

Building without Staples

Photo #1

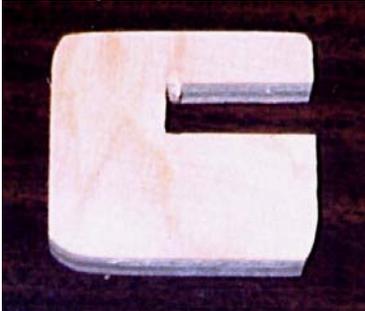


Photo #2



Equipment List

32- 40 L or U-shaped jigs (see instructions below)
32- 40 1 and 2 inch C-clamps
4 - 6 12 inch F-clamps or QuickGrips™
4 - 6 6 inch QuickGrips™
5 - 10 bungies cords of varying lengths
Scrap blocks of wood (varying sizes around one inch square)
Scrap pieces of strips
Small wood wedges
Hot melt glue gun
Wood hot melt glue sticks

Optional Equipment

Industrial Heat gun

Making L or U-shaped Jigs

From ¼ inch plywood, cut your jigs (**Diagram #1 and Photo #1**)

Preparing the Molds

You will still need to mask off the forms to prevent the planking from becoming adhered to the molds, but you should not have the tape folded over the sides. This will prevent the hot melt glue from attaching itself to the mold on the sides. The masking tape will just pull away under pressure.

You may also wish to router a ¼ deep groove around the deck edges of your forms and down the hull side by at least two to three inches. (**Photo #2**) This way you can use small pony type clamps to hold strips in place in tight areas. It will also become very useful when you design a deck pattern. You can very easily and temporarily hold strips in place and adjust your pattern. When you set up the mold, be sure that the groove side is facing away from the center of the boat towards the ends

Photo #3



Photo #4



Photo #5

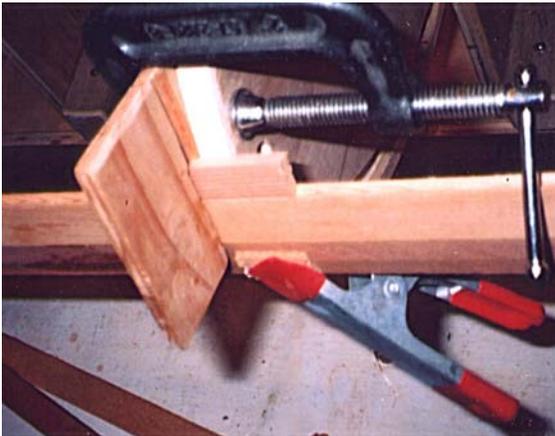
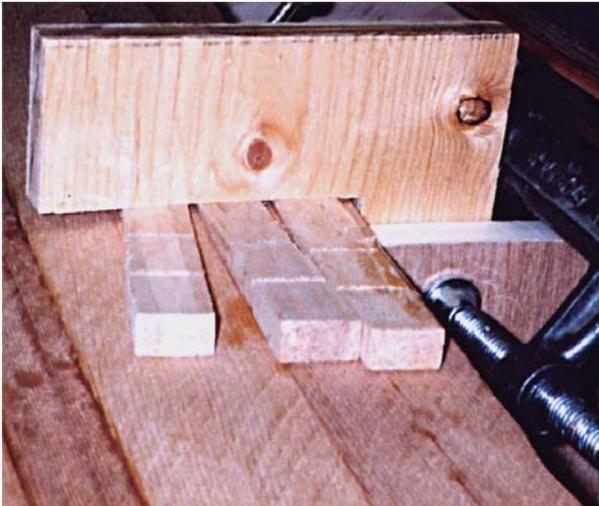


Photo #6



Sheer Strips

The narrow sheer strips are aligned with the sheer marks as in the building instructions and attached to the boat molds with hot melt glue. The glue is not applied between the strip and the mold but a bead is run on each side of the mold. **(Photo #3)**

There may not be enough room for your jigs at this time. The following few strips can be taped to each other to get a nice tight fit and to hold them in place while the glue dries. Electrician's or masking tape is good for this. **(Photo #4)** Do not apply too much pressure so as to break the hot melt glue bond or bend the strips dramatically and be sure to protect edges with scrap pieces of cedar strip with bead and/or cove (depending on which is facing up – recommend cove). Once you have two or three strips on the hull, you will be able to proceed with the jigs. Continue to apply hot melt glue throughout the building process

Once you have applied wood glue to the strip on the boat and placed the next strip in place, firmly press a small scrap of cedar into the new strip to force a good fit. Place an L or U shaped jig over the scrap piece and press the strip onto the mold and into the strip on the boat. Clamp the jig to the mold with a C-clamp. Progress to the next mold until you have the strip firmly held in place.

(Diagram #2, Photo #5)

You can also use a slightly larger jig and use wedges to press strips into each other and onto the boat molds. **(Photo #6)** On areas that are relatively flat, you may be able to apply more than one strip at a time.

Photo #7



Photo #8

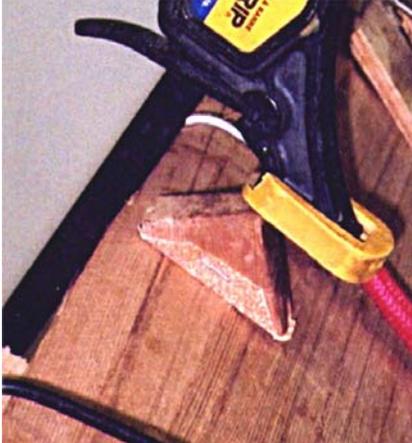


Photo #9



Photo #10

End Forms

To attach the strips to the end forms, you will be able to clamp them with the small 6-inch QuickGrips™ from the end. To force the new strip into the existing strip, use the longer F-clamps or QuickGrips™ to clamp downwards. **(Photo #7)** Always protect the cove edge with a scrap piece. As you progress up the end form, it will become increasingly difficult to use the QuickGrips™, because of the angles at which the strips are coming into the ends. At this time you will find bungs to be useful. Because the clamps will tend to slide off on sharper angles, you can also try stapling a scrap piece of sandpaper to a small block of wood and place that between the clamp and the boat. This may prevent the clamp from sliding. **(Photo #8)**

As you progress up the ends, the strips are under greater pressure to bend and torque at the same time. You can soften the wood with the Heat Gun, being careful not to burn the wood. Progress a few inches at a time and clamp as you go. On longer boats, these bends are not as acute.

Note: Continue to apply hot melt glue as you progress in your building.

Hint: You may also need to make smaller versions of the L or U-Jigs for hard to reach places.

Use of Bungies

In certain areas of the building process you can use the bungies to apply pressure to the strip to hold it to the forms. Wrap the bungee around the hull by attaching to the risers or around the box beam itself. To apply downward force onto the strip, lift the bungee where you want the pressure and place a small block of wood underneath. You want small blocks of wood, as this will concentrate the pressure where you need it. Stack more blocks to apply greater pressure. **(Photo #9)**

Bungies can also be used to pull strips down into each other when clamps are no longer useful. **(Photo #10)**

Note that hull is protected from being damaged by bungee hooks with scrap pieces of wood.

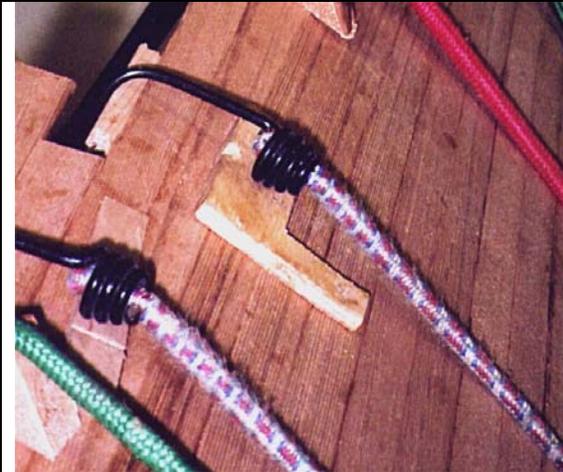


Photo #11



Photo #12



Closing the Hull or Deck

Use the bungees to apply downward pressure in areas that you need and use small scrap wedges of cedar to apply pressure and to hold pieces in place at the ends of each strip. **(Photo #11 & #12)**

Deck Patterns

Use the routed slot to experiment and create your pattern. Once you are satisfied, hot melt glue those strips in place and wood glue to each other. **(Photo #13)**

Photo #13

