



Tool Caddy

Part name	#pieces	T	W	L	Material
sides	2	1/2"	3	15 3/4"	poplar
ends	2	1/2"	3	10"	poplar
Handle divider	1	1/2"	5 7/8"	15 1/4"	poplar
Middle divider	1	1/2"	2 3/4"	10"	poplar
bottom	1	1/4"	10"	15 1/4"	Maple plywood

1. Start by rough-to-ready your sides, ends, middle divider and divider handle. Take your time to get your pieces to exact dimensions.

Sides and Ends Joinery:

2. Use the router table to cut a 1/4" rabbet on the edges of your side and end pieces. This 1/4" rabbet should be done in several passes (3 or more). Set the straight end mill bit 1/4" out from the fence. Test your cut first on a scrap piece of plywood or MDF to ensure you are accurate.
3. To cut your rabbets on either end of your side pieces, mark a 1/2" in from the end of your piece on your edge. Set up your dado blade to 1/2" wide and your sled on the table saw. Set your blade height to 1/4". Use a stop block when setting up your first cut to ensure your next three cuts are identical.



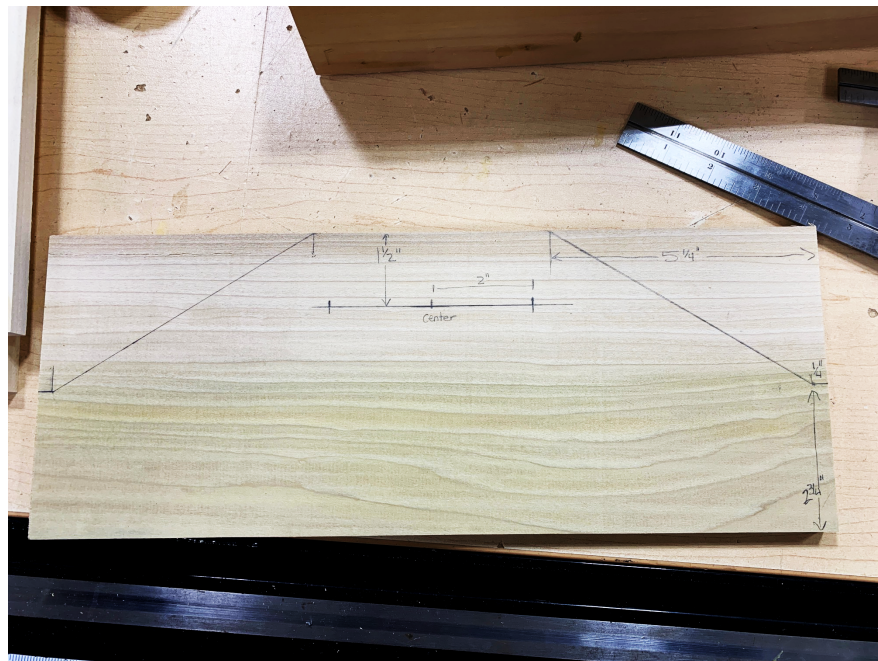
4. Mark out your dado on your end and side pieces. Start by finding the center of your piece, then mark $\frac{1}{4}$ " of the center on either side. This should be marked on the edge to easily line it up with your $\frac{1}{2}$ " dado blade. The dado will only be $\frac{1}{4}$ " deep.

Handle divider & Middle divider

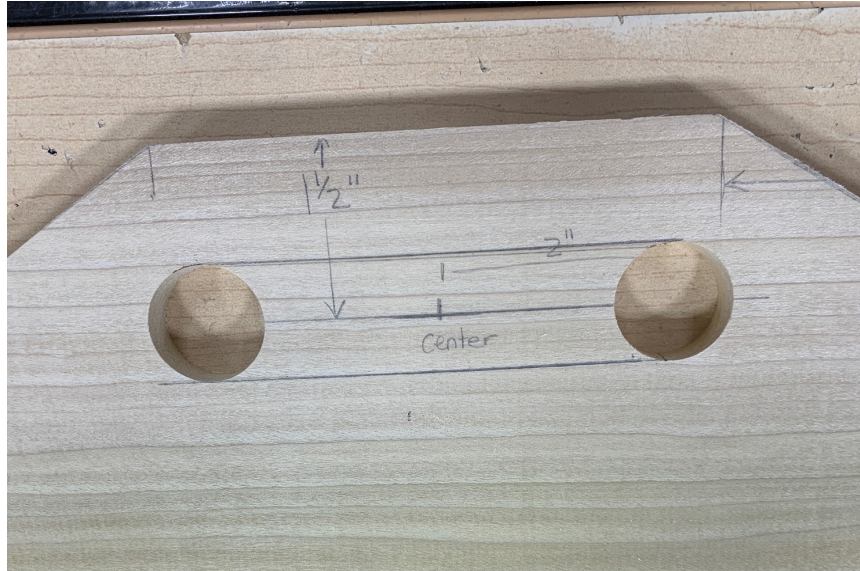
5. Find your center and mark a line down the center. To mark your half lap, from the center, mark $\frac{1}{4}$ " over from each side near the bottom edge of your piece. Take those marks and mark a straight line up $1\frac{3}{8}$ " up from the edge. This should be done on both your middle divider and handle divider.



6. On your handle divider mark out your handle. From the center top, mark a line 2" over on either side of center. Then mark $1\frac{1}{2}$ " down from the top edge intersecting both previous lines. These will be your center marks to drill out with a 1" forstner bit.



7. On the same handle divider, mark out your profile as shown in the picture above or use the template found at the front of the shop.
8. After drilling out your holes for your handle on the drill press with a 1" forstner bit, draw a straight line connecting the top of each hole and bottom as shown in the picture below.



9. Using a jigsaw, cut on the waste side of your line and cut your handle out. Make sure your material is clamped to the table and you are clear from cutting into the table.



10. Make sure to sand your handle to your lines eliminating any hills or valleys on the handle and to even out your cut.

11. With a 1/4" round over bit on the router table, round over the inside of your handle and the top edge of your handle divider.
12. On the bandsaw, cut your half lap out on both your middle divider and handle divider. Use a chisel to cut the end of the half lap as shown in the picture below. Be sure to put a scrap board under your cutting surface and clamp your project down to ensure a safe cut.



13. Dry fit your pieces together to ensure every fits properly. If your center dividers are not centered, the tool caddy will not come together and you will need to make some adjustments or recut your middle/handle divider as needed.

Bottom

14. To accurately cut your bottom piece to fit your tool caddy, cut the length of your plywood to the length of your handle divider and the width of your plywood to the length of your middle divider. Though the bottom should be the same as the measurements on your cutlist, you may have slightly different measurements based on your previous cuts.
15. Before assembly, sand all your pieces making sure to avoid any joinery but **DO NOT SAND YOUR END GRAIN**. Make sure to break all your sharp edges with your sandpaper.

Assembly

16. Take the time to dry fit your pieces before gluing up your caddy. If anything is not fitting properly, fix it now. Once all is fitting properly, glue your project together and pin nail (1-1/4") your joints together as you assemble and staple your bottom with 1/2" crown staples. **Clamps are not needed for gluing this assembly. Let the glue dry for 24 hours before moving on.**

17. From the outside in, mark the center of the bottom that connects to your middle divider with a straight line. Then drill a $\frac{5}{64}$ " pilot hole 5" in from either end of your length and 3" in from either end across the grain on your bottom piece of plywood. Use a countersink bit on each hole for the head of the screw to sit flush.
18. Screw your bottom into the middle divider with #6- $\frac{3}{4}$ " screws.
19. Fill any pin nail holes with wood filler. Do a final sand to eliminate any glue marks, pencil marks and wood filler.
20. Apply your finish evenly over your caddy. We will discuss how to do this properly in class.