

“Dry Erase” Signboard

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Introduction:

The first signboards I made were two foamcore panels with a ducktape hinge across the top. The problem was they were so light, they blew over in the wind. They were also not erasable and re-useable. Once I discovered the whiteboard wainscoting panels, I just had to figure out how to install a hinge and make them “carry-able”. These are great for announcing who you are and when your next show is. The downside is that the dry-erase will wash off if it gets wet (so the wording and art runs if it gets rained on) and rub off it, say, rubs against your leg as you are carrying it.

Materials:

- 48”x32” sheet of whiteboard wainscoting
http://www.lowes.com/pd_61082-46498-31023248_0_?productId=3042205
- 1-1/2” x 12” cabinet hinge



- #8-32 x 3/8” long round head machine screws with matching nuts (x6)
- Flat washers for above screws (x12)
- Carpenter glue/polyurethane adhesive
(I used Gorilla Glue brand polyurethane adhesive)
- Rope (I used ¼” solid braided nylon rope)

Tools:

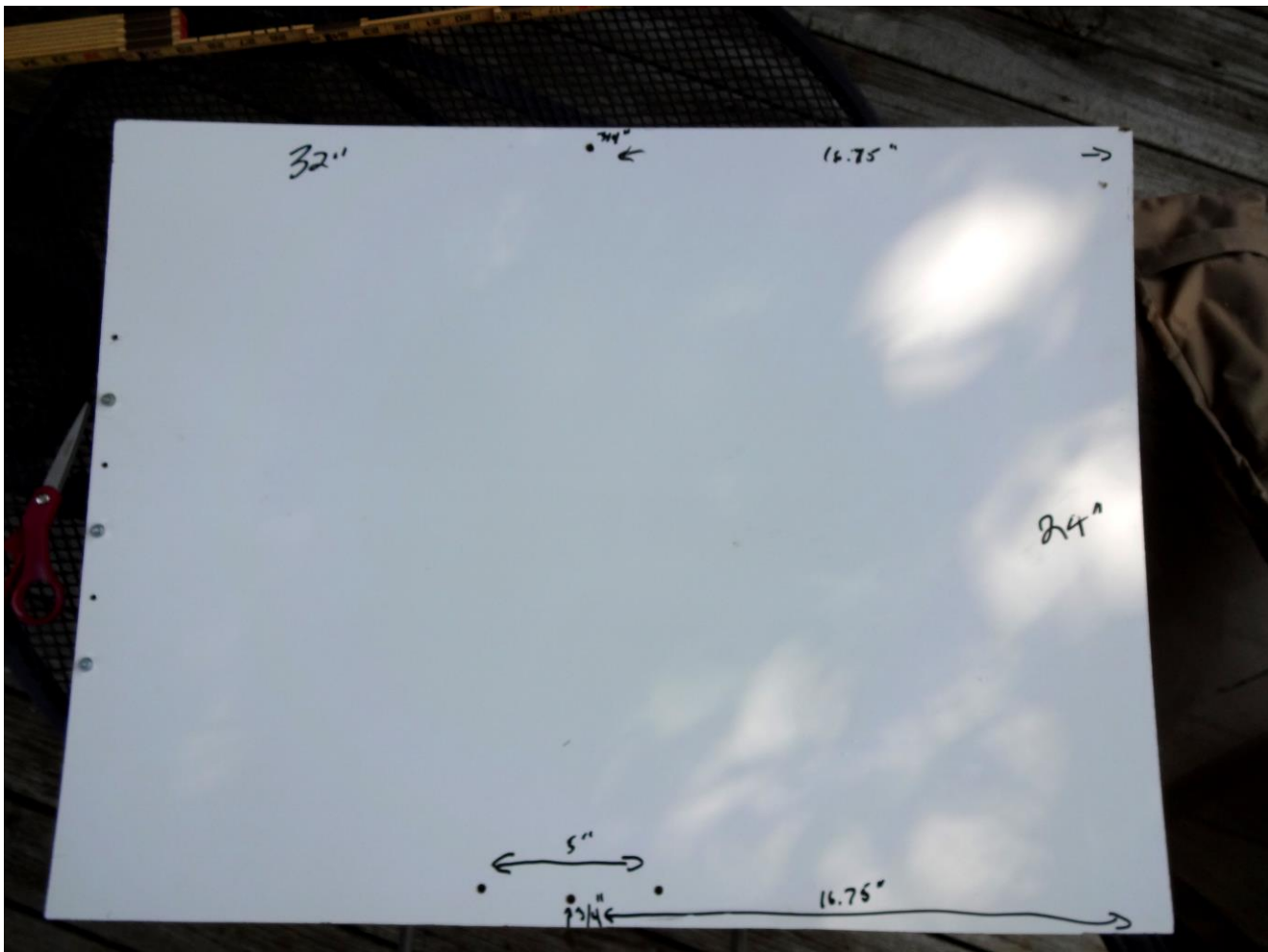
- Saw
- Drill
- Palm sander
- Sand paper
- clamps

Procedure:

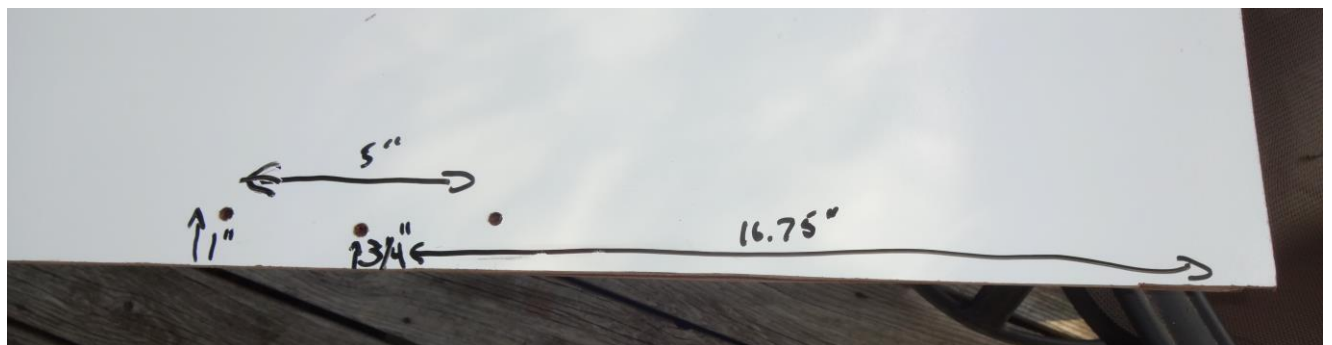
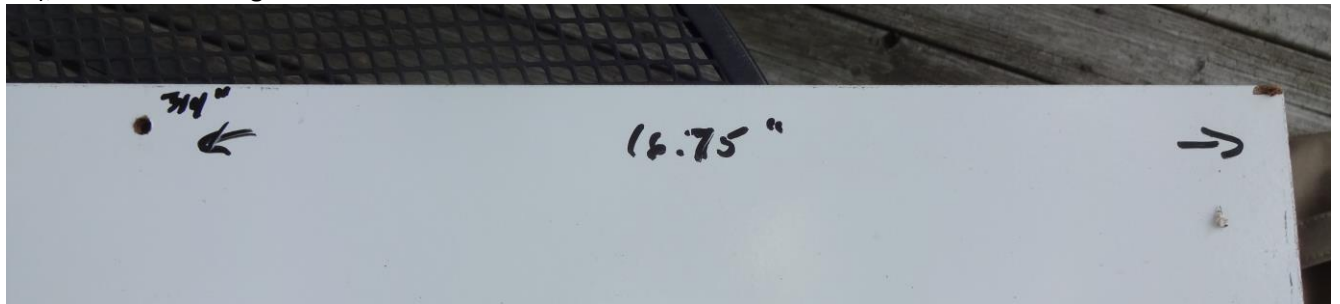
1. Saw the whiteboard panel in half so you get 2 pieces 24"x36"
2. Sand edge you just cut on both pieces so that it has no burrs and the edges are of the boards are slightly rounded



3. Matching the brown side to brown side, long edge matching long edge. Pick one of the 24" edges to be the upper edge. This is where the hinge will go. Do your best to make sure that the two pieces are square to each other and even along this edge
4. Center the hinge along the upper edge, even and square to the edge, and mark the holes. This will become the **top** of the signboard
5. Using drill bit that slightly bigger in diameter than the shaft of the bolts, drill holes through both pieces of panel at each hole.
6. Measuring from the **bottom** edge (the short side NOT marked for the hinge), place marks at the following locations (you will be drilling holes at these marks):
 - a. 16.75" up and $\frac{3}{4}$ " in from the edge on BOTH long edges
 - b. On ONE edge,
 - i. 14.25" up and 1" in from the edge
 - ii. 19.25" up and 1" in from the edge



7. Using a drill bit that is slightly larger than the diameter the rope (so if you are using $\frac{1}{4}$ " rope, use $\frac{5}{16}$ " or $\frac{9}{32}$ " bit), drill holes through both boards at all 4 marks.



8. Attach the hinge to the boards by doing the following:
 - a. Arrange the boards, brown side up with the two “top” edges of the boards next to each other, not quite touching.
 - b. Arrange the hinge knuckle-side up with the holes in the hinge leaves matching up with the holes you drilled.

NOTE: You may wish to do a “dry run” with just the screws/washers/nuts before going with the glue, to make sure you have the hinge correct side up. If everything is right, the two pieces should lie flat when folded together.

- c. Working with one of the boards, apply glue to the side of the hinge that will be in contact with the brown side of the board. Follow the appropriate instruction for applying the glue. NOTE: urethane glue expands so be sparing with it and do your best to minimize the glue that gets on the hinge knuckle.
- d. Insert **three** screws through the hinge and the board (in the side that you just applied glue) **using every OTHER hole on the hinge**. The round head of the screw should be on the brown side, next to the hinge leaf. Place a washer on each screw and then attach the nut. **The washers and nuts are on the white side of the board.**
- e. Tighten the nuts.
- f. Clean up any glue that squishes out
- g. Repeat #c through #f on the other board. **Make sure you use the holes that are NOT adjacent to the screws in the other board. (see the photos below)**
- h. Before the glue sets up, fold the two sides together to make sure everything will lie flat and the hinge and boards are square with each other.



9. Here is what the hinge should look like when attached:



10. Here you see the alternating the screws in the holes in the hinges:



And from the white side:



11. Let the glue dry.
12. Now, set the unit upright with the hinge on top and parallel to the ground, like an inverted “V” (or an “A” without the horizontal line). You can make the angle whatever you want but I think it looks the best when the distance between the two planks at the ground is 20”.

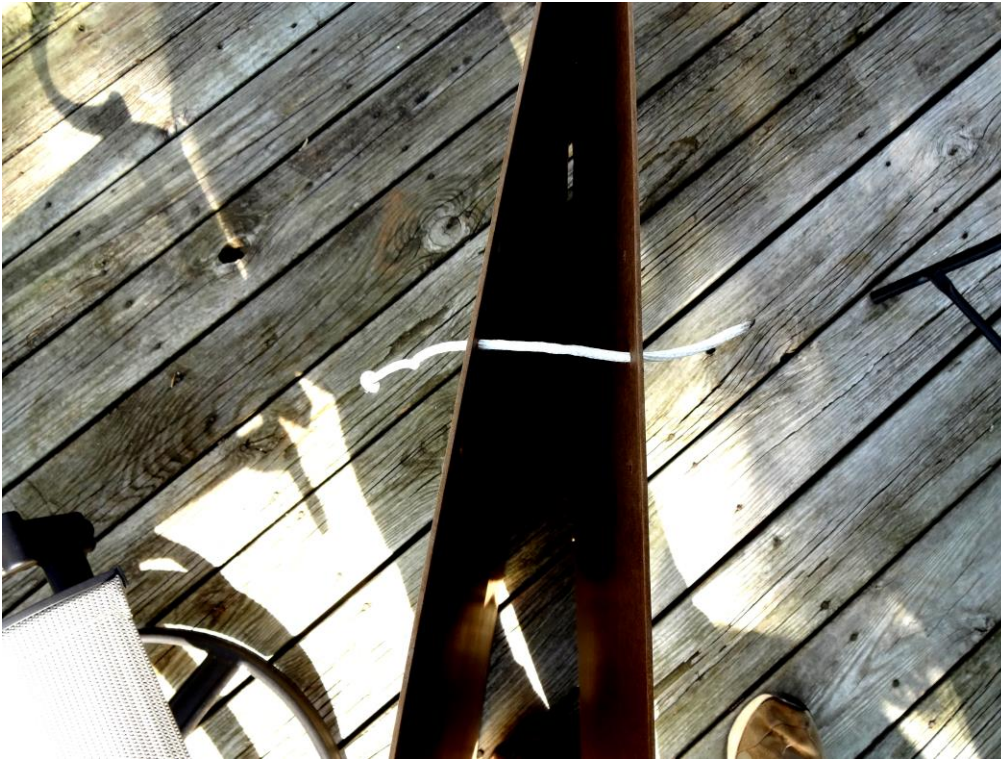
13. Cut two pieces of rope 15" long and tie an overhand knot in one end, as close to the end as possible



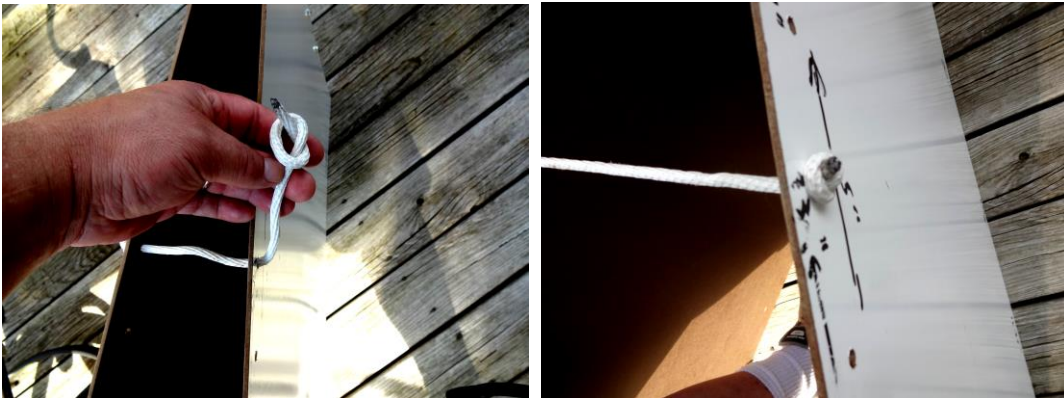
14. Thread the rope through the hole that is $\frac{3}{4}$ " from the edge from white side to brown, with the knot on the white side



15. Continue and thread the unknotted end through the other panel, brown-side to white:



16. Tie an overhand knot in the unknotted end as close to the end of the rope as possible:



17. Repeat on the other side. These pieces make the horizontal bar in the “A” and keep the signboard from falling open flat.

18. Now for a carrying handle:

- a. Cut two more pieces of rope, each 18” long.
- b. Tie an overhand knot in one end, as close to the end as possible.
- c. Set the signboard on its side with the side with the unfilled holes up.
- d. Thread one of the pieces of rope through one of the holes , from white to brown-side and then back through the other hole **on the same board** from brown to white-side:



Take care that this rope stays on the OUTSIDE of the rope that connects the boards together.

- e. Tie another overhand knot in the unknotted end of the rope.
- f. Repeat for the other board.

19. Here's what the carrying handle looks like:



20. Completed signboard! Now all you need are some colored dry-erase markers.



Possible Modifications:

- Paint a section in the center of the board with “chalkboard” paint, turning it into a chalkboard. This might be less prone to drips and runs if it get rained upon.

Contact Info

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