



STRICTLY COMMERCIAL

By Francis Lestingi

Grading on a Carve

Signs of Gold's Francis Lestingi evaluates material carvability.

Francis Lestingi, a retired physics professor, is the owner of Signs of Gold Inc. (Williamsville, NY).

People sometimes ask why I would handcarve a sign when a machine can do it for me in a fraction of the time. My answer stems from how I learned my techniques. I learned from several talented carvers, but Dimitrius Klitsas, a Greek immigrant who now resides in Hampden, MA, influenced me most.

After years of learning from this master artist, I constantly attempt — always in vain — to emulate his creativity and expertise. And, for me, the allure and joy of producing elegant, handcrafted signage reflects Dimitrius' simple, profound philosophy: "Carving makes you happy."

My favorite carving substrate is *khaya ivorensis*, aka African mahogany. Nothing carves as crisply or holds detail as cleanly. Mahogany is heavy (its density measures 42 lbs./cu. ft.), but it also offers lateral strength, rigidity and weather resistance. A mahogany panel becomes an excellent medium for post-mounted and carved-fascia signs.

I've used other wood substrates, such as butternut and redwood, but



This sign comprises an Extira™ composite-material panel, cast letters, a border detailed with a bead-and-cove profile, and years of handpainting and gilding experience.

none approach mahogany's superior carvability. However, other woods are less dense — for instance, redwood weighs 27 lbs./cu. ft., roughly two-thirds of mahogany's mass. If substrate weight is a concern, explore other options.

Viva Vito's

Six years ago, I created signage and menuboard graphics for Buffalo-based Vito's Gourmet Deli and Market, where Vito and Jim Buscemi offer homemade cooking based on their immigrant grandpar-



Lestingi applies the GerberMask II layout pattern with a squeegee.

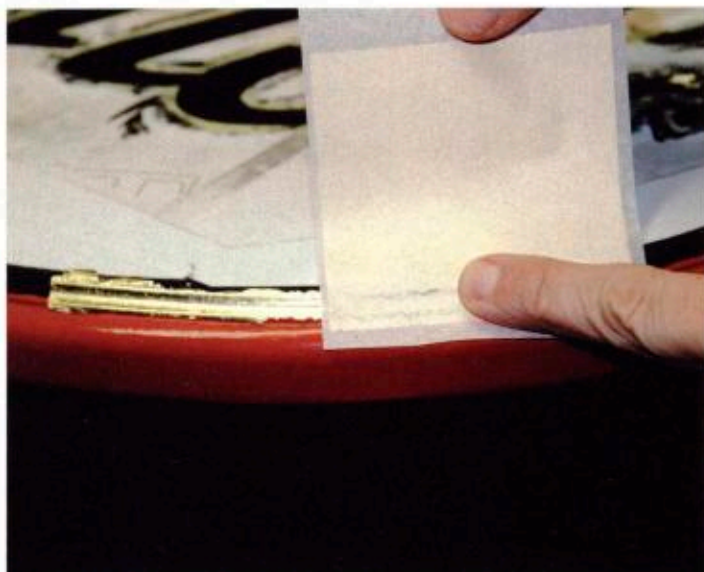


Three coats of Jay Cooke's sign primer and two coats of T.J. Ronan bulletin enamels, applied with a lettering brush, cover the face.

STRICTLY COMMERCIAL



Lestingi applies 23k, surface leaf to the letters with a gilder's tip.



Patent leaf is preferable in such narrow areas as edges.



Lestingi removes the mask from the face.



The Vito's sign installed — the first of several at nationwide, airport locations.

ents' recipes. Today, Vito also works as the culinary manager for CA-1 Services, which handles airport food-service contracts. The company will open Vito's in the Buffalo-Niagara airport, as well as those in El Paso, TX; Newark, NJ; Memphis, and Ft. Lauderdale, FL. Vito hired me to create the signage.

I first milled the Extira sign face into an oval shape and, with a handheld router, detailed the edge with a bead-and-cove profile. After sanding and painting three coats of Jay Cooke's primer, we applied two topcoats of oil-based, T.J. Ronan bulletin colors to the sign. Next, we applied a vinyl GerberMask II® and adhered the layout pattern that we'd created on an Apple® PowerMac®

G5 and laser-printed using tracing paper. I used gouges and chisels to carve Extira as I'd carve wood.

Although carving Extira didn't yield the same characteristics as carving wood, I found it superior to carving HDU — I was quite satisfied. The Extira didn't crumble, which occasionally occurs while incise-carving HDU. But, it lacked the crispness at diagonal cuts that wood achieves.

At this point, we applied Lefranc Charbonnel slow size to the letters and the edge cove, and allowed it to cure for 48 hours. We applied 23k, looseleaf gold to the lettering; we gilded the edge cove with 23k, patent leaf by pressing the leaf into the cove.

Finally, we removed the vinyl mask to reveal the finished product. Signmakers must carefully ensure that the vinyl doesn't lift the paint off the surface. Like other vinyl applications, the mask must be removed at a 120° or greater angle.

Carving choices

Available wood alternatives include high-density urethane (HDU), medium-density fiberboard (MDF), medium-density overlay (MDO) and Extira® exterior-grade, treated-wood panels.

I use HDU for certain carving projects, but never as a substrate. Because HDU foam lacks wood's lateral strength and rigidity, and because I don't find handcarving

STRICTLY COMMERCIAL



Using gouges and chisels, Lestingi fashions a numeral that he'll cast for future use.

incised, HDU letters very satisfying. I only use it for carving certain appliqué. I either attach the add-on directly to the wood substrate, or make a polyurethane-plastic mold of the carving for subsequent castings (see *ST*, May 2003, page 40). However, when a project calls for more sanding than carving, I

prefer HDU.

I've used MDF for a few hand-carved signs, but its carvability was mediocre at best. Worse still, water readily seeps into MDF, which is unacceptable. Thus, I don't use MDF, though it's useful for interior, vinyl-decorated or handlettered signage.

MDO obviously isn't carvable,

though signmakers have long found it useful. Unfortunately, plywood edging must be thoroughly sealed and rounded over with a handheld router before coating to prevent moisture absorption. This edge also hinders saber-saw shaping, which restricts the material's creative use.



The carved numerals sit in the confinement field, awaiting a two-part, liquid-silicone, casting product that creates molds, which can be used for future projects.



Lestingi measures and cuts a casting mold with a box-cutting knife.

Unlike the other substrates, Extira comprises 90% wood that's impregnated with phenolic resin and zinc borate, which makes it moisture, rot and termite resistant. It can be milled, shaped and painted like wood. Available in 1- and 1½-in. thicknesses, Extira provides good lateral strength and

rigidity. We've used it with Sign-Gold® vinyl, and for a large 4 × 10-ft., carved and appliquéd signs (see *ST*, June 2004, page 42).

In both cases, we shaped the panels without moisture-absorption concerns. Yet, it's heavy — the density of 1½-in.-thick Extira panels resembles mahogany's. So, the

question of its carvability remained.

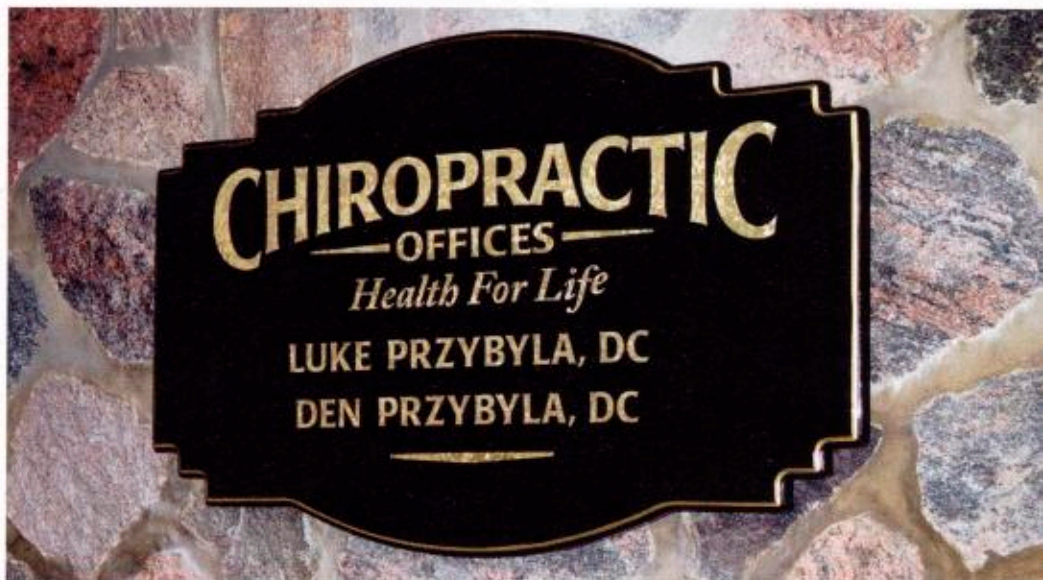
As a test, I transferred numeral patterns to an Extira surface and carved 4-in.-long, 3-D numbers. After transferring the patterns, we cut them out with a handheld, scroll-blade, saber saw. Extira's high density pre-empted a scroll saw. With double-sided, carpet tape, I attached



Cast-resin items interact well with size and goldleaf — they resemble handcarved items when installed.

STRICTLY COMMERCIAL

More samples of Lestingi's handiwork. (Top) This sign, which portends relief for back-pain sufferers, comprises Extira and SignGold™ vinyl. The sign's shape demonstrates Extira's workability with a bead-and-cove profile. (Bottom) This mixed-media sign incorporates Extira, mahogany and HDU, which are adhered together with silicone.



each cut-out numeral to a wood base and began carving.

Extira carved cleanly without concern for wood-grain direction. Carving Extira closely resembles carving wood. Also, it must be sanded like wood, and therefore can't be "sand-carved" like HDU.

After carving the numerals, I placed them in a confinement field to produce a silicone-rubber mold. Once the mold fully cured, we demolded the carved numerals and removed the cast materials, which can be used in the future with many substrates.

My teaching background compels me to grade these substrates' carvability. I give wood an A; Extira, an A-; HDU, a B+; MDF, a D; and MDO, an F. For sandability, HDU earns an A+; everything else receives a C or lower. ■



Equipment and Materials

Computer: Apple® PowerMac G5 computer, HP® LaserJet 2200d printer.

Layout: GerberMask II, available from Garston Sign Supply (Rochester, NY), (800) 825-8808; 16-lb., 8½ × 11-in., 16-lb. vellum, from Clearprint Drafting & Design Vellum (Emeryville, CA), (800) 766-7337.

Paint: Jay Cooke Primer and T.J. Ronan bulletin paint, available from Garston Sign Supply.

Goldleaf: LeFranc Charbonnel slow size, from LeFranc & Bourgeois Inc. (René, France), available at such distributors as Colart Americas Inc. (Piscataway, NJ), (732) 562-0770; 23k Ducate, loose-leaf, double gold, and patent gold, available from Sepp Leaf Products Inc. (New York City), (212) 683-2840 or www.seppleaf.com.

Substrate: Extira® wood-composite material, from CMI (Chicago), (800) 255-0785 or www.extira.com.

Tools: Various chisels and gouges; Bosch saber saw; Bosch plunge router; double-sided sticky carpet tape, available from home-improvement stores.

More on Francis

Signs of Gold (Williamsville, NY) owner Francis Lestingi taught himself brush lettering during his youth. By high school, he'd learned how to gild storefront signs.

After earning degrees from Catholic University and Rensselaer Polytechnic Institute, he taught physics, chemistry and theology at high schools throughout New York City. He left to pursue a doctoral degree and became a professor at SUNY-Buffalo, where he earned several teaching awards.

In 1993, while an active teacher, Lestingi decided to rediscover hand-lettering, and he founded Signs of Gold. He enjoyed it, took early retirement from teaching and pursued signmaking full time. He's garnered awards in several sign contests — including *ST's* — and is a regular workshop instructor at Letterhead meets and the SignWorld tradeshow.