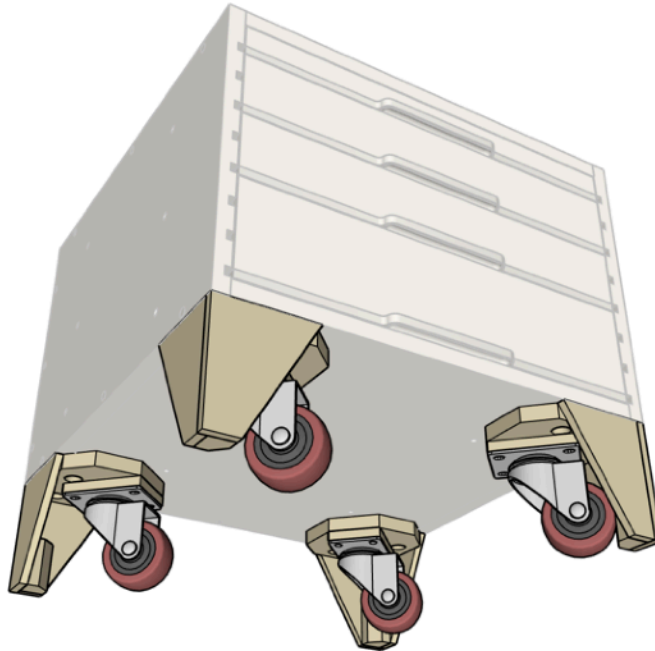


Caster Foot Plans

Part of the Shop Cabinet System



Index

Important notes (please read)	Page 2
Choosing casters	Page 2
Make the top	Page 3
Make the sides	Page 4
Make the corner reinforcement	Page 5
Assemble	Page 5

Materials list

For the Feet:

- 18mm or 23/32" hardwood plywood
- 9mm or 11/32" hardwood plywood
- Wood glue
- 25mm or 1" brad nails (optional)
- Casters (see page 2 for size options)
- 20mm or 3/4" pan-head wood screws to mount casters (4 per foot)
- Protective finish (I used wipe-on poly)

For mounting to the cabinets:

- M6 x 25mm or 1/4 x 1" bolts (3 per foot)
- Hardened washers to fit bolts (6 per foot)
- Locknuts to fit bolts (3 per foot)

Tools list

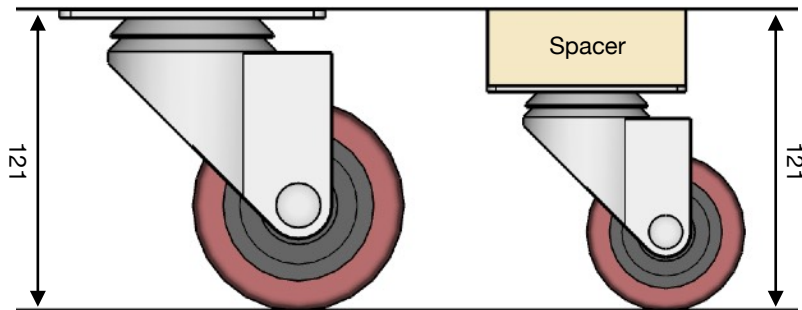
- Table saw
- Router
- Drill press or hand drill with guide
- Brad nailer (optional)
- 2mm or 1/16" drill bit (+/-)
- 9mm or 3/8" drill bit or forstner bit
- 18-20mm or 3/4" forstner bit
- Flush-trimming router bit
- Roundover router bit (2-4mm or 1/16 - 5/32" radius)

Some important notes

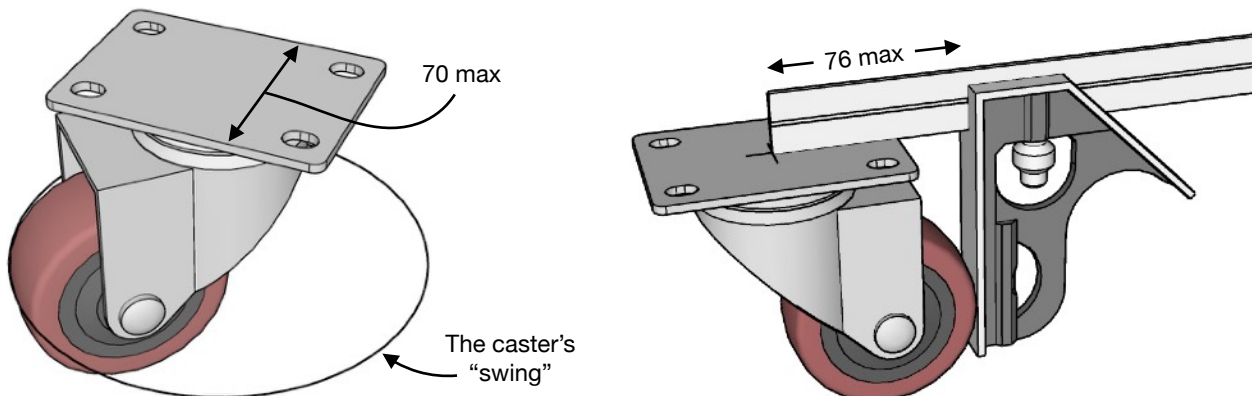
1. Other parts of this system: These Feet are for use with my Modular Shop Cabinet System. You can learn more about the Cabinet System and get plans for other Modules here: <http://jerswoodshop.com/cabinet-system/>
2. It is assumed that you will build and use these Caster Feet in a safe manner, therefore, few safety precautions are set forth in these plans. Build and use at your own risk. I am not responsible for any injuries caused by the manufacture and use of Cabinet System or these Feet.
3. The templates on pages 3-5 may be printed and used as a 1:1 templates — just be sure to confirm they printed at the correct scale before using them.
4. If you haven't seen the YouTube video in which I build these Feet, please watch it by going to <http://jerswoodshop.com/cabinet-feet/> and clicking the “watch build video” button.
5. If you have questions about the build, feel free to contact me at jerswoodshop@gmail.com. I welcome constructive criticism & feedback on my design and plans.

Choosing casters

The maximum overall height of the casters is 121mm or 4.75”. Smaller casters can be used — just make a wood spacer (the size of the caster’s plate) to bring them up to this height.



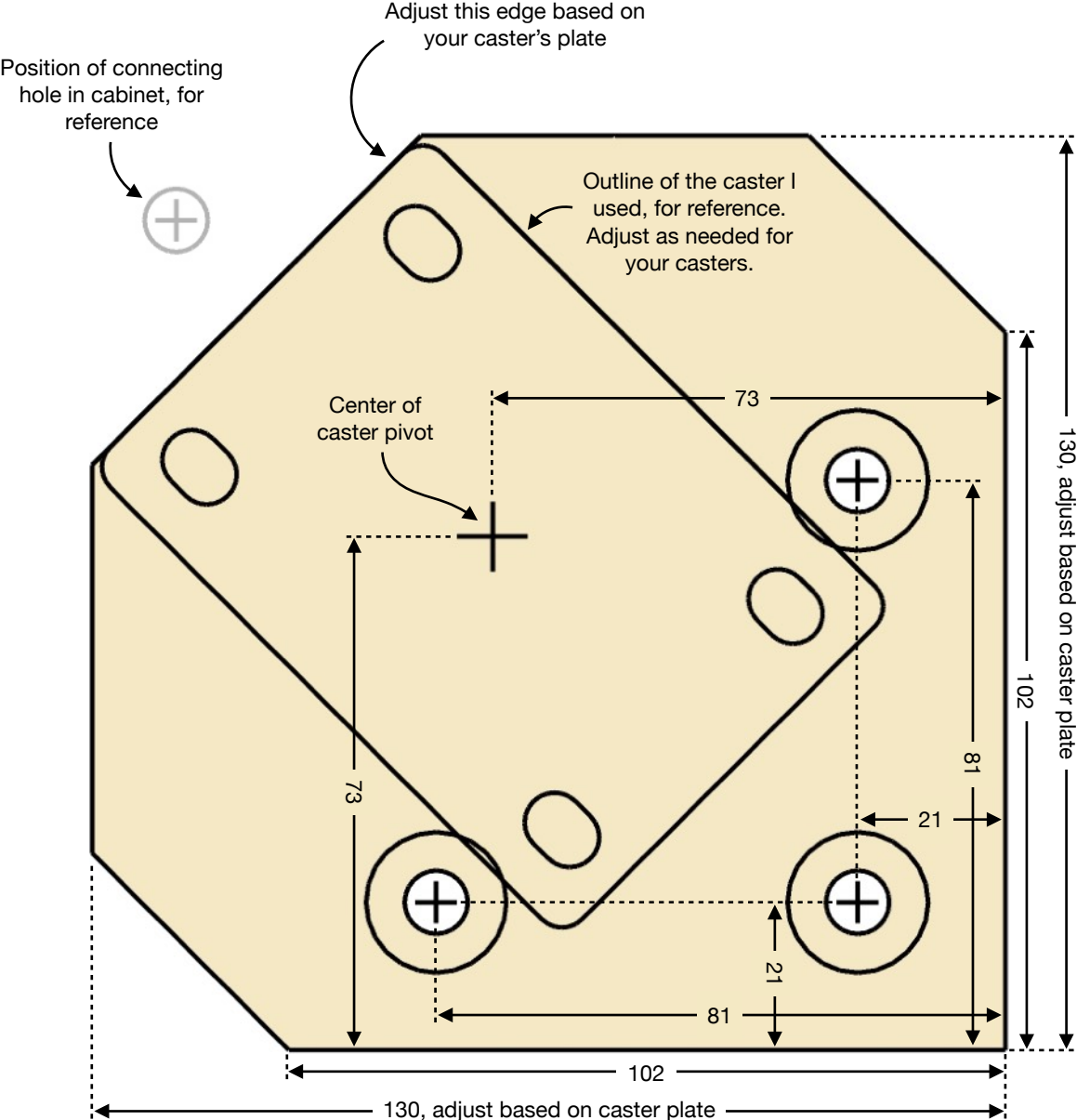
The casters should also have a relatively small “swing”, so that they can be mounted close to the corner to maximize stability. A 76mm or 3” radius is the maximum swing that works with my design. You can modify my design to work with a larger swing, but this may interfere with the use of a support beam under the cabinets. The caster’s plate should be less than 70mm wide, but can be more than 70mm long.



Make the top

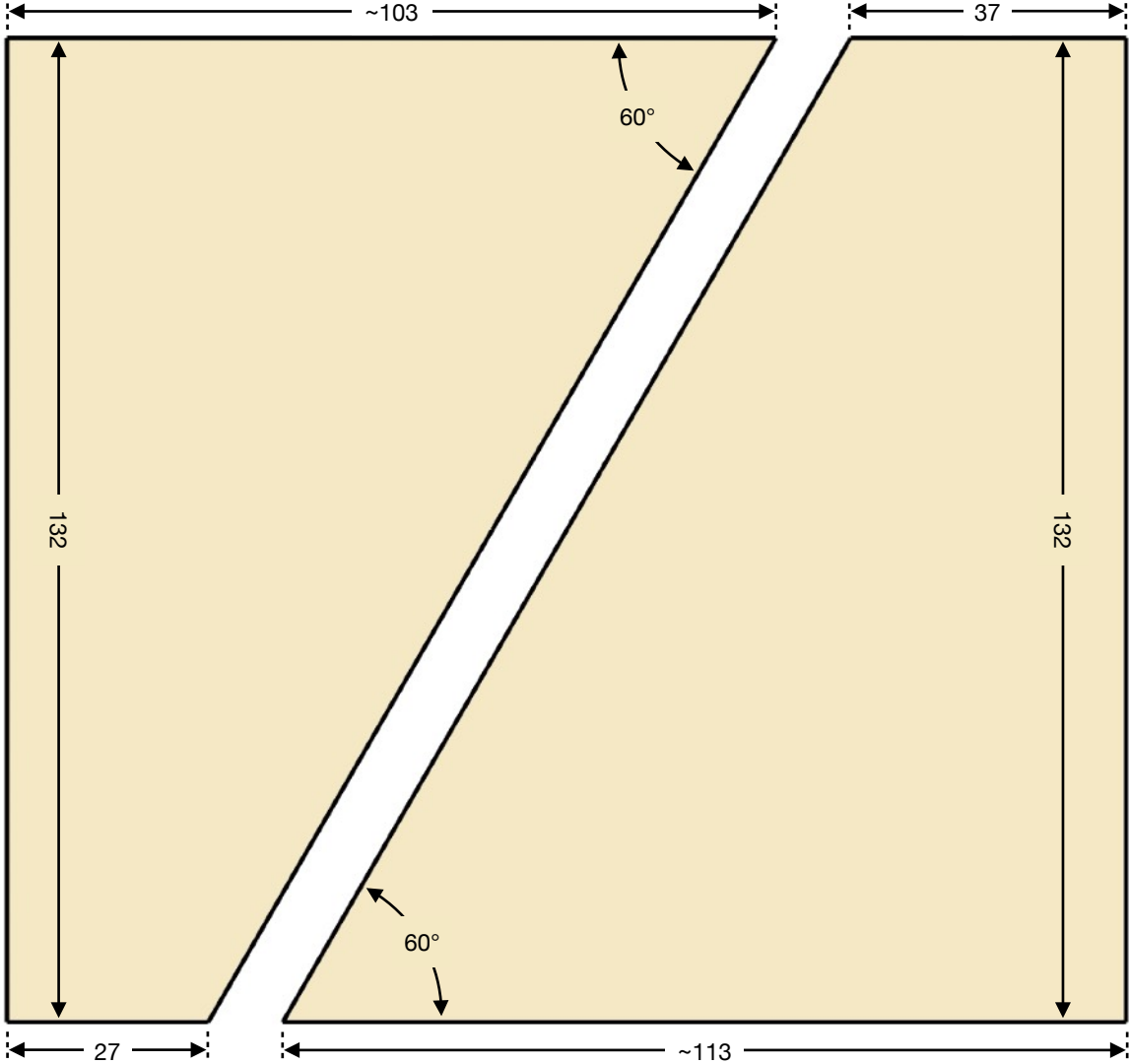
Cut the top of your Caster Foot from 18mm plywood, based on the drawing below. Drill the three mounting holes using the procedure from page 11 of the Cabinet plans.

If your caster's "swing" (determined in the last step) is larger than 76mm, you will need to move the point marked "Center of caster pivot". Note that doing this could make the part larger, blocking access to the connecting hole in the bottom of the cabinet (shown below, for reference).



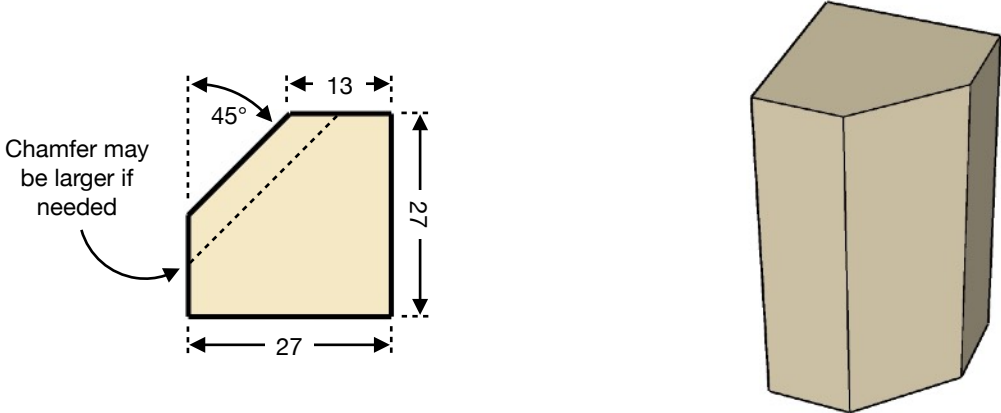
Make the sides

Cut the sides of your Caster Foot from 9mm plywood, based on the drawings below. Note that the two are not identical — the one on the right is 10mm wider, since it will overlap the narrower one when assembled. Both templates are 2mm taller than the final foot, so you can trim it to final height after assembly.



Make the corner reinforcement

The bottom of the leg will be reinforced with a solid 27mm square block, 55mm long, with one corner chamfered to clear the caster. I recommend making this from solid hardwood or from hardwood plywood. You can make a larger chamfer than shown, if needed to clear a larger caster.



Assemble

Assemble with good-quality wood glue, and use brad nails, small screws, or clamps to ensure a strong bond. Be sure that you aren't putting the top upside down — the counterbores need to face the side with the leg & caster. After assembly, trim off the bottom of the leg to bring the overall height to 130mm. Apply a protective finish if desired, then screw the caster in place, making sure it doesn't hit the leg.

