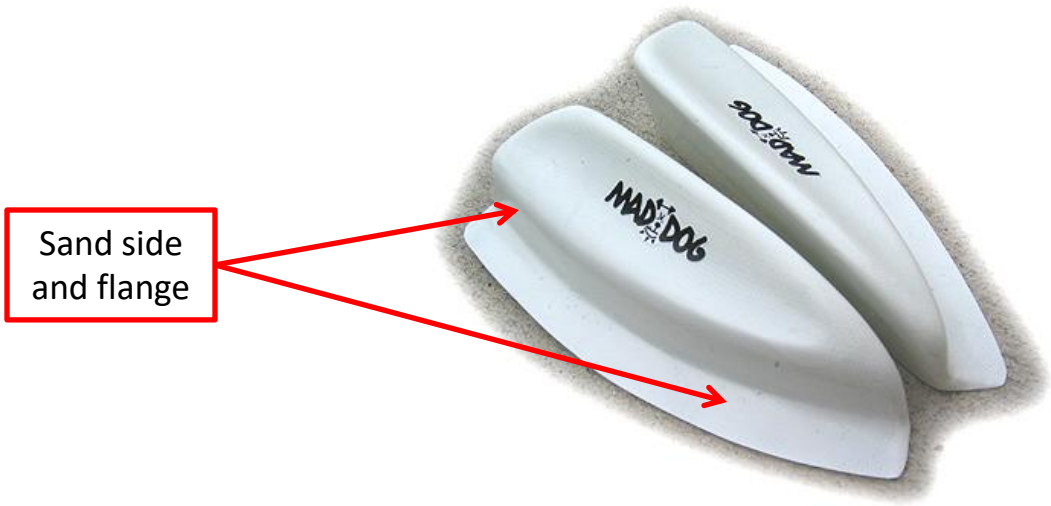
River Elf

Hip Block Installation Instructions:

1. Sit in your boat to decide the best position for your hip blocks. To make sure they are even, you can mark a centerline on the cockpit, and mark with tape equal measurements to the front of the hip-blocks, like this:

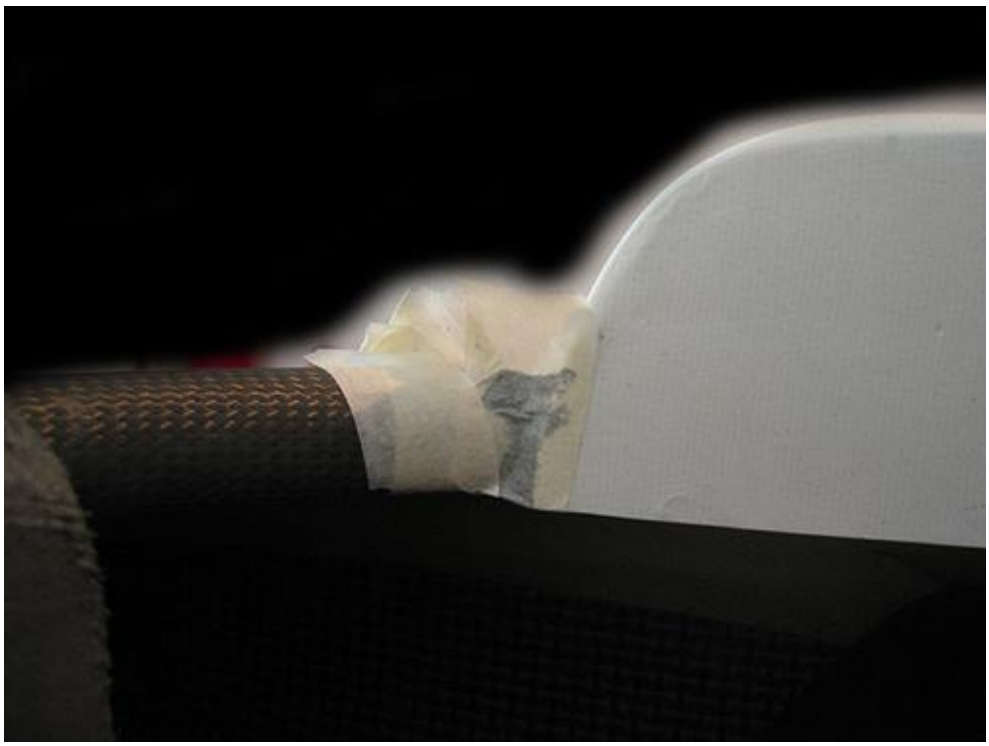
2. Sand the bottom 1" and flange of the hip-blocks so the epoxy micro-ballon mixture will adhere well.



3. Temporarily glue hip blocks in place using 1-minute epoxy. Put a few dots of 1-minute epoxy (available at your local hardware store) on the flange of one hip block and hold it in place until it bonds. Be sure to hold it in the proper position being careful that the face (which will receive the foam) is vertical. This will temporarily secure the blocks and make it easier to apply reinforcement. This method tends to be much better than using clamps, which can slip around, and can get messy. Repeat step 3 for the other hip block.

Once both hip-blocks are temporarily glued into position, you are ready to fill the cockpit rim/hip-block gap with epoxy resin and micro-spheres (a.k.a. micro-balloons) or other resin filler.

4. Tape the flange inside the boat and up the vertical edges to prevent the micro-spheres/resin mixture from running out. Standard masking tape or duct tape will work fine. Create a vertical "tape dam" (see below) on the edges of the hip-blocks, to hold the runny micro-balloons mixture in place until it cures. Be sure the entire flange is leak proof where it meets the cockpit rim ***and the under side of the deck***.

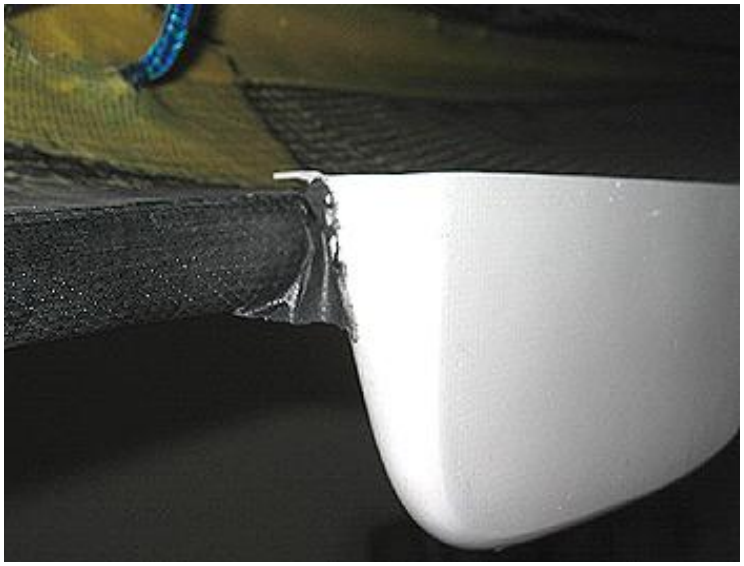


5. Mix epoxy resin and micro-balloons into a thick syrup like consistency. You can also add colored pigment at this time. (Black usually looks best with a carbon rim).

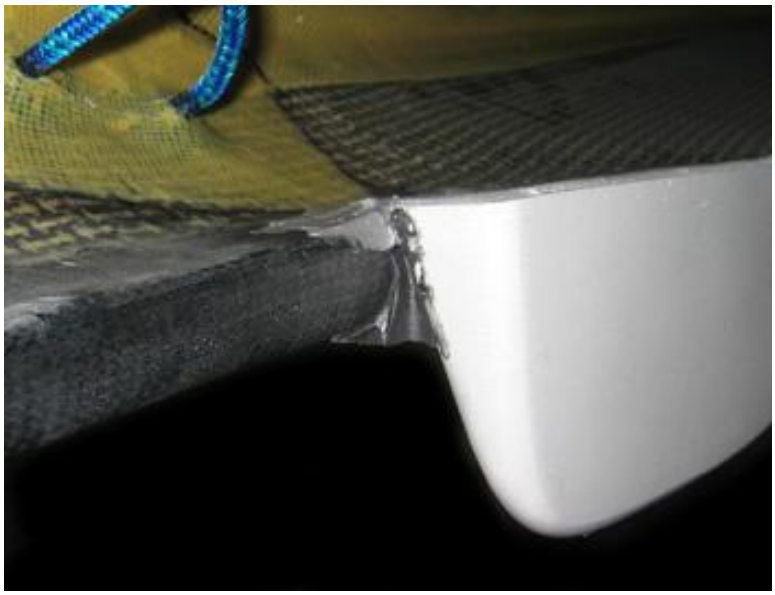
6. Place the mixture in a zip lock bag (shown above), clip the corner of the bag, and squeeze the viscous fluid into the gap (shown below). Keep filling as needed. The mixture will slowly flow throughout the gap, with occasional air bubbles rising to the surface. You may need to add a little more after the first batch has cured and settled.

7. After the micro balloon filler has cured, flip the boat over and do the kevlar reinforcement work. Use ladders or rope to tie the boat upside down. You want the bottom side of the hip blocks to be at eye level.

You may have a small gap between the underside of the deck and the hip block flange (where it overhangs) like this:

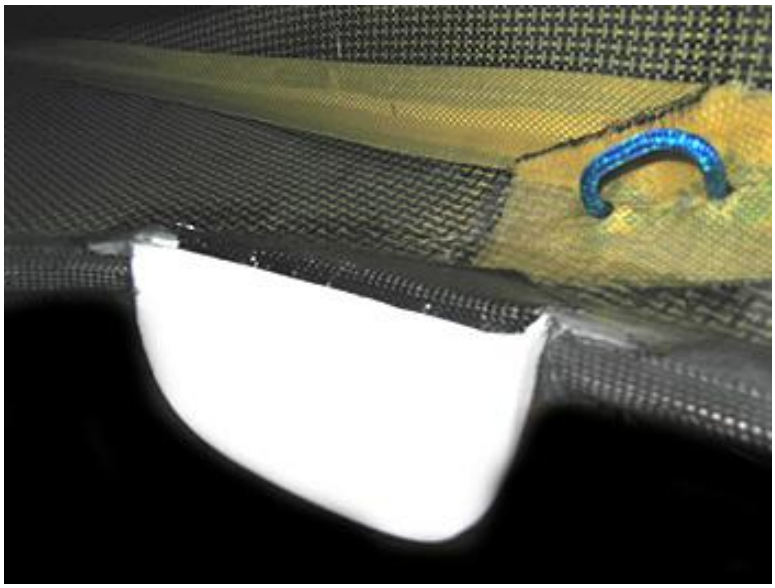


8. Mix a small batch of epoxy resin and micro-balloons into a "peanut butter like" consistency (thicker than before), and fill in any gaps. This will insure that your kevlar reinforcement will lay flush across this area.



9. Cut reinforcement cloth for each block (see below).

10. Wet out the underside of the deck and inside of the hip blocks with epoxy resin and add a first layer of carbon (or kevlar) resin saturated reinforcement .



11. Follow up with a second layer of kevlar (or other material) as shown below:

12. Cover with a piece of peel-ply. This will be peeled off after drying, leaving a smooth finish.

13. Once cured, go back and sand the micro-balloons (and any other areas) as needed to smooth things out.

14. Glue minicell foam onto the vertical walls of your hip blocks and grind down for a custom fit.