

Caesarstone Quartz Surfaces Technical Data

PROPERTY	TEST STANDARD	RESULTS
Water Absorption	ASTM C97 EN-14617-1	≤0.05%
Density	ASTM C97 EN 14617-1	≥2.1 gr/cm ³
Flexural Strength	ASTM C880/C880M-15 EN 14617-2	35.5-77.5 MPa 43-80 MPa
Dimensional Stability	EN 14617-12	Class A
Impact Resistance	EN 14617-9	5.0-14.4 L (J)
Compressive Strength	ASTM C170 EN 14617-15	Dry: 219-299 MPa; Wet: 203-274 MPa 157-243 MPa
Abrasion	ASTM C1243-93 EN 14617-4	Volume of chord: V=59.2-107.2 mm ³ Chord length: 22.0-22.6 mm
Freeze-thaw Resistance	ASTM C1026 EN 14617-2 & EN 14167-5	No obvious damage after 20 freeze-thaw cycles KM _{f25} =95.1-117.7%
Stain Resistance	ANSI Z 124.6	Pass
Chemical Resistance	ANSI Z 124.6 EN 14617-10	Pass Class C ₄
Linear Thermal Expansion	ASTM 372 EN 14617-11	30°C-100°C: 3.0-5.0 x 10 ⁻⁵ per °C 13.4-26.4 (10 ⁻⁶ ·C ⁻¹)
Thermal Conductivity	EN 12664	0.445-0.475 W/(m·K)
Thermal Shock	EN 14617-6	No visual defects after 20 cycles Change in mass: 0.04% to 0.06% Change in flexural strength: -6.7% to 9.3%
Boiling Water Resistance	ANSI NEMA LD3-3.5	No effect
High Temperature Resistance	ANSI NEMA LD3-2005	No effect
Surface Burning	ASTM E84	Class A
Fire Performance	AS 1530.3:1999	Ignitability Index (0-20): 6-8 Spread of Flame Index (0-10): 0-3 Heat Developed Index (0-10): 2-3 Smoke Developed Index (0-10): 6-7
Fire Classification	EN 13501-1	Wall cladding: B-s1-d0 Flooring and stairs: B-fl-s1