

MERCO MARINE™

60 Merco Road
Wellsburg, WV 26070

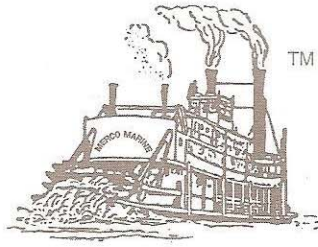
1-800-396-3726

FAX 304-737-3008

www.mercomarine.com

Email: merco@mercomarine.com

MANUFACTURER OF DOCK BUILDING COMPONENTS



LOCAL DEALER

HOW TO BUILD A TRUSS FLOATING DOCK

STEP BY STEP INSTRUCTIONS
USING MERCOS MARINE HARDWARE,
FLOATS, RUBRAIL, AND ACCESSORIES

A 6' X 20' DOCK WITH A 4' X 10' RAMP
ARE SHOWN, BUT THE SAME PROCEDURE
APPLIES TO ANY SIZE TRUSS FRAME DOCK



Tools Needs:

Many truss frame docks have been built using only hand tools, but it does make the job go quicker if you have power tools. You will need a square, chalk line, pencil, hammer, tape measure, 2 C-clamps, power hand saw, 1/2" drill bit, 3/8" drill bit, 7/32" drill bit, 3/4" socket and wrench, 3/8" socket and power drill and 5/16" allen wrench for float drum plugs. On big jobs it is nice to have an impact socket and air tools.

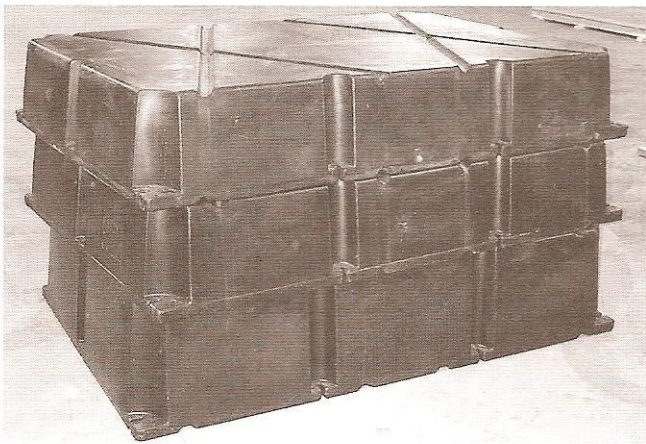
1. Assemble together all the truss frames, floats, hardware and fasteners you need for the project. If you use the components as designed, the dock will last for 30 years or more. If you have questions on components needed, give us a call!



MercoMarine.com

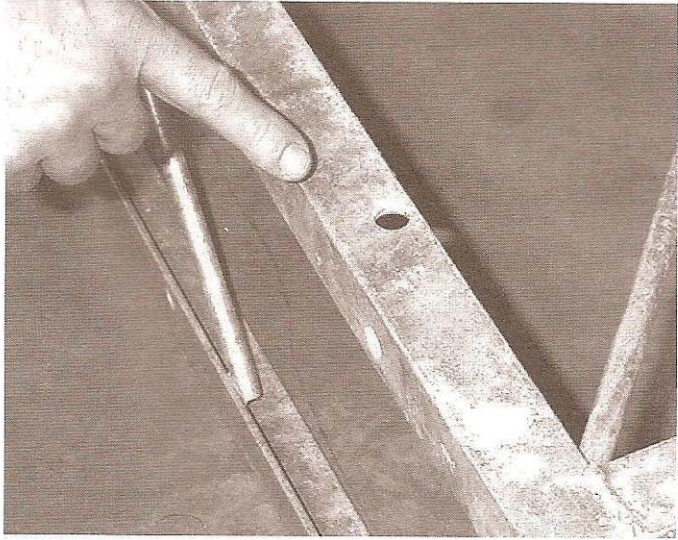
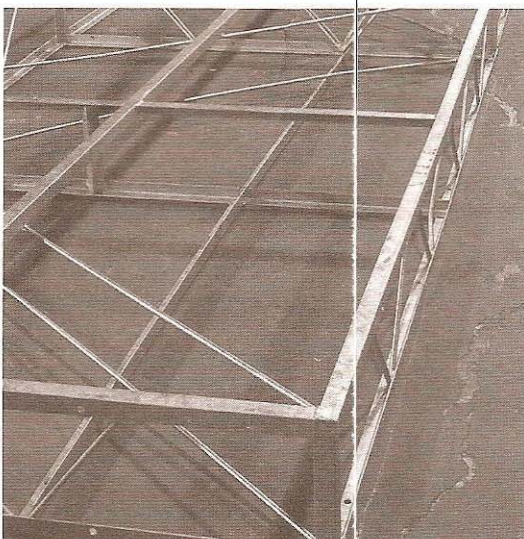
1-800-396-3726

(304-737-3006)

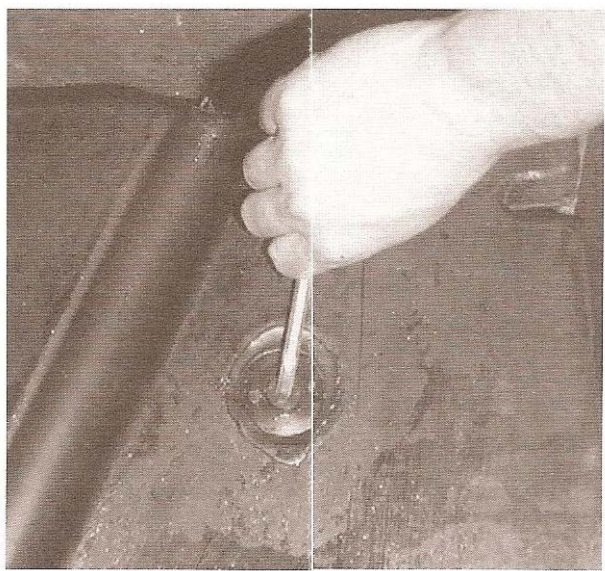
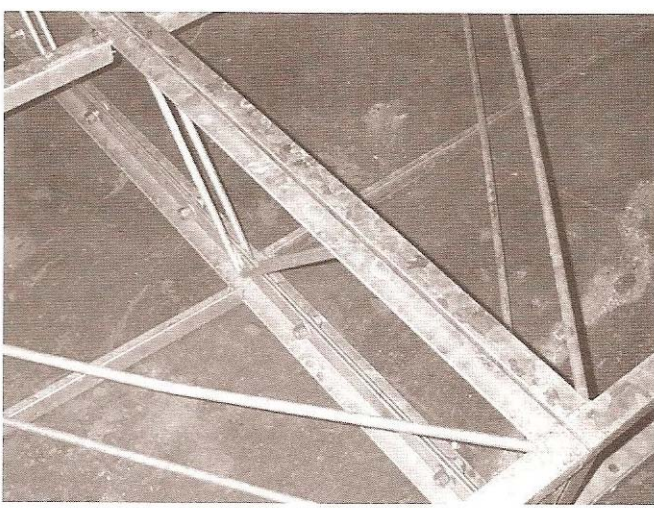


2. Like hardware, assemble together the pressure treated wood you will need. The nailer strips are 2" x 4" and if you are using pressure treated decking we recommend 2" x 6". The bumpboard, if used, are also 2" x 6". Be selective on your lumber. Lumber that is dried out, bent or warped will make your project much harder.

3. Select your floats needed. We only sell Ace floats because they are the best both in the shell polyethylene and polystyrene foam filling. Many float manufacturers claim they are the best. If they sell seconds, they aren't! Merco sells 43 different sizes of floats. Remember, a float could be in the water and expected to function for the next 30 years. It should also meet or exceed Corps. of Engineers Regulation #36 CFR Part 327.



4. Layout truss frames end to end upside down. (The bottom has no holes in angle, the top has holes for the nailer strips.)

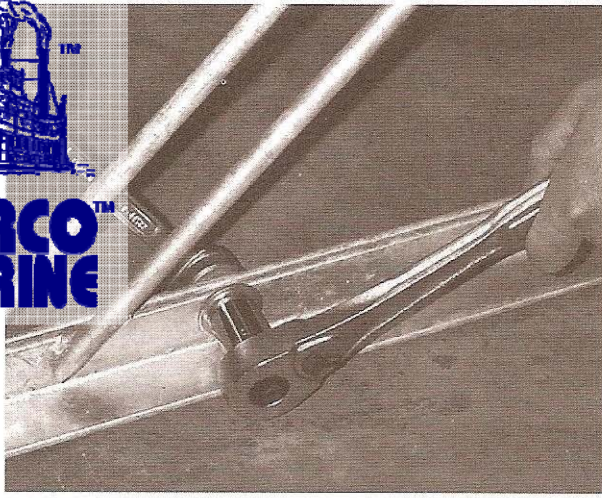


5. Use B-HB1 (1/2" x 1 1/2" bolt) and bolt truss frames end to end. Fill every hole with a bolt. Make sure top and sides of frame are level. Tighten.

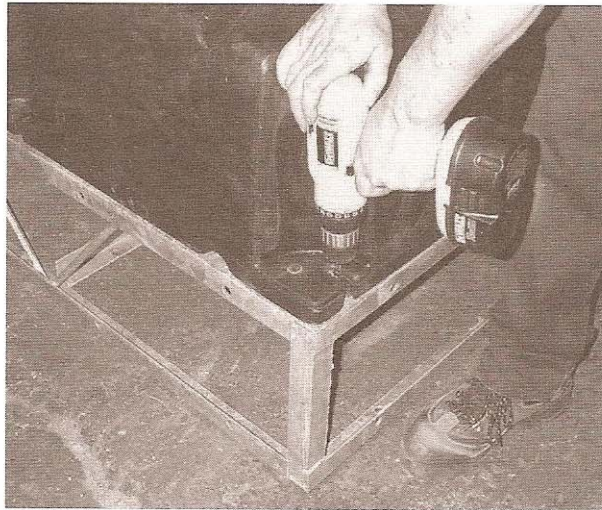
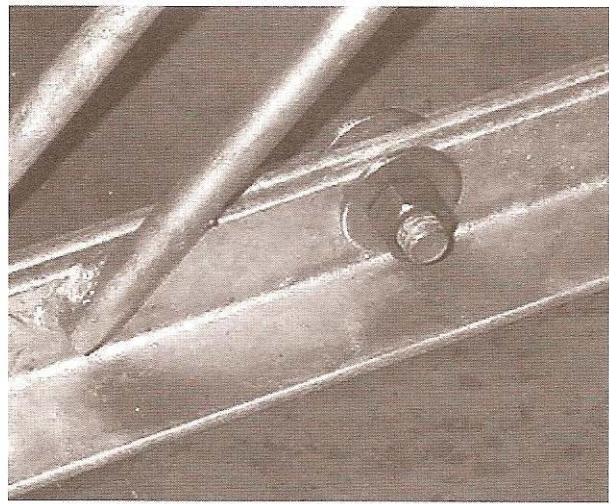
6. Using an allen wrench, put plugs in float drums.

**1-800-396-3726
(304-737-3006)**

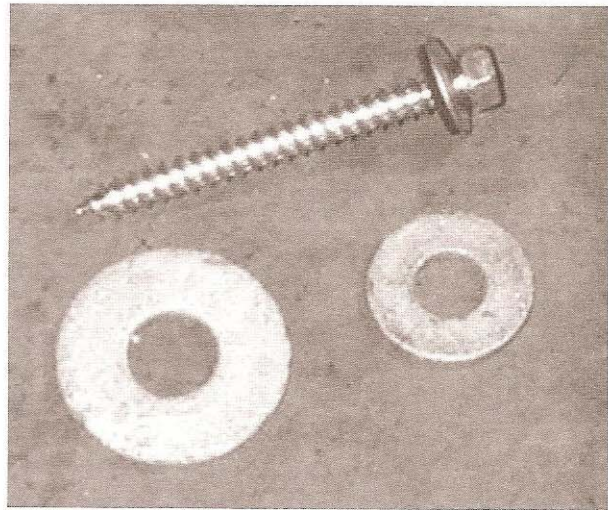
MercoMarine.com



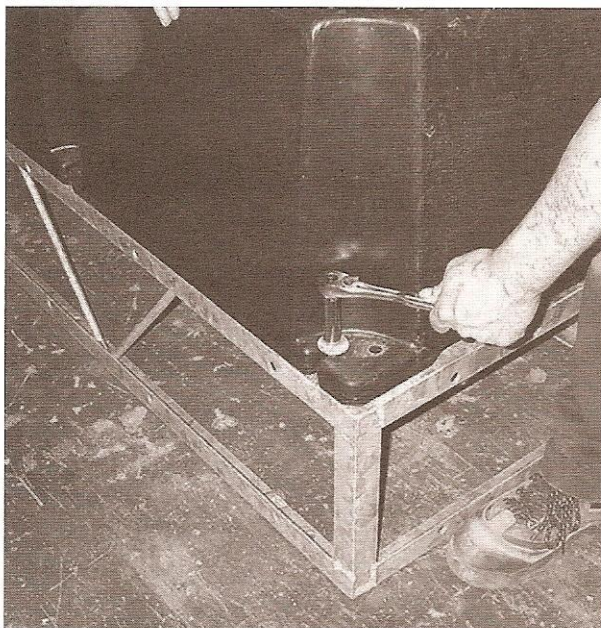
Bolt together truss frames.



7. Set float drums on truss frames. Drill a hole in truss frame with a $\frac{7}{32}$ " drill bit. (If you would rather use a marker to mark hole location, take drum off and drill holes.)

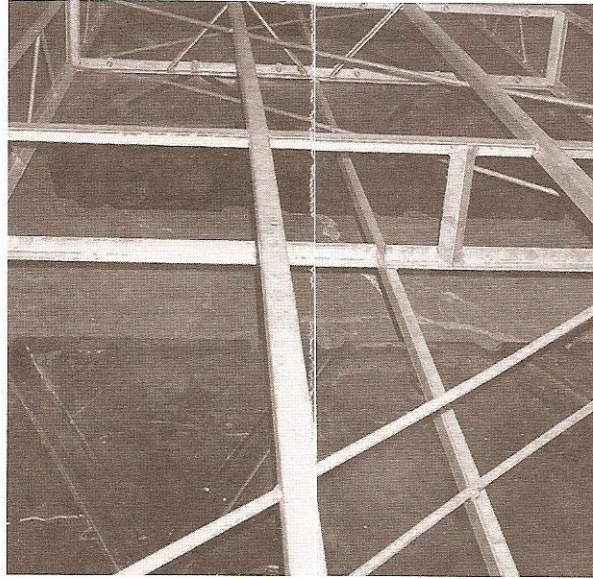


8. Use B-STTS ($\frac{1}{4}$ " x $2\frac{1}{2}$ " self tapping screw) and fasten drums to frame. Use both the $\frac{3}{8}$ " and $\frac{1}{2}$ " washer to bear down on the polyethylene float drum.

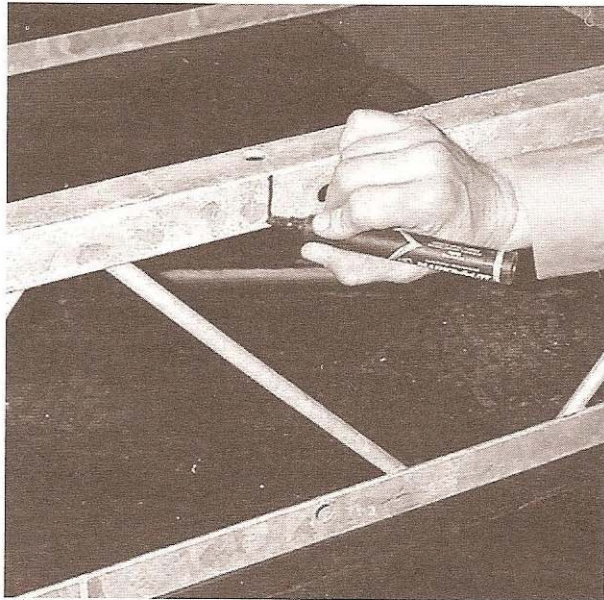


9. Use $\frac{3}{8}$ " hex head socket to fasten drums securely to truss frames.

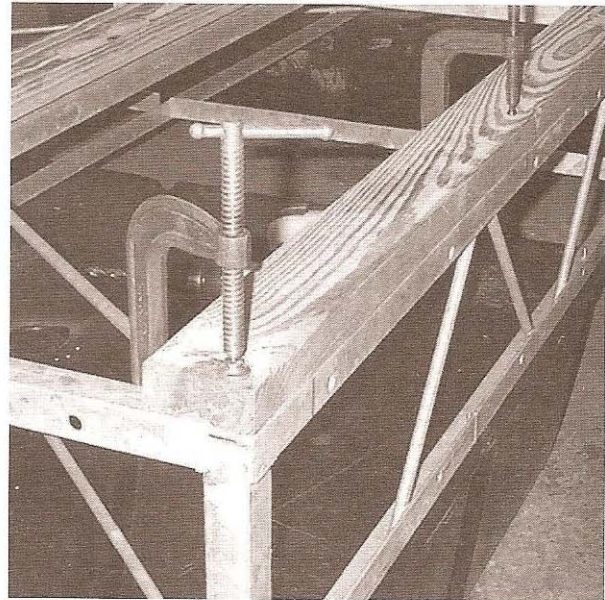




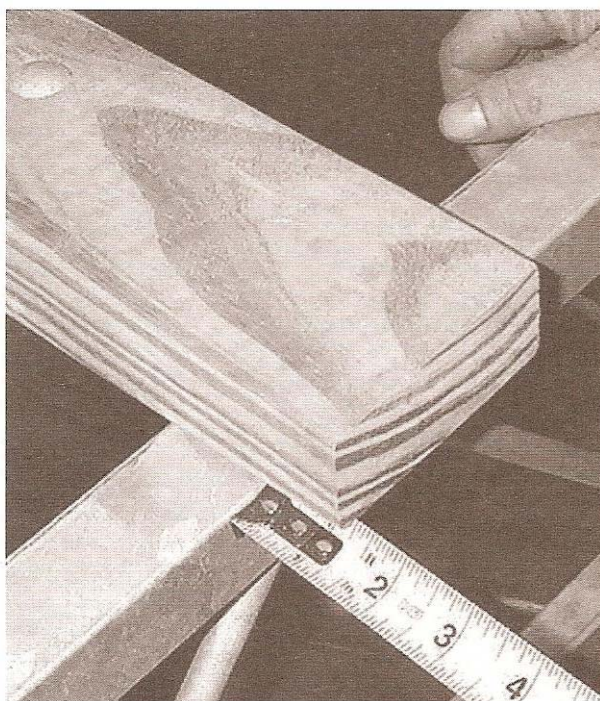
10. Turn truss frame right side up.



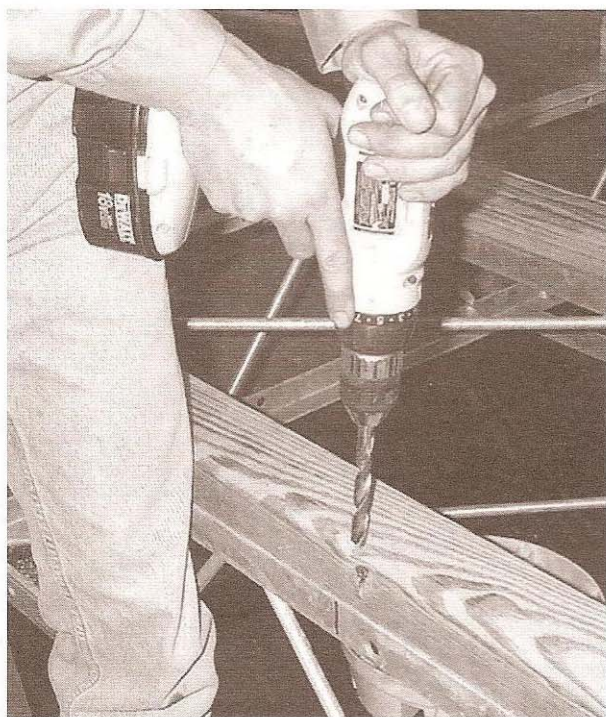
11. Use marking pen to mark location of holes on top of frame.



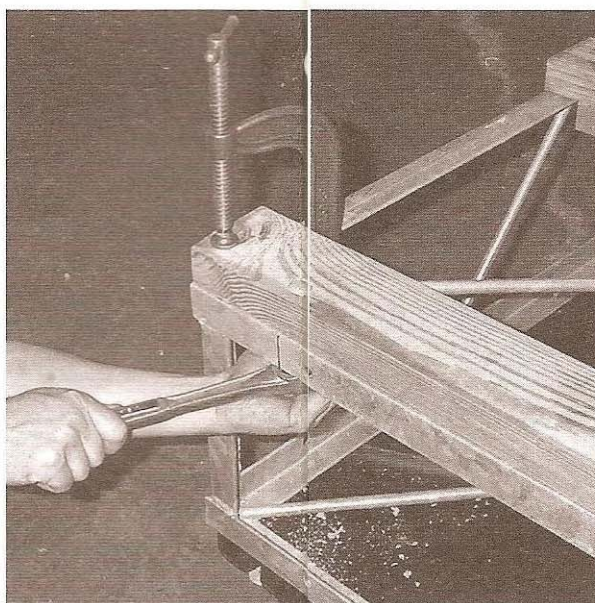
12. Use C-Clamps to hold 2" x 4" nailer flush with truss frame.



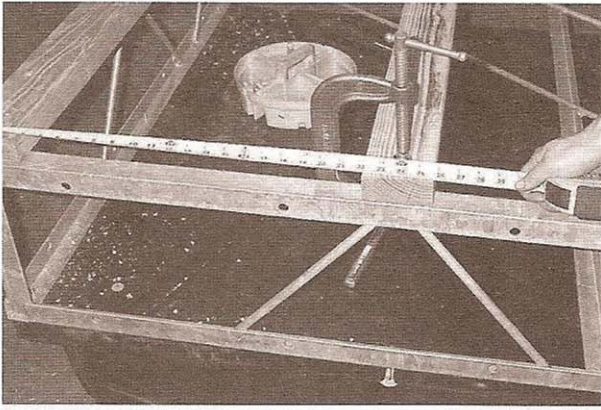
13. If two docks are hinged together, hang nailer strip over $1\frac{1}{2}$ " to accommodate hinge gap.



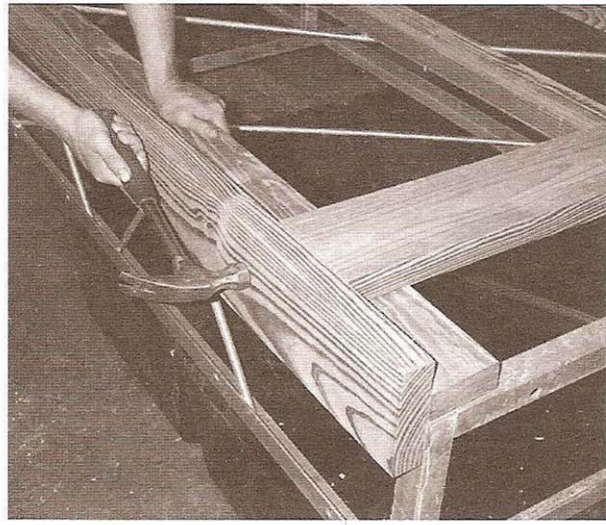
14. Use a $\frac{1}{2}$ " drill bit and drill a hole in 2" x 4" using mark on truss frame as a guide.



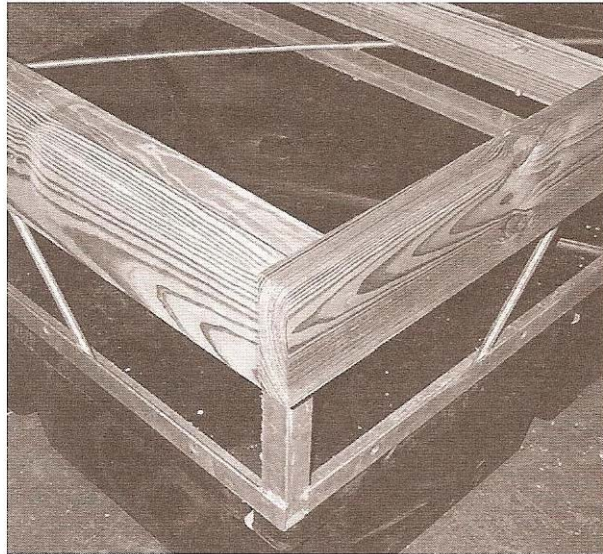
15. Use a B-CB2 ($\frac{3}{8}$ " x $2\frac{1}{2}$ " carriage bolt) to fasten 2" x 4" nailer to frame. Draw head of bolt into the wood and flush with the 2" x 4". (When the lumber is wet this is easy to do. If the lumber is dry, you may have to counter sink the 2" x 4" slightly.)



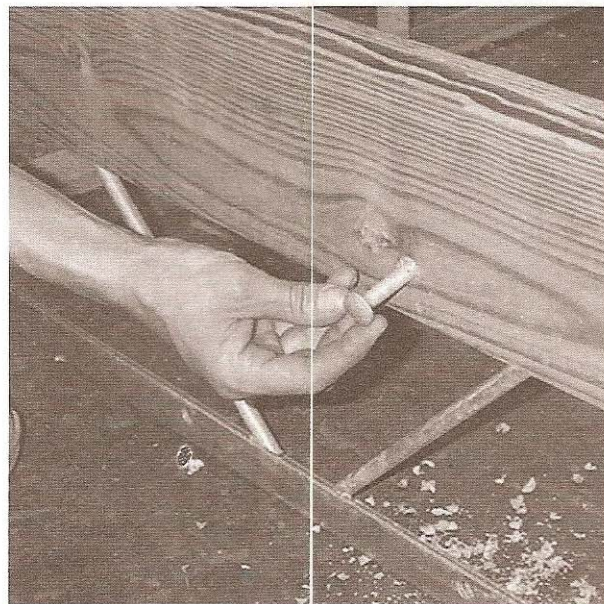
16. Make sure the center 2" x 4" is in the middle (remember this illustration is a 6' x 20' dock.) Generally, these nailers are on 2' centers.



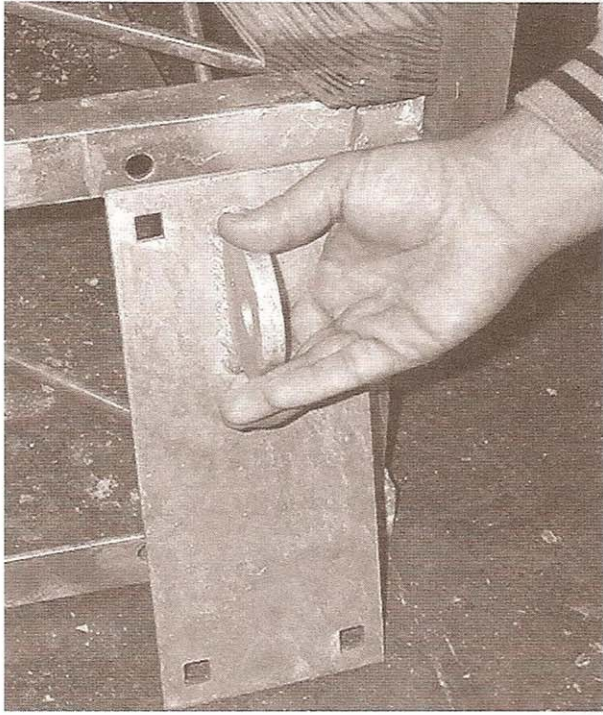
17. If you are adding 2" x 6" bumpboard, use a 2" x 6" deck board for proper height and nail the bumpboard to the 2" x 4" nailer. (Just to hold in place – will be bolted on.)



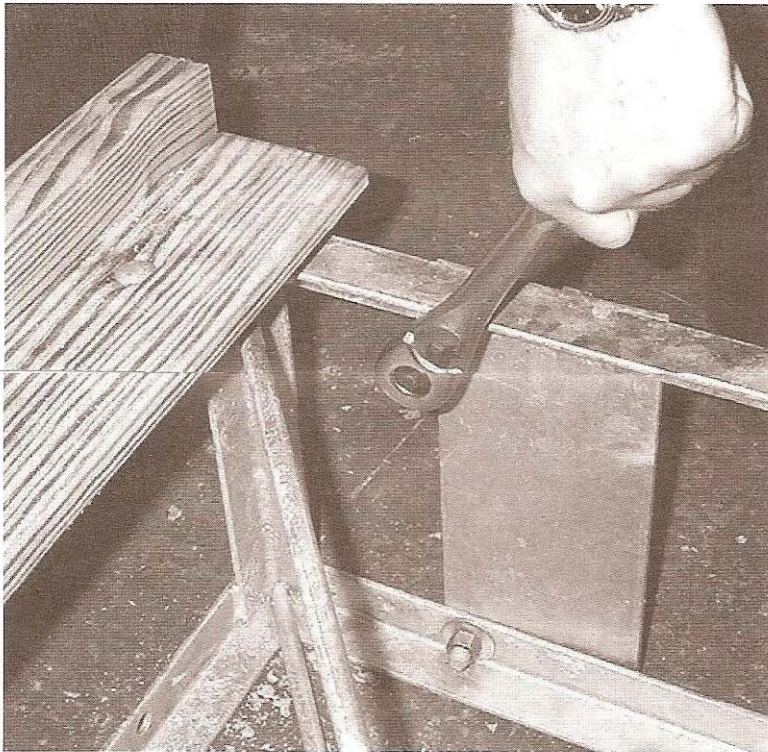
18. Add end bumpboard in the same manner.



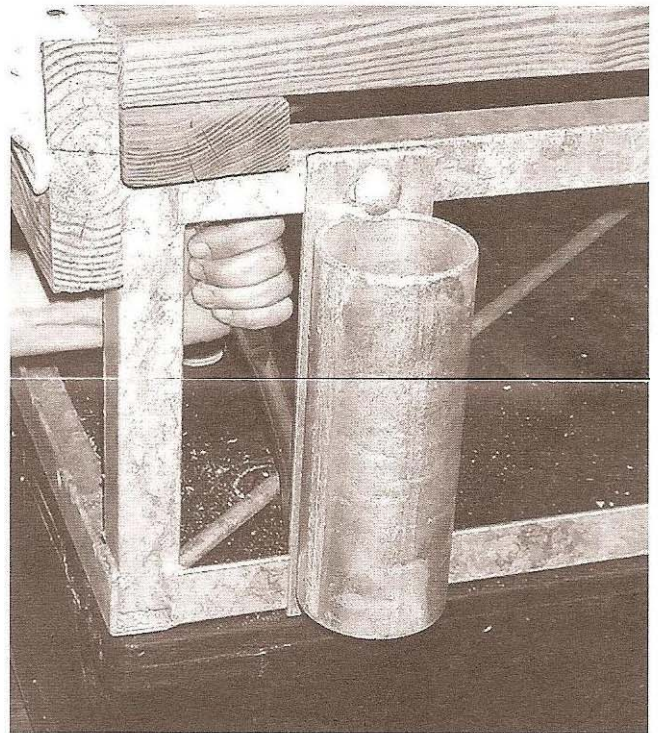
19. Use a 1/2" drill bit and back drill through the holes in the truss frame. Bolt bumpboard using B-CB2 (3/8" x 2 1/2" carriage bolt – You need a bolt at each end every other hole.



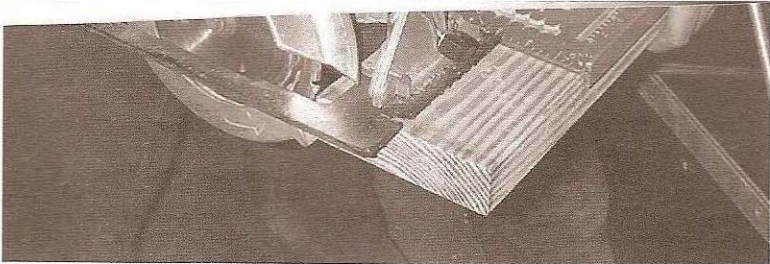
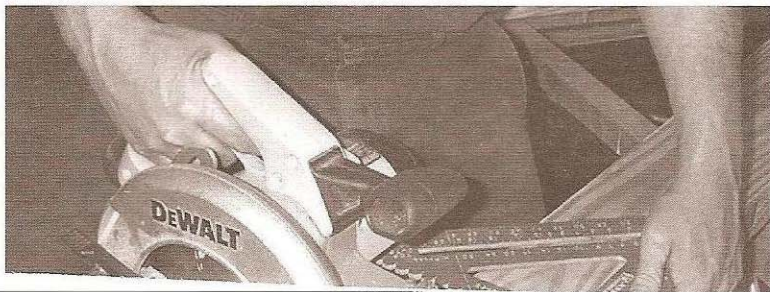
20. Attach hinges now or after decking. It is easier to bolt before decking. One hole in the frame is already drilled. Mark other 2 holes and drill the truss frame with $\frac{1}{2}$ " drill.



21. Bolt on using B-CB1. ($\frac{1}{2}$ " x $1\frac{1}{2}$ " carriage bolt.)



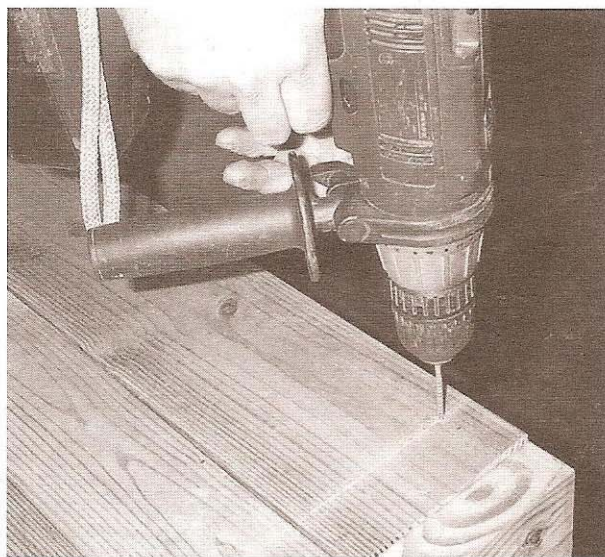
22. Attach pipe holders at this time if you know where they are going – attach in existing holes.



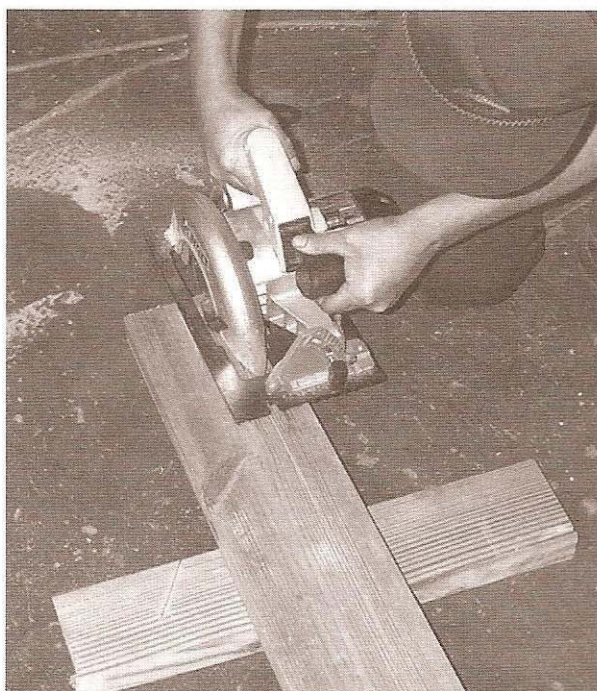
23. Cut deck boards – check for fit before you cut all boards. Make sure 2" x 6" deckboards are cut square.



24. Lay down deckboards tight together. If you are using 2" x 6" that are wet, they shrink about 1/4" and leave a nice drainage crack.



25. Use deck screws and fasten down the first board in a couple of spots. You will have less cupping of boards if you lay 2" x 6" decking bark side up. Always choose the best side of the deckboard – use chalk line 2" in from end of deckboards for a guide for deck screws. Use 6 screws in each board (end, middle and end).

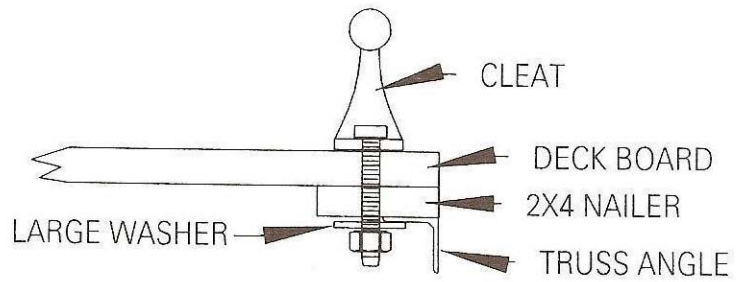


26. You will probably need to cut one deckboard width wise. Put this narrower board in 1 or 2 boards from the end.





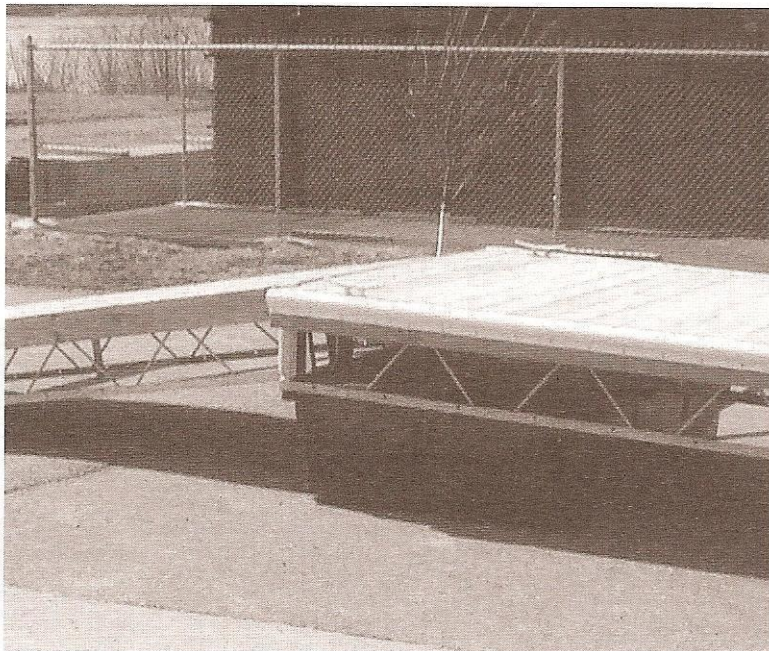
27. Nail vinyl corners (RR-CB) with stainless nails (B-RN).



28. Nail down rubrail – use stainless nails (B-RN). We recommend a nail every 6" top and bottom.



29. Drill and attach cleats. Drill cleats next to truss frame, but not through angle. Use large washer that will clamp over 1/2 of the angle. See below.



MercoMarine.com
1-800-396-3726
(304-737-3006)



There are other accessories that might be added such as hoops, corner wheels, electrical, internal pile holders, etc. Some of these need prior planning or you might need to take up a deck board to bolt down.

CALL FOR OUR COMPLETE CATALOG 1-800-396-3726



GANGWAYS



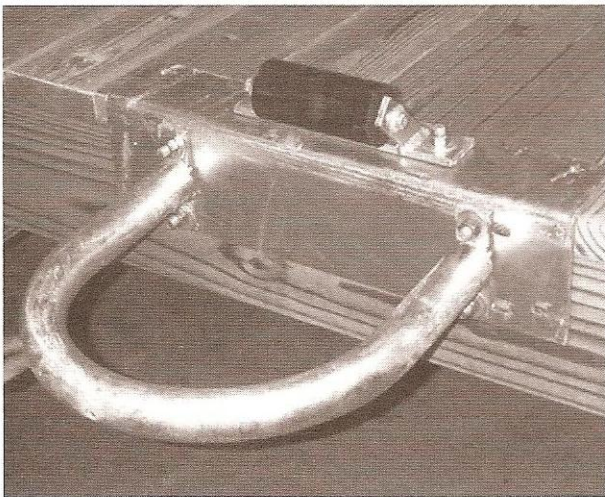
LADDERS



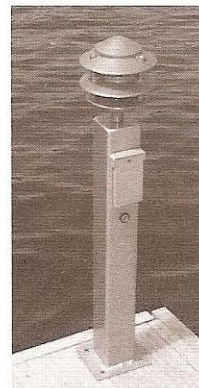
RIDE ON LIFTS™



CLEATS



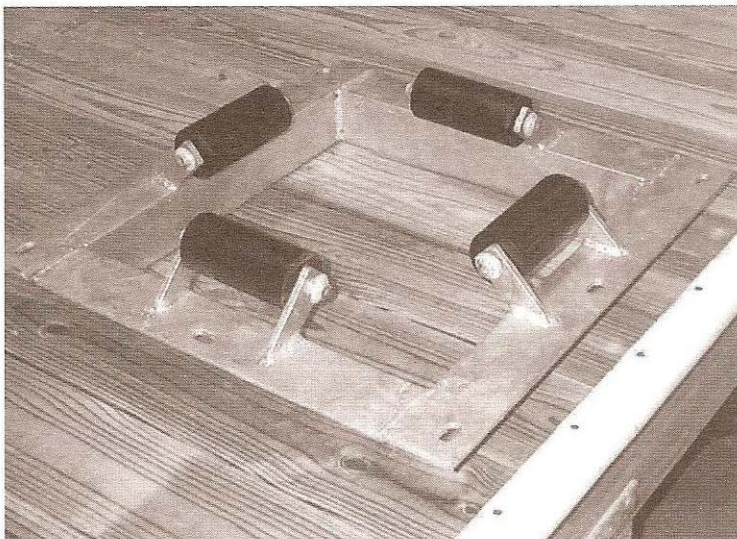
PILE HOLDERS



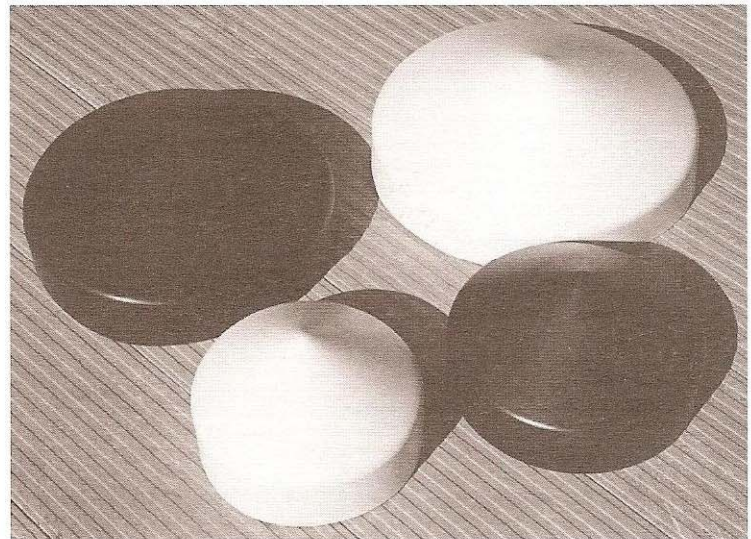
POWER POSTS



CORNER WHEELS



INTERNAL PILE HOLDER



PILE CAPS

MERCO MARINE™

MANUFACTURER OF DOCK BUILDING COMPONENTS

Copyright MERCO MARINE 010
All rights reserved