

There is a contradiction in the construction manual that each of you should note regarding toe rails. On page 44 the manual tells you to cut the strips 64" long. That is correct. On page 45 the manual tells you to cut them off at 55" overall. That is the length I used on the first boat but decided to make them a bit longer on the second one. My preference is that the final length should be 62 inches so that they go from about 1/2" aft of station 8 to station 13. This is not a class controlled length but rather a preference. I recommend that you make them 62" long.

The cradle frames sit on stations 6 and 10. It helps to let the glass hang over the front of station 6 a little more (it is not quite centered on the cradle frame by about 2 inches--you can see what I mean in the picture on page 58).

The big holes in the bulkheads are 3 1/2 inch diameter and the small ones are 2 1/4. Be sure to seal the edges of the holes.

The orientation of the hybrid on the bulkhead material is not critical

Station 10 should be 74" at the widest point. And yes the beam will be about 2" wider than that. By the time you extend the gunwale down below the tip of the station the proper amount, the boat becomes the correct width. This all happens automatically when you bend the gunwale strips according to the instructions.

As I get more experience using epoxy and carbon or s-glass I've come to appreciate the use of peel ply in many applications. Wrapping it around a part or draping it over parts and hanging weights on it (like clamps) is a great way to squeeze extra resin out of the lay-up and to get a very nice surface to work with. I'll post a couple of pictures on the website construction page to have a look at if you've not used it before. I would recommend that everyone buy about 5 yards of the stuff (get coarse mesh) as it will make everything easier. It's fairly cheap.

One thing that I would like to make clear for those new to handling glass. Avoid handling pre wet glass whenever possible. Instead always lay the dry cloth on the part and wet it out (you may want to wet the part first in some rare applications like in multiple layer applications). Pre-wet cloth that is moved in place is hard to handle, traps a lot of air under it that is hard to remove, and makes a hell of a mess. Avoid it whenever possible. Even short pieces of glass tape are best applied by wetting the part and applying the dry tape when possible. By using a squeegee you can bring the resin up through the cloth and avoid air bubbles. You will need to wet out from the top once you've squeegeed it in place.

Bram

A recent question came in about the offset for the vang pedestal. The question was "why is it offset from the center"? The answer is to keep the vang line from interfering with the centerboard.

I just weighed the station 6 bulkhead completed for USA 013. It weighs 1002 grams with all hybrid and epoxy applied. It would be good to get a plywood station 6 completed and weighed.

Because the bulkheads are being used like webbing in an "I" beam, the load is almost entirely in compression and it's doubtful that plywood would provide as strong a vertical column as vertical cedar. However, if the plywood is 5 ply and the outer skins are oriented vertically, I think any difference is probably insignificant. Weight and cost would likely be the real factors. Those milling their own strips from typical lumberyard cedar will likely have a number of lower quality strips (appearance wise) and would be foolish to simply throw them away and buy an expensive sheet of plywood. On the other hand, those buying finished strips may well be better off using plywood as long as they are careful to seal all edges (especially around the lightning holes).

Those looking for router bits may want to try WWW.MLCSwoodworking.com and look for "bead and flute". If others have a good mail-order source let me know. I'll be posting these on the website.

The first things you will need upon completion of the deck (in addition to the parts kits) are the launcher throat, forestay fitting, spinnaker pole and guide rings. These items come from Vanguard (they are all 49er parts) but should be ordered at least 3 weeks in advance (see the links page for Vanguard

info).

A couple of things that have been brought to my attention.

First, when you see the term "straight epoxy" it always means epoxy with hardener but without any other fillers or additives. You will never apply epoxy without hardener.

Second, I forgot to mention that your plans will not include a transom bar pattern as indicated in the manual. The transom bar is a simple 72" radius. I decided some time ago not to include a pattern for it as it is an additional sheet that is simple to cut. The jig ends up being a piece of 2x6 48" inches long. If you drive a nail in the center of one of your sheets of particle board two feet from one end, you can tack the 48" 2x6 parallel and flush with the other end and use a string to strike the radius. The entire process takes less than 5 minutes.

The actual transom bar that you make on the jig will be several inches too long and you should leave it that way until you are ready to fit it to the deck.

If this is still confusing, please let me know since I could mail you a pattern if nothing else.

I would ask everyone to build the new centerboard trunk as it is easier and better. You do not need to buy (or build) your centerboard until later if you use this detail, plus, you have the option of changing boards easily if you want to.

Look on the "links" page of the website often as we'll be adding new suppliers frequently in the future.

Just a note to those getting their plans: While nearly everything is covered in the manual, there is a separate sheet on the outside of the main roll of station templates marked "bow profile" that is an add on. You should glue this on some particle board (just like the station patterns) to use later to check your final bow profile. Don't get concerned while laying the strips on the hull because the shape will be automatically determined at that early stage and trying to use the profile template will only make the process confusing. The final shape is determined by how you cut the bow block and has a lot of latitude. You will use this profile template just prior to glassing and the final bow curve below the waterline is best left to filler after glassing (it's a small amount and covered with epoxy/graphite powder).