**Step Stool**

**Plan of Procedure**

**Step Stool Sides: 8” x 12” Finish Size**

1. Rough cut stock to 40” in length.
2. Rip and use wood that measures 4” to 6” in width.
3. Run each edge over the jointer.
4. Dry fit all pieces together and check the joints for fitment.
5. Glue the stock together to have a width just over 12”.
6. Wipe off the wet glue with a wet rag.
7. Scrape off the glue when dried.
8. Run the pieces through the table saw and rip them to 12”
9. Run the stock through the planer to ¾”.
10. Measure and cut out the sides to 8 ½” on the mitre saw.
11. Set the table saw to a 10 degree angle and cut the sides to a finish height of 8”.
    1. Place the good side up on the table saw.
    2. Cut the top first and then cut the bottom to the 10 degree angle.

12. Use the template and trace the arc at the bottom and also trace the sides.

13. Use the bandsaw to cut out the edges and the bottom arc. DO NOT cut the line!

14. Drum sand the arc. DO NOT round corners or sand the 10 degree cuts.

15. Disc sand the sides. DO NOT sand past the line or gouge the wood.

16. Run the sides over the jointer if needed to straighten the edges.

17. Set the drill press to a 10 degree angle.

18. Set the drill press to drill just through the stock

19. Drill the pilot hole with the short angle facing up.

**Step Stool Top: 9” x 13” Finish Size**

1. Rough cut the stock to a length of 40”.
2. Rip and use pieces that are 3” to 6” in width.
3. Run all edges over the jointer.
4. Glue the stock together so that it is just over 9” in width.
5. Wipe off the wet glue with a wet paper towel.
6. Scrape off the dried glue.
7. Run the stock through the planer to a thickness of ¾”.
8. Rip the stock on the table saw to a width of 9 1/16”.
9. Run the stock over the jointer to finish the edges to 9”.
10. Use the mitre saw to cut the stock to 13” in length.
11. Use the 1” circle template and trace it on the corners.
12. Cut the corner on the bandsaw. DO NOT cut the line.
13. Round each corner evenly using the disc sander. Sand up to the line.
14. Lay the temple on the top. Trace the hole for the middle.
15. Use a ⅝” forstner bit and drill two holes at each end. Drill the holes just inside the lines.
16. Use a jigsaw. Start at one hole and drill to the other. Repeat the cut on the other side of the hole. DO NOT cut close to your lines.
17. Clamp the template to the top of the stock. Use the hand held router and a ⅝” cutter bit to finish cut the middle out.
18. Use a hand held router with a small round over bit to round over the middle hole and edges. Do this to both sides.

**Step Stool Supports: 2 ¼” x 10 ¼” Finish Size**

1. Rip stock to 2 5/16” wide on the table saw.
2. Run the stock over the jointer to a finished width of 2 ¼”.
3. Set the mitre saw to a 10 degree angle.
4. Cut the supports to a finished length of 10 ¼” from the long points of the angle.
5. Use the support template to mark the holes where the pocket screws will be drilled.
6. Keep the pocket screw holes centered and 5” apart.
7. Set the depth of the pocket screw drill to 3/4” and drill the two holes.

**Assembly and Finishing**

1. Lightly scrape and sand all glue off the project.
2. Sand the project starting with 150 grit and working to 400 grit. Be sure to sand with the grain.
3. Use 80 grit on some areas on the end grain.
4. Do not sand any edges that will be joined or have an angle cut on them.
5. Use a portable light to identify any scratches or marks. Remove them with light sanding.
6. Using the jig, place the top of the step stool in the jig, with the side you want to be the bottom facing up.
7. Apply light glue to the short ends of the supports, with the pocket screw holes facing inward.
8. Line up the supports and make them even.
9. Use Kreg jig screws to secure the supports to the top.
10. Remove the top from the jig.
11. Apply light glue to the top of the sides.
12. Center the sides with supports and the top.
13. Pre drill each hole using a 3/32” drill.
14. Apply wax to the screws and screw them in securely.
15. Use a wooden mallet and tap the plugs in the holes with the grain of the plug going crossways to the grain of the sides.
16. Apply two coats of stain.
17. Apply two coats of finish.