

# Fiberglass Fabrics

## Coremat

A lightweight, perforated core material. Used to produce lightweight, rigid parts. Coremat is designed to have composite fabric laminated to either side, creating a "sandwich". The thicker the coremat, the more rigid the final part. We also carry other core materials, such as urethane, pvc foam, and balsa wood. All are used in sandwich constructions but make thicker laminates.

## Chopped Strand Mat

Best Seller

The most economical of reinforcing fabrics, mat is random lengths of glass fibers laid down in a random pattern and held together with a resin-soluble binder. This construction provides equal strength in all directions, wets out easily, and quickly builds thick, rigid laminates. Compared to woven cloth, laminations made of mat use more resin, making them more rigid, more waterproof, but overall lower in strength. Because of the binders used to hold mat together, it is not a recommended fabric to use with epoxy.

## Glass Cloth

Easier to work with than mat, cloth is woven strands of glass fibers that wet-out to make a laminate that is light, strong and flexible. The woven nature of the cloth also allows it to conform to many curves easier than mat. Available in 4oz, 6oz, and 10oz, plus tapes as well (perfect for reinforcing corners).

## Woven Roving

Individual strands of glass fibers, grouped in bunches (roving), then woven into a coarse fabric. Woven Roving provides a medium strength to weight ratio and allows fast thickness buildup for reasonable cost. When used in more than one layer, chopped strand mat must be used between layers to ensure proper bonding (example: mat, roving, mat).

## Stichbond Biaxial/Mat

Staff Favorite

Unidirectional strands of roving oriented in two layers, +45° and -45° for optimum strength, then stitched to chopped strand mat on one side. Excellent for reinforcing corners. Stichbond builds strong, light lay-ups quickly and easily.

## Surface Mat

A very fine version of chopped strand mat. Used to finish laminates with a smooth, resin rich layer and to reinforce gelcoat repairs where stress cracks are involved. Great for model building.

## Carbon Fiber

The strongest and stiffest reinforcing fabric available and the best choice for light rigid parts. For impact resistance, carbon fiber should be used with either aramid or glass fibers. Carbon laminates should also be protected from abrasion.

## Carbon / Aramid

Strands of carbon and aramid (kevlar) fibers woven together to make a fabric that has the structural advantages of both materials. It is also often used for cosmetics, as the "twill" weave produces a striking zig-zag pattern and can be bought in several colours.

## Aramid

Also known as Kelvar. Extremely strong, light, structural fiber that wets out to make laminates with excellent resistance to impact, vibration, and high tensile strength. Aramid has very low compressive strength and is often used with other fibers such as carbon. Excellent for adding impact resistance to laminates.

## Peel Ply

We brought in a full roll of high-grade peel-ply just as we went to press! Peel-Ply is a finely woven nylon cloth that is treated to release easily from fiberglass and epoxy resins. Use it on top of your laminations (either hand or vacuum assisted) to remove excess resin from your part. The extra resin simply goes through the peel-ply and you peel it off when dry! Makes light, strong parts!

# Fiberglass Tools

## Resin Brushes

Pure bristle brushes for resin application. Cheap enough to throw away, or soak in acetone for long jobs.

## Roller Sleeves

Inexpensive and made for use with resin. We have mini rollers and refills and full size roller cages and refills.

## Serrated Rollers

Like paint rollers, but with grooved aluminum. These are specialty tools for pushing resin into fiberglass mat while allowing air to escape. Always keep in acetone after use.

## Squeegees

Squeegees are great for applying body fillers and pushing resin into fiberglass cloth. Cheap, flexible, and resin does not stick to them.

## Mixing Cups and Stir Sticks

Waxed paper and plastic cups for resin measuring, and wooden stir sticks for mixing. We keep various sizes from 1oz to 1 gallon size in stock.

# Resources

Every year, PlasticWorks holds a number of seminars to help our customers learn about our products and how to use them.

Seminars we are planning in the coming months:

*Fiberglass your Sundeck  
Making basic molds for Fiberglass  
Vacuum Bagging & Infusion  
And More!*

Look to our website for the current schedule!

## Fiberglass Sundecks

*When properly applied, a Plastic Works Fiberglass deck provides one of the toughest, most durable, and waterproof deck coatings available. Application is suitable for both professionals and do-it-yourselfers. By simply following the step-by-step procedures in our how-to guide you will have a beautiful deck ready for years of low-maintenance enjoyment.*

