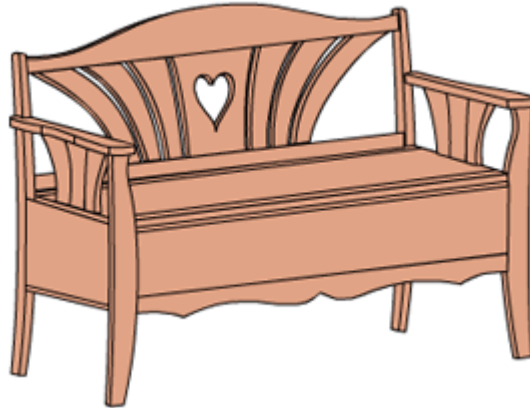


Deacon's Bench

OVERVIEW



Introduction

With its elegant styling and two-seat design, this deacon's bench is sure to draw plenty of compliments and admiring glances.

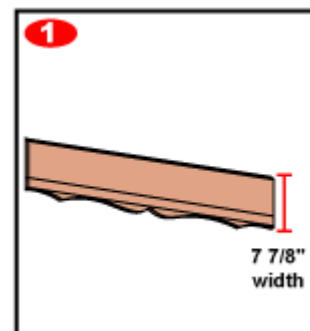
BEFORE YOU START...

SKILL LEVEL & TIME TO COMPLETE

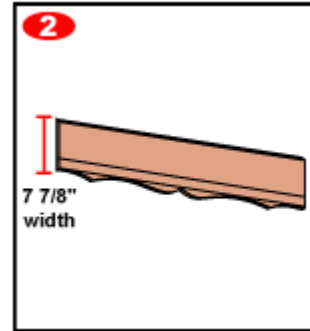
- Beginner - 3 to 4 days
- Intermediate - 2 to 3 days
- Advanced - 1 to 2 days

STEPS

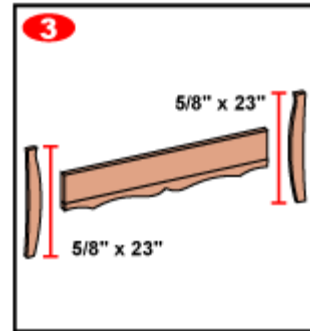
1. After cutting the front panel from the plywood, the front skirt from the oak stock, and the front edge strip from the oak, edge-glue the parts together to form a single unit with a 7-7/8" width.



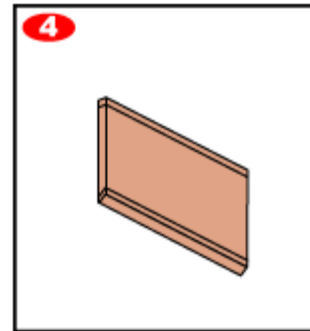
2. When the glue is dry, cut the contour of the front skirt. Sand the entire panel and the edge of the profile, and round over the bottom edge of the profile with a 1/4" radius router bit. On the backside of the completed front panel, cut a dado 1/4" wide and 3/8" deep. The top edge of the dado should be 7 -7/8" from the top edge.



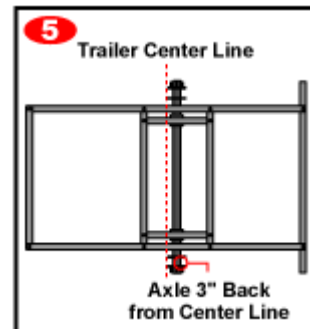
3. Cut the two front legs to from the oak stock, and shape them according to the template. Sand the legs smooth, then apply glue and clamp the legs in place against the front panel. Make sure the upper edge of the dado is 8-3/8" from the bottom of the legs. Drill holes with a countersink to accept the screws. Then sand over the completed assembly to make the legs flush with the surface.



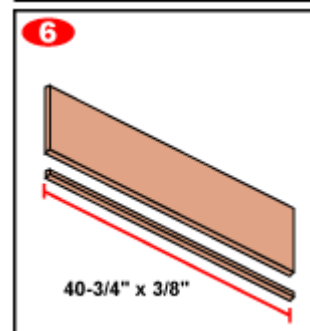
4. Cut the two side panels from the 3/4" oak veneer plywood, and the four side edge strips from the oak stock. Glue one edge strip onto each side of each side panel and clamp. When dry, sand the panels flush. On what will be the good side, round over the edges with a router. Leave the inner and the end edges square. Cut a rabbet on the lower surface, 1/4" wide, 3/8" deep.



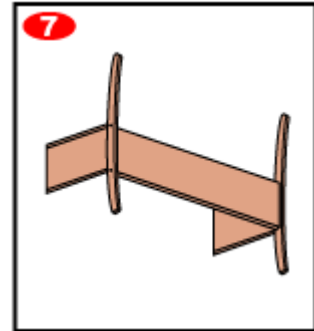
5. Cut the two rear legs from the oak stock, and shape them per the contour template. Sand the contours smooth, then glue and clamp each leg to its respective side panel and attach with screws. The distance between the bottom of the leg and the top edge of the rabbet should be 8 3/8". Countersink and plug the holes.



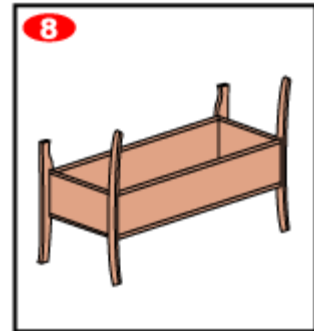
6. Now cut the rear panel from the oak veneer plywood and the rear edge strip from the solid oak stock. Glue the edge strip onto the edge of the panel and clamp. When dry, sand the panel flush and cut a rabbet 1/4" wide and 3/8" deep along the inner edge.



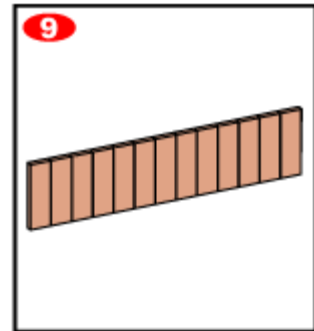
7. Clamp the completed back assembly between the two completed side assemblies. Note that the back is centered on the legs, leaving the legs protruding slightly at the back. Make sure the rabbets line up between the sides and the back. Pre-drill two screw holes on each end, offset from the existing screws. Countersink the screw holes. Unclamp the assembly, apply glue and screw it together.



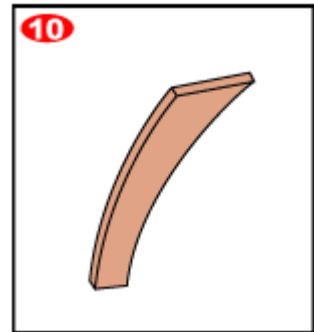
8. Clamp the completed front assembly into place on the side panels. Make sure the four legs rest evenly on the floor and that the assembly is straight and square. From the front, drill screw holes and countersinks, offsetting the holes from the existing screws. Unclamp, apply glue and fasten with screws. Note that the front edge is dropped 3/4" from all the other edges to allow the lid to sit flush with the sides.



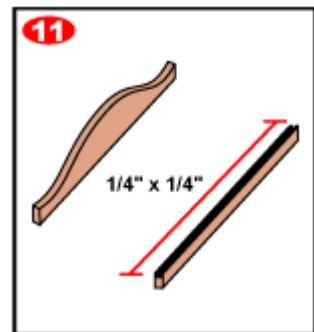
9. From the solid oak stock, cut back slats to a design created or create one of your own. Whichever pattern you use, use a jig saw or band saw to cut out the appropriate profiles.



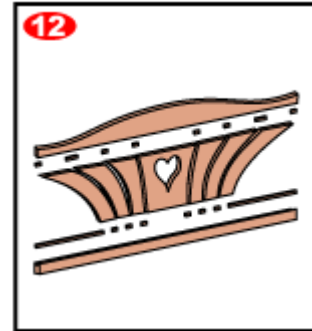
10. Using pipe or bar clamps, edge-glue stock to the required width to produce the center slat that fits your chosen design. Cut a 1/4" wide tenon on each end of every slat you'll use. Cut the tenon to a square shape, centered on the part, using a router table setup.



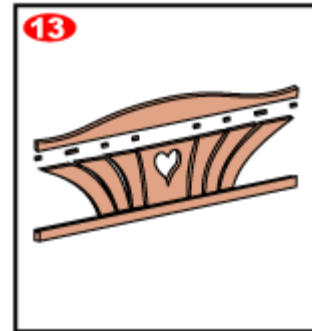
11. From the solid oak stock, cut the upper back rail and the lower back rail to size. Shape the upper back rail. Then set the blade angle on your table saw to 6-degrees and rip the lower edge of the lower rail to this angle. Sand the parts, and cut a 1/4" x 1/4" dado on one edge of the upper back rail and the opposite edge of the lower back rail.



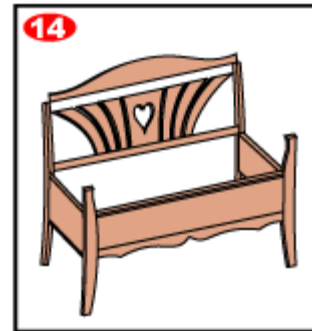
12. Rip strips of scrap oak 1/4" wide x 1/4" thick. Working on a flat tabletop, arrange the back parts into position by inserting the slats into the slots in the rails. Fill in the gaps between them with blocks cut from these strips. Glue the blocks, but the slats should be loose. The gaps between the parts should be 3/4". When the glue is dry, remove the slats and sand the edges of the rails, with the filler blocks, smooth. Round the edges slightly by sanding.



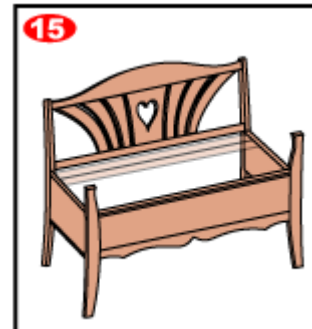
13. Glue and clamp the lower back rail into place on the top side of the back panel. Note that the lower back rail will angle backwards slightly and that the inner edge will overhang the back panel slightly. This won't show when the project is completed.



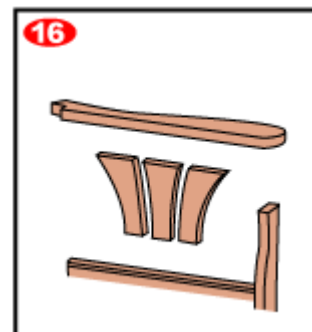
14. Place the top rail over the tenons of the back slats. You might have to support the outer slats with tape or clamps to keep them in proper position. Attach the top rail with glue and plugged screws. In the slot, fill the gaps between the slats with blocks cut to fit, as was done with the bottom rail. Again, glue the blocks, but not the slats themselves.



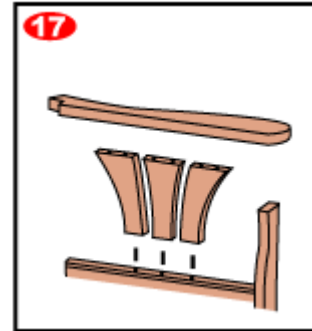
15. Cut the seat support to size from the 2X4. Position it 3/4" below the surface at the back of the seat, clamp it into place and attach it with glue and finishing nails.



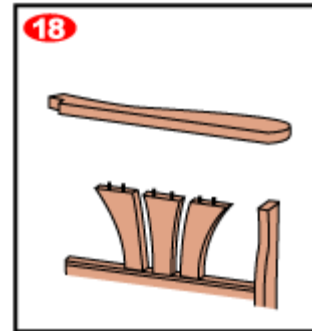
16. Cut out two center side slats from the oak stock, and four outer side slats. Then cut the arms, also from the oak stock. Shape them according to the contour diagram, sand and round over the edges with the router.



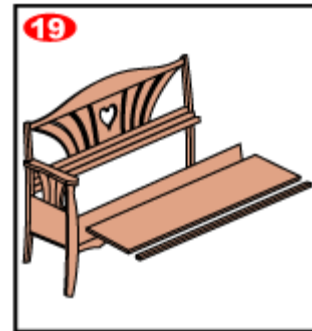
17. Drill 1/4" holes in the top and bottom edges of the side slats in order to assemble using 1/4" fluted dowels. Use dowel centers to transfer the dowel positions to mating parts. Apply glue to the bottom dowels and glue the side slats into position on the sides.



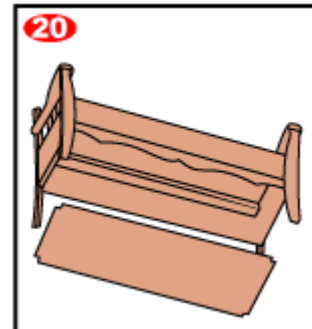
18. Apply glue to the top dowels and place the arms into position. Attach them with plugged 1-1/2" screws into the front legs and 1" screws in the back legs.



19. From the 3/4" plywood, cut the hinge strip to size and install it into position with glue and small finishing nails. Cut the lid from the oak veneer plywood and the lid edge strip to the same length and a width of 1 5/8". Edge-glue them together. When the glue is dry, transfer the profile from the template and cut the edge to shape. Sand the edge of the lid and round it over. Install the completed lid to the lid edge strip using a piano hinge.



20. Cut the bottom from your 1/4" plywood or hardboard to shape or to fit the rabbets in the bottom. Notch the corners as required to fit around the legs, and install using glue and small screws or finishing nails. Now simply go over the completed bench looking to fill screw holes or to give it a final sanding to perfection. Then you can stain, varnish or paint your Deacon's Bench as you wish.



SHOP LIST

Materials List

- Solid oak 1X6 (14 ft.)
- Solid oak 6" width by 3/8", 1/2" or 3/4" thicknesses (8 ft.)
- 1/4" Plywood or hardboard (1/4 sheet)
- 2X4, construction grade (4ft.)
- Brass or stainless piano hinge, 3/4" width (40 5/8")
- (24) Brass or stainless screws to fit piano hinge
- Lid stay (optional)
- (6) 2 1/2" finishing nails
- (20) 2" #8 screws
- (2) 1 1/2" #8 scrws
- (2) 1" #8 screws

(24) 1-1/2" finishing nails
(18) 1/4" fluted dowels
Glue

Tools List

Jigsaw or Bandsaw
Drill or drill press
Sander
Pipe or bar clamps
Table saw
Router
Basic hand tools