X Base Outdoor Concrete Top Bench

*This plan includes the use of a Kreg Jig (refered to by pocket holes), if you are not familiar, please refer to the blog post on my site!



Materials List:

Bench base

-5 - 2x3x8

-2 - 2x4x8

-2 - 2x2x8

-1 - 1x2x8

Concrete top:

-1 - 4x8 sheet melamine

-5 bags Quickrete 5000

-18" roll hardware cloth

-silicone caulk

Cut List Concrete Top

-2 - 16" x 72" melamine

-4 - 2 1/4" x 16" melamine

-4 - 2 1/4" x 73 1/2"

melamine

-2 - 14" x 70" pieces of hardware cloth

Bench Base

-8 - 2x3 @ 16 1/2" - ends mitered at 10 degrees off square, ends parallel

-4 - 2x4 @46"

-4 - 2x3 @ 46"

--4 - 2x3 @ 6 1/6" (longest side end to end) mitered 10 degrees off square, ends not parallel

-4 - 2x3 @ 9 13/16" (strange measurement because I wanted it 3 1/4" from the ground) measured longest end to longest end, mitered 10 degrees off square, ends not parallel

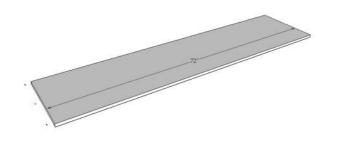
-4 - 2x2 @ 20" mitered at 60 degrees of square, ends parallel

-4 - 1x2 @ 10 3/4" mitered at 38 degrees off square, ends parallel

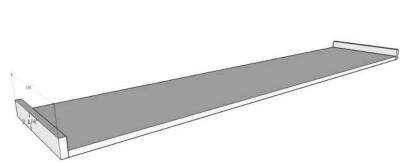
-4 - 1x2 @ 6 15/64" mitered at 38 degrees on one end and 13 degrees -4 - 1x2 @ 3 57/64" mitered at 38

degrees off square on one end 13 degrees other end

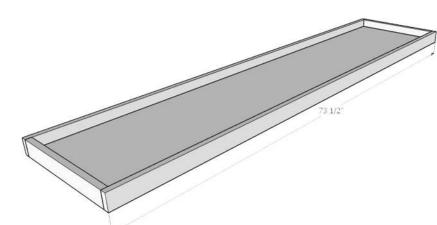
Step 1
Make concrete molds for your bench tops!



Cut two pieces of melamine down to 16" x 72" (only one shown here but the plans are for making 2 benches)



Cut 4 - 2 1/4" x 16" pieces (each bench top form will only use 2 pieces as shown here) Screw them on every 6-8 inches with 1 1/4" screws.

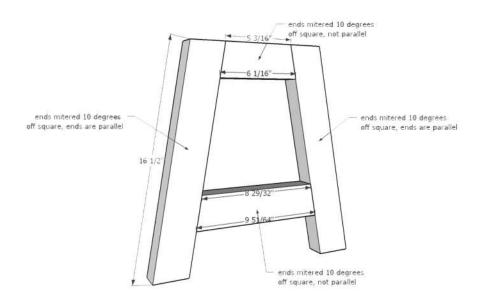


Cut 4 - 2 1/4" x 73 1/2"
pieces of melamine to
complete the mold!
(again only two are
shown here because the
plans are for making 2
benches, if you are only
making one bench you
will not need 4)

Caulk the mold with silicone caulk and wait for it to dry before pouring your concrete! Once it is dry you can mix your concrete according to the instructions on the bag! We hand mixed it one bag at a time. Make sure and work the concrete into the mold really well, focusing on the corners...what is the bottom while filling the mold will be your top once it's cured! After filing the mold about half way, add the hardware cloth or other similar metal! Make sure and cut your hardware cloth 2 inches (14" x 70") all around smaller so it will not stick out on any edges! You may vibrate your mold if you prefer...see my post on this project to see why I won't waste my time vibrating the molds any longer! Lo!!

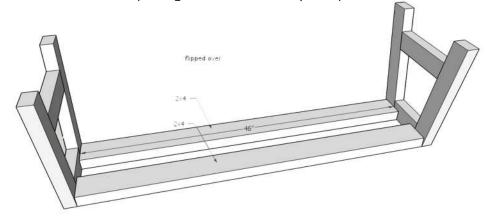
Step 2

While the concrete is setting, you can start work on your bench! I started by building the legs of the bench! Using 1 1/2" pocket holes, 2 1/2" screws and wood glue!



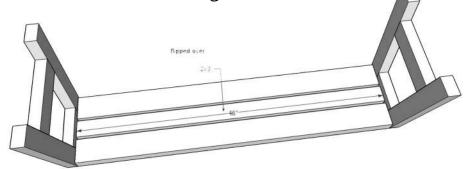
Step 3

After repeating step 2, three more times you will have all your legs ready. Next step is attaching them together with our top stretchers! Again, you will use 1 1/2" pocket holes, 2 1/2" screws and wood glue!



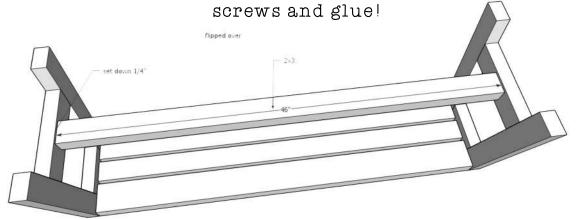
Step 4

Add the 2x3 middle top stretcher! And again, using 1 1/2" pocket holes, 2 1/2" screws and wood glue!



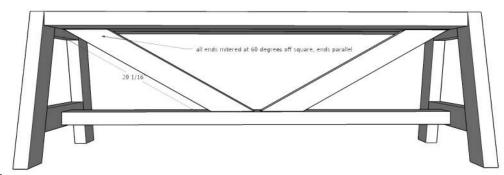
Step 5

Add the bottom stretcher! Attach using 1 1/2" pockets holes, 2 1/2"



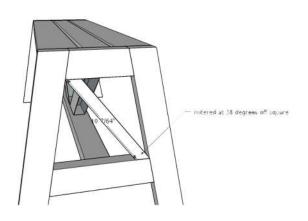
Step 6

Add the 2x2 @ 20 1/16" (or 20" if yours measures like mine! Lol!) braces! They are listed in the below photo as a 2x3 but that is an error on my part. they are a 2x2 on my project, either would work though! Attach with 1 1/2" pocket holes, 2 1/2" screws and glue!



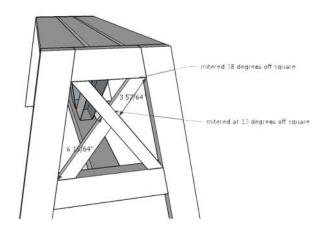
Step 7

The finishing touches of the X detail! I did all the long sides of the X first and then came back and added the smaller sides! I used wood glue to attach, I could not get my brad nailer in the small hole so I just glued them all and let it sit over night before attaching the smaller side!



Step 8

Add the smaller sides of the X, allowing the glue to dry at least an hour or so before messing with it!



Step 9

Sand and stain this baby to your liking! I used provincial by Minwax and Hellsman Spar Urethane for sun and water protection!

If it has been 48 hours or more since you poured your concrete, you can take the screws out of your encrete mold and flip your bench top over to see how it looks! If it has air bubbles, you can always make a slurry of portland cement and rub them down into the holes, I opted not to do this on the benches, but I did do it on the table top! I didn't seal my concrete as of yet either, since it is an outdoor table, I'm not too worried about it!

Now sit back and enjoy a rest on your beautiful new bench!

