



WELCOME TO THE BUILDERS CHALLENGE SEASON 12! MAKE IT ROUND IS THIS SEASON'S THEME. AS ALWAYS WE HAVE THREE CATEGORIES TO ENTER (NOVICE, INTERMEDIATE, FINEST CRAFTSMAN). THIS COFFEE TABLE PLAN CAN BE USED FOR THE NOVICE BUILDERS AS AN INSPIRATION PIECE OR STRAIGHT BUILD PLANS FOR YOU TO PUT YOUR OWN SPIN ON. FOR INTERMEDIATE AND FINEST CRAFTSMAN, GO CRAZY AND JUST MAKE A PIECE OF FURNITURE THAT IS ROUND! ADDITIONAL REQUIREMENTS FOR INTERMEDIATE AND FINEST CRAFTSMAN ENTRIES WILL BE FOUND ON THE WEBSITE.

THE CHALLENGE RUNS NOVEMBER 6TH THROUGH 11:59 PCT ON NOVEMBER 28TH. HAVE FUN AND GET BUILDING!

~ RAECHAL + ADAM



34" W x 19.50" H

Materials & Cut List

- **(4) 1x3x96**
 - **(24) x 15"**
- **(1) 1x4x96**
 - **(4) 20"**
 - **(2) 18"**
- **(2) 1x5x96**
 - **(1) 34.50"**
 - **(2) 15"**
- **48x48 3/4" Sheet of plywood**
- **Edge banding if desired**

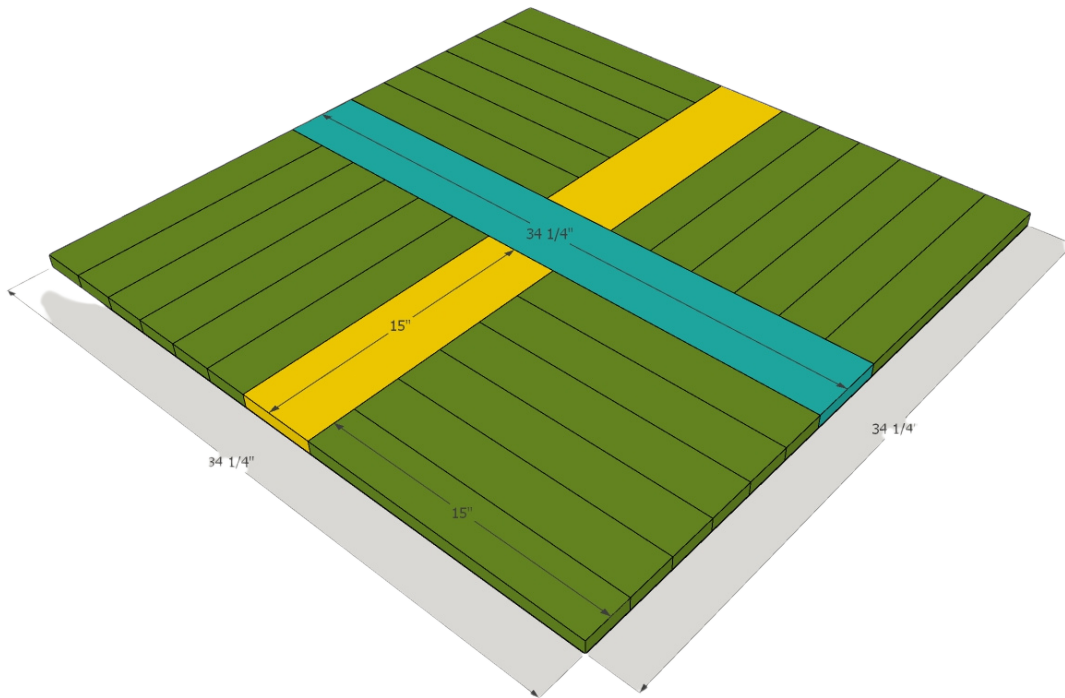


Tools & Supplies

- **Circular Saw or Miter Saw**
- **Table Saw**
- **Jigsaw or Router**
- **Drill Driver**
- **Wood glue**
- **Clamps**

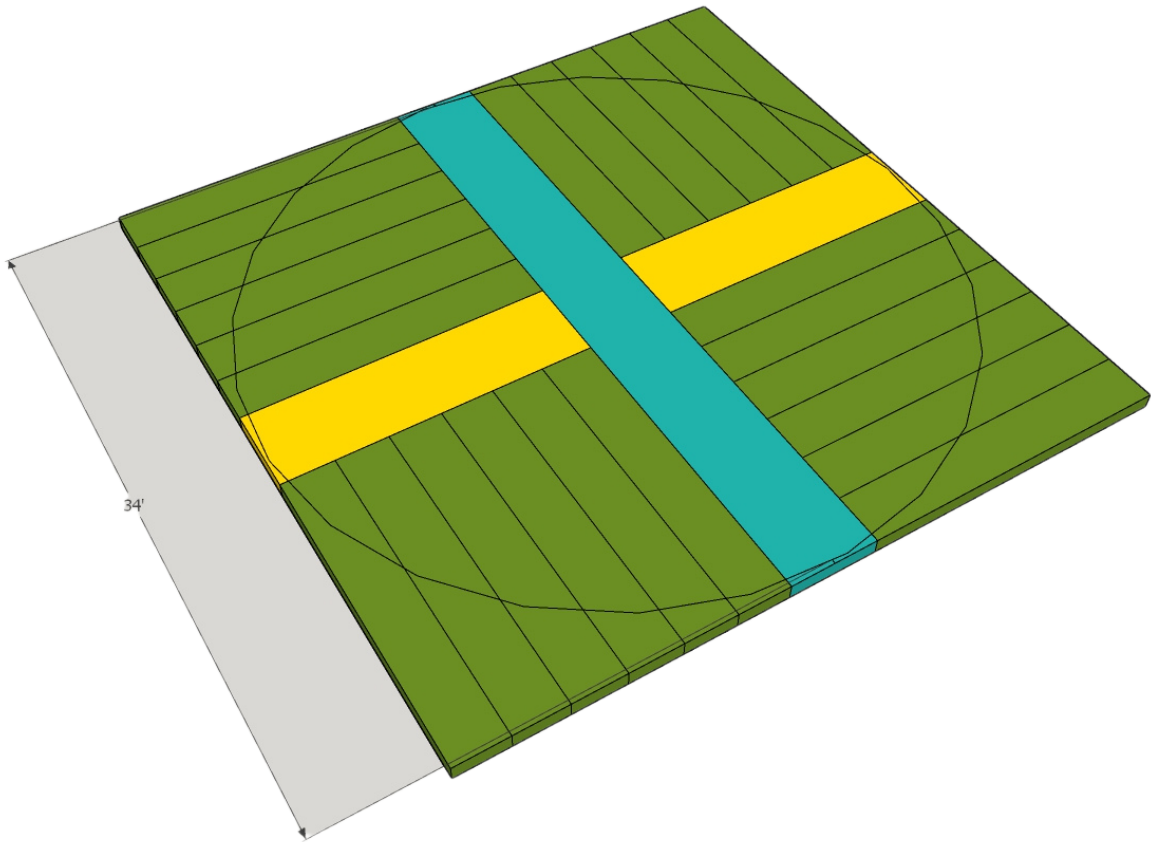
Notes

You can swap out the 1x material for 2x and skip the sheet of plywood altogether. However, the curved edges of 2x material will leave a seam when joined together. When using 1x stacked on a sheet of plywood, you'll need to edge band to hide the layers.



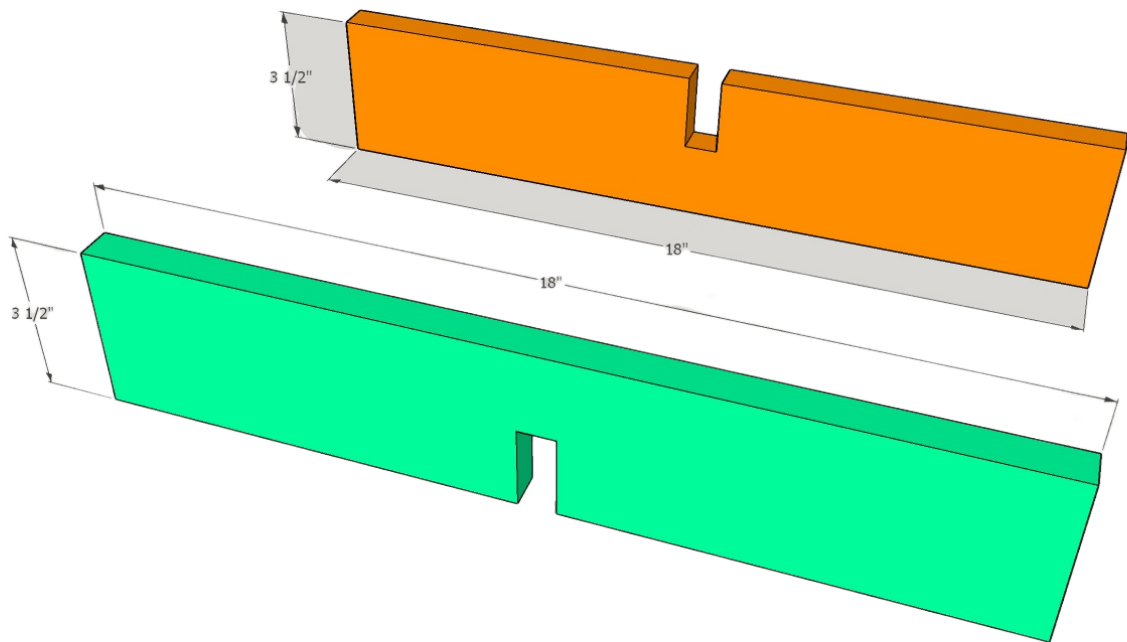
Step 1 - Table Top

Cut (24) pieces of 1x3 to 15". Cut (1) piece of 1x5 to 34.50" and (2) pieces to 15". Cut your sheet of 3/4" plywood to 34.50" x 34.50". Then arrange the pattern of 1x3's and 1x5's on top of the plywood and glue and or tack into place. Be sure not to use any fasteners close to the edge of the upcoming cut path in step 2.



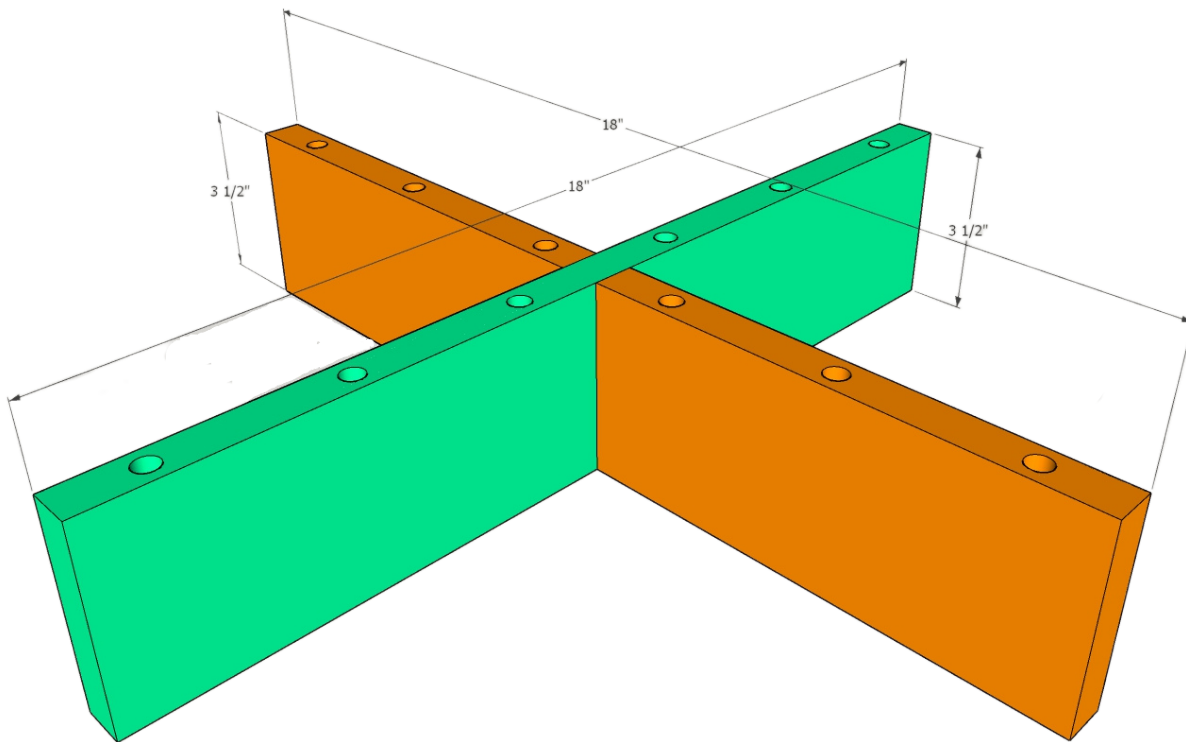
Step 2 - Round Top

Using a tack and a string, draw a circle that is 34" wide that will lay out the table top shape. There are multiple methods for how to cut out a round top. The easiest is to use a router and a circle cutting jig. You can also use a jigsaw on a string or scrap wood jig or a table saw with a scrap wood jig!



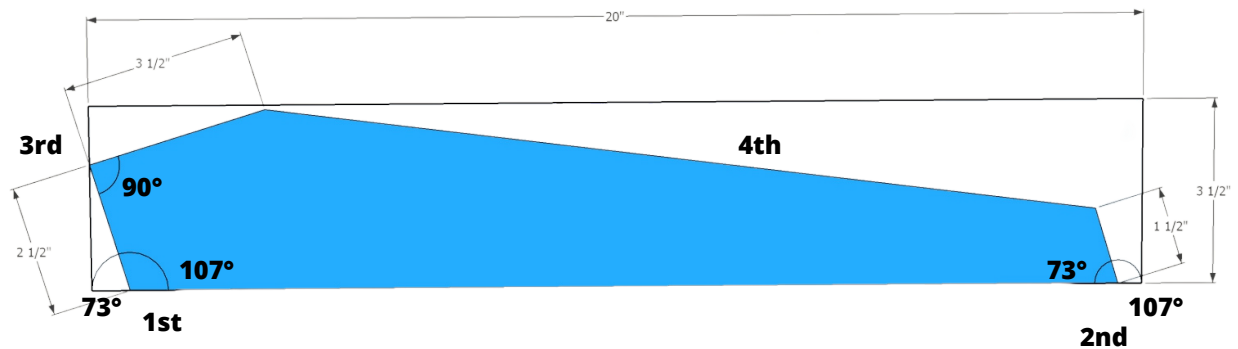
Step 3 - Leg Base

Cut a pair of 1x4's to 18". In the exact middle, cut a 1.75" x .75" dado. If you don't use a dado stack in a table saw, you can make the same cut with multiple passes with a circular saw or sliding miter saw with a 1.75" depth set.



Step 4 - Leg Base Con't

Using wood glue in the dado, saddle the dados into a half lap joint. Once dry, pre-drill pilot holes for attaching the leg base to the bottom side of the table.

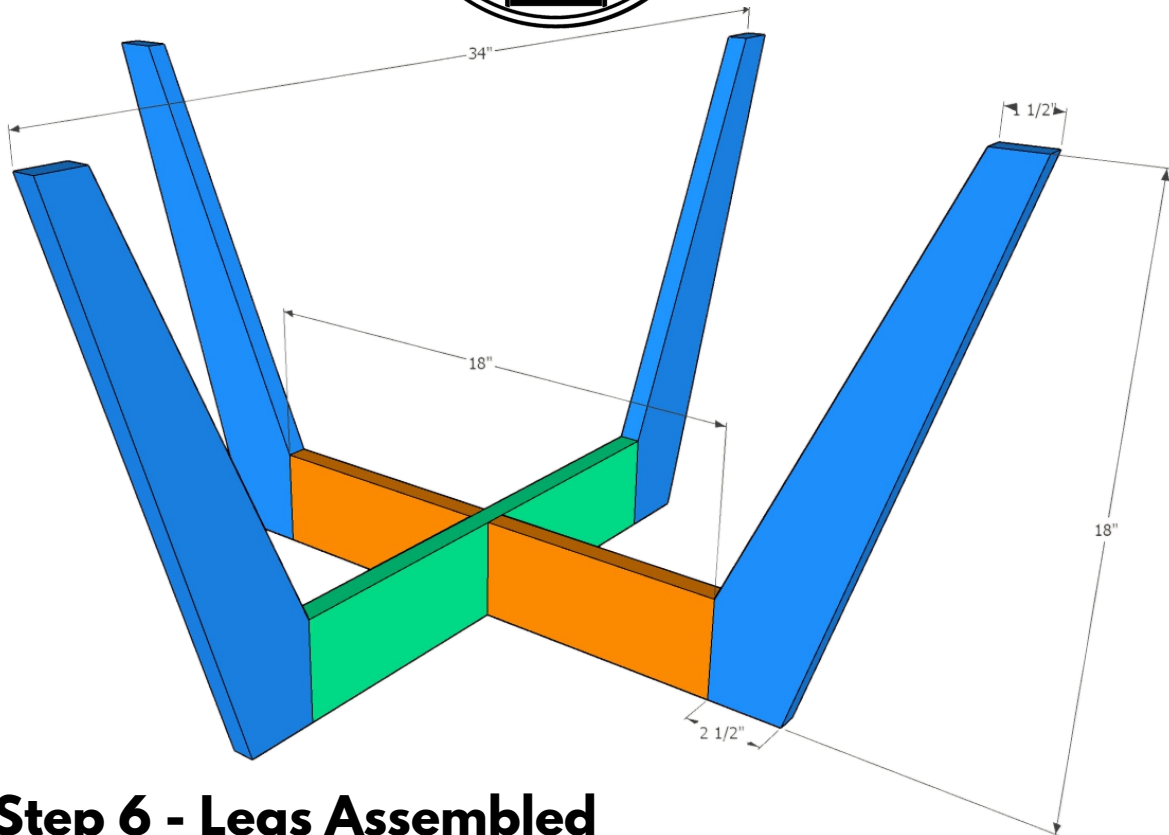


Step 5 - Leg Template

Okay, don't panic. We're going to use math and angles.

Cut (4) pieces of 1x4 to 20+". If using a miter saw, set your blade to 17° ($90^\circ - 73^\circ = 17^\circ$). Before you make any cuts, we recommend drawing your legs out before starting. Make your 1st cut close to the edge leaving at least 2-1/2" available for the top of the leg. For the 2nd cut, ultimately you want these legs to stand 18" tall. You can try to achieve that by making your next cut at 18-53/64" which is a terrible fraction, or make the cut at 18-7/8". For the 3rd cut, set your blade to 90° and make a cut at least 3.50". For the 4th cut you can use a table saw or circular saw and guide to cut to the foot of the leg leaving a 1-1/2" wide foot.

It sounds scary. Draw it out and it won't be bad. You can also use a round over router bit to give the legs a great mid century modern look!



Step 6 - Legs Assembled

Assemble the legs (on the 3-1/2" side) to the leg base.

You can use pocket holes and patch them, biscuits, dowels or dominos to assemble. Then center and attach to the bottom side of the table top using the pre-drilled holes.

