

# Laser at work: Using HDU board

*High density urethane board does the job for thicker graphics*

By Doug Bergstrom

One of the interesting things we do with our laser is cut letters and graphics from high density urethane board. We've found that we can cut 1/2-in. Precision Board HDU with great results. It's the only brand that we've cut successfully on our 35-watt laser.

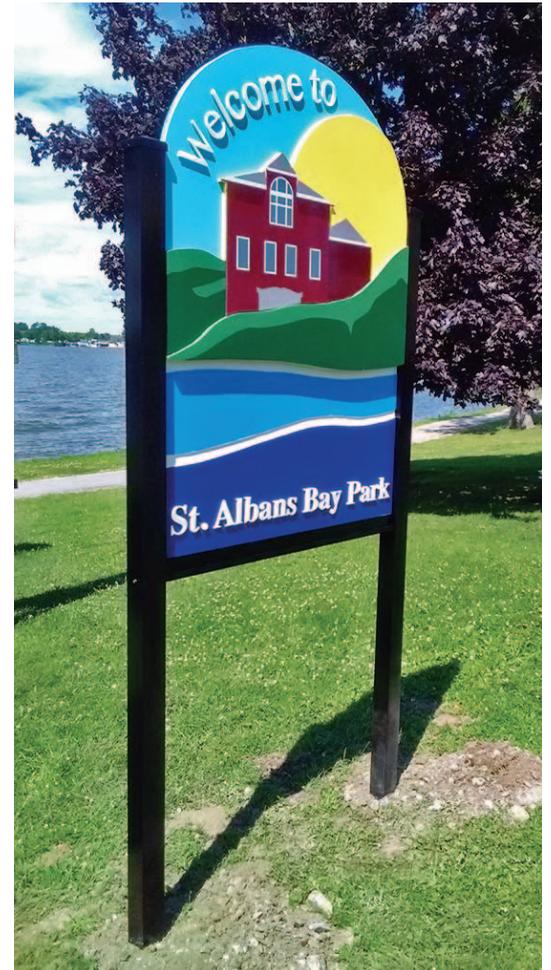
We use HDU board when we want a thicker graphic than the typical 1/8- and 1/4-in. acrylic graphics we frequently cut on the laser. We also often use it when we are building a sign to ship elsewhere. A 1/4-in. acrylic letter mounted on 1/4-in. acrylic spacers can get snapped off during shipping, but the HDU letter is bonded to the surface and will stay put.

**St. Albans Bay Park** The St. Albans Bay Park sign was done with layers of HDU. The letters and some of the graphics are laser-cut HDU. The house graphic is a digital print, mounted on acrylic, then cut out on the laser. A few of

the elements were too large for the laser, so they were cut out by hand.

All the components were then mounted on a panel of 1/2-in. HDU using Weldon 45 adhesive [[www.weldon.com](http://www.weldon.com)]. It's a two-part structural adhesive that comes in a self-mixing dispenser, which is sort of a sophisticated caulking gun that mixes the adhesive for you as you squeeze the trigger.

We were using an aluminum frame system from 4Ever Frames [[www.4everproducts.com](http://www.4everproducts.com)].



com] on all the other signs for the park, and the client wanted it used on the primary sign as well. That frame is designed to accept a 6mm aluminum composite panel that slides into the post, so we bonded the completed sign faces to the 6mm Dibond ACM [www.graphicdisplayusa.com] as the backer.

This project originated as a bid for a flat printed sign. We felt that a more substantial and appealing 3D sign was more appropriate. We also knew that with prices for printed graphics being so competitive, we may not have been able to land the project. By offering an upgraded product, we were able to not only sell the job but make a larger sale than a flat printed job.

We also suggested printing all the secondary signs on reflective film—something no other shops had suggested. The client realized the benefit of reflective graphics and liked that idea, too. Offering those two upgrades got us the project. That's a big part of the sign business—getting in there and determining what the client needs and helping them see what's possible. Clients tend to focus on the price. We have to help them look at the value of more effective signage.

**Franklin West Supervisory Union** This sign was done with a combination of acrylic sheet and HDU board graphics. The white letters are laser-cut from ¼-in. acrylic sheet, then bonded to circles of laser-cut Precision Board HDU. The text is laser-cut blue acrylic. The background panel is 10mm aluminum composite material with a corrugated core. The lower graphic panels are hand-cut HDU board. The HDU board was finished with exterior acrylic paint.

The laser cuts with incredible precision, and the graphics look very professional. Half-inch HDU board gives you plenty of 3D effect, and it's easy to work with. We find that makes a great combination in our shop. **SC**



Doug Bergstrom's shop, Xtreme Grafix, is located on the shores of Lake Champlain in St. Albans, Vermont, and online at [www.xgsigns.com](http://www.xgsigns.com).