

Relang acrylic solid surface is a homogeneous, non-porous, non-toxic, stone-like material. Relang solid surface is comprised of two-thirds natural mineral (alumina trihydrate derived from bauxite) and one-third high performance acrylic resin polymethyl methacrylate) and pigments.

PROPERTY	TEST METHOD	TYPICAL RESULT
Density	ASTM D792 (ISO 1183)	1.7 g/cm ³
Thermal Expansion	ASTM D696	3.5 x 10 ⁻⁵ in/in °C (2.1 x 10 ⁻⁵ in/in °F)
Flexural Strength	ASTM D790	10100 psi (69.6 Mpa)
Flexural Modulus	ASTM D790	1.4 x 10 ⁶ psi (9887 Mpa)
IZOD Notched Impact Strength	ASTM D256	2 J/m
Hardness - Barcol Impressor	ASTM D2583	67
Tensile Strength	ASTM D638 (ISO 527-2)	45.9 Mpa (6657 psi)
Tensile Elongation at Break	ASTM D638 (ISO 527-2)	0.50%
Tensile Modulus	ASTM D638 (ISO 527-2)	9890 Mpa (1.4 x 10 ⁶ psi)
Water Absorption	ASTM D570	0.10%
Colorfastness	CSA B45.4-22/IAPMO Z124-2022	PASS
Stain Resistance	CSA B45.4-22/IAPMO Z124-2022	PASS
Chemical Resistance	CSA B45.4-22/IAPMO Z124-2022	PASS
Cleanability & Wear	CSA B45.4-22/IAPMO Z124-2022	PASS
Cigarette Test	CSA B45.4-22/IAPMO Z124-2022	PASS
Ignitability Test	CSA B45.4-22/IAPMO Z124-2022	PASS
Water Resistance	CSA B45.4-22/IAPMO Z124-2022	PASS
Thermal Shock Resistance	CSA B45.4-22/IAPMO Z124-2022	PASS (No cracking, crazing, blistering or spalling)
Fungal Resistance	ASTM G21	Does not support fungal growth

PROPERTY	TEST METHOD	TYPICAL RESULT
Bacterial Resistance	ASTM G22	Does not support bacterial growth
Boiling Water Resistance	NEMA LD 3-3.5	No visible change
High Temperature Resistance	NEMA LD 3-3.6	No effect
Flammability (United States)	NFPA 101®, Life Safety Code®	Class A
Flame Spread Index, Surface Burning Characteristics of Building Materials (United States)	ASTM E84	<25
Smoke Developed Index, Surface Burning Characteristics of Building Materials (United States)	ASTM E84	<25
Fire Classification of Building Materials (Europe)	EN-13501	B-s1, d0
Classification according to reaction to fire (M Rating-French Standard)	NF P 92-507	M1
GREENGUARD	UL 2818	Certified
GREENGUARD GOLD	UL 2818	Certified
Food Zone	NSF/ANSI-51	Certified for Food Zone

Properties vary by aesthetic. Typical results presented are for 12 mm solid colors unless gauge is specified.