

Setting up a Box Beam

Photo #1



Attaching Riser Blocks

Cut a 2 x 2 into 15 pieces - 6 inches long. Sand and tidy up edges of each block so there are no burrs.

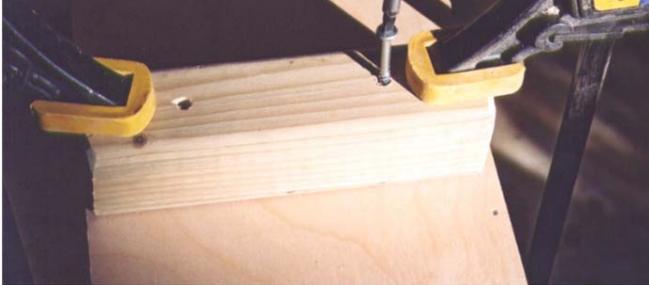
Drill two holes in each block a little larger than the screws that will be used to attach the blocks to the beam. The screws need to easily slide through the holes. **(Photo #1)**

Photo #2



Measure out the box beam in increments as outlined in your plans and mark with a T-square across the beam. **(Photo #2)**

Photo #3



Temporarily clamp the blocks to the beam while you permanently attach with screws. You may also choose to use glue, but once glued, you will not be able to move them in the off chance you measured incorrectly. **(Photo #3)**

Photo #4



Photo #5



Photo #6



Use a taut string line to mark and draw a line down the center of all the blocks.
(Photo #4 & #5)

Making Risers

From the remaining 5 in. wide strips of $\frac{1}{2}$ in plywood from your box beam, cut eight-inch lengths to number your forms. Accuracy is essential. The top edge of the riser **must** be square to the sides. Use a disc sander if you have access to one, **(Photo #6)** otherwise cut a little longer and then sand to the eight-inch line. The bottom end of the riser does not have to be square so mark which end is the top.

Mark a vertical centerline on each side and across the top of each riser. **(Photo #7)**

Drill two holes at the top of each riser. The holes should be larger than the bolts that will be used to attach the forms. This will give you some room to adjust things later. You can also use a router to groove a slot (tidy method) or drill two holes close to each other and make a slot. (not as tidy, but it will do) **(Photo #7 and Diagram #1)**

Now drill two holes $\frac{1}{2}$ inch from the bottom to accommodate screws cleanly. These holes will be used to attach the risers to the blocks.

Photo #7

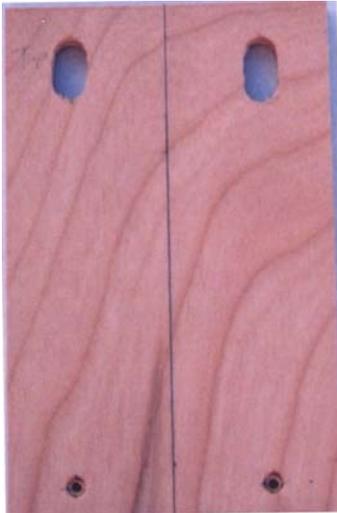


Photo #8

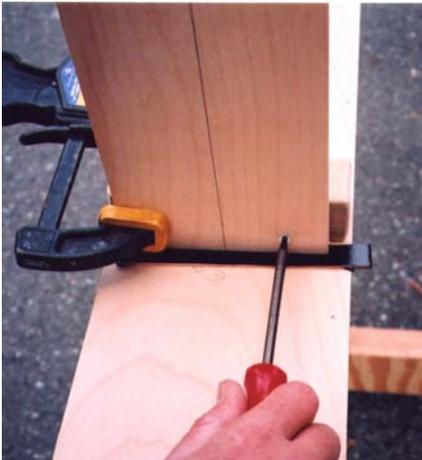
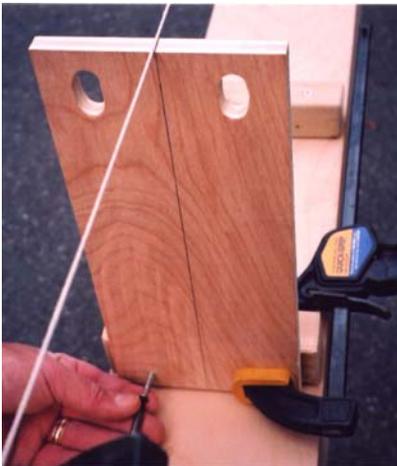


Photo #9



Note: The top ends need to be square and although each riser should be eight inches high, any minor inaccuracies will be eliminated when setting up the risers to the beam.

Attaching the Risers to the Beam

The first two risers that you will be attaching are the two end ones. If all your risers are not exactly eight inches long, select the two longest ones. Place a small flat shim on the box beam under the riser so that it is raised slightly from the beam. (1/8 inch). **(Photo #8 – black wood under riser)**

The first risers should be as vertical to the beam with the centerline of the riser matched up to centerline on the block. Clamp then screw the end risers to the blocks.

Once you have the two end risers firmly in place, stretch a taut string line between the tops of the two end risers from centerline to centerline and clamp in place. **(Photo #9)** Each of the remaining risers will now be attached to the blocks.

On the proper side of each block, place a riser with the bottom of the centerline aligned with the centerline on the block and the centerline on top of the riser lined up with the string line. Raise each riser so that it just touches the string. Clamp, and then firmly attach each riser with wood screws. **(Photo #9 & 10)**

We suggest that you use a hand screwdriver to attach the risers to the blocks. A drill tends to go too fast and often pulls the riser off center as it tightens, especially if the screw is angled into the block. This occurs because you probably will not be able to get the drill to lie horizontal as you tighten. You can glue it if you wish, but we recommend attaching with wood screws. This way it can be adjusted if you have incorrectly measured somewhere and need to move them. The beam can also be completely disassembled later if needed.

Photo #10

