



Fiberglass Reinforced Plastic (FRP) Properties

Typical Fiberglass Properties

Flexural strength, psi	16,000 to 32,000
Flexural modulus, psi	0.8 to 1.4 x 10 ⁶
Tensile strength, psi	9,000 to 18,000
Tensile modulus, psi	0.8 to 1.4 x 10 ⁶
Elongation	1.0% to 2.5%
Compressive strength, psi	15,000 to 25,000
Impact strength izod, lb./in. of notch	4 to 12
Specific gravity	1.0 to 1.8
Density, lbs./ft. ³	80 to 110
Continuous heat resistance	150 to 350
Thermal Coefficient of Expansion, in/in/Fx 10-	12 to 20
Barcol hardness	40 to 60

Properties of a typical 1/8" glass mat laminate using specific fire retardant resin

Flexural strength, psi @ 77 degrees F	28,000
Flexural modulus, psi @ 77 degrees F	1.07 x 10 ⁶
Tensile strength, psi @ 77 degrees F	16,800
Elongation	2.2%
Barcol hardness	45 to 50
Glass content	31%
Specific gravity	1.62
ASTM E-84 (tunnel test)	<25
UL Subject 94	V-O