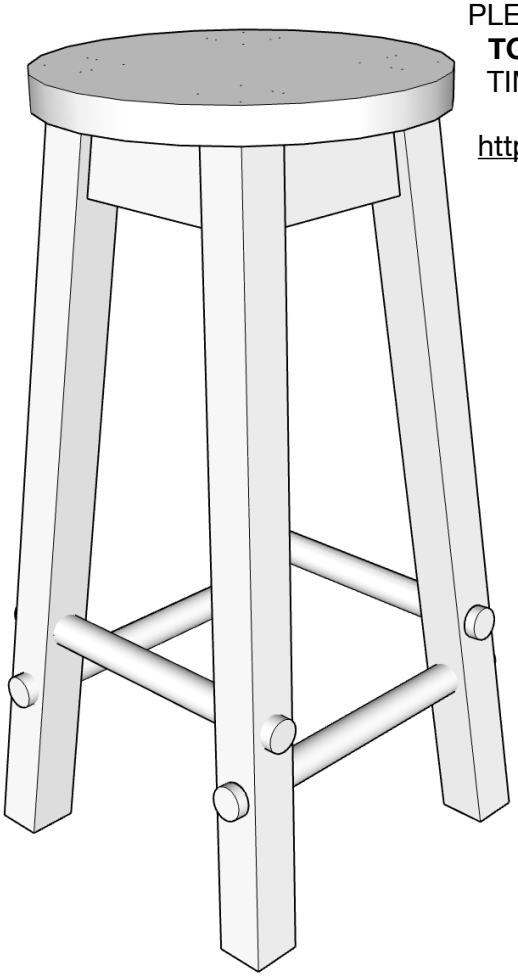
MAKING MAKERS

STOOL PLANS



PLEASE REMEMBER **THESE PLANS ARE COMPLIMENTS TO THE VIDEO**, SO PLEASE WATCH THE BUILD A COUPLE TIMES BEFORE STARTING THE PROJECT.

https://youtu.be/_PsDxwFFcWs <— Please Watch First

MAKING MAKERS 3/2022 VERSION

Shopping List (For 1 Stool)

	Quantity	Material
☐	2	2 x 2 x 8 Furring Strip
☐	2	1” x 36” Round Dowel
☐	1	12” x 1” Wood Round
☐	1	1 x 3 x 6 Pine Board
☐		
☐	1	Box of 1 1/4” Kreg Screws
☐	1	Wood Glue
☐	1	Bottle of Super Glue (Optional)
☐	1	Amber Shellac
☐	1	Wipe-On Poly (Satin)
☐	1	General Finishes Walnut Gel Stain
☐		
☐		**Cut List**
☐	**Quantity**	**Size**
☐		2 x 2 x 8 Furring Strip
☐	4	@ 23” Each End 5° Mitre + 5° Bevel
☐		
☐		1” x 36” Round Dowel
☐	2	@ 11 1/16”
☐	2	@ 11 3/8”
☐		
☐	1	12” x 1” Wood Round
☐		N/A
☐		
☐		1 x 3 x 6 Pine Board
☐	4	@ 4 1/2” Each End 5° (non-parallel)
☐		

	Tools (Modify As Needed)
☐	Mitre Saw
☐	Drill Press
☐	Kreg Jig + Drill Bits
☐	1” Wood Boring Bit (Alternative: Forstner Bit)
☐	Clamps
☐	Drill
☐	Right Angle Drill Attachment
☐	Sander
☐	

Step 1

Aprons

Set mitre saw to 5°

Cut one end of 1x3 then measure 4.5” from short side

Flip piece and cut at mark, remember this is non-parallel

Step 2

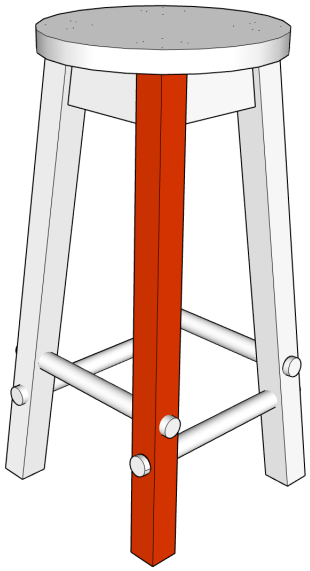
Aprons Continued

Set Kreg Jig for 3/4” thickness

Place aprons ‘show side’ vertically away from you, use holes 1 and 3

Tip: Do a test piece first to make sure you give room on each side of drill hole, if the hole ends up being too close to the side it may split wood.

Now flip apron horizontal with long side up and center in jig. Drill using hole 2 (middle)



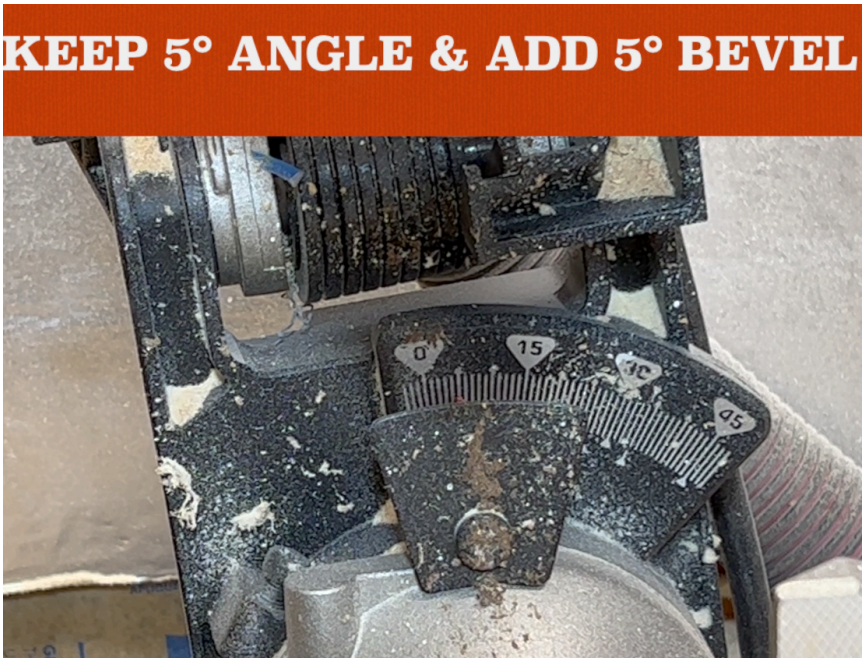
Step 3

Legs

Keep mitre saw at 5°, now tilt saw to 5° bevel

Cut one end of 2x2 and leave piece just the way it is. Measure 23” from one of the top corners (doesn’t matter what corner actually) and make a mark.

Tip: Slide leg left of saw and cut at 23” mark. HOLD piece and place a stop block. This way all your legs will definitely be the same length.



Step 4

Legs Continued

Stand a leg up and note the directions it tilts.

Tip: Keep spinning until leg leans away + to the right of you. The sides you see are the outside facing ones.

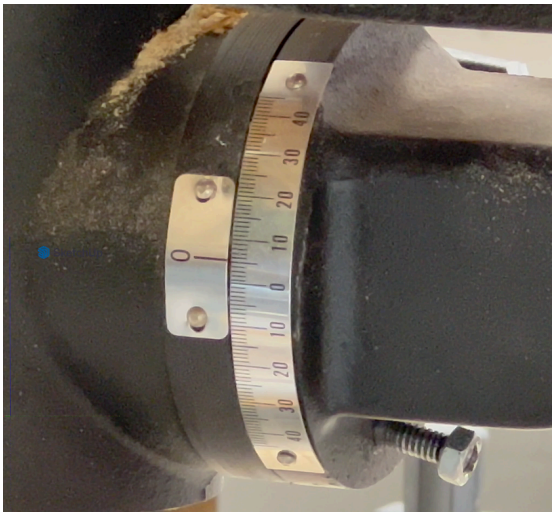
Measure up and mark 5” and 7” and mark the center (which should be 3/4”). You will use this mark in the next step to drill into the legs.

Tip: I found it helpful to pretend I was making letter “A”

Mock the legs up on the table and draw lines indicating which direction you want to drill your holes in.

Tip: Make an “A” on the table, look down at it and place something in the shape of a rectangle (about a foot or 2 feet wide) on top with the bottom edge lined up with the bottom of each of the 2 legs feet. Then draw a line across the tope of the rectangle and marking the wood. That line, is a guideline to make sure you end up drilling in the correct angle/direction using the drill press. The first legs I made were ruined because I did not do something like this (feel free to use your own trick, **just make it something you remember**).
Do this for all your legs. If using the method I described above then basically work your way around the stool and be sure to note which mark is for the 5” (which is one direction) and the 7” (which is perpendicular)

I doubt you will struggle as much as I did when I created these, for some reason working with angles and bevels kind of broke my brain for a couple hours LOL. But I persevered, didn’t give up and finally realized I was over-thinking it.



Step 5

Now it is time to change the angle of the drill press table to guess what? That’s right 5° :)

For my drill press, this mean using a socket wrench to loosen the bolt somewhat hidden under the table. See images.

Place a 1” wood boring bit into chuck and tighten. Be sure to use a scrap piece of wood under the legs to prevent tear-out and protect your table.

Tip: Use clamps to keep your legs from moving during the drilling process.
Bonus Tip: In the video I show you how to pre-drill the pilot holes, this is optional but it can help you get a more accurate aka centered hole.

Step 6

Lay apron between 2 legs about 3/8” off table so that it is centered.

Tip: I use Sticky Notes/Post-It Notes to cheat here, peeling off whatever I need to get to 3/8”.

Screw legs to apron using either 1 1/2” or 1 1/4” kreg screws.

Tip: Use a clamp whenever you use kreg screws, the pieces have a way of moving at the last second w/o one.

Step 7

Head back to the drill press to do the other set of holes for the foot rest. In my video, I do the 5” holes back at step 5, and then do the 7” holes now. For me, that was easier mentally but if you already took care of 5 and 7 earlier…you are smarter than me and may skip to

Step 8

Attach remaining sides, just like you did earlier with glue and kreg screws… this time you won’t have much room to work with so use a right angle drill attachment. This tool is fairly cheap, between $7-$20 dollars.

Step 9

Paint or stain, your choice!

Base:

I stained the stool base using General Finishes Antique Walnut Gel Stain (which I use in a lot of projects)

I then used amber shellac overtop the stain once it dried.

Tip: I like to thin shellac using denatured alcohol when I need to get to tight spots and don't want to stress about thick drip marks.

Bonus Tip: Shellac dries super fast, like under 10 minute sometimes. So it's easy to get a couple coats on quickly. I sand using 300+ grit sandpaper only AFTER 2 coats. I do this because I don't want to risk sanding off stain by accident, especially any edge (been there, done that…not doing that again).

Top and footrest:

Again feel free to paint or stain if desired. I used amber shellac (w/o thinning) on the top and footrest dowel rods (prior to cutting)

Step 10

Attach the seat.

Invert the stool and center the now upside down stool base prior to securing it with glue and kreg screws.

Step 11

Footrest/Stretchers

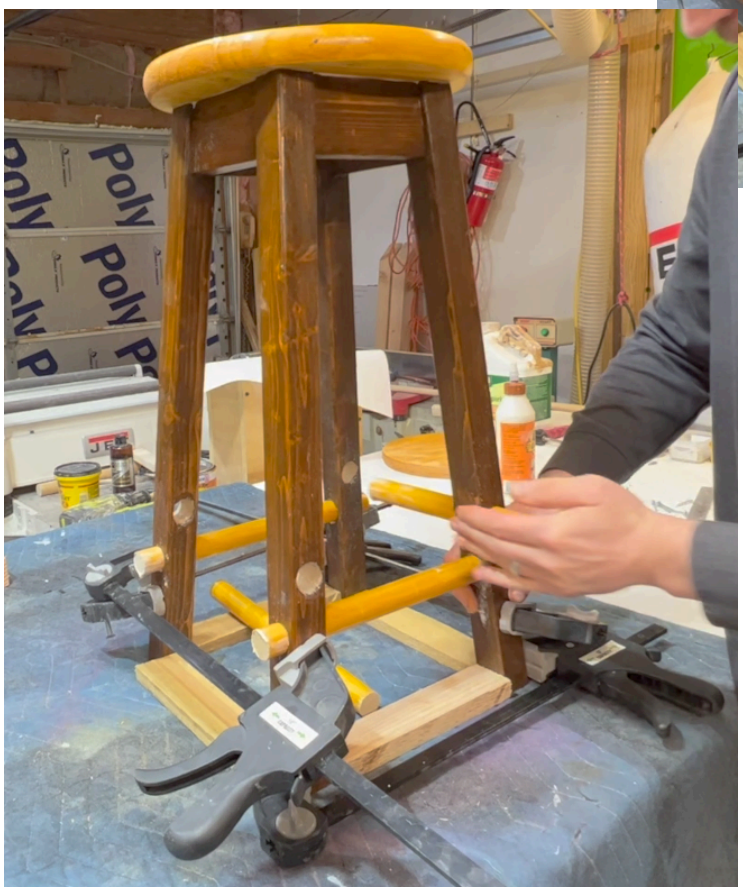
Cut 1” dowels to the correct length. Remember 2 should be longer than the other 2.

Turn your stool right-side up.

Swish some glue in the holes before this sliding the dowels in.
The long dowels go in the bottom holes,

Aim for a 3/8th overhang (from the top).

Note: In the build video I got the dowels to correct size after attaching to the stool, you don't have to do that since you have the cut list and know the amount of overhang to shoot for (adjust as you see fit). I wasn't sure how much I wanted, that's why you see me work through that step. Anyway…NEXT



TIP: For accuracy I put blocks and clamps on the legs prior to inserting the dowels. This is optional, but I recommend it just in case you have to hammer/bang dowel and you won't have to risk breaking the legs. Plus it might help true-up some of your work. Leave blocks and clamps on overnight while glue dries.

Bonus Tip: If you (like me) used shellac on the dowels prior to glueing you might be concerned about the strength of the bond. What I did was add a few drops of super glue in openings I could find which should alleviate any concerns of the footrest loosening over time.

Step 12

Use wipe-on poly for the base.

I used satin but gloss would probably look fine as well.

OK, I think that is it Makers. As with ALL MY PLANS, please adjust as you see fit. Be creative, don't be afraid to try out an idea you might have. The wonderful thing about woodworking is that there are so many ways to make the same thing AND there are so many wonderful things you can make using all kinds of ways. PLEASE REMEMBER THESE PLANS ARE COMPLIMENTS TO THE VIDEO, SO PLEASE WATCH THE BUILD A COUPLE TIMES BEFORE STARTING THE PROJECT.

If you find any errors in these plans, send me an email and I will make the correction and upload a new version to the website. If you have any questions about the build, email me and I will get back to you shortly.

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Yours In Making,

~ Mike From Making Makers