

Photo #1



Photo #2



Photo #3



## Aligning End Forms

If you have forms that need to be attached to the end forms, do that now. **(Photo #1)**

## Attaching End Forms

The two end forms must extend perpendicular to the last two forms on your beam at the right height. You can use wood screws or more wing nuts and bolts to attach the end forms. Either way is fine. Firstly you need to permanently attach some blocks of wood to the end forms, which will be used to hold the end form in place. **(Photo # 2)** You can use 2 x 2 blocks left over from making box beam blocks, or you can glue the end form to the last two forms on your beam with additional screws through them into the end forms.

The latter method may split the plywood if you don't pre-drill pilot holes and attaching them this way needs to be done before you attach the forms to their risers. We recommend using the blocks and bolts.

Whichever method you choose, the purpose is to hold the end forms in place securely and at a right angle to the last two forms with the deck edges of both forms lining up flush to each other. **(Diagram #1)**

After you have the end forms attached and the whole assembly attached to the riser, make a support riser under the end forms, attached to the ends of the beam. **(Diagram #2 & Photo #3)** This will ensure that the end forms do not sag under their own weight or be pulled off center as you apply strips of cedar. These are very common building problems. The strips can exert quite a bit of pressure to the end form depending on hull shape.

Using a square, align the last two forms on your beam so they are perpendicular to the beam and then measure the height required of the end block to hold the assembly in that position. The block system will hold the end form both at the right height and on center at the same time.

Once you have the two end forms attached, we recommend that you double check that everything is still aligned down the entire assembly. Remember, there is no going back after a few strips are attached.

Photo #4



Since the strips will exert upward pressure on the end forms, a trick to hold everything down and in place is to tie the end form down to the beam with wire or string. **(Photo #4)** Do not use nails or screws, which will prevent you from removing the end form from the boat later.

Another tip to hold everything in place is to take a strip of cedar and staple it down the centerline on top of your assembly. Measure each station to ensure it is perpendicular to the box beam and then put a temporary staple through this strip into each station.

You should now have a perfectly aligned form of the whole boat and you should see what the final shape of the hull should be.