

## 660 6K, 5HS Weave Carbon Fiber Fabric



**Overview:** 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.

With twice the fiber density of the 3K types, this fabric is ideal for structural applications. Also, the 5HS weave allows it to work even with the most complex shapes. This material builds quickly to form lightweight structures with virtually no flex.

Available in 1, 3, and 5 yard packages; custom cuts of 10 yards or more; and full rolls.

### General Properties for Carbon Fiber Fabrics:

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

### Specific Product Properties:

Weave Pattern	5HS Plain
Yarn Description	Warp: 6K Multifilament Cont. Tow
	Fill: 6K Multifilament Cont. Tow
Count (ends x picks) inches	12 x 12
Weight	10.9 oz/yard <sup>2</sup>
Thickness	0.024 inches
Roll Width	50 inches

### Weave Pattern Rankings:

	Thickness	Weight	Strength	Porosity
<b>Plain</b>	3	1	3	1
<b>Twill</b>	2	1	4	2
<b>4-Harness Satin</b>	3	1	4	2
<b>8-Harness Satin</b>	1	1	7	4
<b>Leno</b>	7	7	1	7
<b>Mock Leno</b>	6	1	2	4

This was a scale from 1 to 7, with 1 being the lowest and 7 being the highest.

## Resin Compatibility

Part Number	Polyester Resin	Vinyl Ester Resin	System 2000 Epoxy
292	X	X	P
530	X	X	P
596	X	X	P
597	X	X	P
598	X	X	P
660	X	X	P
1064	X	X	P
1069	X	X	P

A "P" is for the primary resin for the fabric.

An "X" means the fabric is compatible with the resin.

The compatibility is based on Fibre Glast Development's resins only