

# Iten Industries

## Resiten® G10 Performance Values

An all purpose non-halogenated NEMA G10 glass epoxy sheet for electrical/electronic applications requiring moisture resistance and high mechanical strength. Not intended for arc and flame resistance. Meets MIL-I-24768/2

<u>Properties</u>	<u>Test Condition</u>		<u>ASTM</u>	<u>Values</u>
Thickness				.125 inches
Tensile Strength:	Condition A	Lengthwise	D638	57,500 psi
		Crosswise		39,500 psi
Flexural Strength:	Condition A	Lengthwise	D790	80,000 psi
		Crosswise		65,000 psi
	D48/50	Lengthwise		78,000 psi
		Crosswise		60,000 psi
Compressive Strength:	Condition A	Lengthwise	D695	42,000 psi
		Crosswise		41,000 psi
		Flatwise		48,500 + psi
Izod Impact (notched):	Condition A	Lengthwise	D256	15 ft.lb./in.
		Crosswise		9 ft.lb./in.
	D48/50	Lengthwise		14.5 ft.lb./in.
		Crosswise	D256	8.5 ft.lb./in.
	E48/50	Lengthwise		16 ft.lb./in.
		Crosswise		9.5 ft.lb./in.
Water Absorption			D570	.10% of weight
Specific Gravity			D792	1.95
Flammability			UL94	HB
Dielectric Strength			D149	488 Vpm
Dielectric Breakdown:	Condition A		D149	80+ kV
		D48/50		45.2 kV
Permittivity, 1MHz:	Condition A		D150	4.79
		D24/23		4.89
Dissipation Factor, 1MHz:	Condition A		D150	0.016
		D24/23		0.016
Permittivity, 1KHz:	Condition A		D150	5.04
		D24/23		5.17
Dissipation Factor, 1KHz:	Condition A		D150	0.005
Shear Strength			D732-90	21,000 PSI
Coefficient of Thermal Expansion, cm/cm/degC				1 x 10 <sup>-5</sup>
Thermal Conductivity, calories per sec. /sq.cm /degree C/cm of thickness				7 x 10 <sup>-4</sup>
Youngs Modulus				2,500,000 psi
U.L. temperature Index:		Electrical		130° C
		Mechanical		140° C

Coefficient of Friction with semi gloss finish is ≈ .25 to .300  
 Standard Sheet sizes are 36" x 48", 48" x 48", 48" x 72", & 48" x 96"  
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All values are average test results from typical production material. No warranty is implied or guaranteed and testing is recommended for each application.