



STRICTLY ELECTRIC

By Doug McCoige

Doug McCoige is the director of operations for North American Signs (South Bend, IN).

The Bright Stuff

Several factors influence a channel-letter rebranding.

A corporate logo significantly impacts a brand's status. The visual manifestation of a company's identity and character, a logo powerfully conveys the quality of products and services to customers. In retail environments, where consumers make quick purchasing decisions, successful logos drive sales and reinforce customer loyalty.

To distinguish and enhance its image and visibility, OfficeMax officials recently switched its corporate logo from red, which competitors Staples and Office Depot employ, to white and black. Of course, conveying the change to store customers was paramount. To execute the program, OfficeMax enlisted North American Signs (South Bend, IN), which has been an OfficeMax partner since 1991.

Coming to light

For many years, OfficeMax channel letters comprised red acrylic faces illuminated by clear neon. When LEDs became a viable option several years ago, we discussed retrofitting its existing stores and fabricating



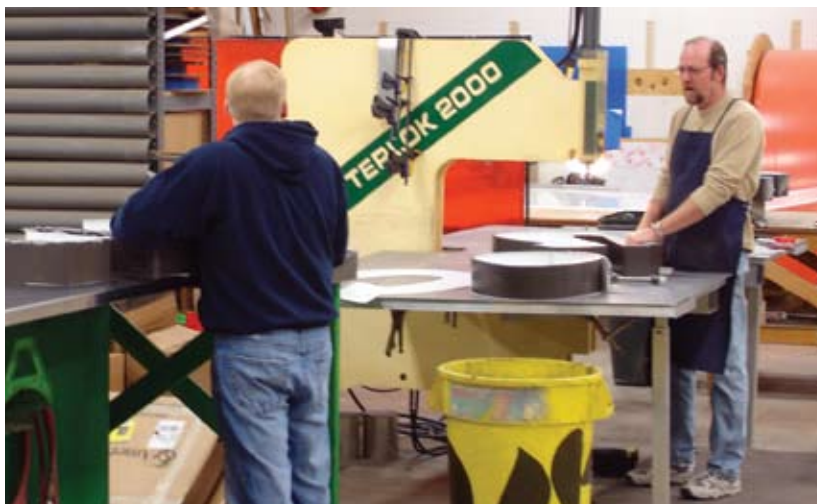
To differentiate the company from competing office-supply superstores, the OfficeMax management team changed the company's logo color from red to white and black. Then, the company enlisted South Bend, IN-based North American Signs, which has fabricated its exterior channel letters since 1991, to undertake the changeover at its approximately 900 stores.

new-store signage with LEDs.

Eventually, we sold them on LEDs' substantial energy savings and durability. Also, because LED strands are much lighter than cumbersome neon tubing, we can transport the letters more cheaply and pass the savings on to the customer.

A sign fabricator abhors proposing

a solution that ultimately fails or doesn't meet the customer's needs. To complete due diligence, we obtained samples from two LED manufacturers and developed side-by-side samples. Given the test performance, we selected SloanLEDs' (Ventura, CA) white, CL4 LEDs, which we powered with the compa-



North American Signs employees fabricated the letters. The shop created 9-in.-deep returns, which provide sufficient prominence against the building. (Right) To make the letters appear dark by day and illuminated at night, North American Signs decorated the first surface with Arlon black, perforated vinyl.



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Installing the signs required a combination of a bucket truck, ladder and crane trucks. Each letter contains $\frac{3}{8}$ -in. rivnuts, set within the letters' backs, that are installed with stainless-steel, threaded rod.



ny's 12V power supplies.

With the color change, operational costs increased – white LEDs are more expensive and less luminous than red. However, even with the color switch, OfficeMax saves \$1,500 in annual energy costs on every set of channel letters.

Design issues

LEDs provide versatility when designing channel letters, such as the letter returns' depth. With large channel letters, such as the 5-ft.-tall type OfficeMax specified, the letters demanded substantial depth (these are approximately 9

in. deep). Cans that are too shallow compromise the letters' appearance and visibility. Easily repositioned, LEDs facilitate diode placement within the letter that provides optimally efficient illumination.

To complement the new channel letters' white faces, OfficeMax altered its design to match brightly colored building façades. Consequently, we used Arlon's (Santa Ana, CA) black, perforated vinyl, which we applied to the white faces' first surface. With this film, the letters appear black in the day, and, at night, illumination permeates the vinyl's perforations

and allows a bright-white glow.

Contrastingly, to illuminate channel letters against buildings with dark facades, we affixed the signfaces to the aluminum returns with Wagner Zip-Change's black Jewelite® (Melrose Park, IL) trimcap to complete each letter.

Points of clarity

To make the signfaces legible and attractive, we needed a face material that would withstand prolonged, outdoor exposure and provide light transmission that would yield clear, bright illumination. To determine the optimal material, I investigated and tested various plastic materials.

At a tradeshow, I found CYRO's (Parsippany, NJ) ACRYLITE® SignFlex™ impact-modified, acrylic sheet. The material features a textured surface that hides scratches, and the company's testing indicated ACRYLITE provides 60% light transmission. Without a diffuser film, the film, ideal for backlit applications such as this, provided a striking, cloud-like appearance without hotspots.

At SloanLED's suggestion, we asked CYRO to produce custom, .177-in.-thick sheets, which are ideal for withstanding the larger letter sizes without deflecting excessive light.

Fabricating a new brand

Using two Multicam (DFW Airport, TX) CNC routers, we cut out acrylic



To make the signfaces, the shop used custom-cut sheets of CYRO's ACRYLITE Signflex impact-modified acrylic because of its light-transmission properties. Creating channel letters without hotspots is an important consideration.

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faces and aluminum backs and used Computerized Cutters' (Plano, TX) Accu-Bend equipment to bend aluminum coil and fabricate the letter returns. Using a hydraulic clinch machine, we attached the letter backs to the returns. We painted the letters white on the inside and black on the outside with blockout paint to maintain the brightness of the interior LED cavity, while the letter surface appeared black.

We installed the LEDs within the letters according to SloanLED's instructions, with 3M's (St. Paul, MN) adhesive tape. As a precaution, we also applied a silicone adhesive layer along the LED modules to further secure them. Stroke width and letter height always dictate LEDs' layout, and face treatments, such as perforated vinyl, may also influence the number of modules required to reach desired brightness.

A successful mount

Like most of our national accounts, OfficeMax operates nationwide locations, which necessitates hiring subcontractors who serve a store's local area. In our view, installers – like all subcontractors – reflect North American Signs and must meet our level of service and professionalism. When we request

Equipment and Materials

Fabrication: Accu-Bend metal-bending system, from Computerized Cutters Inc. (Plano, TX), (800) 310-2887 or www.computerizedcutters.com; LetterLok 2000 channel fastener, from Chief Enterprises Inc. (Elmhurst, IL), (800) 831-7294 or www.chief-mm.com; 6 x 10-ft. and 8 x 24-ft. CNC routers, from MultiCam (Dallas), (972) 929-4070 or www.multicam.com

Installation: Ladder, bucket or crane trucks, available from industrial- and installation-equipment rental and leasing facilities.

Letters: Signflex satin-finish, impact-modified acrylic, from CYRO Industries (a subsidiary of Degussa), Parsippany, NJ, (800) 631-5384 or www.cyro.com; Jewelite channel-letter trimcaps, from Wagner Zip-Change (Melrose Park, IL), (800) 323-0744 or www.wagnerzip.com.

LEDs: White, CL4 LEDs, from Sloan LED (Ventura, CA), (888) 756-2699 or www.sloanled.com

Vinyl: Cast, 2-mil film, from Arlon Inc. (Santa Ana, CA), (714) 540-2811 or www.arlon.com.

subcontractor bids, we weigh their submitted costs, but we also require references that can vouch for a company's reliability.

Along with the channel letters and equipment, each installer also receives a full-size paper pattern from North American Signs. This pattern precisely marks where to drill holes in the stores' exterior for mounting the sign. Each channel letter contains $\frac{3}{8}$ -in. rivnuts, which are mechanically set into the letter backs and installed with $\frac{3}{8}$ -in., stainless-steel threaded rod.

Sometimes, buildings' existing walls may be "stress-core," precast-concrete walls. In these cases, alternatives, such as lags and shields, are preferable to drilling completely through the wall, which compromises structural integrity. Often, I'll use custom raceways and background panel systems that accommodate building and engineering-design requirements. We typically use a ladder or bucket truck to drill electrical holes and mount hanging hardware, and then a crane truck to hang the letters.

Shining results

As work continues for the sign-update project, OfficeMax has been pleased with the channel letters' look and performance at its retail stores. The company plans to continue the rollout across its more than 900 stores nationwide. Because our shop can complete each location with a lead time of only three to five weeks, including research and fabrication, North American Signs guarantees that retail stores don't have to wait long for their new look. ■

About North American Signs

In 1934, the late Maurice P. Yarger founded South Bend Neon. Several years later, Yarger changed its name to North American Signs; the company's focus included department-store and car-dealership signs, as well as retail storefronts. Later, the company began fabricating plastic-faced, fluorescent-lit cabinet signs.

In the 1970s, as larger customers began dominating the business landscape, North American Signs adapted and broadened its focus and began developing comprehensive sign programs for such regional and national retailers as Barnes & Noble, GameStop and the Limited. Also, North American Signs' facilities have grown to 13 acres in a state-of-the-art building that's served by an adjacent, regional airport.

Maurice's sons, Tom and Noel Yarger, remain active in the company's operations, and his grandson, John Maurice Yarger, serves as the company's president. The company's management remains active in the industry; it has served on various International Sign Assn. committees, and is a longtime member of World Sign Assoc.

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