

HOW TO CUT A STRINGER WITH NOTCHES FOR THE FRAMES.

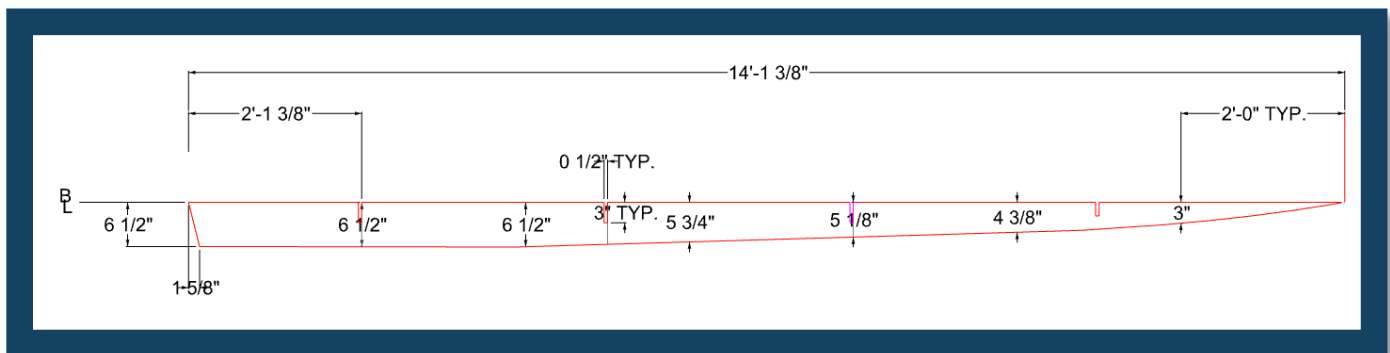
This applies mostly to our power boats 16' and longer. As explained elsewhere, our notched frames and stringer system is optional. One can build the boat the traditional way without using them, but they are very practical. The notches automatically align frames and stringers and make the assembly easier. The key to success is to take it one step at a time. There is nothing difficult about building a large boat but if you try to solve all the problems at once, the project becomes overwhelming.

In this case, the steps are simple:

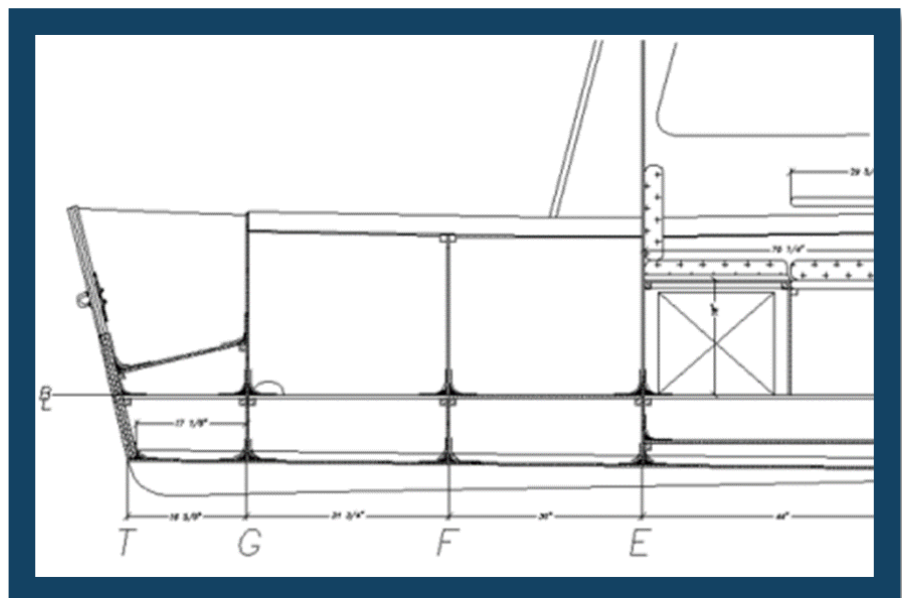
- ✍️ cut the stringers
- ✍️ mark the location of the frames
- ✍️ mark the thickness of the frames
- ✍️ mark the depth of the notches
- ✍️ cut the notches.

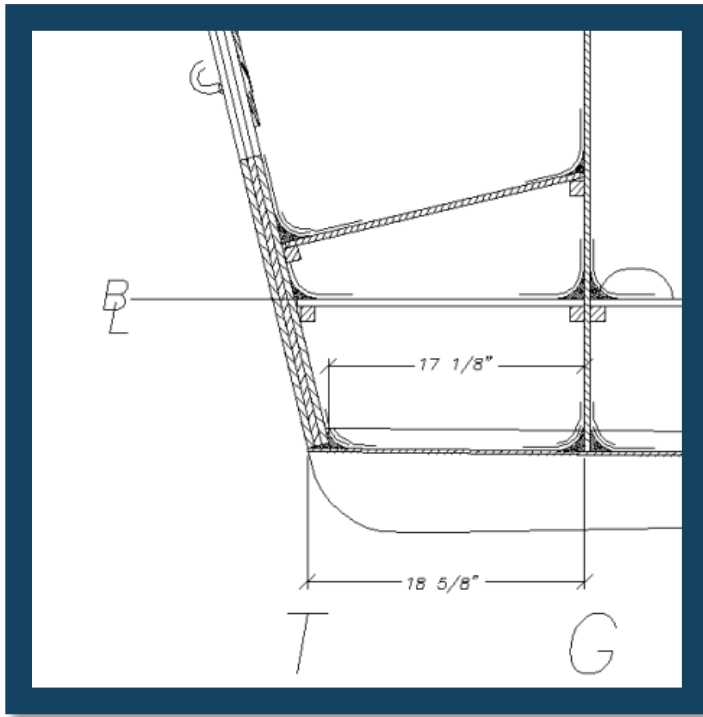
***All images are strictly used as an example. Use the dimensions available in your plans.**

Step 1: Cut the stringers. Dimensions are given at regular intervals, in this case every 24". Mark the points, join them with a batten (PVC pipe) and draw the outline. Cut the plywood parts and assemble.



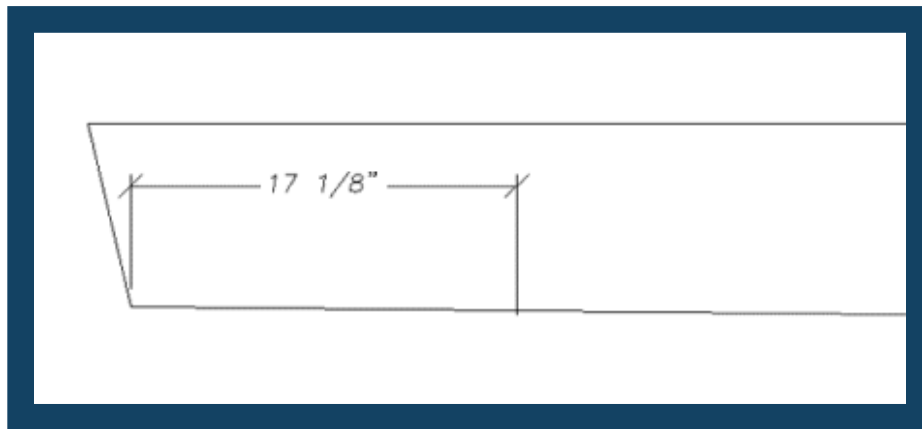
Step 2: Look for the frame spacing. This should be on the Stations drawing in your plans. Note how each frame is identified by a letter, T being the transom.



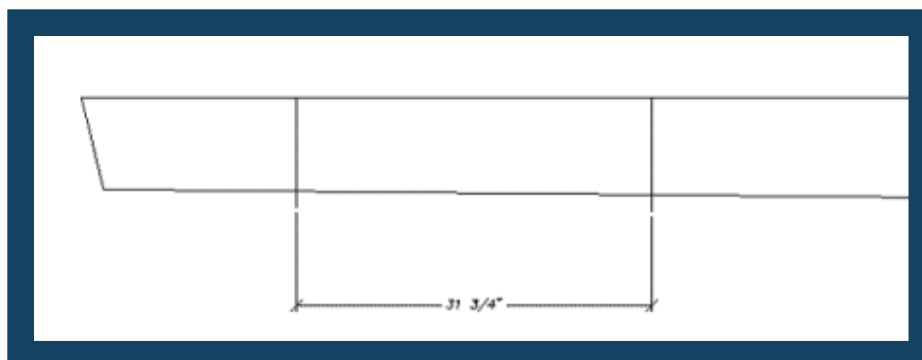


Step 3: Understand where we measure from: the origin. In the case of the DE23, our origin for the dimensions is the lower tip of the transom, outside face. Since the stringers stop on the inside face, we must subtract the thickness of the transom. The distance from the lower tip of the stringer to the motorwell bulkhead is 17-1/8". Note that at this point, we don't worry about the thickness of the bulkhead.

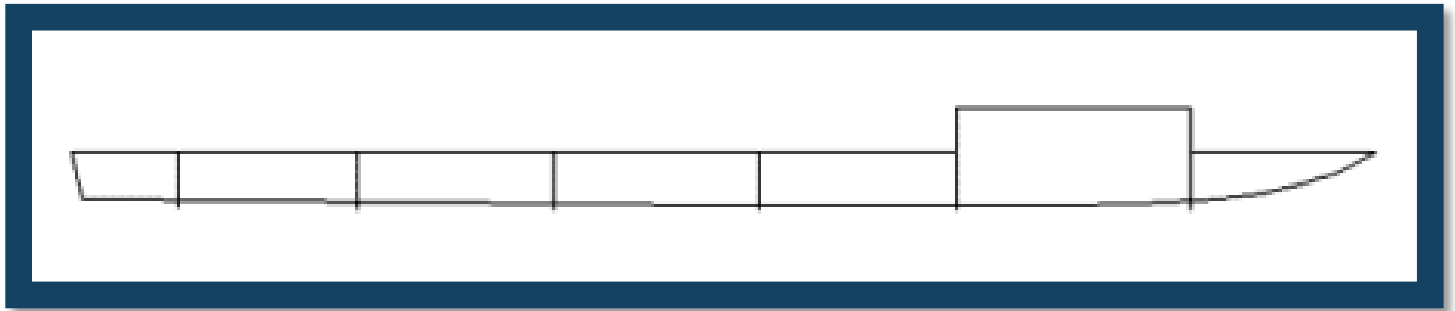
Step 4: Mark the first frame location. That's easy, just draw a line.



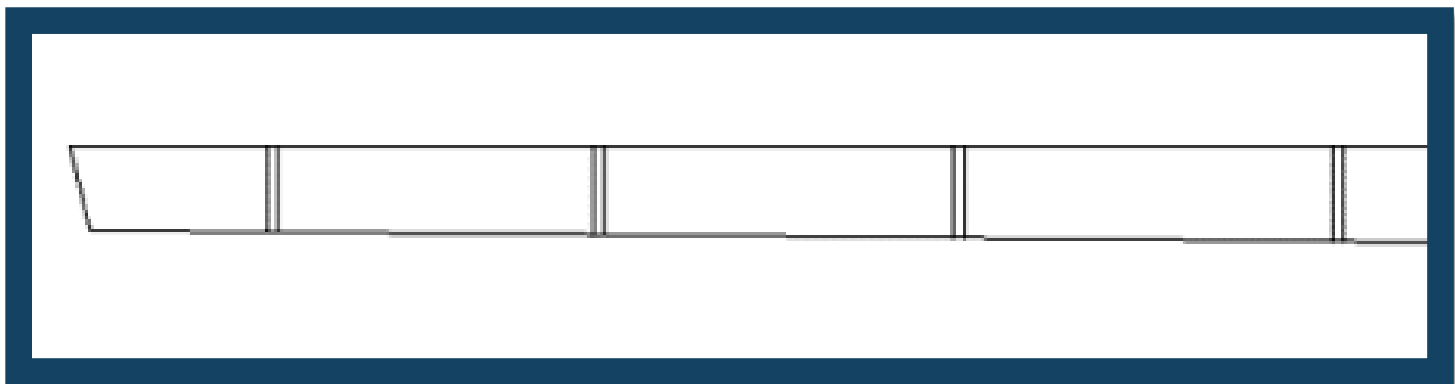
Step 5: Draw a second frame location. Note that I did not worry about any thickness, I just drew a line. This makes sense if you look at the plans: the dimension lines show clearly that you measure from the previous location line. Please do not think of the thickness or the depth of the notches at this point, keep it simple, location marks only. Mark them with the frame letter.



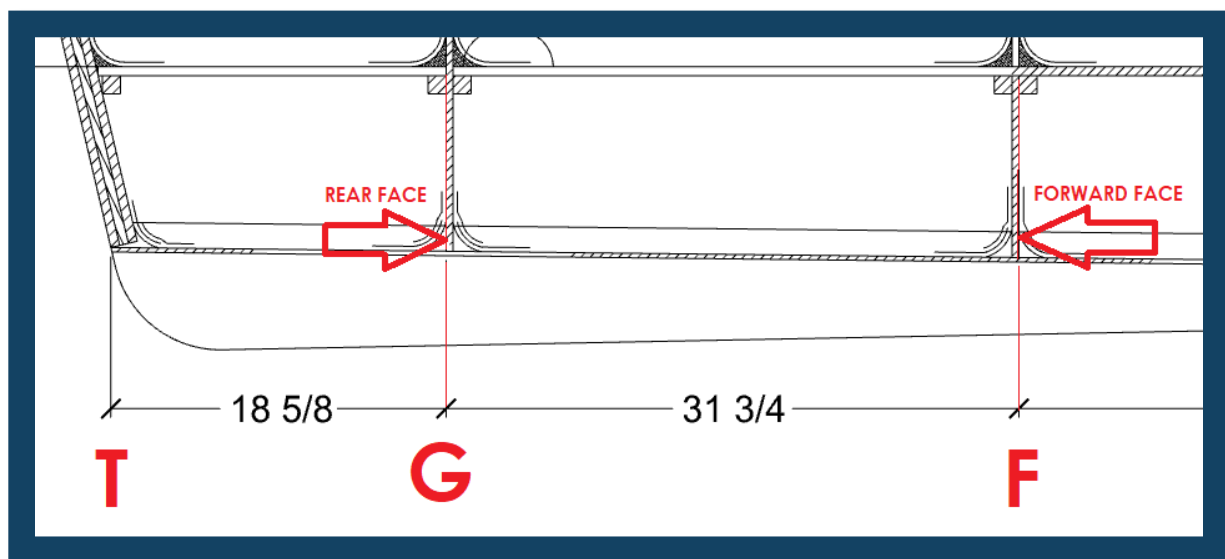
Step 6: Mark all other frame location lines. Nothing difficult there, just keep marking the distances as shown on the plans.



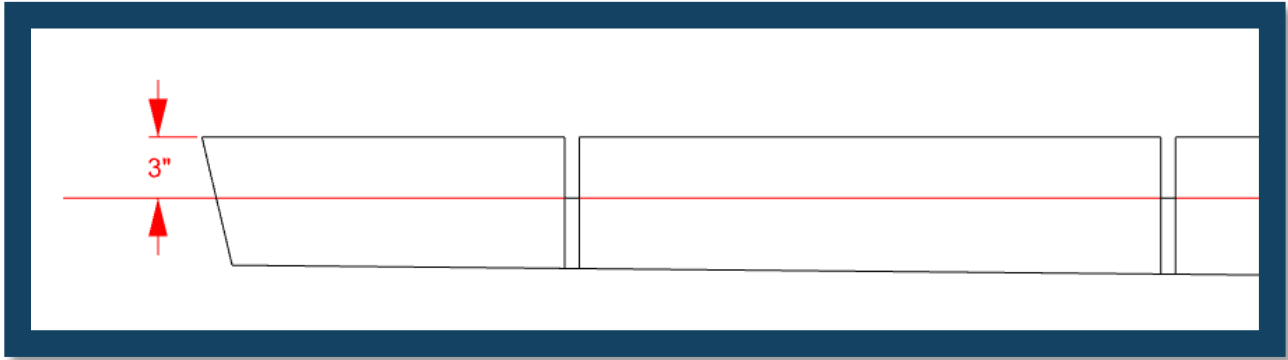
Step 7: Draw the thickness of the frames, one at a time, and look at the plans.



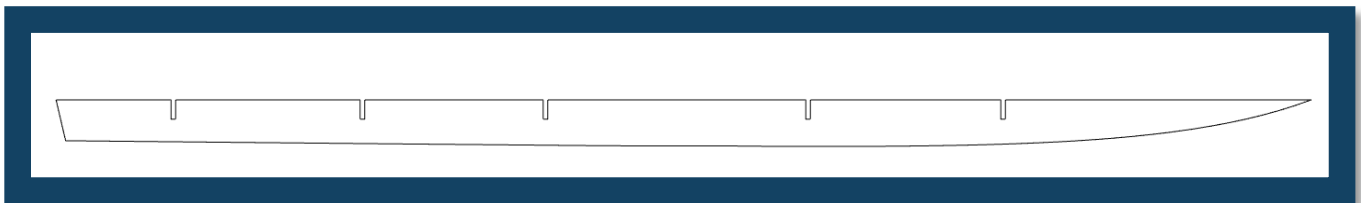
The dimension lines on the plans clearly show where we measure from. In this case, for the DE23, the first location, line G, refers to the **REAR FACE** of the frame G. You know the thickness of that piece of plywood: add it forward of your location line. The second location, line F, is to the **FORWARD FACE** of the frame. Add the thickness behind that line, towards the stern. There are reasons why we do not always use the same face. Proceed the same way for all your frames.



Step 8: Mark the depth of the notches. In most cases, 3" (75 mm) will be fine but there is no absolute rule. Let's do it at 3". Draw a line parallel to the sole (the upper face of the stringer), 3" down.



Step 9: Cut the notches.



You see, one step at a time does it.