

Greenhouse Planting Bench

It all started in July when I had the brilliant idea it would be cool to put a greenhouse in my backyard. I've never grown anything in a greenhouse so this is becoming a slightly costly experiment, but if it works – WOW!! And.....while assembling the greenhouse I realized I'd need somewhere to plant stuff so I thought it would be great to build tables with three tiers of planting surface, and voila – these benches were conceived!

I didn't think 4x4s were necessary to use as legs, so I opted to build the tables out of 2x4s and 1x2s; I chose the combination because 1x4s are 1.5" wide and 2x4s are 1.5" thick (you'll see why later).

My greenhouse measures 95" per side inside, so I started with that measurement for the overall length per bench. Sorry I didn't take a picture of the pieces before I assembled them, but here's the frame for one shelf.



FYI, I almost forgot to measure the width of the doorway into the greenhouse and might have made the benches too wide. Luckily, my brain kicked in and I found that I had 22.25" to work with, so I planned on the benches being 22" wide overall. I cut some 2x4s down to 92" for the length per shelf and because a 2x4 is 1.5" thick and a 1x4 is 1.5" wide, I subtracted 6" from 22" and made the shorter 2x4 pieces 16" (you'll understand why later). I made all the 2x4 joints with 3" screws.



The 2" screws were used to attach the 1x4 pieces. And I opted to make the shelves from half-inch galvanized hardware fabric, because I wanted the sun to shine through the shelves and watering would certainly be easier with open shelving.



To assemble one shelf I started with the 2x4 frame and attached the hardware fabric. First I laid the fabric on top of the frame with about a one-inch overhang at the ends and a two-and-a-half inch overhang on the sides. (I opted to NOT cut the excess off because it wasn't really necessary.) Tin snips work well for this.



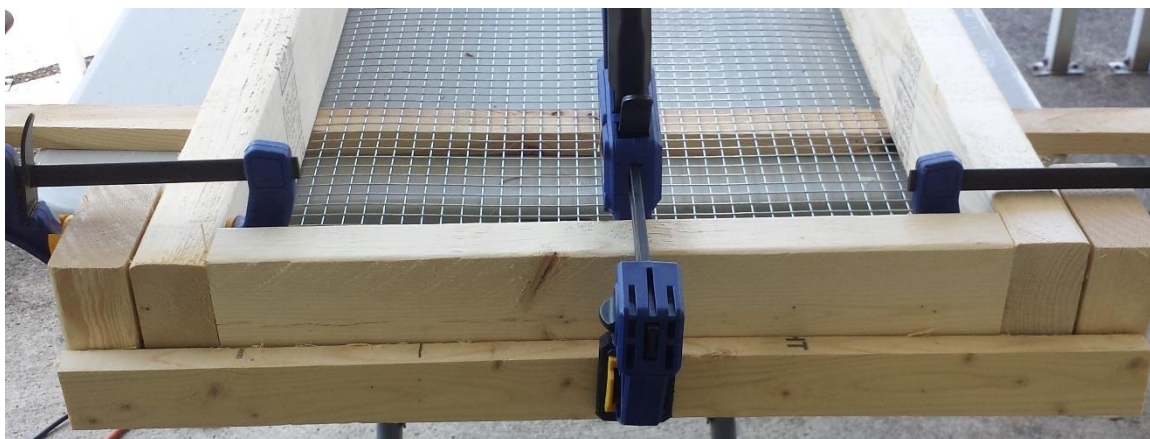
To secure the "fabric" I cut the corners, folded it over the 2x4 frame and used a staple gun. Unfortunately, I still had to use a hammer to push the staples into the wood and in some cases to flatten the fabric to the frame.



Next I flipped the shelf upside-down with the fabric on the bottom. I used 1x4 pieces under the shelf to allow some finger room for checking the alignment of the 1x4 pieces being attached to the top perimeter of the shelf. I used the 1x4s to additionally secure the hardware fabric AND to protect myself from the overhanging fabric while working in the greenhouse.



I used scraps of 2x4 to eyeball the position of the longer 1x4 pieces. I cut these to 40" long and screwed them into the sides with the 2" screws. (The scraps simulate the leg placement). On the ends I used 1x4 pieces cut to 22".



Then I flipped the shelf over (with the fabric side up) to attach additional 1x4 pieces on top of those around the sides. I used my nail gun with 1.25" finish nails for this.



See how the additional pieces form a ridge around the perimeter of the shelf equaling the 22" finished width.

Now to attach the legs, etc.

I cut three 2x4 pieces at 48" for the back legs, and three 2x4 pieces at 36" for the front legs.



I also attached short 2x4 pieces to the 48" legs to support a shelf I made from a 1x6. The tops of the front legs are flush with the 1x4 perimeter pieces. This also creates a nice lip to prevent anything from falling off the shelves.

Here's one bench pretty much finished:



After moving the benches into the greenhouse, I realized the top 1x4 pieces on the ends of each shelf need to be removed because they interfere with the diagonal supports inside the greenhouse. I also needed to shorten the shelf a bit and I still needed to cut 4" holes in the wood to accommodate 4" flower pots.

So you're probably thinking "will these shelves hold anything with weight?" I thought of that - I made a bunch of mini-shelves 6" wide by 22" long that can rest on the sides of the shelves. They can be used, or not, and moved around to accommodate pretty much anything I'll need.



Here's a shot of the shelf for the flower pots, you can see a few of the moveable shelves set up to look like one large shelf.



And after I was all done, I thought I might need some extra storage, so I made this "tower" for larger or miscellaneous stuff. This one measures roughly 12" deep, 25" wide, and 66" tall.



Next year I might build a potting bench to put on the outside of the greenhouse, probably on the north side. Now it's time to put away the power tools and start planting!!

Never mind – I decided to make the potting bench/multipurpose table this past weekend. As it turns out I had some pressure-treated 2x4s to reuse, so I cleaned them up, doubled up some for the legs, purchased 5" locking casters, and eight 1x6x8 treated boards, and this is the result. Unfortunately, I still need 4' of 1x6 to finish the ends of the lower shelf. The table is the perfect height to use as an out-feed for my table saw, potting (of course), workbench, and one heck of a bar (if I ever throw a party!)

