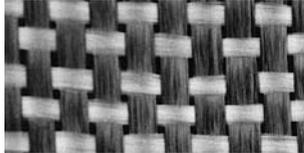


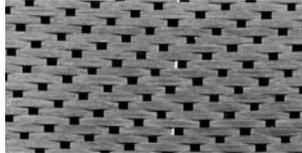
# CARBON GRAPHITE

CM

## BIDIRECTIONAL WOVEN CARBON GRAPHITE



282



584

Woven graphite is a fabric introduced in recent years which has become an excellent alternative to fiberglass and Kevlar - only mils thick with great strength. In addition to its great strength, graphite fabric also has very low density and is very stiff. Although it is quite costly, the material saving is appreciable since only one course of graphite is required for 3 or 4 of fiberglass. It cuts considerably easier than Kevlar. Graphite The excellent qualities of the graphite fabric itself give it an immediate waiting market in the aircraft building field.

Graphite fabric is stocked in the three different styles shown below. Other weights and weaves of graphite are available on a special order basis. Be sure to specify the graphite style when ordering. These carbon graphite cloths are not pre-preg fabrics.

**\* Warning folding for shipment can damage the filaments in the fabric. Folding will be done at customers risk and request only.**

| CARBON FIBER |          |                   |       |            |           |       |                        |            |
|--------------|----------|-------------------|-------|------------|-----------|-------|------------------------|------------|
| Style        | Part No. | Weight Oz./Sq Yd. | Width | Thick-ness | W x F     | Weave | Tensile Strength (KSI) | Price /yd. |
| 282          | 01-00971 | 5.8               | 50"   | .007"      | 12.5x12.5 | Plain | 675                    | \$29.50    |
| 282          | 01-28260 | 5.8               | 60"   | .007"      | 12.5x12.5 | Plain | 675                    | \$33.55    |

| TWILL 2 X 2 WEAVE |          |                   |     |            |       |              |                        |            |
|-------------------|----------|-------------------|-----|------------|-------|--------------|------------------------|------------|
| Style             | Part No. | Weight Oz./Sq Yd. | W   | Thick-ness | W x F | Weave        | Tensile Strength (KSI) | Price /yd. |
| 284               | 01-00602 | 5.7               | 50" | .007       | 12X12 | 2/2 Twill 3K | 675                    | \$29.95    |
| 284               | 01-01232 | 5.8               | 60" | .007       | 12X12 | 2/2 Twill 3K | 675                    | \$35.50    |
| 384               | 01-01529 | -                 | 50  | .007       | 12X12 | 2/2 Twill    | -                      | \$31.80    |



## STANDARD E-GLASS & FIBERGLASS TAPES

Tapes are woven from 8.7 oz./sq. yd. fiberglass cloth, .012" thick, into narrow widths with non-raveling selvage. Perfect for glassing seams, corners, edges fan for repair jobs. Sold in 50 yd. rolls.

- 1" Width 26 Warp, 17 Fill ..... P/N 01-06610..... Roll **\$20.50**
- 2" Width 40 Warp, 17 Fill ..... P/N 01-06600..... Roll **\$25.50**
- 3" Width 58 Warp, 17 Fill ..... P/N 01-06700..... Roll **\$32.75**
- 4" Width 76 Warp, 17 Fill ..... P/N 01-06705..... Roll **\$39.95**
- 6" Width 106 Warp, 17 Fill ..... P/N 01-06710..... Roll **\$62.75**
- 12" Width 218 Warp, 17 Fill ..... P/N 01-06720..... Roll **\$87.75**

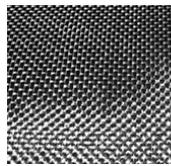
## UNIDIRECTIONAL FIBERGLASS TAPE



This is a fibrous glass reinforcement designed to furnish exceptionally high directional strength. Manufactured from parallel strands of glass roving which are held together by a fine woven cross thread. The placement of the cross thread is such that the parallel rovings do not wander or have a tendency to cross over each other. This 100% unidirectional tape can be used instead of unidirectional fabric for spar caps, wings and elevators. Contours well and cuts building time considerably. Wt. 22 oz./sq. yd., 0.025" thick. May be used with either polyester or epoxy systems. Used on Polliwagen. Long-EZ, Cozy. Adventure and applicable to all composites.

- 3" Wide ..... P/N 01-06800..... **\$1.85 Yd.**

## UNIDIRECTIONAL CARBON 175

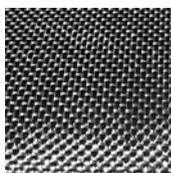


Construction is such that the fibers are oriented in a straight or linear manner with no twist and are able to be maintained in that condition while being impregnated by hand. The fabric is formed from rovings or "tows" of fibers similar to that used in making woven fabric. These fibers are locked into position by very fine fill (or cross machine direction) fibers.

For hand lay-ups, resin may be applied by spray, brush, or by pouring action. A short napped paint roller is recommended for spreading the resin. Excess resin should always be rolled out in a direction parallel to the graphite fibers. Satisfactory for use with epoxies, polyesters, vinyl esters, and other resins. Care and cleanliness should be practiced when working with Graphite materials. Unattached graphite fibers are easily airborne. A filter mask should be worn when cutting and fabricating. Itching and irritation caused by broken filaments becoming embedded in the skin can result from filament breakage during handling. Sold by the yard Style: 715. Weight: 5.37 oz./sq. yd. Width: 53.5 in. Thickness: 6.69 mils.

**\*\*Warning folding for shipment can damage the filaments in the fabric. Folding will be done at customer's risk and request only**

P/N 09-04023..... **\$45.95**

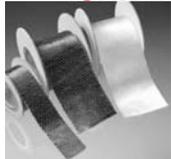


## UNIDIRECTIONAL CARBON FIBERGLASS 44"

Unidirectional Carbon Fiber. 44-TWCO-007 44". 170GSM PW Uncert 3K/75 1/0 44".

P/N 09-04685..... **\$37.95**

## UNIDIRECTIONAL CARBON TAPES



These carbon fiber tapes are used to add stiffness and tensile strength in one direction without adding significant thickness or weight. These West System tapes have 12 carbon fiber bundles per inch of tape width. The bundles are held together with a polyester fill thread making the tape easy to handle. These tapes are compatible with epoxies but not with vinyl-ester or polyester resins. #702 tape is 1.5" wide and

#703 tape is 3" wide.

| Style No. | Width (in.) | Length     | Part No. | Price/roll      |
|-----------|-------------|------------|----------|-----------------|
| 702       | 1.5"        | 12 ft.roll | 01-00238 | <b>\$55.30</b>  |
| 702       | 1.5"        | 50 ft.roll | 01-00239 | <b>\$145.80</b> |
| 703       | 3"          | 12 ft.roll | 01-00240 | <b>\$70.75</b>  |
| 703       | 3"          | 50 ft.roll | 01-00241 | <b>\$190.75</b> |

## CARBON FIBER TUBING



Aircraft Spruce offers structural tubing and structural torsion tubing, engineered and built to meet your exact specifications and tolerances. Structural Torsion Tubing, in continuous lengths up to 40', is manufactured with the computer-controlled, fully-automated Helical Winding Process. We offer a broad array of Fiber Options and tubing wall thickness and diameter is determined on a case-by-case basis to suit your application. **Special Order Sold in 10 ft. lengths only (can cut for UPS shipment).**

\* The image shows two types of finish on this product. The standing tube is sanded and painted with a gloss finish. This is available for an additional cost of **\$249.00**. The tube lying on its side is a rough surface, which will be received when product is purchased.

| D of Tube | Wall Thickness | Length | Part No. | Price           |
|-----------|----------------|--------|----------|-----------------|
| 0.5"      | .100           | 10'    | 03-00171 | <b>\$428.95</b> |
| 0.75"     | .100           | 10'    | 03-00172 | <b>\$428.95</b> |
| 1.00"     | .120"          | 10'    | 03-00173 | <b>\$357.95</b> |
| 1.25"     | .120"          | 10'    | 03-00174 | <b>\$515.00</b> |
| 1.5"      | .120"          | 10'    | 03-00175 | <b>\$414.95</b> |
| 1.75"     | .120"          | 10'    | 03-00176 | <b>\$565.00</b> |
| 2"        | .120"          | 10'    | 03-00177 | <b>\$464.95</b> |
| 2.5"      | .120"          | 10'    | 03-00178 | <b>\$572.00</b> |
| 3"        | .120"          | 10'    | 03-00179 | <b>\$689.99</b> |