

Stained Glass 101

hands-on info for the hobbyist

by Brian McMillan

Using Paint to Personalize Your Work

We are often asked about painting lettering on glass for projects such as religious commissions, family crests or for signage of any kind.

For those of you who have not been trained in calligraphy or the art of painting numbers and letters on glass, we have a simple solution for you. Using traditional painter's stain, a sandblaster and a vinyl stencil, you can create and personalize your stained or fused glass creations with lettering that will look professional. It is easy to achieve with the right tools and some guidance.

Brian McMillan

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Decide on a Font

The first thing you will need to do is decide on the size and type of font for the lettering. This is generally based on the type of design you are working on and how prominent you want to make the lettering. Choose the font and size you like, using a computer word processing program. When selecting a font, try to choose one that is fairly bold without a lot of fine lines or elaborate detail. The plotter used to cut the stencil will not be able to cut anything that is too detailed. Keep it simple. We have found that good old Times New Roman is our favorite.

Have a Stencil Made

Once you decide the size and type of font you would like to use, print a sample and take the sample to a local sign company. They can turn your idea into a vinyl stencil which they cut out using a plotter. This stencil is composed of three layers:

- the stencil backing
- the sticky vinyl stencil—the portion that will be stuck to the glass
- the pre-mask, which keeps the stencil intact until you transfer the stencil to the glass, after which it is then removed.

Preparing the Glass For Sandblasting

Once you have the stencil, you will need to prepare the glass for the stencil. Cut the piece of glass as usual and grind the piece to fit your pattern.

You will need to clean your glass with glass cleaner or rubbing alcohol. This will ensure that your stencil will not easily come off the glass once applied.

When you are ready to apply the stencil, first make reference marks on both the glass and stencil. These reference marks are placed on center and under scoring the lettering. This ensures that the stencil is centered and level in relation to the glass.

Start by peeling and folding back about ½" of the stencil backing, then check your reference marks and stick the exposed ½" of stencil to the glass. If you



need to reposition the stencil, it is fairly easy to do at this point. Once you are happy with the placement, grab the folded portion of the stencil backing and slowly remove it from the stencil. At the same time, burnish the stencil down onto the glass using a plastic squeegee (which you may be able to buy from the sign company) or just use your finger, if you prefer. The main idea is to remove any wrinkles and bubbles, both of which will distort your stencil.

Once the stencil is applied, you can remove the pre-mask, exposing the stencil. Remove the lettering portion of the stencil using a craft knife. Next, mask any exposed glass sections that you do not want to be sandblasted, both on the front and back of your glass, using regular masking tape.

Sandblasting the Glass

Take the glass to your sandblaster (if you do not own a sandblaster, you should be able to rent time at your local stained glass retailer for a nominal fee). Start by spraying the stencil with just compressed air to make sure the stencil is well adhered to the glass. Once you give the stencil a couple of passes with just air, slowly add the abrasive. Make sure to keep the spray square to the glass or you may force air under the stencil and cause the stencil to lift (not good!). You want to carve into the glass to create a shallow indentation (about 1/64" or so deep) into which the paint sits, and to create an edge for the paint. Once this indentation is created, you can remove the stencil.

Accentuating the Lettering

To make the lettering stand out and make painting the lettering easier, take a rag and dip it into traditional painter's stain and rub it onto the sandblasted lettering. Then, using a fine tracing brush, fill in the void with traditional painter's stain and allow to air dry. Once dry, simply dampen a rag with water and gently wipe across the lettering, taking care not to press too hard, as you may remove too much paint. The idea is to remove any excess paint that may have strayed from the stencil indentation you created.

Finally, put your piece of painted glass into a kiln and fire to 1175°F. Voila! You have a permanent and weatherproof solution to any custom project that requires lettering, giving it the finishing touch that will last a lifetime.



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