A Minnesota sign maker overhauls a flat painted sign

Step-by-step: Building an 8-by-12-ft. dimensional sign

by Dave Correll

Borrowing the famous line from Charles Dickens, "It was the best of times, it was the worst of times" most accurately describes my recent experience in completing the sign you see here. They were the best of times because I had the opportunity to build a dimensional sign with all the trimmings, and the worst of times because we were swamped with work. But amidst the pressing deadlines, I somehow squeezed this job in with a few late nights, weekends, and the help of some friends.

The owners of The Depot, Jeff and Patti Labeau, liked the size and location of their existing sign. It had to be read from a block away and hide a refrigeration unit on the side of the restaurant, too. So we decided to make use of the existing 8-by-12-ft. structure. We re-faced it with three sheets of T1-111 (grooved 8 in. on center) and a redwood frame. The posts needed some help, too, so we faced them with 4-in. grooved T1-111.

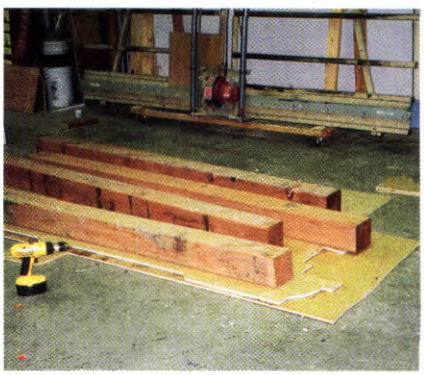
I had developed the logo for them a few years ago. It lent itself to becoming a 3-D element on the new sign, which would measure 6 by 10 ft. and mount to the background described above.

To give the sign panel some rigidity and achieve the desired thickness, I decided to laminate the face from two sheets of ½-in. overlaid plywood to keep seams to a minimum. I used a 4-by-10-ft. sheet and a 18-by-60-in. piece for the top layer of the face, and a 4-by-8 ft. plus a few scraps for the back.

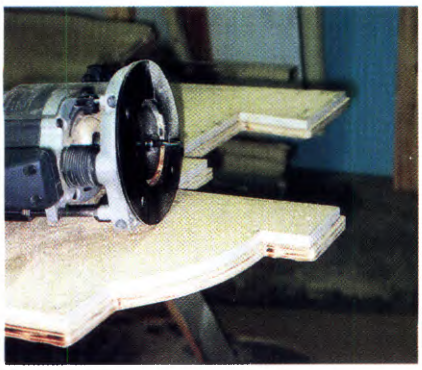
Before gluing the two layers together, I projected the logo on

1. The existing sign

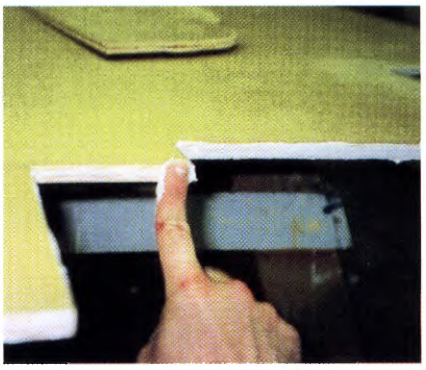
2. The two panels, ready to glue



3. Gluing the two panels together



4. The router sign with template guide



5. Sealing the edges of the panel with paintable acrylic caulk

6. Gluing high-density urethane panels up for train graphic

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to the face layer, then cut it to shape. I sanded and sealed the edges. I then applied a generous coat of West Systems [P. O. Box 908, Bay City, MI 48707; 517-684-7286] epoxy to both panels, and fastened the gooey mess together with 1-in. screws. For extra measure, I threw on some 6-by-6-in. posts as weights.

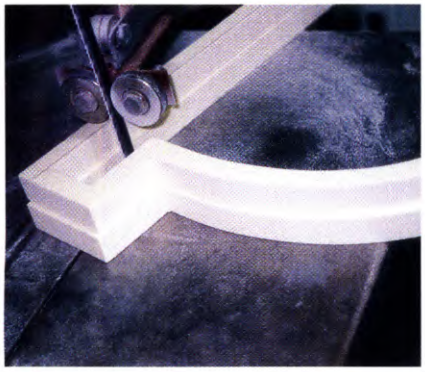
The next day, after the epoxy had dried, I put the face on sawhorses to cut the back panel to shape with my router. Using the router with a 1/2-in. template bushing and a 1/4-in. bit, I ran the router along the edge of the cut out front panel. The result was a perfectly cut back panel which was 1/4-in. larger than the face panel, which gave the base of the sign some added dimension. At this point I sanded and sealed the edges of the back panel.

Now it was time to start building the train. I wanted the train to be the thickest at the front, then gradually slope back to the base level towards the back of the train. I accomplished this by

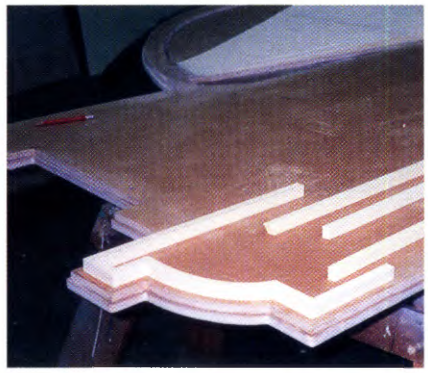
7. Rough shaping the train with the belt sander

8. Chisels and files were used to add detail

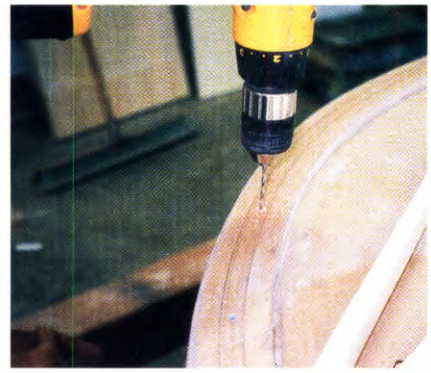
9. Home-made shaping tools



10. Cutting the raised border to shape



11. Gluing the border to background



12. Predrilling for the top border section

13. Removing screws from border

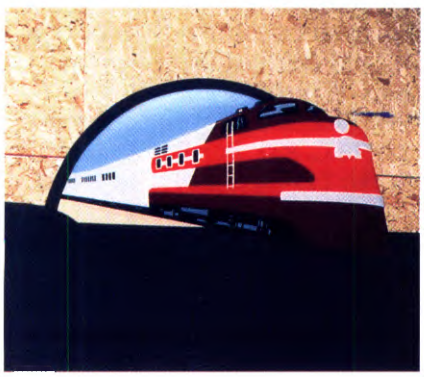
14. A block plane was used to shape the arc border

15. Priming the raised border

gluing different thicknesses of Precision Board [Coastal Enterprises, P. O. Box 4875, Orange, CA 92863-4875; 714-771-4969, 800-845-0745] high-density urethane board to the sign panel, starting with 1½-in. HDU for the front, and ¾ in. for the rear. Once the urethane glue [PB Bond 240, from Coastal Enterprises] was dry, I trimmed the HDU to shape.

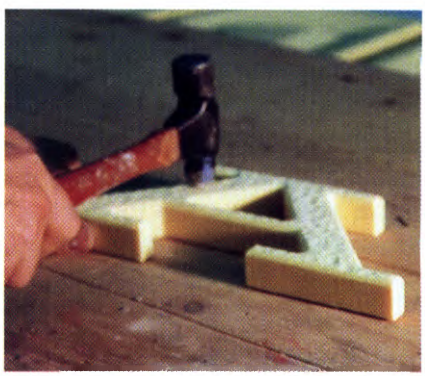
Using a belt sander with a 50 grit belt, I roughed in the shape of the train. I used chisels and files to carve in details. One tool that came in very handy was a broken 50 grit belt glued to a piece of scrap overlaid plywood—it served as a 4-in.-by-12-in. shaping tool. I made a few smaller ones, too, which were also very helpful. Once the train was carved and sanded smooth, I applied three coats of Chromatic Water-Borne High Build Primer. [Akzo Coatings, 5555 Spalding Dr., Norcross GA 30092; 770-662-8464].

For the raised border around *Bar and Grill*, I cut ¾ in. HDU into 8-ft. long ½-in. strips, then trimmed

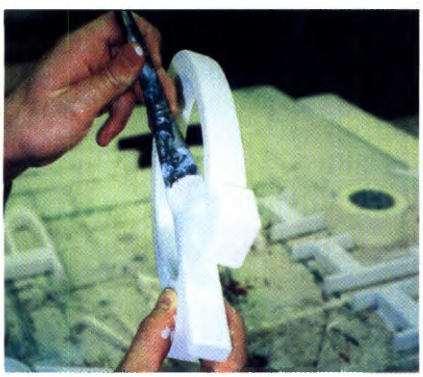


16. Train graphic and background were painted with flat finish acrylic latex

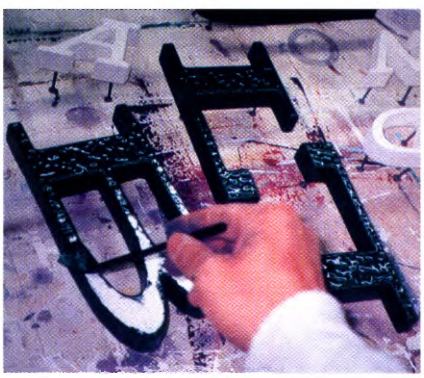
17. Edges of the secondary copy were routed using a ¼-in. round-over bit



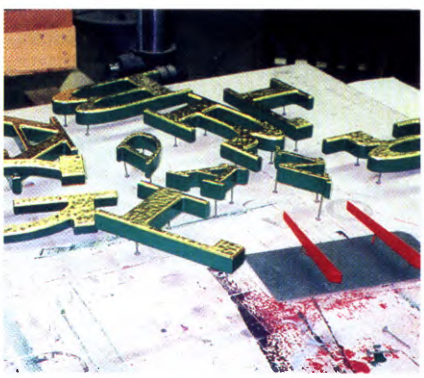
18. Using a ball peen hammer to give a unique texture to the letters



19. Applying High Build primer



20. Applying lettering enamel



21. Gilding the secondary copy

22. Applying smalts. Note can "shaker".

23. Installing the sign with the help of my good friend Mike Meyer

24. Note the smalt outline on Depot

and glued them to the face of the sign. I used the same material for the arc border above the train.

I accomplished this by bending the HDU strip to the desired arc and screwing it, from behind, to the sign face. I removed the screws after the glue set. Once the glue was dry and the screws were removed, I used a block plane to create the gradual slope from top to bottom. I applied three coats of primer to these border pieces, then the entire sign received a coat of primer.

Next it was time to paint the background and train graphic. I thought that a contrast of flat finish acrylic latex (for the backgrounds) and high gloss lettering enamel (for the train graphic) would create an interesting effect.

Originally, I had planned to cut the letters out by hand. Time was short, however, so I asked a friend, Scott Bouma of Grandville, MI, to help out by cutting the letters on his router table. After discussing the project with Scott, I let him do what he thought was best as far as a decoration cut in the letters.

One week after I e-mailed the graphics file to Scott, I received the letters, cut from 1-in. Precision Board, in the mail. Scott had given *Depot* a unique double-incised V-cut. *Bar and Grill* was left as a straight-cut letter.

Now it was time to finish the letters. I wanted the letters for *Bar and Grill* to be gold leaf, but in order to add some interest and sparkle, I first rounded all the letter edges with a 1/4-in. round-over bit on the router table. Then with a ball peen hammer, I made a bunch of little dents in the face of the letters. Once leafed, these letters looked like rough, hand-pounded metal.

When the pounding was finished, all the letters received three coats of high build primer. I finished *Depot* in acrylic latex with a sprayed fade at the bottom. *Bar and grill* received two generous coats of lettering enamel, then I sized One Shot Fast Dry size [One Shot LLC, P.O. Box 6369, Gary, IN 46406; 219-949-1684] and leafed with 23 karat gold. Using silicone adhesive caulk, I glued the letters to the sign face.

With the letters now in place, I mixed up half black lettering enamel, half Smith's Cream, and a little bit of japan dryer in preparation for applying the glass smalts. I painted the mixture around the word *Depot* and inside the *Bar and Grill* panel, then got out my "smalts shaker"—a tin can with several 1/8-in. holes drilled in the bottom. The next day, the sign was ready to install.

As I said earlier, the help of friends made this job possible. Ron Helstern came in for a few days and completed a number of other signs that were due (and I didn't have time to work on!). Scott Bouma cut out the letters for me, and Mike Meyer came over from Mazeppa to help with the installation. Their help made the worst of times not so bad, and the best of times that much better.❑

Dave Correll and Ann Meillier's shop, Brushwork, is in Faribault, Minnesota.