

# The Techniques and Secrets of Beautiful Glass Painting—Lettering

*Design, Fabrication and Text by David Williams and Stephen Byrne*

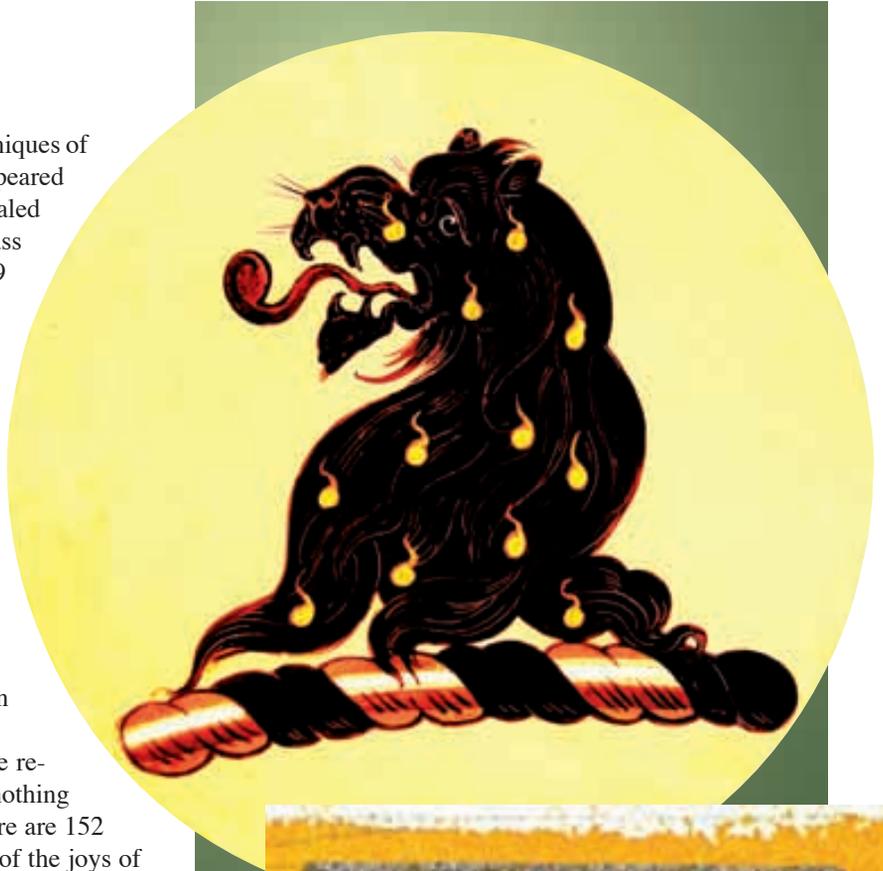
Here's the fourth article in our series on the techniques of stained glass painting. Part 1 on silhouettes appeared in Fall 2008 of *Glass Patterns Quarterly*. Part 2 revealed an amazing way of shading and matting stained glass and appeared in Winter 2008. Part 3 in Spring 2009 explored different ways of tracing gorgeous lines. Now, in part 4, we look at lettering—and we also examine a heraldic beast!

## Discovering the Nature of Glass Paint

To paint glass beautifully, you have to grapple with a pair of fiendish problems. First of all, glass paint behaves in such peculiar and demanding ways. For example, it is forever drying on the palette, and you must, therefore, be forever remixing it. Secondly, glass is such a shiny surface to paint that the brush has nothing to grip, and paint can run all over the place. Therefore, tracing a design accurately is certainly a demanding task.

Now, this isn't always a bad thing. When you're required to focus closely on what you're doing (and nothing else), it's often far more pleasurable than when there are 152 other things buzzing around your head. That's one of the joys of stained glass painting—the peace of absolute concentration. To make tracing as easy—and tranquil—as it can be, however, we have so far given you two important proposals to make your tracing less stressful. First, before you start, prepare a good size lump of glass paint (not a teaspoonful). When you work with a lump, you can dilute it a little at a time to obtain the consistency you need for the next few brushstrokes. You can then trace in the confident knowledge that your paint is as it should be—even an artistic genius needs well-mixed paint.

Second, before you trace, it is often sensible to prime the surface of the glass with a light-colored undercoat of glass paint. This means that you cover the shiny, slippery surface with a matte finish. Therefore your brush now has something it can adhere to, which makes it easier to trace beautifully.



## Tracing Integrity

One problem, however, still remains—accuracy. Remember that when you trace, the glass is placed on top of the design. Remember also that the glass itself has a particular thickness and texture, and this thickness and texture always distort—sometimes minutely, sometimes substantially—the appearance of the design that lies beneath. The distortion is increased because it is impossible for you to always look down from exactly on top of the line that you are copying. So how can you then be certain that the lines on your glass will correspond exactly with the lines on your design? This is the problem of “registration”—how to make sure that the traced lines match the lines on the design. It’s important to keep this problem in proportion. That is, it doesn’t often matter that a traced line is a fraction of an inch in the “wrong” place when compared with the design. Usually, it’s more important that the traced line has its own life and character. These are qualities that your line cannot easily possess when it is just a slavish reproduction of another line. In this sense, it’s far better to trace a twinkling eye than a lifeless one. And, as with the phoenix in our last article, when you’re painting flames, you want them to dance, not freeze. It doesn’t matter if they’re not exactly the same as the flames in the design. It does matter that they flicker.

If you don’t need life and character in your traced line, there may be little point in using a brush at all. You might be better off using a stencil, or a pen, or even printing the line mechanically. However, even when you work with hand and brush, perfect registration is sometimes necessary, so let’s consider a useful way of solving the problem.

## Painting with Accuracy

Imagine that you want to include an inscription in your stained glass panel. Perhaps it’s someone’s birthday or an anniversary or a memorial. In this instance, you definitely want the letters and numbers on the glass to correspond accurately with their layout on the design. Just as the problem of registration is caused by looking at the design through the glass, so it is solved by placing the design on top of the glass. Here’s what you do.

First, transfer the design onto glass paint that you’ve already applied to the surface of the glass. Then you remove the unwanted paint. For hundreds of years, this is pretty much how people have painted letters and numbers onto glass.

Although it’s a dusty method, it’s certainly straightforward. First we’ll show you how to test the whole procedure, and then we’ll show you how to paint the actual lettering.

### Glass

Any Light-Colored Glass

### Glass Paint

Reusche DE401 Tracing Black mixed with Reusche DE402 Bistre Brown (in ratio 3:1) mixed with Water and Gum Arabic)

Light-Colored Paint

Dark-Colored Paint

### Tools and Materials

Pencil Lightweight Tracing Paper

White Chalk Cardboard Thin, Wide Brush

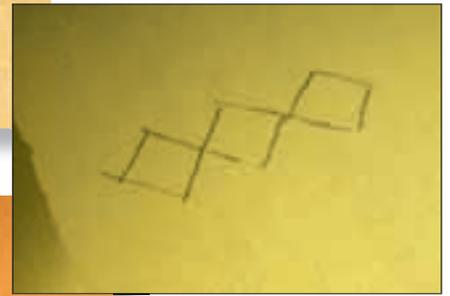
Blender brush Various Tracing Brushes

Painting bridge Pointed Wooden Stick

Scrubber brush Light Box Kiln

1

Prepare a test design by using a pencil to draw a simple, small design on tracing paper.



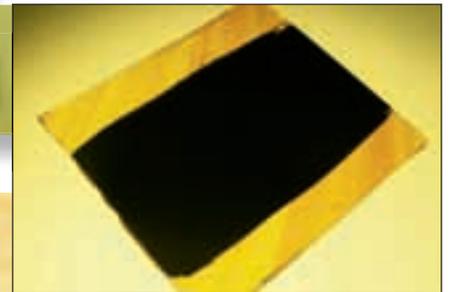
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Turn the tracing paper over and apply white chalk over the lines of the design.



3

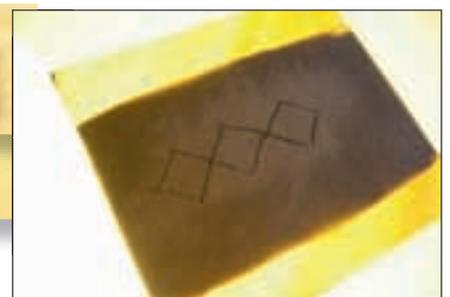
Prepare a test piece of painted glass.



Prepare some thick, dark-colored glass paint. Use the thin, wide brush to apply it to the glass. Use the blender as needed to make the glass paint smooth. Let the paint dry.

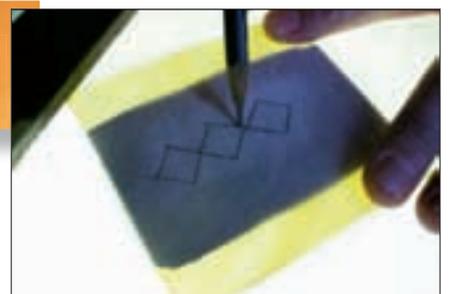
4

With the chalk side down, place the tracing paper on top of the design.



5

Transfer the design by using a hard pencil to draw over the lines of the design.



Do this carefully and accurately.

6



*Check the painted glass.*

Remove the tracing paper. Check that you've transferred the chalked image of the design onto the painted glass. If this hasn't worked, you may need to apply more chalk to the back of the tracing paper (step 2). Or you may need to press more firmly with the pencil (step 5). If the dried paint has been bruised by resting tracing paper on top of it, you either need to be more gentle or add more gum arabic to your paint.

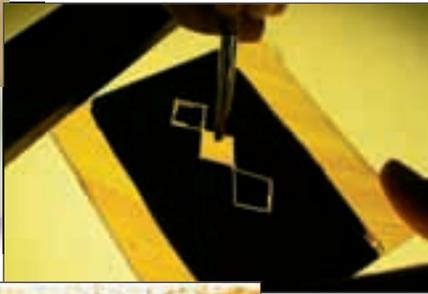
7



*Use a sharp wooden stick to pick out the outline of the design.*

If the paint flicks off uncontrollably, you need to pick more carefully and/or reduce the amount of gum arabic in the paint.

8

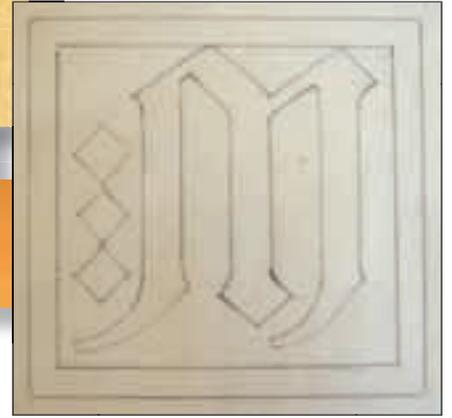


*Use a scrub to remove the unwanted paint.*



It's a good idea to wear a protective mask to prevent the dust from entering your lungs. If all of this goes well, it's also worth firing your piece. If the paint blisters in the kiln, you'll need to reduce the amount of gum arabic in the paint and/or apply the paint less thickly (step 3). If the test piece comes out fine, then go straight ahead and do the lettering as we'll now explain. Here we're using the letter "M" as our example.

9



*Trace the letter carefully onto tracing paper.*

Prepare the artwork. Draw and/or paint the design onto normal paper. Then use a pencil to trace the outline of the letter onto tracing paper. You need to work accurately and carefully.

10

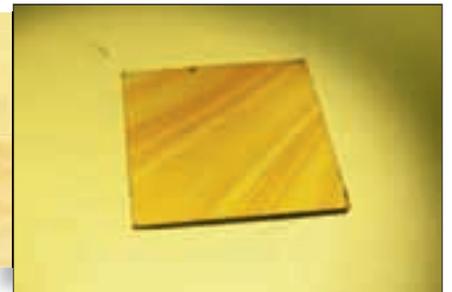


*Turn the tracing paper over and rub white chalk all over the back of it.*



Also use your fingers to smooth the chalk dust across the whole surface of the tracing paper.

11



*Cut the glass to size.*

Groze the edges, then clean your glass thoroughly several times.

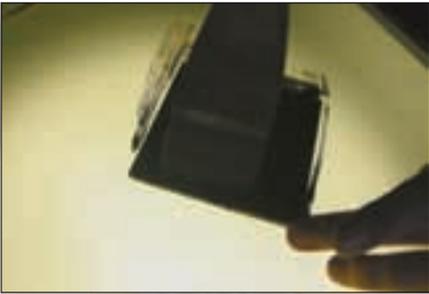
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*Prepare the glass paint.*

Dilute the glass paint to the right consistency. It's a lot heavier than you would use for tracing, but it's not as thick and dark as paint you'd use for silhouettes. Test the paint on a spare piece of glass. Use the thin, wide brush to apply it in careful stripes. Then as needed, use the blender and blend it gently. Let the paint dry. When it's dry, it needs to be even and dark.

13



*Cover the glass with a dark-colored coat of paint.*

Load the thin, wide brush with glass paint. Now apply dark, even stripes over the whole surface of the glass. As needed, you can use the blender very lightly. But note this: If you blend too much, the paint will dry and scratch. Let the paint dry.

14



*Transfer the chalk outline onto the painted glass.*



15



*Check that you've transferred the chalk outline onto the glass.*



Carefully lift up the tracing paper and check the outline on the glass. If the chalked outline hasn't transferred completely, carefully replace the tracing paper and use the pencil to try again.

16



*Use the pointed wooden stick to pick out the entire outline.*

So that you don't accidentally bruise the paint, you can rest your hand on the bridge. You can also use the bridge like a ruler whenever you need to pick out lines that must be absolutely straight. Wear a protective mask so that the dust does not enter your lungs.

17



*Thicken the outline.*

Once you've carefully used the wooden stick to thicken the outline, you can quickly use a scrub to remove the rest of the unwanted paint. Wear a protective mask so that the dust does not enter your lungs.

18



*Use the blender to dust the surface clean.*

Do this carefully and slowly, and then clean up the discarded dust.

19



*Use the wooden stick to remove any last flecks of unwanted paint.*

20



*Fire the glass.*

Ramp to a top temperature of 1250°F at 500°F per hour and hold for 3 minutes or as the paint manufacturer recommends. Then descend and anneal the glass as needed.

That's it! You can use the same technique for all kinds of letters and numbers where precision is required. You can also use it for other styles of designs where, for example, there is more paint than line work. This is exactly how we made ten copies of the magnificent heraldic beast at the start of this article. We began by applying thick paint to most of the glass, and then we used chalked-up tracing paper to transfer the outline and highlights. After that, it was a simple case of picking out—plus a little bit of enamel and silver stain.

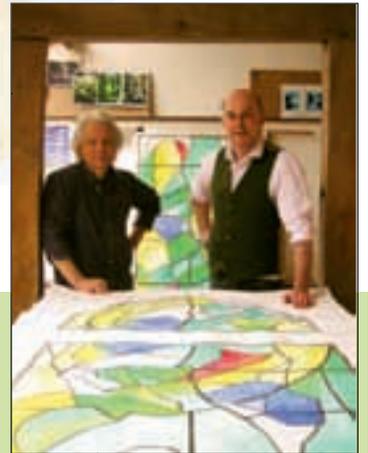
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*You'll find this and loads of other great projects in the Summer 2009 issue of Glass Patterns Quarterly.*

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*Anyone who wants to find out more about stained glass painting can visit David and Stephen's website. There you will find free guides to stained glass painting, including a lovely design for English dog roses. There are also ten step-by-step glass painting projects (featuring flowers, birds, faces, and decorations) for you to make. What's more, you will discover Glass Painting Techniques & Secrets from an English Stained Glass Studio. Kat Colburn wrote from Texas to say that this is a "lovely eBook," and Jeanette Austin wrote from Florida to say it is "complete and easy to follow."*

*David and Stephen will make the time to answer your questions, which is why Eve Hamner wrote from California to say, "Thanks so much for all the helpful tips and information." Learn and improve your glass painting skills with David and Stephen by visiting [www.beautifulglasspainting.com](http://www.beautifulglasspainting.com).*

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