



B25 Keel Stub Crack Repair

Provided Courtesy of Leif Beiley, B25 Designer, Cruising Boat Designs

The most cost effective way to reinforce the B25 keel would be to laminate a layer of unidirectional carbon on each side of the keel. Below is a guide for doing the reinforcement.

Step 1: Template the keel (if desired).

Step 2: Grind a recess into each side of the keel approx. .06" deep beginning 2.00" aft of the leading edge and ending 2.00" forward of the trailing edge of the keel, and extending 8.00" above and below the horizontal line where the composite stub joins the lead ballast.

Step 3: Cut a piece of Vectorply P/N C-LA 1812 (or equivalent) unidirectional carbon fiber cloth to fit into the recess with the fibers running vertically, and laminate in place using WEST Systems 105/205 epoxy laminating resin.

Step 4: Fair the area with thickened WEST epoxy and paint as desired with epoxy barrier coat.

Other Useful Information:

Vectorply C-LA 1812 is 606 gsm unidirectional carbon fiber stitched to 1.2 oz./ft² fiberglass chopped strand mat. You can also use plain 606 gsm (18 oz/ft²) unidirectional carbon and 1.0 oz/ft² Chopped Strand Mat. If you do that, be sure the CSM is epoxy compatible.

The keel stub is fabricated from multiple layers of Vectorply biaxial fiberglass and WEST epoxy, and is approximately .38" thick in the areas where you will create the recesses. The material below the line is, of course, solid lead.