



## 3K, 2 x 2 Twill Weave Carbon Fiber

Part # - 1069 & 2069

5.7 oz/sq yd, 50"/60" Wide, .012" Thick, 3K, 2x2 Twill Weave.

This 2x2 twill weave fabric offers the cosmetic appearance so desirable on modern composite parts. But don't just use it for looks, this fabric is highly formable and slightly stronger than the plain weave. To increase the conformability of this fabric lay it up in the mold at a 45 degree bias. Due to the looser weave of this fabric, it will be prone to unraveling once cut. Be sure to use our 1735-A Perfect Line Tape or 1713-A Dritz Fray Check prior to cutting the fabric to avoid unraveling issues.

Product Properties	
Warp Raw Material	3K –Multifilament Continuous Tow
Filling Raw Material	3K –Multifilament Continuous Tow
Weave Pattern	2 x 2 Twill
Fabric Areal Weight	5.7 oz/ yd <sup>2</sup> (200 gsm approx.)
Warp Ends/ Inch	13.0 ± 1.0
Pick / Inch	13.0 ± 1.0
Nominal Thickness	.011 ± .01 inches
Fabric Width	50 ± .25/-0 inches; 60 ± .25/-0 inches
Roll Length	100 Yds.
Tensile Strength	610-640 KSI
Tensile Modulus	33.6-34.9 MSI
Elongation	1.75-1.95%

### DESCRIPTION

Graphite fibers contain up to 95% carbon and yield the highest tensile strength in the FRP industry. These fibers woven together form graphite fabric. These fabrics offer higher strength and stiffness-to-weight ratios than any other commonly available reinforcements. While there are hundreds of types to choose from, we have selected three styles of standard modulus carbon fiber which are suitable for use in racing, aircraft, competition marine, and light industrial applications. To maximize the fiber properties we recommend using only epoxy or vinyl ester resin, although polyesters will bond to the fabrics. This 2x2 twill weave fabric offers the cosmetic appearance so desirable on modern composite parts. But don't just use it for looks, this fabric is highly formable and slightly stronger than the plain.

### Resin Compatibility:

1069 & 2069, Carbon Fiber Fabric, is compatible with Polyester, Vinyl Ester, and Epoxy Resins.

### General Properties for Carbon Fiber Fabrics:

- Lightweight
- High Modulus
- Fire Resistant
- Dimensionally Stable
- Fatigue Resistant