

COLORQUARTZ

Guide Specification

Colorquartz Quartz Surfaces Technical Data

TEST PERFORMED	TEST STANDARD	RESULTS	REMARKS
Moisture absorption	ASTM C241/C241M-15	0.03%	Low absorption means Colorquartz's nonporous finish resists stain and provides endurance power against bacteria development.
Density	ASTM 97/C97M-18	2354kg/cm3	Tested with 3/4" (2cm) thickness. 3/4" Colorquartz = 2354kg/cm3.
DURABILITY			
Mohs Hardness Scale	DIN EN 101	Quartz = 7 Diamond = 10 (highest)	Gemstones and other minerals are ranked according to their Mohs hardness. Mohs hardness refers to a material's ability to resist abrasion or scratch. Quartz is harder and endures scratch better than any other natural stone.
Impact Resistance	NEMA LD3 Section 3.8	No fracture	This is a fracture resistance test. A half pound (224g) steel ball dropped from varying heights onto the surface. Developed concentric indentation at 84" drop but no surface fracture.
High Temperature Resistance	NEMA LD3 Section 3.6	No effect	No change in color or surface finish - no blistering, crazing, whitening, cracking, and delamination when tested at 365 degree Fahrenheit. (180 degree Celsius).
Cigarette Test	ANSI Z124.6 Section 5.4	Pass	No ignition or glow. ColorQuartz resists ignition by cigarettes.
STRENGTH			
Flexural Strength	ASTM C880	42.9MPa(Dry) 46.6 MPa(Wet)	Tested with 3/4" (2cm) thickness. This is a bending strength test. Colorquartz is stronger and withstands bending better than natural stone.
Compressive Strength	ASTM C170-09	233MPa(Dry) 235MPa(Wet)	This is a compression stress test. High psi indicates Colorquartz's capacity to tolerate heavy load on surface.
Stain Resistance	ANSI Z124.6 Section 5.2	No effect	No stain after 16-hour exposure to crayon, shoe polish, ink, gentian violet solution, beet juice, grape juice, lipstick, hair dye, iodine, and wet tea bag.
Wear and Cleanability	ANSI Z124.6 Section 5.3	Pass	Wear: passed 10,000 scrub cycles. Cleanability: lost 1.1% of light reflectance after 25 cycles.
Resistance to Fungi and Bacteria	ASTM G21	No traces of growth	Colorquartz is inherently resistant to fungi and mold due to its low moisture absorption and nonporous properties.
Resistance to Household Chemical	ANSI Z124.6 Section 5.5	Pass	No visual damage after 16-hour exposure to naphtha, ethyl alcohol, ammonia, citric acid, lye (drano), acetone, vinegar, pine oil, phenol (Lysol).
Resistance to Chemical Substances	ASTM C650	Not affected	This test measures resistance to acid, alkali, and chemical agents. Colorquartz is not affected by majority of acids and hydroxide.
Surface Burning	ASTM E84	Class A rated	Colorquartz is rated Class A building material by National Fire Protection Association - Life Safety Code (NFPA) and International Building Code (IBC) Chapter 8 Interior Finishes.
Volatile Organic Compounds (VOCs)	EPA 5021 method	7.01 mg/kg	VOCs are a large group of carbon-based chemicals, which evaporate at room temperature. Colorquartz test results are within the safe level in VOCs content.
Benzene Toluene Ethylbenzene Xylene(BTEX)	EPA 5021 method	Benzene and Xylene= Not detected Toluene = 5.45 mg/kg Ethylbenzene = 1.20 mg/kg	Colorquartz is tested to contain none or very low level of BTEX.
Styrene	EPA 5021 method	Not detected	Colorquartz product is safe from Styrene.
Slip Rating	A137.1 / A326.3 method	0.43 Average DCOF	The ANSI standard, Section 3.1 states: "Unless otherwise specified, hard surface flooring materials suitable for level interior spaces expected to be walked upon when wet with water shall have a wet DCOF of 0.42 or greater when tested using SBR sensor material and SLS solution as per this standard.

