

FIBER/LITE MATERIAL PROPERTIES

		ECFG	PLFG	PLFC
Density		1.81 - 1.85 g/cm ³	1.95 - 2.00 g/cm ³	1.51 - 1.57 g/cm ³
		.065 - .067 lb/in ³		
Flexural Strength		58,000 psi		
Flexural Modulus		2.6 x 10 ⁶ psi		
Tensile Strength @ 75°F		33,000 psi	40,000 psi	50,000 psi
with threads @ -320°F		22,000 psi		
Tensile Modulus		3.4 x 10 ⁶ psi		
Tensile Elongation		1%	1%	1%
Compressive Strength	75°F	33,000 psi	33,000 psi	33,000 psi
	300°F	10,400 psi		
	400°F	6,100 psi		
	600°F			
Double Lap Shear Strength		30,000 psi		
Single Shear			60,000psi	50,000 psi
Heat Distortion Temperature @ 265 psi		+575°F		
Continuous Use Temperature (1000 hours)		400°F	500°F	500°F
Coefficient of Thermal Expansion		7 x 10 ⁻⁶ in/in/°F	4-11 x 10 ⁻⁶ in/in/°F	1 x 10 ⁻⁶ in/in/°F *
Water Absorption (24 hrs. @ 23 C)		0.08%	0.11%	0.06%
(D.I. H ₂ O Soak) (7 days @ 23 C)		0.28%		0.2%
Poisson's Ratio		0.30		
Thermal Conductivity		6.8 X 10 ⁻⁴	8 x 10 ⁻⁴	2-3 x 10 ⁻⁴
		cal/sec-cm ² °C/cm	cal/sec-cm ² °C/cm	cal/sec-cm ² °C/cm
Thread Load Carrying Capacity 1/4" Thick Panel w/1/4" Threaded Hole w/Steel Bolt (Coarse Threads)		2,000 lbs.		
Volume Resistivity		> 3 x 10 ¹⁴ ohm-cm	10 ¹⁶	Conductive
Dielectric Strength		500 v/mil	450 v/mil	Conductive
Dielectric Constant (100 Hz)		4.3		Conductive
Dissipation Factor (100 Hz)		0.007		

* in direction of fiber