

Caesarstone Quartz Surfaces Technical Data

TEST PERFORMED	TEST STANDARD	RESULTS
PHYSICAL PROPERTIES		
Water Absorption	ASTM C97*	<0.05%
Density	ASTM C97*	2.2-2.4 gr/cm ³
	EN 14617-1*	2.2-2.4 gr/cm ³
Flexural Strength	ASTM C880	6,500-10,770 psi; 44.8-74.3 MPa
	EN 14617-2*	57.6 -70.0 MPa
Dimensional Stability	EN 14617-12*	Class A
Electrical Resistivity	EN 14617-13*	Volume resistance (R _v) = 0.92 x 10 ¹⁴ Ω Volume resistivity (ρ _v) = 4.88 x 10 ¹² Ωm
DURABILITY		
Impact Resistance	ASTM D1709*	26.3 lbs (117N)
	EN 14617-9*	4,000 - 10,000 [J]
Compressive Strength	ASTM C170*	21,312- 27,133 psi
	EN 14617-15*	178.3-210.6 MPa
Abrasion	ASTM C501*	216-696
	ASTM C1243	Volume of chord: V=132-244 mm ³
	EN 14617-4*	Groove length = 21.8 mm or V=86 mm ³
Freeze-Thaw Resistance	ASTM C1026*	No defects after 15 freeze-thaw cycles
	EN 14617-5*	No defects after 25 freeze-thaw cycles
Mohs Hardness		6.5-7
STAIN AND CHEMICAL RESISTANCE AND CLEANABILITY		
Stain Resistance **	ANSI Z 124.6	Pass
Wear and Cleanability	ANSI Z 124.6	Pass
Chemical Resistance	ANSI Z 124.6	Pass
	EN 14617-10*	Class C ₄

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THERMAL PROPERTIES		
Linear Thermal Expansion	ASTM D696	-30 to +30°C: $1.3-1.9 \times 10^{-5}$ cm/cm/°C
	EN 14617-11*	-30 to +30°C: 2.1×10^{-5} (°C ⁻¹); -30 to +60°C: 2.7×10^{-5} (°C ⁻¹)
Thermal Conductivity	EN 12664/ISO 8301*	1.75 W/m. °K (mean T of 10°C)
Thermal Shock	EN 14617-6*	No visual defects after 10 cycles Loss in mass = 0.02%-0.05% Loss in flexural strength = 0.7%-1.1%
Boiling Water Resistance	NEMA LD3-3.5	Pass
High Temperature Resistance	NEMA LD3-3.6	Pass
SAFETY		
Cigarette Test	ANSI Z 124.6	Pass
Surface Burning	ASTM E84*	Class 1 and Class A
Fire Classification	EN 13501-1*	Wall cladding: B-s1-d0 Flooring and stairs: B-fl-s1
Static Coefficient of Friction	ASTM C1028*	As received – Dry: 0.8; Wet: 0.6
		As renovated – Dry: 0.9; Wet: 0.6
Slip Resistance	DIN 51130*	Oil wet ramp: R9-10
	DIN 51097*	Wet barefoot ramp: C
	EN 14231*	Wet: 13-21 SRV; Dry: 43-53 SRV
	AS/NZS 4586*	Four S rubber pendulum: 25-30 BPN
		Wet barefoot ramp: B
Oil wet ramp: R10		
Radiation	ANSI/N42.14	²²⁶ Ra = 1.4-6.8; ²³² Th = 1.4-3.7; ⁴⁰ K = <3-30.3 (Bq/kg dry weight)

Caesarstone quartz surfaces are created from up to 93% natural quartz aggregates, organic pigments and enhanced polymer resins.

*Results represent a partial series range.

**Some models require scrubbing to remove certain stains.