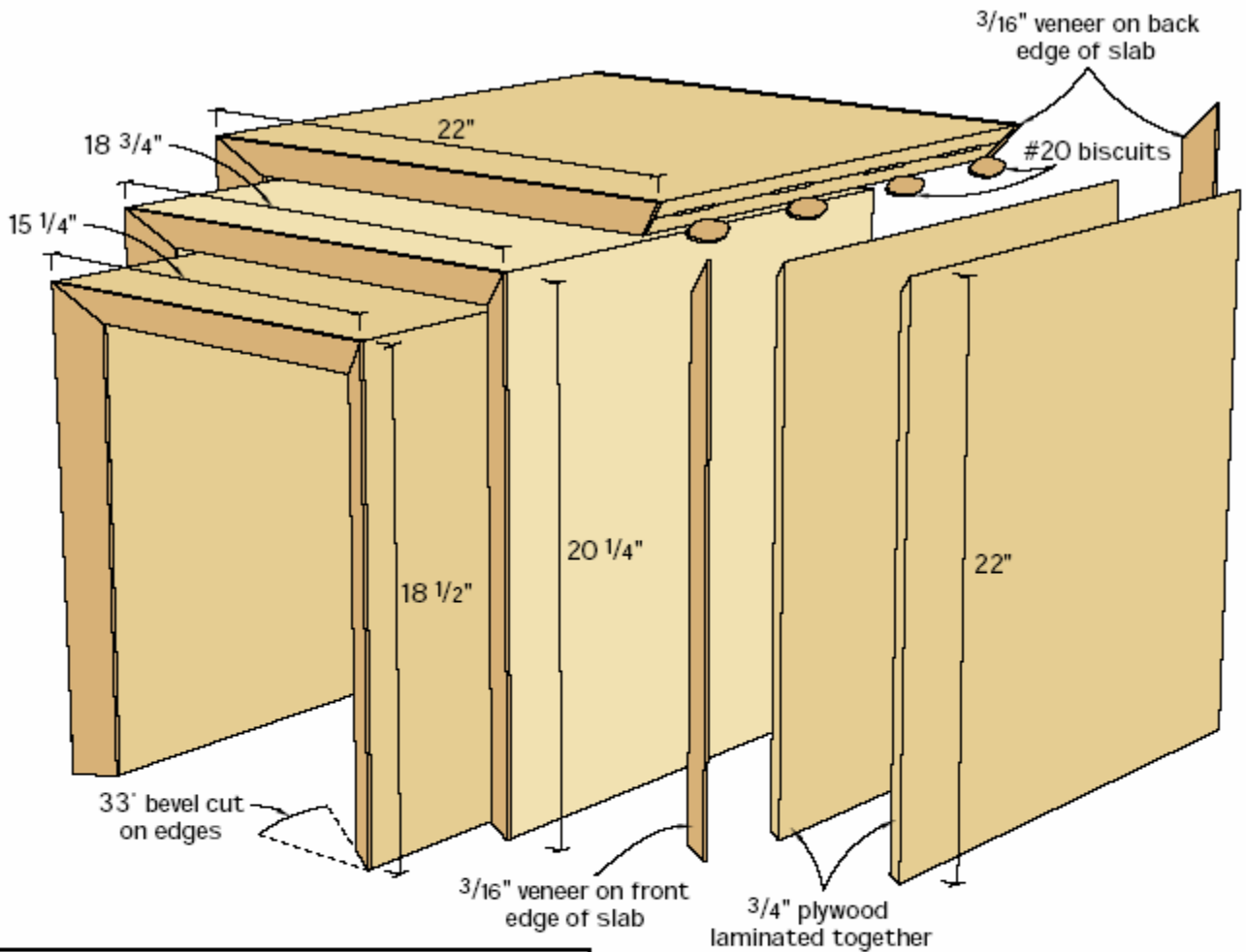


87

# NESTING TABLES





**Nesting Tables**

No.	Item	Dimensions T W L	Material
4	Sides*	3/4" x 22" x 22"	Birch ply
2	Tops*	3/4" x 22" x 22"	Birch ply
4	Sides*	3/4" x 21" x 20 1/4"	Birch ply
2	Tops*	3/4" x 21" x 18 3/4"	Birch ply
4	Sides*	3/4" x 20" x 18 1/2"	Birch ply
2	Tops*	3/4" x 20" x 15 1/4"	Birch ply
6	Veneer edges	3/16" x 2" x 96"	Birch/Maple

\*Sizes are of finished components, not cutting sizes.

## Make a Slab

Start the tables by ripping three sheets of plywood in half to just under 24" in width. You won't need all that width, but it will come in handy later. As for the lengths, using the full 96" is a little wasteful, but it makes gluing the two halves together easier.

After ripping the sheets, determine which three faces are most attractive and mark these as the outsides of the tables. Next glue the pairs together. To keep the sheets from sliding around during glue-up, pound a nail into each slab



Glue up the Slabs • Spacers underneath the slab allow the solid wood edging to hang over to evenly cover the edges. It doesn't take a lot of pressure to clamp the

about 1" from the ends. These ends will be cut off anyway, and it makes glue-up much easier. Stack the three pairs together, then clamp across the stack using stout wood braces to spread the pressure.

After the glue is dry, square off one end of each slab. Then cut the slabs to 68", 62-½" and 55" in length. Don't pitch the fall-off pieces, they'll be useful later. Next rip each slab to 23" wide to give you one flat edge. You could run one edge over a jointer, but the adhesive in plywood is murder on high speed steel knives. When you have one square edge, set the table saw's blade to bevel at 33° and rip the three slabs to 21-5/8", 20-5/8" and 19-5/8" wide respectively. Again, save the fall-off.

## Homemade Veneer

You're now ready to run some solid lumber to cover the plywood edges. I used soft maple edging on my birch ply tables.

Run out six lengths of 3/16"-thick solid wood for the edges. To plane wood that thin, you probably will have to put an extra board over the bed of your planer — most planers aren't designed for wood that thin.

With the strips ready, it's time to glue them to the slabs. Go find the fall-off from the bevel cuts and grab a couple other sturdy solid strips. Use the fall-off as a caul for clamping. By gluing the edges on the slabs with the bevel facing up, gravity is on your side. I also cheated a little by tacking the edge strips in place with a few small brads at either end. Once again, the extra inch in length will be cut off, so the nail holes won't show.

Glue the edging to the three slabs, then trim the edging flush to the plywood. I used a router with a flush-cutting bit for the back edges, and I used a jack plane to get the beveled edges nearly flush. Then I used a random orbit sander to flush the edges perfectly. To soften the edges I used some 120 grit paper and a block of wood to round over the sharp edges.

## Make Your Miters

The tables slip inside one another with a ¼" gap between each, so accurate cutting and spacing is important. To make the mitered corners and still maintain the grain pattern on the table tops, first crosscut the three slabs into three parts. Use the table saw with the blade set to 90°. Start by marking the middle of each slab and cut the top section from the middle of each slab, allowing the excess length to remain on the leg sections.

You're now ready to do the precision cutting, and you'll see quickly why a sharp blade is important. Start with the largest top (22" x 22") and set the blade bevel to exactly 45° and the rip fence to cut the miter exactly to the width of the top. If you have a left-beveling table saw you're in luck as the inside of the table is on the tearout side. If you have a right tilt, that sharp blade is important. Make the first bevel cut on one end, then spin the top and make the cut on the opposite end. Again, with a right tilt you have the extra difficulty of the first miter trying to slide under the rip fence. Adjust your cut for any variance and consider adding an auxiliary fence that fits tight to the table surface. Repeat this with all three tops.

You're now ready to make the miter cuts on the legs. Start with the 22"-high legs and work through the 20¼"- and 18½"-high legs, checking the spacing between the tables by "dry-nesting" as you go.

edges, and too much pressure will force the front edge caul to slide.



Center-cut Slab • The first miter cut on the center slab (on a right-tilt saw) will balance the fall-off piece on the blade. Be aware of possible kickback of the scrap piece.



Disappearing Miter Trick • Unless your rip fence is tight to the saw table, the miter will have a tendency to slide under the fence during the second cut (on right tilt saws). Recheck your measurements to accommodate this, or add a tight-fitting auxiliary fence to the standard rip fence.



A Little to the Left • Enough clamps and careful adjustment during glue-up will ensure tight miters and an evenly spaced opening from top to bottom.

## Assembly

The hard part is done. The rest is biscuits and clamps. I used four #20 biscuits for each miter joint. With the biscuits cut, the fall-off pieces from cutting the slabs to length come into play. You'll stick them between the legs while gluing up the miters. It makes glue-up much easier. First check the internal dimension between the miters on each table top. Try to be as exact as possible, then cut spacers from the fall-off pieces for each table. Finish sand the interior faces of each table and the beveled front edge of each piece before assembly. Put glue on the miters and biscuits and glue the tables. Pay careful attention to the miter joint where the top and legs join. Unlike the hardwood edging, you only have about 1/16" of veneer to sand to match the joint.

With the tables assembled sand the outer faces, paying extra care with the mitered joint. You're now ready to finish. I chose to simply add a few coats of clear finish to the tables, but any number of stains to match an existing decor will work well.