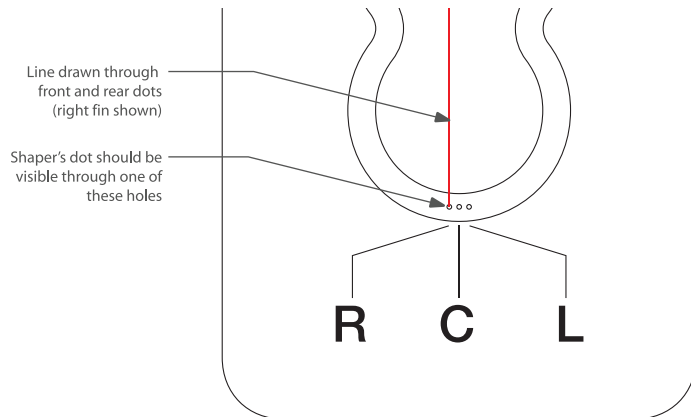


A note on Fin Plugs:

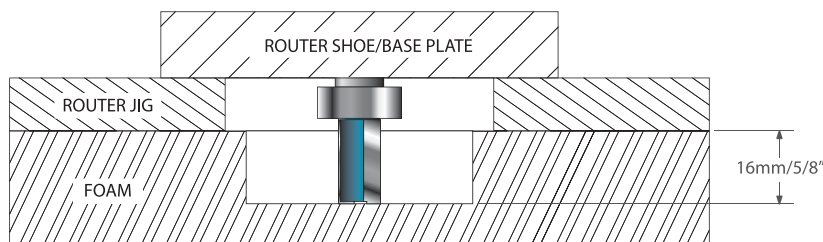
- For center fins use the 0 degree plug
- For side fins use either the 5 degree or 9 degree plug depending on the bottom contour of the surfboard. FCS recommends you use the 5 degree plug for standard concaves and V-bottoms and the 9 degree plug for deep concaves.

Before You Make the Cut:

1. Mark the fin dots on the shaped blank. One dot should be placed at the point where the trailing edge of the fin should sit and the other should be placed where the leading edge should sit. Essentially this is the toe angle of the fin. Draw a line that connects these dots. The line should extend 4 1/2" in length from the rear dot toward the front dot.
2. Place a shaper's weight on the foam blank to ensure stability during the install process.
3. Position the router template over the drawn line. Locate the rear dot so it can be seen through the hole provided in the template. Choose the relevant hole depending on whether the installation is for a center, right or left fin.

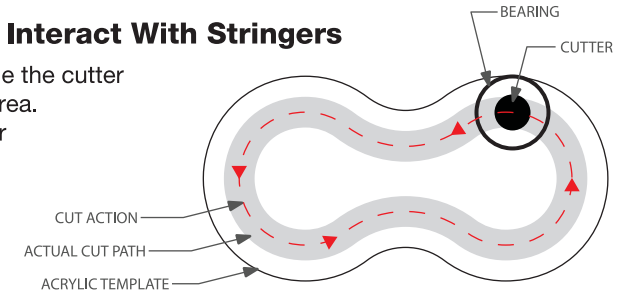


4. Set the depth of the cutter so it extends 5/8" (16mm) beyond the base of the acrylic jig. This will allow for the plugs to sit 1/32" below the surface of the shaped surfboard blank.

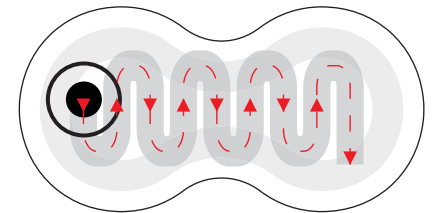


For Cuts That DO NOT Interact With Stringers

5. Turn the router on and plunge the cutter into the center of the foam area. Now complete one perimeter of the outside shape

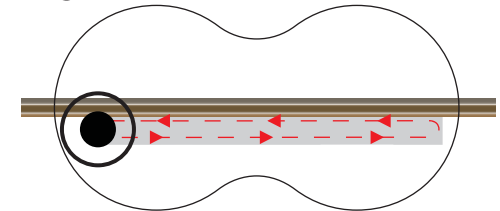


6. Now zig zag back and forth to clean up the foam left in the center. Once the cut is finished, turn the router off

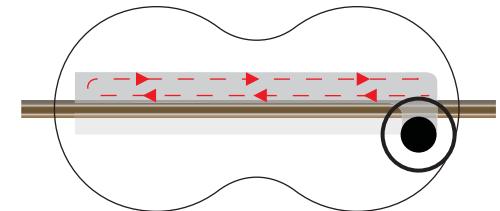


For Cuts That DO Interact With Stringers

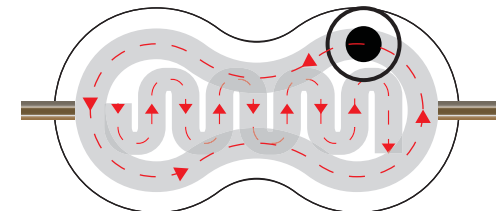
5. Turn the router and make several passes along the stringer leaving the foam around the edges to protect from stringer blowout into sidewall. Hold the router firmly so you have control at all times.



- 6a. Now cut through the end point of the stringer. Repeat the previous step but on the other side of the stringer. Continue until stringer is completely removed.

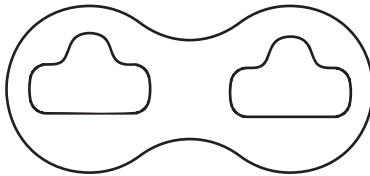


- 6b. Now complete the perimeter shaped by running the bearing along the side wall of the jig. Clean up any excess foam left in the centre of the cavity.

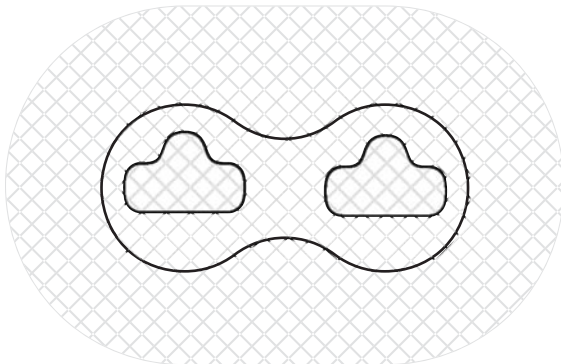


Setting the plugs:

- Pour a small portion of resin into the cavity you have made. With a brush, wet out the walls of the cavity. Note for Epoxy resin systems remember to mix slurry of resin and FCS glass powder. This will reduce the chance of out gassing.
- Use a brush to apply a thin layer of resin onto the foam part of the Fusion plug.
- Place the Fusion plug into the cavity. This should be a snug fit.
Note: For side fins, make sure the grub screws are on the side closest to the stringer.
- Use a brush or squeegee to wipe down any excess resin.
- Now place the FCS dummy jig into the plug slots. Check the cant and toe angles are correct. Adjust accordingly and then tape down until the resin has gelled.
- Remove the dummy jigs, screw down the grub screws and place the provided stickers over the slot openings. Make sure the screws are deep enough so you eliminate the chance of sanding them.



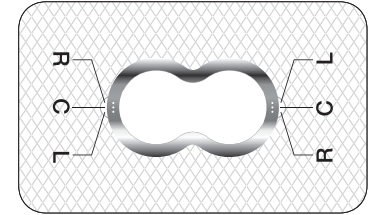
- Place "football" patches over the plug. This will strengthen the system by adding more glass over the flange of the plug. These patches should extend approximately 1" around the plugs perimeter.



- Glass and sand the board as per normal pre-glass installations.

Installation Set Includes:

- **The router template.** This is made of acrylic and an interchangeable stainless steel insert.



- **Router bit.** This is a standard 3/8" wide, 3/4" deep, straight two flute carbide tip cutter. It is assembled with a 3/4" bearing.



- **White stickers** to cover plugs slots during glassing of the board.



- **1 x Board sticker** which describes the NEW system:

Place the fusion sticker on the deck of the board, towards the rail & just above the fins. This sticker is designed to give customers confidence in the new FCS Fusion and ensure great sell through of your board.

FCS Fusion™

This board is installed with a genuine FCS product to fit the world's largest range of premium fins. The FCS Fusion™ is designed specifically for EPS/Epoxy boards to ensure maximum performance in new technology requiring a pre-glass install. This is a Patent Pending system.

- Curve shape prevents shearing of fiberglass.
- Elongated slots offer forward and aft movement of the fin.
- Flange distributes the forces exerted on the plug during surfing.
- High density foam provides a dense and rigid platform for superior strength and reduced weight.
- Shapers fin positioning dots are still visible.
- Fusion is 43mm (approx 2") shorter than Futures or Lokbox. This reduces weight and creates a more natural tail flex for a livelier feeling board.
- Resin flow cutouts create an extremely strong bond.
- Lateral pressure from screws prevents base flex in the fins.

