

BUILDING WORK TABLES FOR BANNER MAKING

These instructions have not been certified by a structural engineer. They are for the work table that I made in 1993 and that is still completely functional 19 years later. This work table is able to support ten bolts of fabrics as well as hand tools for measuring, cutting, pinning, and sewing. NOTE: It is not designed for people to stand or sit on it.

The finished work table is 4 feet wide and 10 feet long. Those dimensions will easily accommodate a banner 8 feet tall by 42 inches wide. Working with 9-foot lengths of fabric on the work table, you will still have room at both ends for scissors, a pin dish, and other tools. As shown in the photos, I chose to build a table that would allow me to work standing up, thereby relieving my back from the strain of bending over. I am 5 feet 6 inches tall, and the table is 41 inches high, whereas tables have a standard height of 30 inches. When building your own work table, calculate the height that will enable the user to work most comfortably while standing. More on this in Step 25.

SUPPLIES

- One 4' x 8' piece of 3/4-inch sanded plywood
- One 2' x 4' piece of 3/4-inch sanded plywood
- Two 9-foot lengths of 2" x 4" construction grade lumber
- Six 33-inch lengths of 2" x 4" construction grade lumber
- Two 30½-inch lengths of 2" x 4" construction grade lumber
- One pair of banquet table legs
- Four one-inch-wide hose clamps
- One box of 3-inch-long flathead wood screws
- One box of 1-inch-long flathead wood screws. You will need a countersink bit that fits these screws.
- One box of 1½-inch roundhead wood screws
- Four 2¼-inch rubber wheel casters with locks
- Four sections of PVC pipe, 1¼-inch outside diameter, 1-inch inside diameter. Have your hardware store cut 4 sections, each one 15 inches

long, and keep in mind that you may want to shorten them later, depending on the desired height of your table. Do not shorten them yet. More on this in Step 25.

Vinyl: 3¾ yards of 54-inch-wide, smooth-textured thick vinyl in the color of your choice—but not transparent vinyl. (Do not purchase the thin vinyl with flannel backing.) I recommend dark brown because it is gentle on the eyes; it's easy to spot pins against this color. Most of the fabric colors used for the banner field will show up easily when they lie on a dark brown table surface.

ASSEMBLING THE TABLE

1. Assemble the frame: Fasten two of the 33-inch lengths of 2" x 4" lumber to the two 9-foot lengths of 2" x 4" lumber. Use two of the 3-inch-long flathead wood screws at each join. Pre-drill the holes.

2. Assemble the tabletop: Lay the two pieces of plywood on the floor, rough side facing up. Carefully line up the 4-foot edge of the smaller piece with one of the 4-foot edges of the larger piece. The two pieces together will form the table surface, measuring 4' x 10'.

3. Prepare the plywood top to be fastened to the frame: Measure and mark with a pencil 6¾ inches from the edge of the plywood all around.

4. Turn the plywood pieces over, smooth side facing up. Measure and mark with a pencil 6-3/8 inches from the edge of the plywood all the way around. At the 6-3/8-inch mark, pre-drill holes to fit the shaft of the 1-inch-long flathead wood screws, placing these holes at each corner and at 16 inch intervals all the way around. Drill again with a countersink bit so the flathead screws will be level with the plywood.

5. Position the plywood top on top of the frame: Lay the frame on the floor. Place the plywood pieces on top of the frame, smooth side facing up. Make sure the top pieces overhang the frame by 6 inches on all four sides. The two pieces of plywood must stay square with one another.

6. Place the drill into each hole and drill down into the frame 1½ inches. Insert the 1-inch flathead screws into the pre-drilled holes and screw them into the frame. It is important to measure the overhang of 6 inches frequently to make sure the frame is fastened squarely to the plywood top.

7. Prepare to fasten to the tabletop unit the first bracing block for the first leg: Turn the tabletop over onto the floor so that the frame is facing up.

8. Measure 20 inches in from one end of the tabletop. Center one piece of 33-inch-long 2" x 4" lumber to form a table leg bracing block at this mark.

9. Position the 2" x 4" piece so that it lies flat against the underside of the plywood top and also horizontal to the frame. Fasten this bracing block to the wood frame with two 3-inch wood screws at each end of the bracing block. Do not screw the bracing block to the plywood top.

10. **Fasten one banquet-table leg to the first bracing block:** Center the banquet-table leg on the bracing block. Fasten the banquet-table leg's two hinges to the bracing block using 1½-inch roundhead wood screws.

11. **Prepare to fasten the second bracing block to the banquet-table leg's metal folding extension:** To find the right location for the second bracing block, unfold the banquet-table leg's metal folding extension into the straight position. Make sure the two hinges of the metal folding extension are level with the two hinges of the leg on the first bracing block. Place the second bracing block so that the two hinges of the metal folding extension are in contact with the second bracing block, and the second bracing block is flat against the plywood top.

12. Fasten the second bracing block to the frame using two 3-inch wood screws at each end of the bracing block.

13. Fasten the two hinges of the metal folding extension to the second bracing block using 1½-inch roundhead wood screws.

14. To secure the metal folding extension in the straight position, wrap one hose clamp on each side of the extension where the two pieces of folding metal straighten out next to each other. Hose clamps may be used as a safety-locking device if the manufacturer of the banquet table legs has not provided them.

15. Repeat steps 7–12 to fasten the other banquet-table leg unit to the opposite end of the table.

16. Assemble the first leg base with casters: Remove the rubber caps from the two short legs of the first banquet-table leg unit. You may have to cut them with a sharp blade to remove them.

17. Center the 30½-inch length of 2" x 4" lumber (the wooden leg base) on top of the two short banquet-table legs. (The following measurements will vary depending on the manufacturer of the banquet table legs.) Allow 3 inches at each end of the lumber beyond the two short legs.

18. With a pencil, draw around each short metal leg where it comes in contact with the lumber. Mark the center of each circle.

19. Drill a 1¼-inch-diameter hole at each center mark, to a depth of ¾ inch. Do not insert the PVC pipe into these holes yet.

20. **Attach the casters:** Turn the wooden leg base over. Center a caster 1¾ inches from each end, and 1¾ inches from both edges. Fasten the caster to the wood using 1½-inch flathead wood screws so that the caster unit can swivel completely around without bumping into the screw heads.

21. Now turn the wooden leg base over and insert the PVC sections into the two holes. Be sure to push the PVC all the way into the holes. They should fit snugly.

22. Slide the wooden leg base, now with the PVC extenders and casters all attached, onto the short metal legs of the banquet-table leg unit.

23. Repeat steps 16–22 for the second banquet-table leg unit.

24. Read Step 24 before doing this next section!

Turn the completed table over onto the PVC/castered leg base: CAREFULLY lift the entire table into the air. It will be heavy. USING EXTREME CAUTION, turn the table over in the air WITHOUT LETTING THE CASTERS TOUCH THE FLOOR. ONLY THEN SHOULD YOU SLOWLY LOWER the table onto all four casters at the same time. BE SURE you do not lift the table up by one of its edges and roll the table onto the legs. If you do this, the heavy weight of the table will bend and twist the banquet table legs. You must turn the entire table over in the air and then lower it onto all four casters at the same time.

25. Check that the table is at your desired height: If you need the table to be lower, measure the distance from the floor to your waist. Then measure the distance from the floor to the current height of the table. Subtract the first distance from the second distance. That is the number of inches you will need to cut off from each PVC section. Turn the table over so that the tabletop rests on the floor. Remove each PVC/caster leg base unit. Remove each PVC section from its unit. Cut the required number of inches off each PVC section. Reinsert each PVC section into its hole and reinsert the PVC/caster leg base unit onto the banquet-table legs. Turn the table over onto the casters, remembering to LIFT THE TABLE INTO THE AIR, TURN IT OVER, AND LOWER THE TABLE ONTO ALL FOUR CASTERS AT THE SAME TIME.

26. Cover the tabletop with vinyl: Lay the vinyl lengthwise on the table surface. Make sure the vinyl hangs off the four edges equally all the way around.

27. Fold the vinyl so that it lies flat on the underside of the tabletop and secure the vinyl along one length of the table using a staple-gun.

28. Do the same along the other length of the table, pulling at the vinyl to create a snug fit as you staple the fabric to the table's underside. There should be no wrinkles in the vinyl. It should lie flat across the entire surface of the table.

29. Fold and staple the vinyl to the underside at each end of the table.

30. At each corner, place one flap of vinyl on top of the other, making the corner as flat as possible. This is important because you don't want to lose the square corner of the plywood under the bulk of the vinyl. You may have to cut away some of the underlying vinyl and staple the upper layer over the area. The entire corner—top, sides, and bottom—must be covered with vinyl evenly. Carefully form each square corner, because they will be extremely helpful to the banner maker in squaring up lengths of fabric or in squaring up the edges of a banner.

You have successfully constructed a work table at the desired height for the user of the table, and on casters that will enable you to position the table in your work room wherever the table will best serve you. THE END

