

Enliven surfaces with parquetry

DIAMOND AND HERRINGBONE VENEER PATTERNS ADD PIZZAZZ TO FURNITURE

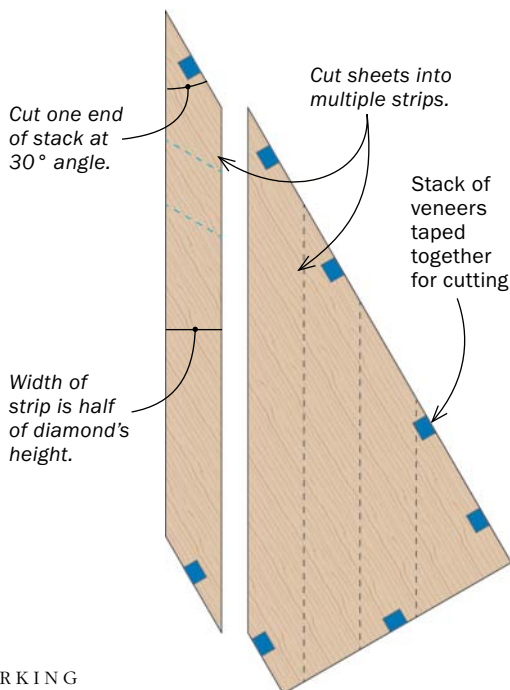
BY CRAIG THIBODEAU

While working on an entertainment cabinet decorated with hundreds of veneer diamonds, I needed a quick, accurate way to cut them. The technique I arrived at requires few tools and works with almost any veneer. I start with a stack of veneers in two contrasting colors. Making a series of diagonal cuts, I create a set of parallel-sided strips with angled grain. I tape those strips together side by side, alternating dark and light. Then I cut this taped sheet on the opposite diagonal, producing strips of diamonds with the grain running perfectly from tip to tip. I tape the strips of diamonds together to make the final design. I use a similar technique to create a herringbone pattern of zigzagging stripes (see p. 86). These two patterns are only slightly more challenging than the chessboard I made

Diamond pattern

Carefully controlled angled cuts help create dynamic geometric parquetry patterns that add visual intensity to pieces like Thibodeau's cabinet (left).

START WITH THE STRIPS



Angled edge goes against the stop. This ensures that the grain will run vertically in each diamond.



CREATE THE DIAMONDS

Tape together a pattern of alternating strips, then crosscut it at an angle to yield strips of diamonds.

in *FWW* #219 ("A Chessboard Made Easy"). See that article for an explanation of how to glue up and trim a marquetry panel.

Getting started

To cut the diamonds, you'll need a veneer saw and a plywood cutting board about 12 in. wide by 24 in. long, with a stop glued to one long side. You'll also need a cutting guide—a length of $\frac{3}{4}$ -in.-thick hardwood with straight, parallel sides, and sandpaper glued to the bottom for a firm grip on the work.

Lay out the pattern so the tips of the diamonds in the outside rows fall right at the panel's edges. The pattern can grow or shrink a bit during cutting and assembly, so it's best to start by making the diamond panels and adjust the rest of the piece to fit.

For an attractive pattern that is practical to make, I like diamonds with 60° points. Start by deciding how tall you want the diamonds. For 60° diamonds, make the cutting guide's width half the height of the diamond. The width of each finished diamond will be 0.5775 times the height of the diamond.

Become a diamond cutter

Select two straight-grained veneers in contrasting colors and cut them into rectangular sheets. Stack and tape the sheets in bundles of three or four. Now use the cutting guide and a veneer saw to trim a straight edge on one long side of each stack.

Now use a plastic 30°-60°-90° drafting triangle—the larger the better—to mark out a second cut. Align the triangle along the stack's newly cut straight edge and mark a 30° line across one end. Now hold the guide tightly on the marked line while sawing through the veneer. This cut establishes the reference edge for crosscutting the stack into angled strips. Press the angled edge tight against the board's stop and hold the stack down with the cutting guide. Press the guide tight against the stop. When you saw through the veneer, you'll create a strip that is the width of your cutting guide. Repeat until you have eight to 10 stacks of veneer strips cut in each color. Be sure to keep the strips in the order they were cut and right side up.

Tape it up and cut it apart

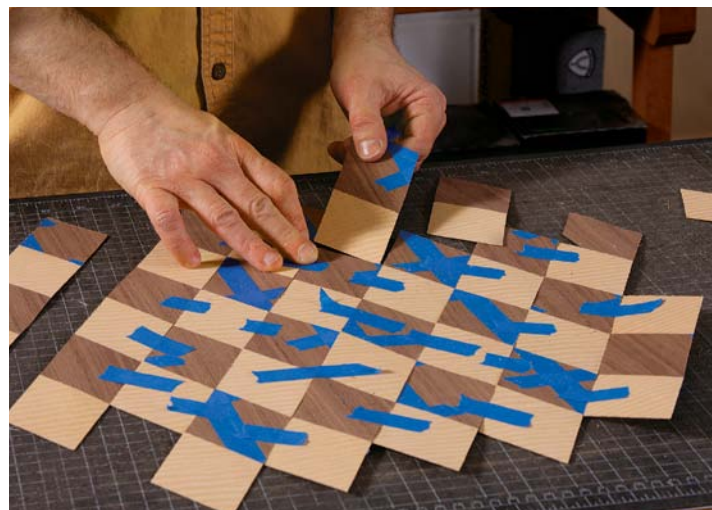
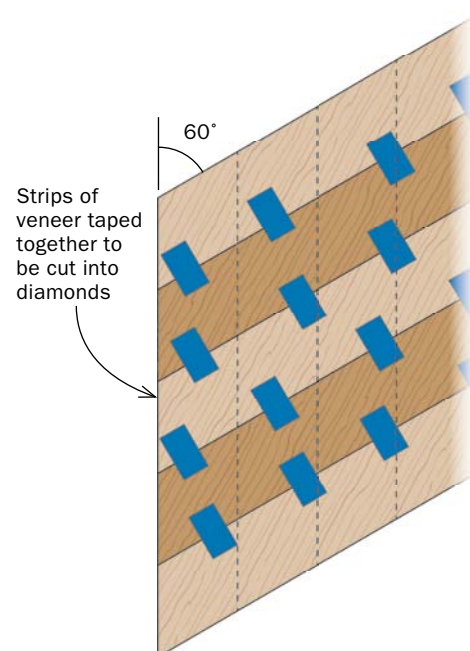
Undo the tape on each stack and begin taping the strips together, side by side, alternating colors (see top right



Tape the strips together. For the best grain appearance in the pattern, keep the strips in the order that you cut them.



Rotate and cut again. Trim one end at a 60° angle and butt that end against the stop. Use the same cutting guide to yield strips of alternating diamonds.



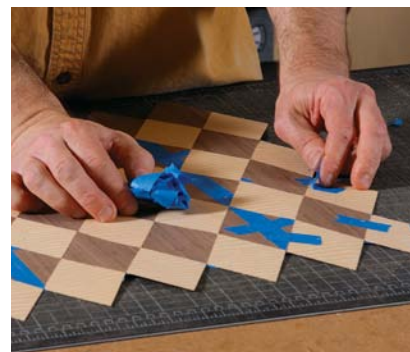
Use your cutoffs. Fill in additional diamonds as needed to complete the pattern.



Lock the pattern down. After taping the strips together on the show face, flip the sheet and apply blue tape across and along each seam on the glue face to hold the pattern securely together.

TRIM AND TAPE

After the diamond strips are cut, creating the pattern is a matter of carefully aligning and taping them together.



Remove the tape from the show face. After thoroughly taping the glue face, flip the assembly and pull all of the blue tape from the show face.



Prepare for glue-up. Use a cutting guide to saw away the points and square up the veneer (above). Cover the show face completely with overlapping strips of 2-in.-wide veneer tape to hold it securely during glue-up (right).



photo, p. 83). Be careful to keep the strips oriented in the same direction to avoid any distracting differences in the appearance of the grain from diamond to diamond. Pull the strips tightly together (one by one) and tape across the joints with blue tape. Finish each joint with a single strip of blue tape down its length and, when the sheet is together, burnish all the tape with a brass brush. After taping all the strips into sheets, stack the sheets, aligning one long edge, and tape the stack together. To make the next cut, draw a 60° angle across the alternating colored strips (see drawing, p. 83). Cut on this line through the entire stack.

Untape the stack so you can cut individual strips of diamonds from each sheet. The pattern will be more precise if you cut one strip at a time. Do this with the freshly cut 60° edge pressed tight against the cutting board stop. Cut all of the sheets into strips, making sure to keep them oriented properly.

Assemble the pattern

To assemble the full design, start with two strips and stagger the diamonds so that they alternate in color, making sure the points line up precisely. Working with the show face up, tape across the joints, but not down the entire length

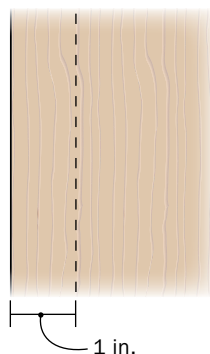


Prepare the glue surface. Now take off all of that blue tape from the underside of the panel. Once it's gone, the veneer is ready for glue-up.

of the strips. Once the sheet is taped together, flip it glue side up and fully tape all the joints, both across and along the joints. Now flip the sheet over again, pull the blue tape from the show face, and use a straightedge to trim the overhanging diamonds from each edge and square up the sheet. Cover the show face with overlapping strips of gummed veneer tape, first wetting the tape with a sponge. Burnish the tape with a brass brush and then set the veneer under a piece of MDF to keep it flat until the tape dries. Afterward, trim the veneer tape flush with the edge of the pattern, then remove the blue tape from the glue face. The veneer is now ready to glue down.

Herringbone pattern is another gem

Like the diamond pattern, this design also relies on a series of angled cuts.



Rip the veneer to width. The herringbone pattern starts with straight, narrow strips.

For herringbone panels, add a second cutting guide

To make a herringbone pattern, the strips should be proportioned so that the valleys in one rank don't overlap with the peaks in the rank underneath. In the design shown here, the individual tiles are about twice as long as they are wide. You'll need two cutting guides, one for each dimension. As with the diamond design, it makes sense to make your herringbone panels first and size the surrounding components to fit.

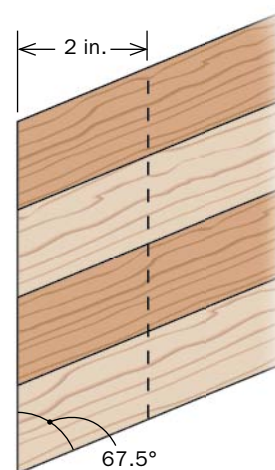
Tape the veneers together in two stacks, one for each color. On each stack, cut a straight reference edge along the grain, press that edge tight against the cutting board stop, and use the guide to saw the stack into narrow strips. Keep the strips oriented properly; the grain on a flipped piece will reflect light differently and spoil the pattern's three-dimensional effect. Now unbundle the stacks and tape the strips together in alternating colors to create sheets of six. Next, make two stacks of sheets and tape each stack together.

You'll cut the sheets into strips at a 67.5° angle. First, strike a line at that angle across the end of one stack. Place your cutting guide on it, and cut through the stack. Flip that stack and you can use the angled end as a template to lay out the mating angle on the second stack.

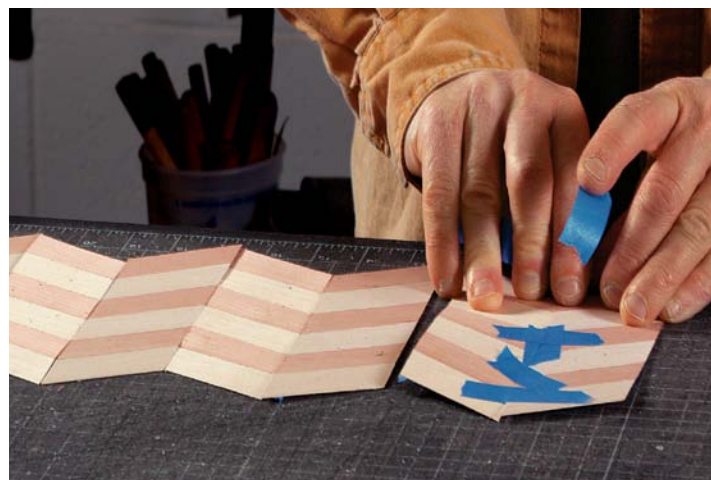
To cut the herringbones to length, untape the stacks. At the cutting board, press the 67.5° edge of a single sheet tight against the stop with its show face up and use the wider cutting guide to cut the sheet into 2-in.-wide strips.

With all the sheets cut and restacked, assemble the pattern show face up, taking one strip from each stack and aligning the pair so the color flows from one piece to the next. Tape across the joints. Continue until you have a full panel, then flip it over and fully tape across and along all the joints on the glue face. Now remove the blue tape from the show face, trim the panel, and veneer-tape the show face to prepare for glue-up. □

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Crosscut at an angle. With the long strips taped together, trim one end at a 67.5° angle and set it against the fence to cut the strips to length.



Assemble the pattern. Two sets of strips are cut at mating angles and used in sequence to create a pattern with flowing grain lines.