



If you like a natural look in your kitchen, this wooden paper towel holder will provide an additional accent. It is a great kitchen accessory, and can be mounted on a wall or on the side of a cabinet. It is easy to load; just slip the new roll over the decorative rod and replace it on the holder. It provides a very functional way to dispense paper towels, and it fits all standard rolls.

A. Materials List:

QUANTITY	LETTER	NAME	SIZE	MATERIAL
1	A	Back	3/4" x 8 1/4" x 13"	Oak
2	B	Sides	3/4" x 4 1/8" x 7 1/2"	Oak
1	C	Towel Rod	3/4" Diameter x 13 7/16"	Oak
2	D	Towel Rod Ends	1 3/8" Diameter x 2 1/16"	Oak

B. Patterns:

1. Scale back (A), sides (B) and towel rod ends (D) to the drawing dimension sizes. This can be accomplished by measuring the print out and dividing that size into the dimension size. This will give a multi-factor that can be used to figure the enlargement size for the patterns. Most companies that do duplicating can make the enlargement required for the patterns.
2. Transfer the pattern enlargement onto poster board, and use a pair of scissors to cut out the patterns

C. Cutting Procedures:

1. Trace patterns back (A) and sides (B) onto a 3/4" x 8 1/2" x 20" oak board.
2. Trace patterns back (A) and sides (B) onto a 3/4" x 8 1/2" x 20" oak board.
3. Use a [spindle sander](#) to sand the pattern areas of back (A) and sides (B).
4. Purchase a 3/4" oak dowel rod and use a [radial arm saw](#) to cut it to 13 7/16".
5. Set the table saw fence to 2" and rip two 1" oak boards.
6. Use a radial arm saw to cut the two boards 12" long.
7. Glue and clamp the boards using hand screw clamps. The ends of the clamped boards should be approximately 2" square. Allow the glue to dry over night.
8. Use a radial arm saw to cut the glued board into two 6" lengths.
9. Insert one of the 6" boards into a lathe chuck. Turn on the [wood lathe](#) to make sure that the wood is turning true.
10. Adjust the tool rest to clear the wood approximately 1/8", with the tool rest 1/8" above center. Turn the wood stock by hand to make sure it does not contact the tool rest.
11. Adjust the lathe speed to about 600 R.P.M.
12. Use a gouge to cut the wood stock to a cylinder. Use a square nose tool to turn the stock to 1 3/8" diameter.
13. With a pencil and a ruler mark the wood stock according to the shapes of the towel rod ends (D). This procedure may have to be repeated from time to time as wood is shaped. The lathe should be set at its lowest speed for the markings.
14. Set the lathe speed at 1000 R.P.M. Use a parting tool to cut the stock to the appropriate diameters. Measure the diameters with an outside caliper.
15. Use a skew to shape the beads.
16. Use a round nose tool to cut the concave shape.
17. Use a skew to round off the end.
18. Repeat steps #9-17 to shape the other towel rod end (D). **Note:** If a lathe is not available, you should be able to purchase the towel rod ends at a hardware store or a hardwood lumber store.

D. Oak Paper Towel Holder Sanding Procedures:

1. Remove the tool rest and, turn on the lathe, and hand sand the towel rod end (D) with 120 grit sandpaper. Repeat the process using 220 grit sandpaper. Finish the sanding process using 400 grit sandpaper.
2. Repeat step #1 to sand the other towel rod end.
3. Rough sand the back (A) and the sides (B) with an orbital sander and 80 grit sandpaper.

1. Intermediate sand parts (A) and (B) with an orbital sander and 120 grit sandpaper.
2. Finish sand parts (A) and (B) with an orbital sander and 220 grit sandpaper.
3. Hand sand all edges, details, with 220 grit sandpaper.

E. Assembly Procedures:

1. Clamp the ends (B) in hand screw clamps. The straight edges should be up. Place wood glue on the edges and position the back (A) on the ends. Use a nail gun and 1 1/2" nails to secure the back to the ends. Be sure the edges are flush.
2. Allow the glue to dry over night.
3. Use a [horizontal boring machine](#) and a 1/4" drill bit to drill a 1/2" deep hole in the center of each end of the towel rod (C). Use a hand screw clamp to hold the towel rod while drilling.
4. Repeat step #3 to drill a hole in the flat end of the towel rod ends (D).
5. Use a [band saw](#) to cut two 7/8" lengths from a 1/4" diameter dowel.
6. Use 120 grit sand paper to round the edges of each end of the dowels.
7. Place a drop of glue in the dowel holes of the towel rod (A).
8. Use a wooden mallet to tap the dowels into the towel rod.
9. Place glue on the exposed dowel rods and on the ends of the towel rod and the towel rod ends.
10. Gently tap the towel rod ends onto the towel rod.
11. Use a small bar clamp to secure the assembly. Clean up any excess glue and allow the glue to dry over night.

F. Finish & Installation Procedures:

1. Use plastic wood dough to fill all nail holes, cracks and imperfections.
2. Hand sand the wood dough flush with the surfaces.
3. If stain is desired, apply with a brush and allow to penetrate for 5-10 minutes, and then remove with a clean rag.
4. Allow stain to dry 6 hours and then repeat with a second coat.
5. Apply a clear finish coat such as Varathane, Polyurethane, lacquer, etc. using a pure-bristle brush. Allow to dry 12 hours.
6. Lightly hand sand with 220 grit sandpaper.
7. Apply second coat of clear finish.
8. If additional finish coats are desired, repeat steps #5 & 6.
9. Allow to dry 24 hours before using your wooden paper towel holder. **Notes:**1. Be sure to match the color of the wood dough to the stain color.2. Use a tack rag after each sanding procedure to remove the dust.

Place the oak paper towel holder on the wall in the desired position. Use a hand drill and bit to drill two holes through the back (A) and the wall.