

Step-by-step: Making a carved gilded sign

Put a chisel to wood or high-density urethane board

When a local parish church wanted to identify a small chapel on the church grounds, we presented a design for a carved wood sign. The parish officials ordered three signs. We went on to produce them with the help of our Apple Macintosh G4 computer, a laser printer and traditional carving tools.

this task, but a transfer tool heat pen [Highland Hardware, 800-241-6748, www.highlandhardware.com] works better. ❧



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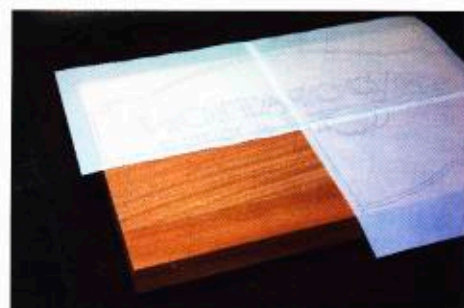
For a sign like this, we take advantage of a property of laser printing that transfers our designs. Laser printer output is made up of deposits of microscopic carbon particles on the surface of the page. We can transfer those carbon particles to the surface of a sign panel with heat. A household iron can be used for



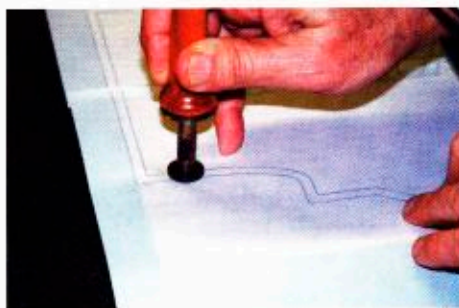
1. We produced the design using Adobe® Illustrator®. The panel shape was easily created, and the lettering style was customized from a font that is based on the earliest known example of Roman lettering (the Trajan Column in Rome, circa 100 AD). Note the swash on the *A*, the extension on the *R* and the larger *C*.



2. After ordering three 12-by-20-by-1/4-in. mahogany sign blanks [KenCo Wood Products, Buffalo, NY, 800-757-9142], we printed the pattern on high-quality tracing paper using an HP LaserJet 2200 laser printer. Since the printer can handle a maximum size of 8 1/2 by 11 in., we used Illustrator's tiling feature to produce four 8 1/2-by-11-in. tiles.



3. We prepared the blank to accommodate the four tiles by marking the center midpoints and drawing pencil lines on the surface. The tile pages were placed face down on the substrate. The translucent paper made it easy to align the tiles with the centerlines.



4. Here's the transfer tool heat pen in action, tracing over the printed areas of the tracing paper. An iron works, but the tool gives more control and better selectivity.



5. The heat from the pen literally transfers the carbon particles from the tracing paper to the bare wood. If the substrate were larger, this procedure could still be used, but would involve a greater number of tile sheets.



6. With the outline of the panel shape neatly transferred to the blank, it was cut to shape with a saber saw. After sanding the edges, a hand-held router was used to round over the backside and to detail the topside with a bead-and-cove profile.



7. Before coating the panel, I carved a registration nick corresponding with the midpoint lines on the four sides. These marks, which are still visible after the coating process, save you from having to make centerline measurements again during the layout phase.



8. Before the shaped panel was undercoated with three coats of Jay Cooke's All Purpose Primer [available from your sign supply retailer]. Two 3-in. screws were attached to each end grain. When placed on supports, these convenient "suspenders" allow easy flipping for coating both sides of the substrate.



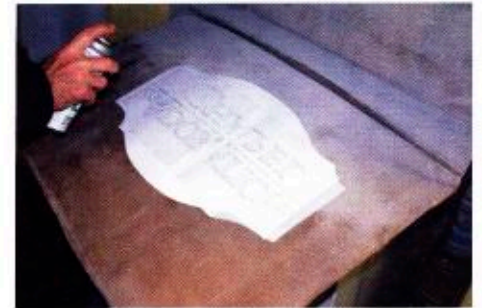
9. Following the primer coats, two coats of Ronan [T.J. Ronan Paint Corp., 800-247-6626, www.ronanpaints.com] Bulletin black enamel were applied. The black serves as an edge color to compliment the final New England Red coat we mixed for the substrate top surface.



10. When the coatings were dry, the suspender screws were removed and the holes were filled with epoxy wood filler. Later, sanding and recoating completely hid the original screw holes.



11. To start the layout, we completely covered the sign face with GerberMask I™ removable vinyl. Now we made use of those midpoint nicks to draw the centerlines. Running a piece of masking tape from the nick up to the vinyl mask saves remaking the measurements.



12. To hold the pattern to the vinyl, I sprayed the back of it with 3M™ Spray-Ment Craft and Display Adhesive. I lay the pattern on a large piece of cardboard, far from the sign to avoid getting overspray on anything important.



13. Carefully following the drawn centerlines, the tracing-paper pages were applied to the vinyl and squeegeed smooth. This tiling technique works for panels of any size. We have used it for signs as large as ten feet across. Illustrator allows one to design on workspaces as large as 12 by 12 ft.—it just means more tiled pages.



14. Now the carving can begin. Your tools will cut through the tracing-paper pattern, the vinyl, the top and under coats, and finally the wood. As the letters are carved, a mask is being created, making coatings easy to apply once the carving is complete.



15. The bare wood letter carvings require three undercoats and two topcoats, but it goes on quickly. It's not necessary to stay within the letter's boundaries.



16. Once the letter coatings are dry, the surface of the mask is sanded with 80-grit sandpaper. This reduces the coating buildup and produces clean edges on all the letters. The panel's surface is unaffected because of the layers of tracing paper and vinyl.



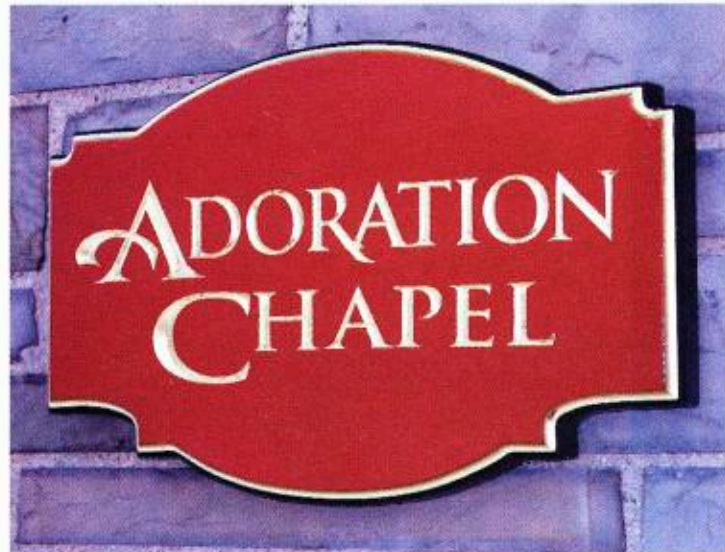
17. Next, the size—LeFranc® slow size with a little 1Shot [219-949-1684, www.1shot.com] Imitation Gold to serve as an indicator—is applied. The mask makes sizing the letters easy. Sizing the covered border, though, takes a little skill. I dust the edge with talc or rouge before sizing to prevent the gold from sticking where it should not.



18. We let the size dry for 48 hours for an extra brilliant gild. Gilding with 23K gold leaf [Barclay Leaf Imports, Inc., 908-353-5522, www.barclaygoldleaf.com] is the ultimate finish for the carved lettering. Waiting 24 hours before removing the vinyl mask allows the size to cure further and helps the vinyl separate cleanly from any overlapped gilding.



19. A pair of scissors, tweezers and an X-Acto® knife are used to remove the mask. The vinyl should always be removed at right angles to an edge and should not be pulled into the letter.



20. I mounted the sign using three 1/4-by-3-in. hangar bolts. I screwed the bolts about 1/4 in. into the back of the sign, and then used a cardboard template to transfer the bolt pattern to the wall. Using a 1/2-in. bit, I bored three 3-in.-deep holes in the mortar, blew the dust out, filled them with clear silicone and pushed the sign into position.