

## **FRP- OVERVIEW**

## "FRP" (FIBERGLASS REINFORCED POLYESTER) – "PLASTICS"

**FRP** (Fiberglass Reinforced Polyester) is a molded product, used in construction and many other industries where a high strength to weight ratio is required. Varying the chemical makeup and/or adding other materials to the composite can allow for different colors, textures and physical and structural properties. Pleasure boat hulls, "Corvette" body panels and many architectural installations can attest to both the strength and weathering properties of this most versatile composite.

**FRP** is a multi-layered lamination of continuous mat and/or loose, chopped strand fiberglass reinforcement, within a matrix of thermosetting polyester resin, all as the structural backup to a thin, pigmented gelcoat finish. The gelcoat is spray applied to the mold first and is typically no more than 20 mils thick. Cores of various types are frequently incorporated into the back laminate to provide surface flatness, additional strength, R-value and even sound attenuation. Once the resin has set the molded part is removed and will maintain the shape of the mold. Shapes as intricate as can be imagined to large sweeping planes are possible.

<u>Integral, custom colored gelcoats</u> are a possibility, even in small quantities. Although lighter, neutral shades are easier to field finish and may be more stable, dark and "primary" colors are also possible. A "ready for field paint" finish is frequently the answer to field finished column cover joints and other locations where the FRP parts are to match adjoining construction. Non-brittle paints with the proper primer should be applied over a well-sanded or lightly sandblasted gelcoat finish. <u>Surface texture</u> of finished parts may also be varied. The gelcoat is very sensitive to textures applied to the mold surface. Post applied texture, either by sandblasting or other techniques are also commonly done.

<u>Installation</u> is readily accomplished with embedded metal or wood providing convenient attachment points. Parts up to ten feet in length are easily handled by a single person resulting in field labor costs that are many times considerably less than estimated. Joints may be monolithic for a seamless appearance or caulked with a paintable or matching sealant. Fasteners may be concealed in caulk joints or countersunk and field filled with a factory supplied thickened gelcoat patch material. A further discussion of the merits of either method as a "best" solution for various applications, FRP surfaces and colors can be found in our Installation Instructions or should be inquired about direct with the factory or local representative.

## Possible Uses...

Column Covers	Dentil Moldings	Copings, Brackets	Spandrel Panels
Cornices, Coves	Reproduction Castings	Domes, Vaults, Ceilings	Light Fixtures
Sculptures	Soffits, Fascias	Balustrades	<b>Custom Applications</b>

## Major Advantages...

Integral Colors	Textured or Smooth	Low Maintenance	Moisture impervious
Field Paint to Match	Light Weight	Cores for Extra Strength	Freeze/Thaw Stable
Intricate Detailing	High Strength	Sound Attenuation	High UV Tolerance