

TECHNICAL DATA: SLABS

NOTE:

The values provided are for polished finishes. These results are indicative only. The values quoted below are the average for different Phoenix Quartz products of 20mm thickness. Test results may vary depending on the thickness, colors, special additives, and batches of the products, as well as the grain size of the quartz.

Test Results

Test Performed	Test Standards	Test Results
Water Absorption	ASTM C97	<0.03%
	EN- 14617 - 1	<0.03%
Bulk Density	ASTM C97	2.15-2.46 g/cm³ or 2150-2460 Kg/m³
	EN- 14617 - 1	2.15-2.46 g/cm ³
Flexural Strength (Dry)	ASTM C880	>5810 psi (40 MPa)
Flexural Strength (Wet)	ASTM C880	>5520 psi (38 MPa)
Flexural Strength	EN- 14617 - 2	31 – 80 N/mm ²
Compressive Strength (Dry)	ASTM C170	>28430 psi (196 MPa)
Compressive Strength (Wet)	ASTM C170	>27560 psi (190 MPa)
Impact Strength	EN-14617-9	3.4 – 14.5 Joules
Thermal Expansion	EN-14617-11	$16 \times 10^{-6} - 20.8 \times 10^{-6}$
	ASTM C372	$30^{\circ}\text{C} - 100^{\circ}\text{C} : 2.8 \times 10^{-5} - 4.9 \times 10^{-5}$
Abrasion Resistance	ASTM C241	>61.2
	EN 14617 - 4	21.2 – 26.5 mm
Freeze-Thaw Resistance	EN-14617-5	0.999
Thermal Shock	ASTM C484	Passes - 5 cycles
Mohs Hardness	EN – 101	6.5-7.5
Slip Resistance	ASTM C1028-07	Coefficient of friction > 0.5*
Stain Resistance	ASTM C1378-04	Not Affected: Pass
Surface Burning	ASTM E-84	Class A
Chemical Resistance	EN-14617-10	Class C4
Static Coefficient of Friction	ASTM C1028-07	Dry average- 0.74* Wet average- 0.5*
Flame Spread	ASTM E-84	FSI<10 for 3 cm and <15 for 2 cm: Class A
Wear and Cleanability	ASTM Z124 6.5.3	Pass

Cigarette Test	ASTM Z124 6.5.4	Pass
Bond Strength	ASTM C482	240 psi (1.65 MPa)
Modulus of Rupture	ASTM C99	6315 psi (43.54 MPa)

This technical data sheet outlines the physical, chemical, and mechanical properties of Phoenix Quartz slabs, ensuring high durability, strength, and performance across various applications.