# Build A Classic Porch Glider w/PM Plans

**Get in the swing of things with a classic porch glider.**

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You might think relaxation equates with keeping still. Yet, the popularity of everything from cradles to porch swings proves otherwise. The fact is, a gentle, undulating motion is soothing to most of us, regardless of our age. People like to keep on the move--even when they're not actually going anywhere.

A glider is something between a rocker and a swing. It's essentially a bench that's suspended from its base at each end by a pair of armlike brackets. The brackets have ball bearings at their ends to allow the bench to swing forward and backward a few inches. While you could convert an old bench to a glider, building one from scratch is a lot more satisfying. Our mahogany version is elegant enough for the most upscale porch or patio, and it's sure to become a favorite on warm summer afternoons at your house.

**PROJECT NOTES**

**MATERIAL:** Mahogany
**OUR COST:** About $500
**TOOLS WE USED:** Band saw, drill/driver, drill press, jigsaw, jointer, plunge router, router table, table saw, thickness planer

**TOOLS AND MATERIALS**

This is a sophisticated project that incorporates six wood thicknesses ranging from 3/8 to 1-3/4 in.--sizes you're not likely to find stocked at any dealer. The best approach is to buy rough lumber and use a jointer and thickness planer to bring the material to size. A band saw is invaluable for resawing thick pieces to get the most from them before planing. If you don't have the machinery, your dealer may be able to mill your stock to thickness, or a local cabinet shop might do the job.

We used a table saw to cut the tenons and, where possible, made fast work of the mortises with a plunge router. Where the router was less suited to the job, we roughed out the joints on a drill press. For each mortise, we bored a series of holes with a Forstner bit, then cleaned up the sides with a chisel.

While you could choose a clear sealer for your glider, we finished ours with three coats of spar varnish--a high-gloss finish that stands up well to the elements and screens UV light to help prevent fading. Sand between each coat and clean the wood with a tack rag after sanding to remove all dust.

Finally, smooth the last coat with 4/0 steel wool to reduce the gloss to a satin finish.

**A. SEAT SUPPORTS**

Begin by using templates to lay out the shapes of the back stiles and seat supports **(1)**. Then, while the pieces are still square, cut the joints at the ends. Use a table saw and dado blade to make the half-lap joints, allowing the fence to act as a stop to ensure consistent cuts **(2)**. To cut the short tenons, clamp scrap stock to the fence and raise the blade into it the correct amount for the cut **(3)**. With the tenons and half-lap joints made, finish the shapes of the seat supports and back stiles by cutting to the layout lines with a band saw **(4)**. Use a spokeshave to smooth the sawn surfaces.

Install an edge guide on a plunge router and rout the back-rail mortises in the back stiles **(5)**. (Don't cut the seat-rail mortises yet.) Then, square the mortise ends with a chisel **(6)**.

Spread glue on the half-lap joints--a glue designed for exterior use, like Titebond II, is best. Bring each seat-support/back-stile assembly tightly together and clamp **(7)**. When the glue has completely cured--overnight is best--it's time to cut the seat-rail mortises. Install a 1/2-in.-dia. bit in a drill press and use it to remove most of the mortise waste **(8)**. Then, clean up the walls of the mortise with a chisel.

Mark the chamfer at the top of each back stile and trim to the line with a chisel.

Cut the seat and back rails to size, and use a table saw and dado blade to shape the tenons. Move back to the drill press and rough out the mortises for the seat supports, then pare the mortise sides smooth with a sharp chisel.



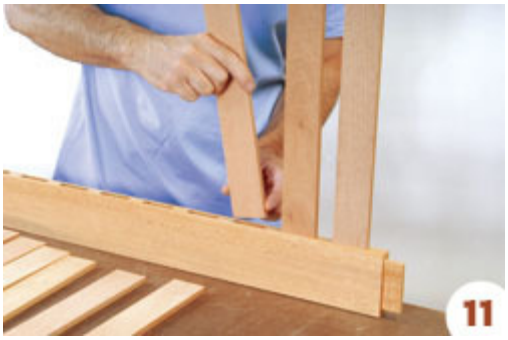





**B. BACK ASSEMBLY**

Mark the slat mortise locations in the two back rails. Clamp the rails together with the edges flush to provide a stable base for the router. Then rout the slat mortises **(9)** and square their ends with a chisel. Lay out the stepped profile of the top rail, use a jigsaw to make the cuts and smooth the edges with a file or sandpaper **(10)**. Cut the slats to size and sand all the parts before assembly. Insert the slats in the bottom back rail **(11)**. You don't need glue, but if a slat is too loose, use a drop to prevent rattling. Then, fit the top rail over the slats. It's a good idea to have a helper for this since it's difficult to support the assembly while positioning each slat. With the slats in place, apply glue to the back-stile mortises and back-rail tenons for one side, slide those joints together and clamp **(12)**. Then add the rear seat rail. When the glue has set, remove the clamps and join the other back stile/seat support to the assembly.



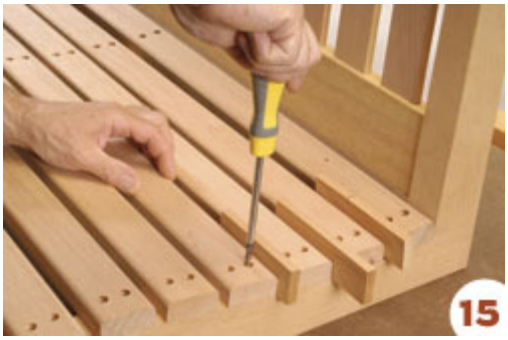




**C. FINISHING THE SEAT**

Apply glue to the seat-support mortise-and-tenon joints, assemble the pieces and clamp **(13)**. Prepare 3/4-in.-thick stock for the seat slats. Use a 3/8-in. quarter-round bit in a router table to shape the top edges of each slat **(14)**. Bore the slat screwholes and plug counterbores on a drill press. Lay out seat slat spacing on the end seat supports and cut spacers to temporarily position the slats while you drive the screws **(15)**. Make the plugs on your drill press with a plug cutter, glue each plug in place and trim them flush with a chisel. With the seat built, prepare the pieces for the bench sides, cut the joints and assemble as described for the seat. Place one of the side frames on your worktable and position the seat on it. Bore screw-holes, attach the seat to the side and then secure the other side **(16)**. Use a jigsaw to cut the arms from 1-in. stock. Install the arms with screws and plug the holes.







**D. BASE AND HARDWARE**
The base is built from heavier stock to provide more weight and increase stability. If you can't find thick lumber, laminate the pieces from thinner wood. Cut the mortise-and-tenon joints as described in Step A, saw the curved profiles and assemble the base. Bore the 1/4-in.-dia. bolt holes and install the glider brackets **(17)**. Then, position the bench over the base with 3/4-in. spacers under the bench legs, and bolt the brackets to the bench **(18)**.



Click here for pdf version of the porch glider plans

**MATERIALS LIST**

| KEY | QTY. | SIZE | DESCRIPTION |
|---|---|---|---|
| A | 2 | 1-3/4 x 3 x 19-1/16" | mahogany (seat support, outer) |
| B | 2 | 1-3/4 x 3 x 17-1/2" | mahogany (seat support, center) |
| C | 2 | 1-3/4 x 4-1/8 x 31-1/4" | mahogany (back stile) |
| D | 1 | 3/4 x 5 x 58-1/2" | mahogany (back top rail) |
| E | 1 | 3/4 x 3-1/2 x 58-1/2" | mahogany (back bottom rail) |
| F | 1 | 1 x 3-3/8 x 60" | mahogany (front seat rail) |
| G | 1 | 1 x 2-1/8 x 58-1/2" | mahogany (back seat rail) |
| H | 1 | 3/8 x 6-1/2 x 21-1/4" | mahogany (back slat) |
| I | 16 | 3/8 x 2 x 21-1/4" | mahogany (back slat) |
| J | 8 | 3/4 x 1-3/4 x 60" | mahogany (seat slat) |
| K | 4 | 1-3/8 x 3-1/2 x 21-3/4" | mahogany (side leg) |
| L | 2 | 3/4 x 2 x 16-1/2" | mahogany (side top rail) |
| M | 2 | 3/4 x 3-1/4 x 16-1/2" | mahogany (side bottom rail) |
| N | 2 | 3/8 x 5-3/4 x 16" | mahogany (side panel) |
| O | 2 | 1 x 5 x 23-1/2" | mahogany (arm) |
| P | 2 | 2 x 2-1/2 x 21-1/2" | mahogany (base foot) |
| Q | 4 | 1-3/4 x 2 x 9" | mahogany (base stile) |
| R | 2 | 1-1/2 x 3-1/4 x 18" | mahogany (base rail) |
| S | 2 | 1-3/4 x 2-3/4 x 56-1/4" | mahogany (base stretcher) |
| T1 | 4 | 1/4 x 2" | carriage bolt, washer, nut* |
| T2 | 4 | 1/4 x 2-1/2" | carriage bolt, washer, nut* |
| U | 64 | 1-5/8" No. 8 | deck screw* |
| V | 10 | 2-1/2" No. 8 | deck screw* |
| W | as reqd. | 3/8"-dia. | wooden plug |
| X | 1 set | | glider brackets** |

**Misc.:** Waterproof glue; sandpaper; spar varnish; steel wool.* Galvanized hardware. **
No. 58330 available from Rockler Woodworking and Hardware, 800-279-4441;
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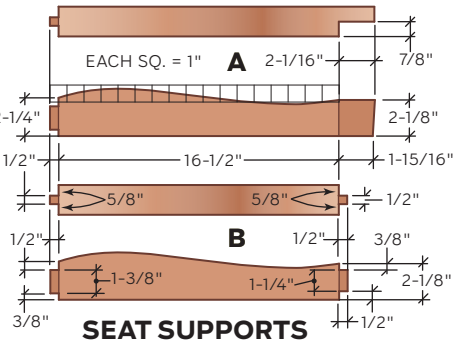
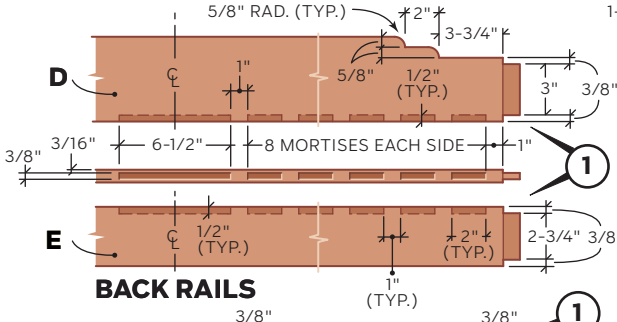
# MAHOGANY GLIDER

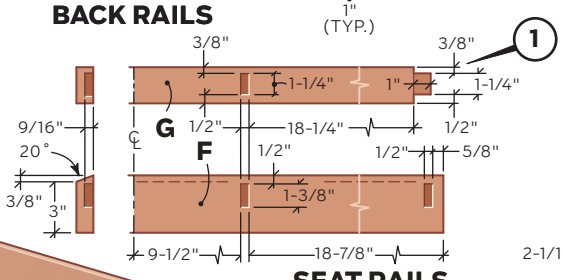
26" DEEP X 44" HIGH X 66-3/4" WIDE



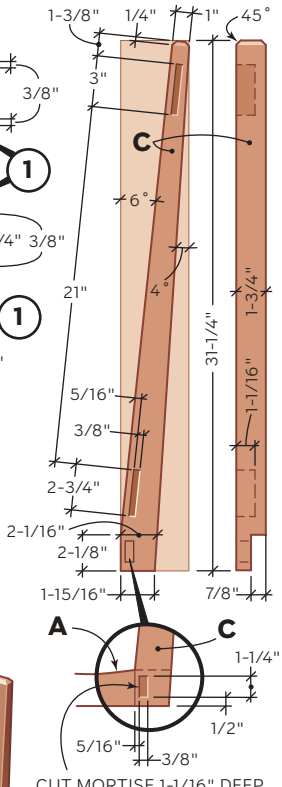

## SEAT SUPPORTS




## BACK RAILS

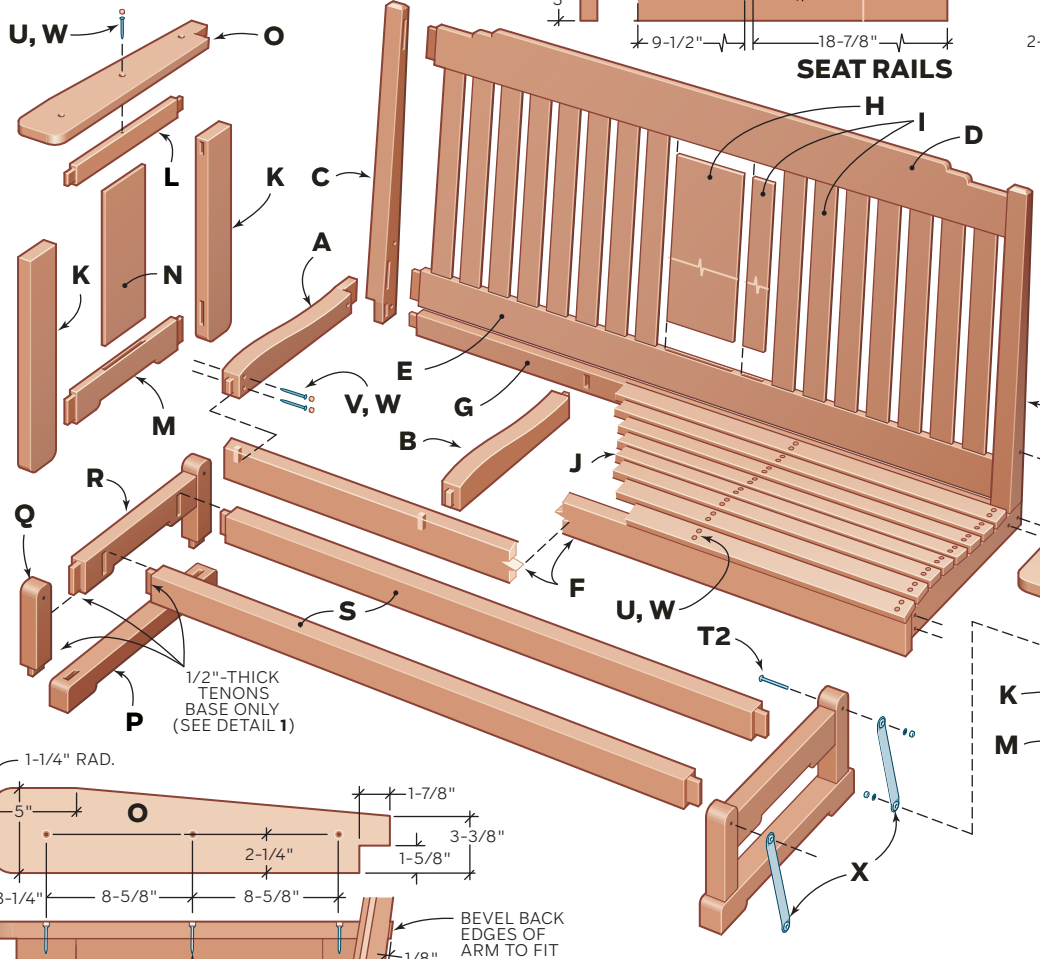


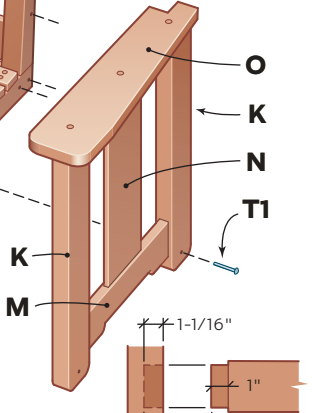

## SEAT RAILS

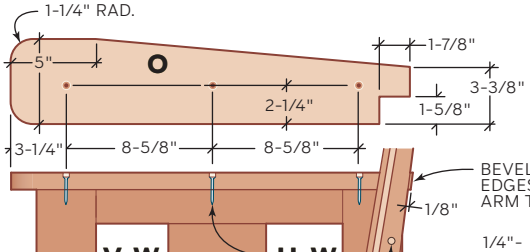


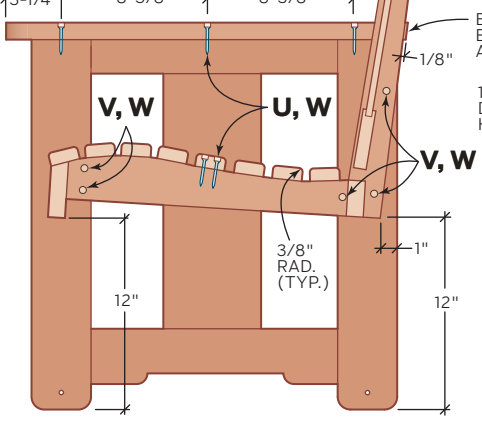

CUT MORTISE 1-1/16" DEEP AFTER ATTACHING STILE TO OUTER SEAT SUPPORT

## STILE—C

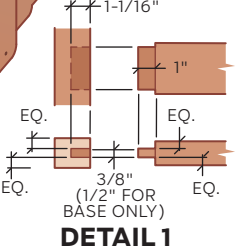


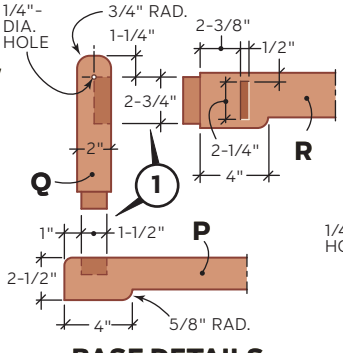



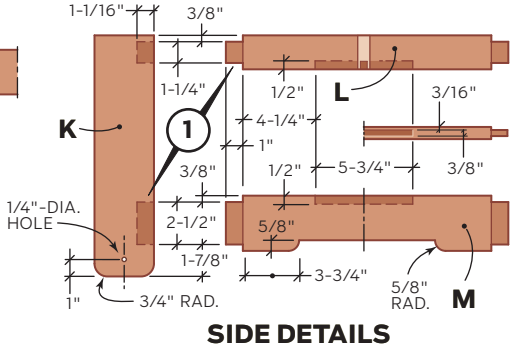

## SECTION VIEW




## DETAIL 1




## BASE DETAILS




## SIDE DETAILS