2	Edge Curvature - ±1.8mm	Max +0.14 Max -0.00
	ISO 10545 - 2	Warpage - ±1.8mm	Max +0.12 Max -0.00
Surface Quality	ISO 10545 - 2	95%	98%
PHYSICAL PROPERTIES			
Water Absorption - %	ISO 10545 - 3	EV ≤ 0.5%	0.052%
Modulus of Rupture (M O R) - N/mm ²	ISO 10545 - 4	Minimum 35	52.89 N/mm ²
Breaking Strength in N	ISO 10545 - 4	Not less than 1300	2413.10 N
Crazing Resistance	ISO 10545 - 11	No Crazing in Two Cycle	Confirm

Thermal Shock Resistance (15/145 °c)	ISO 10545 - 9	10 Cycle, Min	Confirm
Coefficient of Linear Thermal Expansion	ISO 10545 - 8	9X10 ⁻⁶ Max	5.12x10 ⁻⁶
Resistance to Surface Abrasion	ISO 10545 - 7		2100 Revolution Pass
Bulk Density, (g/cc)	ISO 10545 - 3	2.2 Min	2.2584 g/cc
Moisture Expansion mm/m	ISO 10545 - 10	0.02 mm/m max	No Expansion
Impact Resistance	ISO 10545 - 5	0.55 Min	0.57
CHEMICAL PROPERTIES			
House Hold Chemical Resistance	ISO 10545 - 13	Min Class - GC	Class GA
Swimming Pool Salt	ISO 10545 - 13	Min Class - GC	Class UA
Acid & Alkalis – Low Concentration (L) – Hydrochloric Acid Solution 3%	ISO 10545 - 13	Min Class GLC	Class GLA
Acid & Alkalis – High Concentration (H) - Hydrochloric Acid Solution 18%(v/v)	ISO 10545 - 13	Min Class GHC	Class GHA