

SignCraft still gets numerous requests on the basics of sandblasted signs—a subject I covered in one of the first articles I did for the magazine back in 1982. Back in 1980, we made this sandblasted sign for a gift shop in Jackson Hole, Wyoming. Luckily for us, we took a few photos of the project as we did it.

The design

For this sign, we hand lettered the main copy and graphic, then scanned them. The resulting bitmap was turned into a vector image and compiled in our Graphix Advantage software. At the time, we printed a color sketch on a Hewlett Packard PaintJet printer. That printer has since been replaced with a Canon Bubble Jet printer, but most of our sketches are presented in black and white to save time. After the client approved the final design, we made a full size pounce pattern on our Gerber HS-15 plotter, set at about 50% speed and highest pressure.

Preparing the panel

This sign was approximately 1-ft by 4-ft. double faced. For small signs like this, we used clear heart vertical grain redwood—with the finest grain we could find. The end grain of vertical grain wood looks like Figure 1.



Figure 1

Larger signs allowed us to use grain that was a bit more coarse. Using in-house equipment, we laminated the panels, using a jointer and epoxy glue. Our preference in glue was West Systems Epoxy, Gougeon Brothers Inc., P.O. Box 908, Bay City, MI 48707; 517-684-7286. We could thicken the glue mixture, using the 403 microfibers available as part of the system.

Generally, we used 2-by-8 stock and glued up large panels from the smaller pieces. This sign would have used two boards with only one glue joint. The pieces were glued and clamped near the

Step-by-step: Making a sandblasted sign

end of the work day and placed upright in some out of the way place in the shop. The next day, this panel and all others would be sanded, using a Makita buffer/grinder equipped with an 8-in. 3M foam pad wheel and coarse sandpaper. We sometimes ran small panels like this one through a 15-in. surface planer to remove excess glue.

Once the panel was sanded smooth, it was cut to exact size

on a radial arm saw, panel saw, table saw, or circular saw—depending on the size. Edges were always sanded smooth and usually a cove was added with a hand-held router as we did on this project.

There are numerous suppliers who provide laminated panels from redwood or cedar without all the mess and equipment. Balsa, mahogany, and high-density foam panels are also available.

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Color sketch of design printed on an inkjet printer



Figure 2. The panel, with stencil cut and ready to blast

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Cutting the stencil

When you sandblast a sign, a stencil—cut from a material that can resist the sandblasting—protects the areas you want to remain raised and smooth. Any unprotected area will be eroded by the sand and left with a rough texture. The stencil material is a rubber-like product that comes with adhesive applied to one side. To assure a good bond between the stencil and the wood, we applied a coat

of lacquer sanding sealer from the local paint store. There is another product called “First Step” (Sign Life Systems, 162 N. Diamond St., Mansfield, OH 44902; 419-524-7446) which is designed specifically for this purpose.

A piece of stencil approximately 2-in. wider and taller than the panel was cut from the roll to allow for some overlap to protect the edges. This sign was double-faced, so we cut two pieces of sten-

cil and applied one to each side of the panel after the sealer was dry. The perforated pattern was aligned over the panel and pounced, using a pounce bag filled with charcoal, leaving an imprint of the design on the stencil. You can see some of the charcoal lettering showing through in the centers of the Jack Pine lettering (Figure 2). After Darla made sure the borders were square and even, she hand cut the stencil, using a No. 11 stencil knife.



Figure 3. Sandblasting took about five minutes per side.



Figure 4. The stencil was removed and the surface was sanded.



Figure 5. Several coats of latex paint were applied.

The sandblasting process

In the September/October 1996 issue, I described the equipment required to do commercial sandblasted signs. Using the setup—a 125-cfm compressor and a 300# sand pot—we blasted both sides of this small panel (Figure 3). With everything going correctly, this sign would have taken roughly five minutes per side to blast. The nozzle is held about 10 inches from the surface and kept moving in a circular motion. Some wood is harder than others so I usually began by going once around the outside border to identify any extra hard piece or area. Knowing where the hard areas were, I would blast that board first then try to feather in the softer pieces that were adjacent to it.

Since this sign is double faced, you have to be careful not to go all the way through. If you see daylight, you went too far—and some Bondo [auto body filler] and extra time are in store for you.

Sanding and painting

Once the panel was blasted, we peeled the stencils off the entire sign and sanded the panel, using a coarse belt on our 4-by-24 portable belt sander (Figure 4). To speed the process, we had one sander with 36-50 grit belt and another with 100-120 grit. It kept us from having to constantly

change belts. Lacquer sanding sealer is not durable outdoors and also may repel latex paints so we thoroughly sand all of it off, leaving only a beautiful raw piece of wood.

If any areas needed touching up, we used body filler from the local automotive supply store. Today there are some wonderful two-part epoxy putty products that come in a roll. You pinch off enough material to do the job, then roll it around to mix the two parts together. It works well between your fingers and can be pressed into position. It can be carved and sanded, though carving is best done just before it really cures.

Most of the time, we used latex paints on all redwood panels, for both background and borders. This is one of the rare cases where we used varnish on a border. The sign hung under a well-protected canopy, so sun and weather were not an issue. We applied three or four coats of Dutch Spar Varnish to the outside border and edges, using a 2-in. foam brush.

After the borders were dry, we applied a piece of 12-in. masking (the same material that we used for transferring vinyl letters) over both sides of the entire sign. Using a sharp No. 11 stencil knife we cut along the weenie-shaped sandblasted area and removed the inner portion, exposing the raw wood and protecting the varnished portion. Using a $\frac{3}{4}$ -in. fitch, we applied at least three—usually four coats—of green latex paint (Figure 5). Once the last coat dried, we removed the masking. On occasion, small amounts of paint would run under the masking, but in this case we considered that in the design by planning for the tan stripe. Darla taped off and lettered the stripe, using lettering enamel. (Latex would not have bonded to the varnish.)

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The finishing touches

The background of the circle and the larger raised lettering on *Jack Pine* was hand lettered with two coats of dark green and allowed to dry. *Gifts* was primed with one coat of block-out white followed by one coat of ivory lettering enamel. The details and stripes were painted with enamel (Figure 6).

With everything dry, Darla ran a Han-See pounce pad filled with jeweler's rouge around the varnish border to keep any gold leaf from sticking to the varnish. She applied a coat of gold size to the coves and over the word *Gifts* on both sides. We usually mixed our own size from 95% imitation gold enamel and 5% quick size. After a few hours the size was the proper tack. We gilded, using 23k gold patent leaf, then cleaned off the excess

gold. The excess rouge was wiped off with a damp paper towel. With the sign nearing completion, we cut the white lettering on the plotter and applied it onto the raised section.

If you don't want to fabricate your own sandblasted signs, there are wholesalers who will handle all or part of the process for you. They'll work from your art work and specifications, then ship you the sign—ready to paint or completed and ready to install.

But we coulda' done...

While this sign does have some pizzazz, it is still a fairly basic sign. There is a lot more that could have been done to make it even more interesting, depending on the customer's budget. We could have cut a real pine cone in half and applied it carefully to the design.

Or, the overlapping needles could have been carved to show the overlaps and texture. The entire circle part of the graphic could have been cut out of another piece and applied as an overlay.

The individual letters of *Jack Pine* could have been cut out of 1/4-in. PVC sheeting and applied to the panel—or they could have been carved into the main panel and gilded. *Jack Pine* could also



Figure 6. After enamel painting was done, the sign was ready to gild.



The finished sign, installed under a storefront canopy

Source list: Sandblasted sign making

Wholesale signs and blanks:

Capitol Design of S.C., Inc.

1128 Joe Louis Drive
Columbia, SC 29201
803-254-8278, 800-327-0493
Fax: 803-252-4717

Redwood Specialties, Inc.

116 N. Shorecrest Rd.
Columbia, SC 29209
800-839-8028, 803-783-0477
Fax: 803-783-0575

Trademark Signs

130 Cayuga Street
Groton, NY 13073
607-898-5954, 800-423-6895
607-898-5969

Wooden Sign Co.

3443 E. Lake Road
Canandaigua, NY 14424
800-391-7696, 716-394-4180
Fax: 800-587-9551, 716-393-0269

Stencil and equipment:

3M Commercial Graphics Div.

3M Center, Building 220-6W-06
St. Paul, MN 55144
800-374-6772
Fax: 612-736-4233

Anchor Continental, Inc.

2000 South Bellline Blvd.
Columbia, SC 29250
803-799-8800, 800-845-2331
Fax: 800-462-1293

Hartco, Inc.

1280 Glendale-Milford Rd.
Cincinnati, OH 45215
513-771-4430, 800-543-1340
Fax: 513-771-3327

Richards Distributing, Inc.

11350 Wabasis Ave.
Rockford, MI 49341
800-848-1245
Fax: 616-754-6603

Tip Tools and Equipment

Dept. SC, 7075 Rt. 446,
PO Box 649, Canfield, OH 44406
330-533-3384, 800-321-9260
Fax: 330-533-2876

have been masked, then air-brushed from top to bottom. The entire sign could have had a nice frame complete with decorative molding and gilded ornamentation.

Another technique which we like is cutting completely through part of a hanging sign, letting light show through. In this case, we could have cut out the really dark areas inside the circle of the graphic. Doing so would mean the design on the other side would have the graphic in reverse—on the right instead of the left. Cutting through all the spaces would have been time-consuming but not impossible.

Once you get used to thinking three dimensionally, the possibilities are almost endless, but we let the customer's budget define the final look. There certainly is a lot you can do by creatively combining techniques and processes. □

Here are some of Mike's past articles on sandblasting: *Setting Up for Sandblasting*, Sep/Oct 1996; *Answers to a Few Typical Questions on Our Approach to Sandblasted Signs*, May/June 1992; *Mike Jackson on Sandblasted Sign Basics*, Jul/Aug 1991; *Sandblasted Signs: With a Little Imagination, the Possibilities Are Endless*, May/Jun 1990; *Step-by-Step: Sandblasted Sign*, Summer 1982.



After over 23 years of running his own commercial shop, Mike Jackson and his wife, Darla, now operate Golden Era

Studios in Jackson, Wyoming, and do a variety of sign-related projects. His website is www.goldenstudios.com, and his e-mail address is golden@goldenstudios.com.