

## Installation guide Fiberglass coating of wooden boat

FRP (Fiberglass Reinforced Polyester) provides a strong and water tight coating at the old wooden deck, deckhouse roof or on the entire wooden boat. It requires that the wood is healthy. A rotten boat can only be saved by fiberglass for a few years.



**1.** FRP has saved many beautiful veteran boats. It is superstition that wood rots beneath water tight covering and paint. The deck house should be self-emptying to ensure that there is no water inside.



2. Prior to FRP coating all old paint on the outside must be removed, so the wood is clean. For the best adhesion, use a belt sander or grinder with coarse sandpaper/ round plate.



3. The joints between bulwark and deck planks and especially at deadwood and keel must be scraped clean from old »works«, putty, joint filler and more to allow the wood to dry at all sides. Moist bulwarks at the bottom are also scraped clean of paint on the inside.



**4.** Blue-black discoloration of wood means nothing, but especially wood at the bottom at keel and stern can be soft and rotten on the inside. Have a professional take a look. Rotten bulwarks must be replaced before FRP coating, or rot might spread throughout the entire boat.



**5.** All joints gap after desiccation. Joints are filled with polyester filler. With filled joints, the bulwark cannot »work« at shifting humidity. Coating with FRP is best at a temperature between 15-20 °C.



6. Prime with polyester + hardener diluted 20 % with acetone, to make it penetrate the wood. Wood must have a rugged, roughly sanded surface. FRP cannot bend around sharp corners, so they must be rounded (A). Afterwards the edges are filled and sharpened using polyester fiber filler (B).



7. Fiberglass mat 450 g/m<sup>2</sup> is torn in pieces at approx. 0.5 m<sup>2</sup>. Apply polyester + hardener with a paint roller and firmly push the mat in place. Roll the glass fiber mat with an air roller (C) until the mat is transparent and soaked.



8. Continue with more mats with 4-6 cm. overlap wet in wet. Apply three layers of fiberglass mat on deck and freeboard and four-five layers of fiberglass mat on submerged hull, preferably wet in wet. A double layer of fiberglass mat is applied around the inward curving of the hull (E). Hardened layers are sanded lightly prior to applying the next layer.



**9.** After two days of hardening it must be sanded and filled for finish. Thereafter the fiberglass coating is painted with a polyester topcoat or epoxy paint.

