

Fiberglass Reinforced Lining (FRL)

(For Filterwells and Footwells)

This hand lay-up application is made up of two components: FRL resin and standard fiberglass matting. If applied properly, the application will be a long lasting durable finish with a consistent textured appearance. While there is no implied warranty of these materials and techniques, the success of the application and final appearance lies with the experience and skill of the individual performing the repair.

Kit Components:

- 4 oz **FRL** paste for filling and surface preparation
- 1 Qrt **FRL Resin/Final Coat**
- 1 yrd **Standard Fiberglass Mat**
- 1 20CC **Dropper Bottle of Catalyst** to harden resin and paste
- **Measuring Cups, Stir Sticks, and Gloves**

Miscellaneous Materials and Equipment Needed:

- 3" Standard Enamel Paint Roller
- 2" Standard Paint Brush (Disposable)
- 1-Quart Mixing Bucket
- Acetone or Lacquer Thinner for Clean up
- 100 Grit Wet/Dry Sandpaper
- Masking Tape (Good Quality) for trimming around application
- Grinding and Sanding Tools 3"-5" Disc Sander, Dremel for crack, etc.

Safety Precautions:

Most fiberglass repair applications require personal contact with a variety of solvents, each having its own characteristics. Avoid contact with skin during mixing. Gloves are provided. Ventilation is required. Wear a vapor/particulate respirator (NIOSH/MSHA TC-23C). Eye protection is required when grinding, drilling, sanding and mixing. Keep away from heat, sparks and flames. Vapors may cause a flash fire. Close containers after use. Dispose of waste properly.

Procedures:

I. Surface Preparation:

- A. Prepare the cracked, damaged, blistered or delaminated areas by using proper surface and damage filling techniques. Be sure to use the vinyl ester paste as a filler. Use 2 cc's MEKP per 4 oz. Do not use bondo or polyester fillers. On blistered and delaminated areas, dry the structure sufficiently with a heat gun.
- B. Tape off jets, intakes, and desired areas to be surfaced.
- C. Sand or grind entire area with 100 grit. Make sure all the gloss is removed from the surface and clean the surface using a cloth with acetone or isopropyl alcohol.

II. Mat Preparation:

- A. Pre-measure mat to be laid to size. The mat will be applied in sections. No larger than 12" x 12" sections (smaller sections in tight areas).
- B. Fray the edges of the mat to be overlapped with other frayed mat sections next to it and so on. This will feather the mats together giving it an appearance of one whole piece. Put aside until application.

III. Resin Preparation:

- A. Catalyze 1 pint FRL resin with 5 cc's of MEKP using measuring cup. Working time is 10 to 15 minutes.

IV. Application:

- A. Using a paintbrush, apply FRL resin to surface generously but evenly. Remember, working time is limited.
- B. Immediately apply the prepared mat to the surface (by hand) over the uncured resin. The resin will begin to saturate the mat.
- C. Using the remainder of the catalyzed resin and a paintbrush, apply more resin to the mat.
- D. Use a standard enamel 3" paint roller to roll out the mat smoothly. It is helpful to saturate the roller with resin first. The object is to roll out any air pockets and to lay the mat down as smooth as possible so there will be minimal sanding.
- E. Once the application is satisfactory, immediately apply heat to the saturated mat to accelerate the cure. Depending on the degree of heat applied, it should take approximately 5 minutes to set.
- F. Prior to the resin setting too hard, trim the edges at the taped lines and remove any excess matting with a razor knife.

- G. Prepare the surface for the final coat by sanding resurfaced area and removing any roughness. Retaping may be necessary.
- H. **The Final Finish** – Catalyze appropriate amount of resin and apply to surface with clean paintbrush evenly until satisfactory.
- I. Apply heat if necessary. Repeat final resin application (H) if necessary.
- J. Remove tape. Be sure to cut at edge of tape before removing. Allow 48 hours to cure before filling spa with water.