# COMPOSITE MATERIALS

# STANDARD E-GLASS FIBERGLASS CLOTH

Fiberglass cloth is exactly what the name says - glass. Fine fibers are spun from molten glass marbles, gathered into yarn and woven into a strong, supple glass fabric. It can be folded, rolled or draped, like any other loosely woven fabric - but it can be chemically transformed into solid sheets of tremendous strength. All the fiberglass fabrics listed below are volan treated for maximum strength and resistance to moisture and abrasion. They feature a weave that is tight enough for high strength, yet open enough for thorough wetting by resins.



1.45 oz./sq. yd. Lightweight Industrial Cloth used in Osprey and other designs. Widely used by model builders, known as "Deck Cloth", Thread Count 60 x 47.

#1080 (P/N 1080-50) 50" Width yd



3.16 oz./sq. yd. Lightweight Industrial Cloth with aerospace applications. Excellent for model building. Only .004" thick. Crowfoot weave, which contours nicely. Thread Count 60 x 58. Breaking Strength 125 x 120 Ib./in. Finished Weight 3.08 oz./sq. yd. #120 (P/N 120-38) 38" Width **yd** 



3.74 oz./sq. yd. Light weight Boat or Tooling Cloth. Tight plain weave. Thread Count 24 x 22. Breaking Strength. 160 x 135 lb./in. Finished Weight 3.60 oz./ sq. yd. Thickness .0055" #1522 (P/N 1522-50) 50" Width **yd** 



5.79 oz./sq. yd. Lightweight Boat Cloth. Flat weave, not twisted. Thread Count 18 x 18. Breaking Strength 250 x 225 lb./in. Finished Weight 5.85 oz./sq. yd. Thickness .010". #3733 (P/N 3733-60) 60" Width/yd



The chemical formulation of S-glass differs from that of standard E-glass. Examples of E-glass are found in the Standard Fiberglass Cloth section of this catalog. S-glass is 30% stronger and 15% stiffer than E-glass and retains these properties up to 1500° F. S-glass is also considerably tougher than an equivalent E-glass. Other styles are available on request. Sold by the yard.

Specifications: • Style #: 4533 • Weight (Oz./Sq Yd.): 5.8 • Width: 60" Thickness: .009" • W x F: 18 x 18 • Weave: Plain

P/N 4533-60/yd.



#### **GLASS MAT**

100% Fiberglass in a non-woven state. It is used for bulk "build-up" in molding and fabricating components. Also useful for filling holes and badly damaged parts. 1.5 oz. Weight. 38" Width. **Note:** Pricing is sold per yard.

P/N 01-06500**/Yd** 

## **KNITTED E-GLASS FABRIC**

Knitted fabrics are a relatively new format in composites. The performance of the glass is greatly enhanced by removing the interstices of the woven fabric and the crimped condition. E-glass in woven goods normally has 22,000 PSI tensile strength. Layered nonwoven goods give 27,000 PSI which is about a 20% improvement. Knitted glass offers greater ease of fabric orientation and saves time over multi-layered wet lay-ups.

Part No.	Weight/sq yd	Width	Ply Thickness	Price/yd	
Biaxial - Double Bias +/-45°					
01-00640	17.6 oz	50"	17.0 mm		



5.85 oz./sq. yd. Lightweight Boat or Tooling Cloth. Plain Weave. Thread Count 18 x 18. Breaking Strength 250 x 250 lb./in. Finished Weight 5.64 oz./ sq. yd. Thickness .009" as used on KR Aircraft. #7533 (P/N 7533-60) 60" /Width **yd** 



8.5 oz./sq. yd. Lightweight boat or tooling cloth. Threads per inch: 18L x 18W. Used in Osprey aircraft and other homebuilts.
#7520 (P/N 7520-50) 50" width yd



8.95 oz/yd<sup>2</sup> Medium Weight Standard Industrial Cloth. 8 Harness Satin. Thread Count 57 x 54. Breaking Strength 350 x 330 lb./in. Finished Weight 8.95 oz./ yd<sup>2</sup> Thickness .009 mils. Sold by the yard. #7781 50''' Width (P/N 7781-50) **yd** #7781 60'' Width (P/N 7781-60) **yd** 

9.66 oz./sq. yd. Heavy Weight Boat or Tooling Cloth. Plain Weave. Thread Count 16 x 14. Breaking Strength 450 x 410 lb./in. Finished Weight 9.40 oz./ sq. yd. Thickness .014". #7500 (P/N 7500-60) 60" Width **yd** 

\_\_\_\_\_



### NOMEX HONEYCOMB

AHN 7800 is an Commercial Grade Nomex honeycomb particularly suited for use where resistance to corrosive attack and moisture are important. This material exhibits good strength characteristics and is fire resistant. It is available in a variety of cell sizes and densities to suit most purposes. Typical applications include light-

weight non-structural bulkheads for ships, joiner panels, shelters, antennas, and auto body panels. This material is not intended for aircraft or aerospace applications. This material also exhibits good thermal insulation properties and also has good dielectric properties. This honeycomb is easily machined, formed, and shaped and well suited to adhesive bonding.

Description	Part No.	Price
Honeycomb 1/8" Thick, 1/8" Cell 4' x 8'	01-00487	
Honeycomb 1/8" Thick, 1/8" Cell 4' x 4'	01-00489	
Honeycomb 1/4" Thick, 1/8" Cell 4' x 8'	01-01052	
Honeycomb 1/4" thick, 1/8" Cell, 4' x 4'	01-01564	
Honeycomb 1/8" Thick, 3/16" Cell, 39" x 108"	01-01572	
Honeycomb 1/8" Thick, 3/16" Cell, 39" x 54"	01-01573	
Honeycomb 1/8" Thick, 1/4" Cell, 39" x 108"	01-01574	
Honeycomb 1/8" Thick, 1/4" Cell, 39" x 54"	01-01575	