

Build an Heirloom Toddler Stool

Home repair expert Henry Harrison gives a guest a boost when he shows her how to build a stool so her toddler daughter can reach the sink and closet. On his elbow grease scale of one to four, Harrison gives this project a three.

Tools:

work table
table saw
push sticks
power drill with 1/4-inch bit
router
jigsaw
orbital sander
carpenter's pencil
tape measure
C-clamps
bar clamps
woodworker clamps
spring clamps
rasp
dowel dimplers
combination square
plate
cup
towel
safety glasses
dust mask
wood glue
white poplar boards

Steps:

1. Draw up a plan for your stool (**figure A**). This project called for a stool with a top that is 13 inches by 9 inches. A board that size would be susceptible to warping and cracking, however, so rip three 3-inch-wide strips with the table saw.

2. Wear a dust mask and safety glasses when working with power tools. Also, use push sticks to guide the boards through the table saw. Always keep your hands well away from the blade.

3. Use a carpenter's square to measure and mark the end cuts so you're left with three boards that are 13 inches by 3 inches.



Figure A



Figure B



Figure C



Figure D



Figure E



Figure F

4. Join the three boards using six dowels (**figure B**). Lay the boards out on your work table and mark positions for the six dowels. Draw a diagonal line across all three boards to make it easier to line them up later.

5. Transfer dowel marks to the edge of the first board and drill holes for the dowel pins using a 3/4-inch bit (**figure C**). Place a piece of tape on the bit so you know how far in to drill.

6. Use dowel dimplers to precisely mark holes on adjacent board. Drop a dimpler into each hole drilled into the first board (**figure D**), then line up the second board and press together. The dimplers will leave indentations in the second board exactly where you need to drill.

7. Fill dowel pockets with glue and work dowels into pockets, turning them so all the fluted edges fill with glue. Run a bead of glue along the edges to be joined and push the three boards together (**figure E**).

8. Clamp the three pieces together with a woodworker's clamp and tighten the clamp until all gaps between the boards are closed (**figure F**).

9. Trace rounded corners on each corner of the stool top using a plastic cup. Cut away the corners using a jigsaw, then smooth using a rasp (**figure G**). Use spring clamps to hold the top in position while you work.

10. Sand the top of the stool with a random orbital sander and medium grit paper.

11. Cut the two side supports and two longitudinal support pieces. Round all edges off using a router.

12. Connect the four pieces using glue and wood screws. Dab drops of glue along the top of the base before attaching the top (**figure H**).



Figure G



Figure H