

**Gift
Project**

Tile-topped Plant Stand



By Rob Johnstone

Curved lines and quarter-sawn grain combine to make this little plant stand a pretty piece. The ceramic tile top resists water and adds an attractive accent to the dark dyed wood.

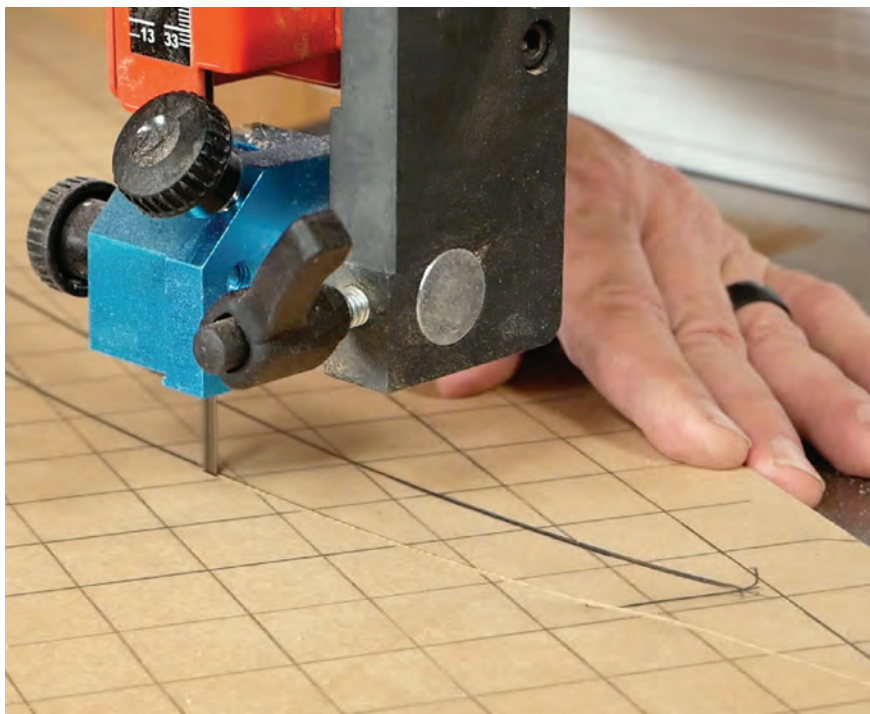
Plant stands are a very popular project and have been made in all manner of shapes and sizes. This elegant little version uses white oak that we colored with some Mission brown dye, and I think it turned out great. It was a fun shop workout. If you've got a band saw and a router table in your shop, those will be your go-to machines to get this project made.

Prepping Materials

The stock for this project needs to end up a full 1" thick. We always recommend that you get it in your shop and let it acclimate to your space. You are going to want to start with 5/4 rough stock and machine it to the one inch dimension.

With that done, set the oak aside for now, and grab some material to make templates — we used 3/8" MDF, but 1/4" MDF or hardboard would likely work just as well.

Use the gridded drawing provided on page 35 to draw the leg to full size and create a template. Cut it out carefully on the band saw and then refine the shape by sanding, either with a machine or by hand. (We used a spindle sander.) Use your template to transfer the leg shape onto four workpieces, then rough-cut



After laying out the shape of the leg onto 3/8" MDF, the next step is to carefully cut out the template using a band saw. Cut close to the line, but leave a small bit of material outside the line so you can refine the shape exactly by sanding. A spindle sander is a great tool for this task. You can also refine it with a drill press and sanding drums or by hand sanding.

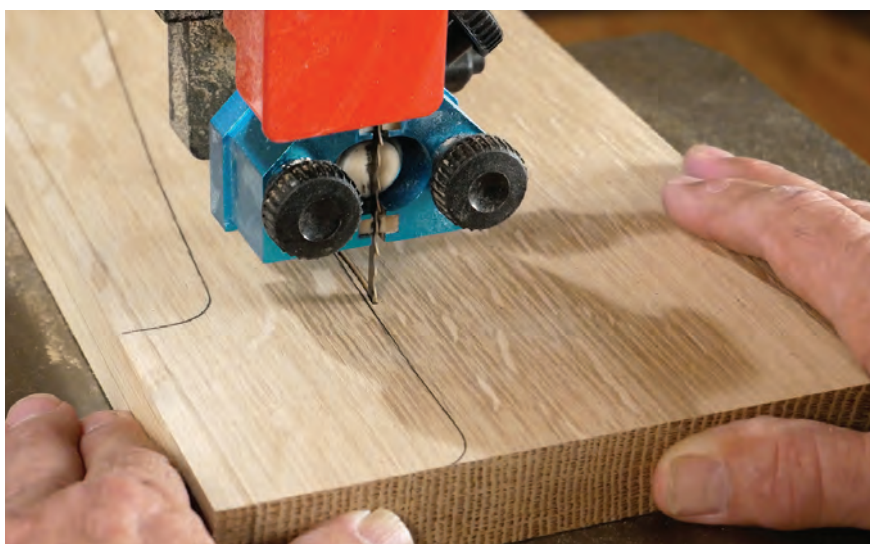
them with a band saw. Make the cut just outside the line on the legs; the less material the router bit needs to remove, the better the cut will look.

Template Routing for Accuracy

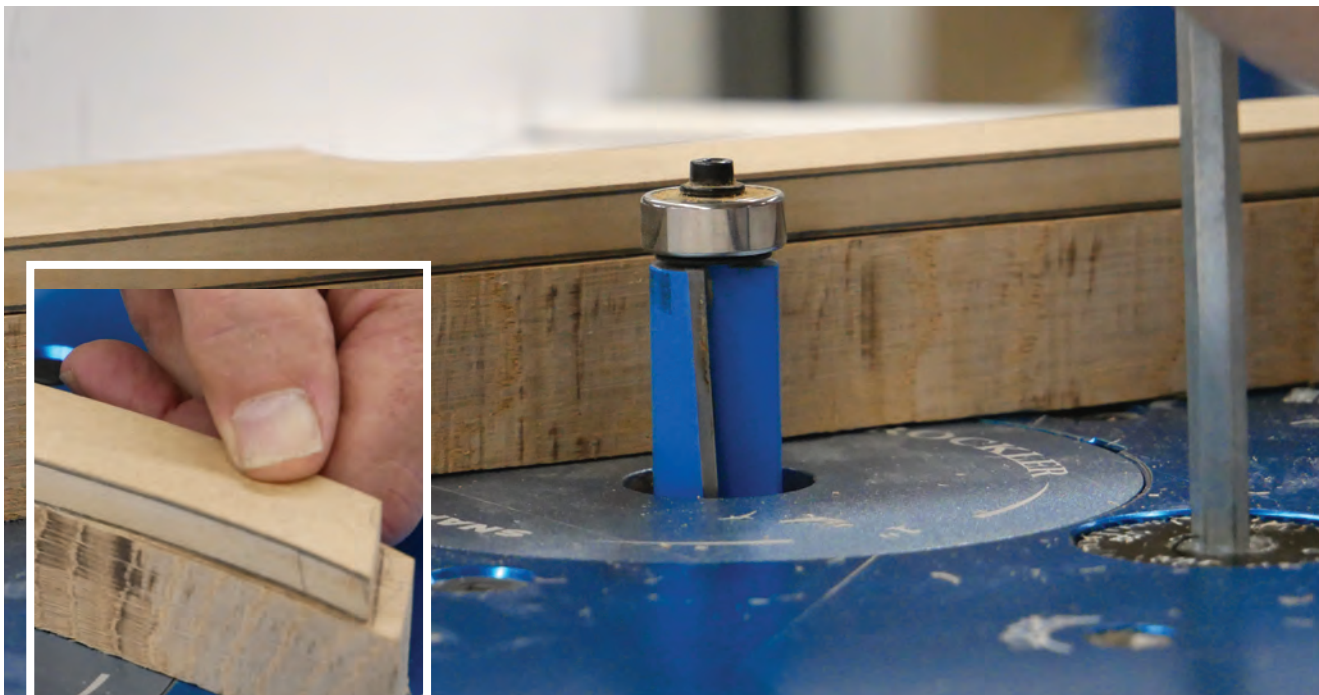
Now you can template-route the legs to their final shape. The template you used earlier to transfer the shape to the leg blanks will now be employed to guide a router bit. I attached the template to each leg cut out with double-sided tape.

Next, I chucked a flush-trim bit into the router table and set the depth to align the guide bearing with the template. The bearing will guide the router bit to shape the leg so it matches the template exactly. Engage the bit against the hardwood carefully and keep it moving steadily to prevent burn marks.

But here is an important point: don't use the router to shape the bottom narrow ends of the legs — the danger of tearout is too great (photos, next page).



After transferring the leg shapes to the hardwood by marking around the template, cut out the legs, again using the band saw. Leave just a small amount of material to remove with a router.



*Template routing is a great way to get perfectly matching parts. Attach the template to the roughed-out leg blank with double-sided tape. Then, using a bearing-guided bit, cut away the excess stock. **NOTE:** Don't try to rout away the stock at the end of the leg (inset) — tearout will likely occur.*

Forming the Center Column

With the legs done for now, we need to move on to the center columns. These are small interlocking pieces of stock that will eventually join the legs together. That begins by cutting half-lap joints in them. Forming those joints is a multi-step process. First, mark the joints carefully — the goal is that they will just slip together when assembled. Remove most of the waste with a band saw.

Then step to your router table and, with a 1/2"-diameter straight bit that has 2" cutting edges, remove the remaining stock, testing the fit on scrap wood. To do this accurately and safely,

I used a miter gauge with a sacrificial fence attached and a stop block. Clamping the pieces to the sacrificial fence kept my fingers clear of the outer bit as the stock was removed. Raise the bit in sequential cuts to make the task more controllable.

The last bit of machining involves drilling out mortises for Beadlock® loose tenons. The Beadlock system forms rock-solid joints. Making these mortises involves simply drilling a series of holes, and the system is very affordable. But, other types of loose tenons or doweling systems will also work.

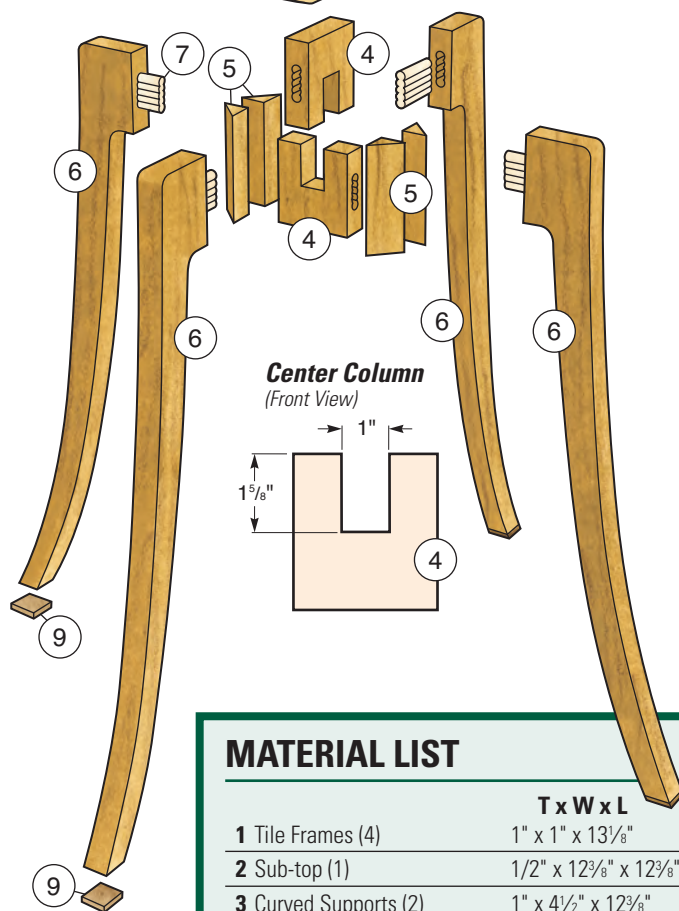
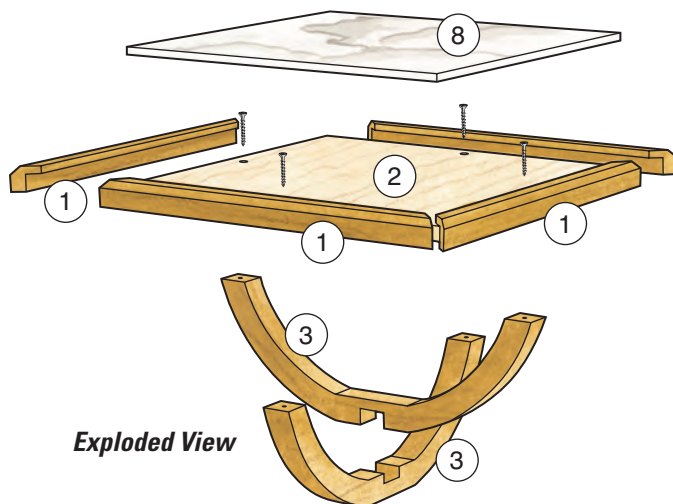
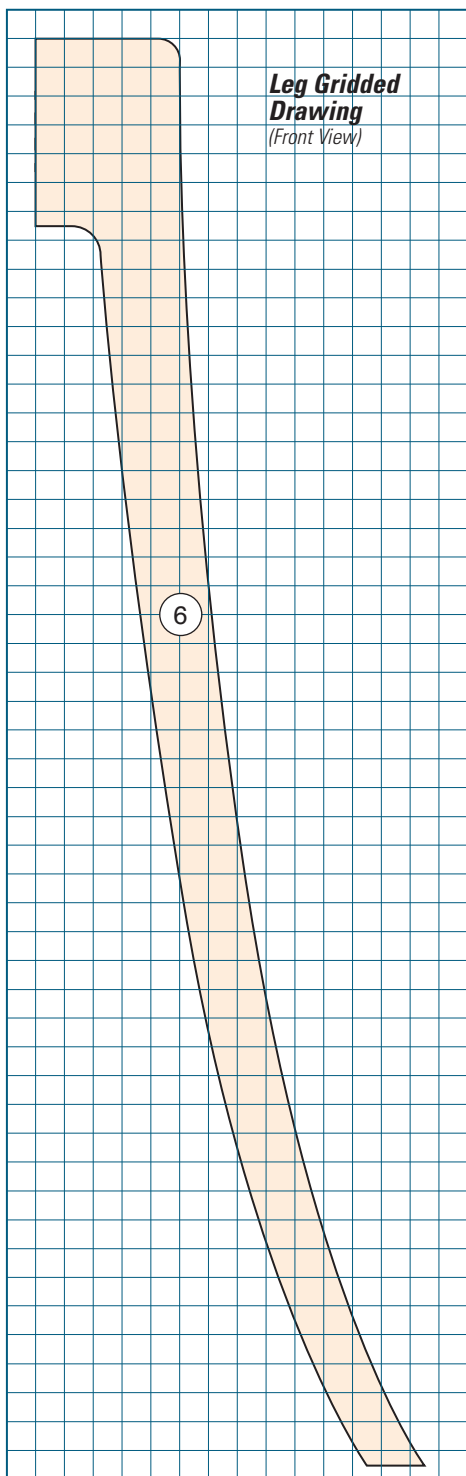
Now sand the legs smooth to get them ready for adding color in a short while. Glue and join each center column to a pair of legs with tenons inserted to form two flat leg subassemblies.



The lap joint on the center column pieces are started on the band saw but completed on the router table.

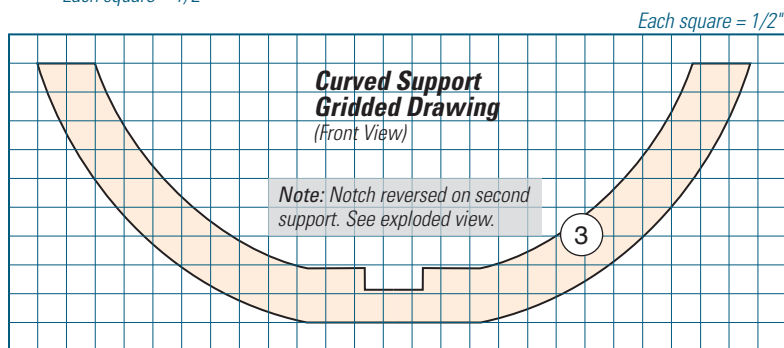


Beadlock loose tenons are a great way to make rock solid joints. In this case, the legs are glued to the center columns using the Beadlock system. Be sure to orient one center column piece with the notch pointing "down" (see photo, far left) and the other pointing "up" so the columns will interlock.



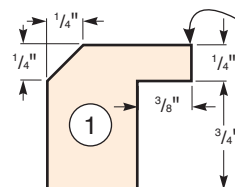
MATERIAL LIST

	T x W x L
1 Tile Frames (4)	1" x 1" x 13 ¹ / ₈ "
2 Sub-top (1)	1/2" x 12 ³ / ₈ " x 12 ³ / ₈ "
3 Curved Supports (2)	1" x 4 ¹ / ₂ " x 12 ³ / ₈ "
4 Center Columns (2)	1" x 3" x 3 ¹ / ₄ "
5 Center Column Accents (4)	1" x 1" x 4 ³ / ₁₆ "
6 Legs (4)	1" x 6 ³ / ₄ " x 24 ³ / ₄ "
7 Beadlock Tenons (4)	3/8" x 1 ³ / ₈ " x 2"
8 Tile (1)	1/4" x 11 ⁵ / ₈ " x 11 ⁵ / ₈ "
9 Feet (4)	1/8" x 1" x 1"

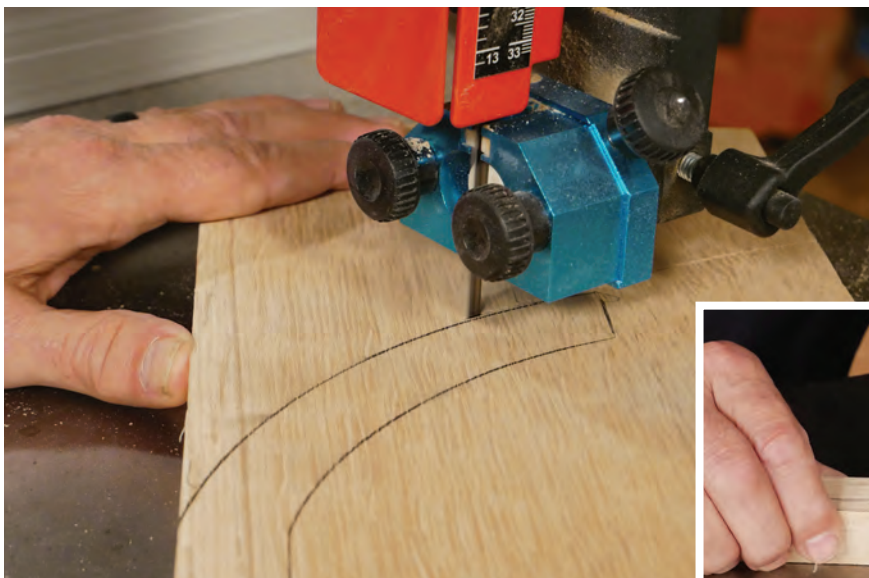


Tile Frame

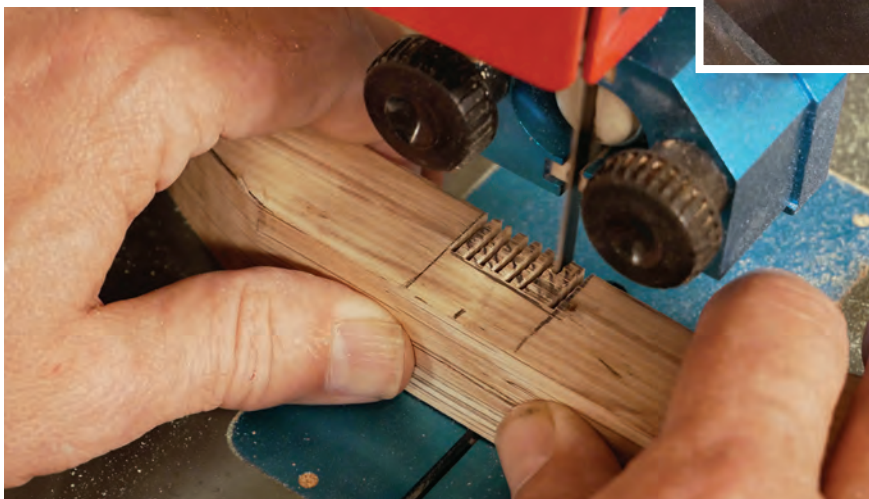
(End View)



Note: The inner edge of the frame can be cut back to accommodate a larger tile.



Making the curved supports was a three-step process. First, cut them out of the hardwood stock at the band saw (above). Then refine their shape using a spindle sander (right). Finally, form the half-lap joints (below). The joints were cut on the band saw and then refined with a sharp chisel



Making the Curved Supports

I once again used a template to help make the curved supports identical, just as I did with the legs. But in this case I did not use it to template-route the final shape. In my opinion, the pieces are too narrow and could break during that

process, which would not be good. Once I had the template ready, I transferred its shape to the white oak lumber and cut the two curved supports out at the band saw. I then refined them to their final shapes on a spindle sander.



Ceramic tile can vary a bit in terms of its exact dimensions. To accommodate that variation, you can adjust the rabbet on the tile frame moldings to suit the tile. Take the time to measure carefully before cutting the sub-base and moldings to final size

MORE ON THE WEB



For a video of building this plant stand and using dye to color the wood, please visit woodworkersjournal.com and click on "More on the Web" under the Magazine tab.



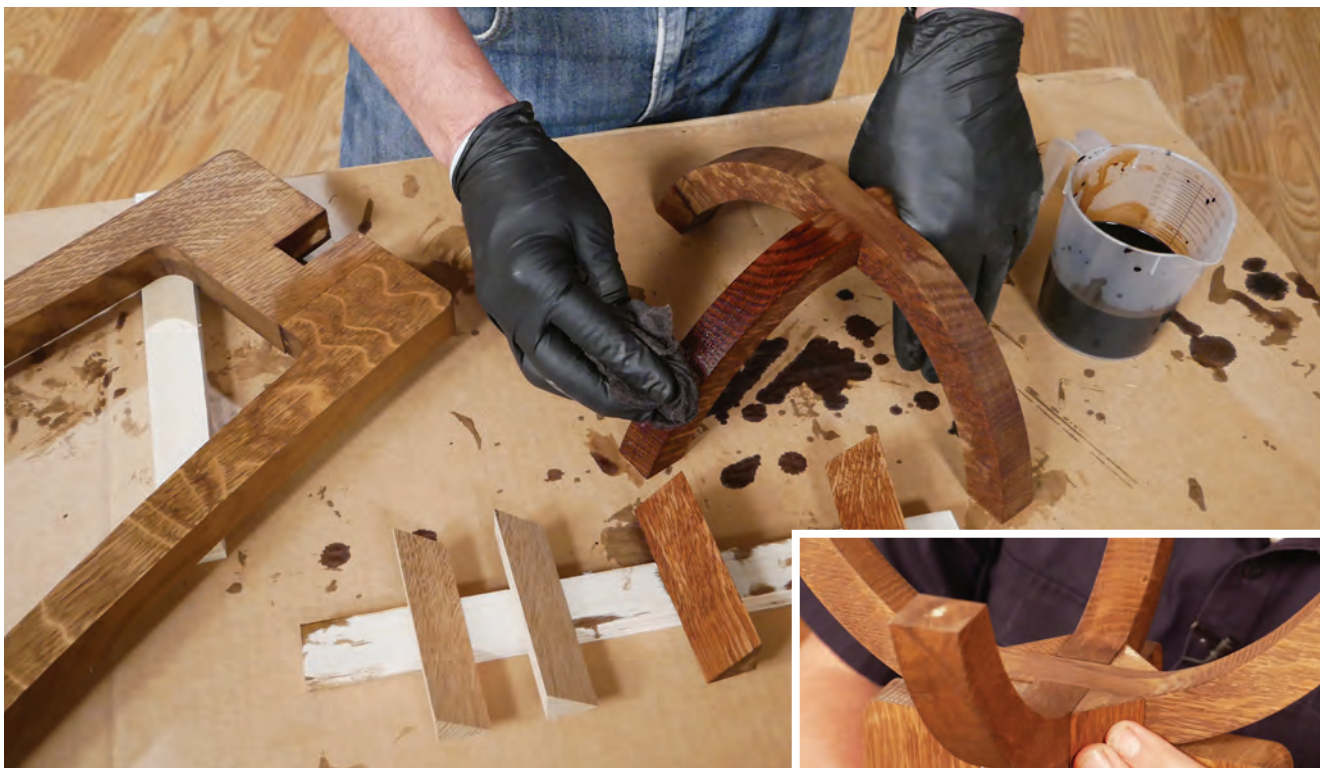
When I was happy with them, I formed the half-lap joints (see the *Drawings* and the photo at left) in the curved supports by making a series of side-by-side cuts on the band saw, then chiseling the remaining waste away. I tested the fit of the joint and used the chisel to pare away stock until the half lap was perfect. Final-sand the supports and set them aside with the leg subassemblies.

The next pieces to complete are the four frame moldings that surround the sub-top and tile. I made these, including the rabbet, on the table saw and then formed their bevels on the router table with a chamfering bit. You may need to adjust the rabbet to properly accommodate the tile you are using for the top.

Next, I cut the small triangular-shaped center column accents and sanded them smooth. Finish-sand all the other parts to prepare them for the colored dye.

Dye Before Glue

Why use dye rather than pigment stain? The biggest reason is that you can add all the color you want but without having to mask off the glue joints. (You can glue dyed wood together as if it were raw wood — so handy!) The other reason is that I like the color control that dye affords ... the hues are essentially infinite. Here I used TransTint® Dark Mission Brown (Rockler item 27419).



White oak looks great with a Mission oak dye applied, evoking an Arts & Crafts classic finish. By using dye rather than a traditional stain, the parts can be colored first and the glued and clamped together. It's a real advantage for this specific project, as there are many small parts that need to be fitted together and colored (inset)

Quick & Thick glue from Titebond® works well on this project for a couple of reasons. First, its quick tack and drying quality really help in these specific glue-ups, especially with the column accents. Second, it works great with multiple materials, like the ceramic tile, wood and MDF that we are using on the top of the stand. As I mentioned, I glued these dyed pieces together without a hitch. The last thing to do was to glue some small pieces of hardboard to the legs of the stand. They will help to keep the short grain on the corners of the legs from chipping off, and they create nice little feet.

Finishing Up

With all that done, I buffed the piece down with a grey synthetic pad to remove any raised grain the water-based dye created when I flooded it on. Then I used an aerosol can of shellac to apply two seal coats of clear finish. Shellac is an easy-to-use product that will build up a film coat quickly. I followed that with a final coat of satin lacquer from a spray can as well — rattle can finishes are so easy to use.

Grabbing the Quick & Thick glue again, I secured the ceramic tile to the sub-top and the project was done! All that was left to do was to find a nice plant.



Glue a small hardwood "foot" to the bottom of each leg (above) to protect the short grain. Titebond's Quick & Thick glue, which works well on dissimilar surfaces, is a good choice for attaching the ceramic tile to the MDF sub-top (below).



Rob Johnstone is publisher of Woodworker's Journal.