

PROPERTIES

PROPERTIES	METRIC SYSTEM	ENGLISH SYSTEM
Total Layers Normal Range (Typical)	2 to 6 (One Layer = One Ply)	2 to 6 (One Layer = One Ply)
Cure Time	Typically 5 Hours @ 25°C	Typically 5 Hours @ 77°F
Maximum Recommended Operating Temperature	82°C Standard	180°F Standard
Chemical Resistance	Excellent	Excellent
Nominal Thickness	0.91 mm for 2 Ply BA Fabric to	0.036 in for 2 Ply BA Fabric to
	2.74 mm for 6 Ply BA Fabric	0.108 in for 6 Ply BA Fabric
Fabric	PAN (Polyacrylnitrile)	PAN (PolyacryInitrile)
Carbon Content by Volume	21% to 40%	21% to 40%
Glass Fiber Content by Volume	0%	0%
Lap Sheer (Adhesive) Strength	> 8,618 kpa @ 60°C	> 1,250 psi @ 140°F
Compressive Strength of Putty	33,129 kpa @ 60℃	8,805 psi @ 140°F
Hardness	78 to 84 (Shore D)	78 to 84 (Shore D)
Linear Elastic Behavior	1.20% Strain to Failure	1.20% Strain to Failure
Elastic Modulus, Hoop Direction	3.47 x 10 ⁷ kpa for BA	5.03 x 10 ⁶ psi for BA
Elastic Modulus, Axial Direction	3.16 x 10 ⁷ kpa	4.59 x 10 ⁶ psi
Tensile Strength, Hoop Direction	4.44 x 10⁵ kpa	6.44 x 10 ⁴ psi
Tensile Strength, Axial Direction	2.72 x 10 ⁵ kpa	3.94 x 10 ⁴ psi
Coefficient of Thermal Expansion, Hoop Direction	2.52 x 10 ⁻⁵ /°C	1.4 x 10 ⁻⁵ / °F
Coefficient of Thermal Expansion, Axial Direction	1.278 x 10⁻⁵/°C	0.71 x 10 ⁻⁵ / °F
Design Stress, Hoop Direction	3.42 x 10 ⁵ kpa	4.96 x 10 ⁴ psi
Design Stress, Axial Direction	2.09 x 10⁵ kpa	3.03 x 10 ⁴ psi
Fatigue (cycle without failure - defect dependent)	>100,000 cycles (0 -100% MAOP) with up to 80% wall loss	>100,000 cycles (0 -100% MAOP) with up to 80% wall loss