

Laser at work: Cutting flat acrylic graphics

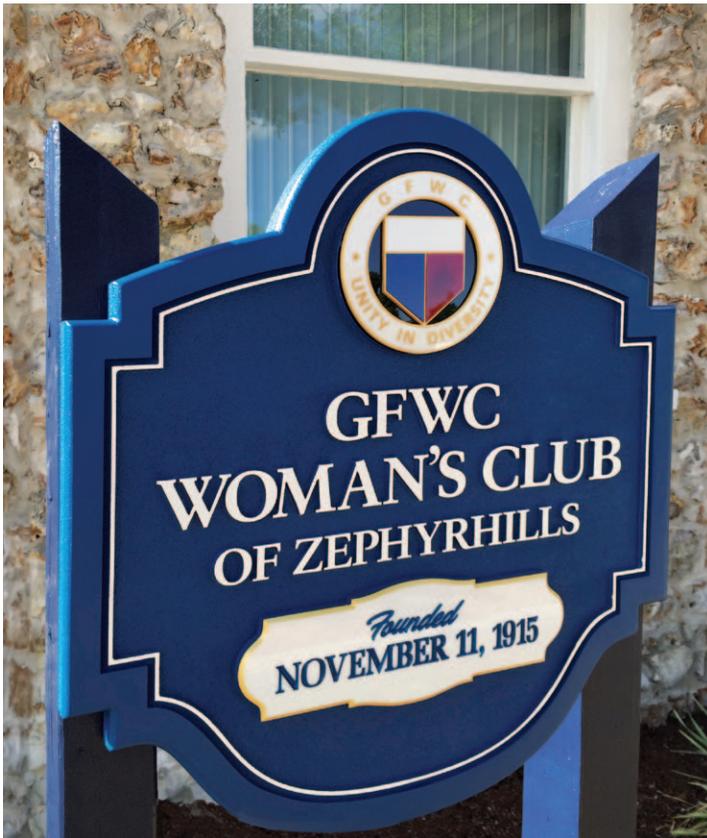
A laser can cut production time and add durability to 3D signage

Besides being capable of doing very detailed engraving on almost any surface, lasers can be used to cut graphics from several substrates. For the sign shop, the ability to cut letters from flat acrylic can be a major time saver, especially when used in conjunction with other 3D sign production techniques.

"I added the laser a few months ago because I wanted to cut down on our labor time," says Bob Stephens, Skywatch Signs, Zephyrhills, Florida. "We do a lot of 3D signs. In the past, we

often cut letters out of PVC on the router. That meant the edges had to be hand sanded to clean up the tool marks, then painted. That can take a lot of time, especially when there is a lot of secondary copy on a sign.

"Now we cut the letters or graphics from 3/16- and 1/4-in. acrylic with the laser. For smaller letters, I put a piece of high-bond double-sided tape completely over the back, using 6-in.-wide foam tape, before cutting. Once they're cut, they're ready to peel off the



The medallion graphic and the date panel are both done with layers of laser cut acrylic with laser etched lettering. The acrylic is masked with blue painter's tape then the lettering is etched with the laser. It is then painted with Matthews polyurethane paint [www.matthewspaint.com] and the masking is removed. The sign panel is sandblasted and carved HDU board.



Laser-cut acrylic letters finished with Matthews Brilliant Metallic Gold on a 34-by-37-in. CNC router carved HDU panel.

backing and mount—no sanding, no painting, and the edges are beautiful. They look good forever, and we save a lot of production time.”

Cutting a 6-in. letter from ¼-in. acrylic with a laser takes about 90 seconds. The laser leaves a “flame finished” edge on the acrylic that’s just as smooth as the face of the letters.

If the letter color required for the job is a color of acrylic sheet that Bob has in stock, he cuts them from that. If not, or if a color match is required, he paints the acrylic

using Matthews polyurethane paint [www.matthewspaint.com].

“If we’re shooting them with Matthews,” Bob says, “there’s still no sanding, and the letters look great once they’re painted. This approach saves you a lot of time and gives you a great-looking product that really lasts. That’s what I prefer to sell.” **SC**



“This sign is a good example of how we use laser-cut acrylic on our work. The HDU panel was cut and carved on the CNC router, then the graphics are all laser cut from different colors of acrylic. I like that the acrylic will look good forever, and I really like how much production time we save.”