

# **How to Etch Glass**

# A guide to personalized glass etching.

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#### **Author's Note:**

Thank you for downloading my free ebook which will cover most of the basics on how to etch glass with different processes.

While this is a free ebook, please don't give it away to others. Instead, it would be appreciated if you shared it with others by telling them to download it here: <a href="http://www.glassetchingsecrets.com/howtosteps.html">http://www.glassetchingsecrets.com/howtosteps.html</a>

Before I get into the steps on how to etch glass, you should first know that there are a few different ways to do it. So in Part 1 of this ebook, I will give a brief overview of the different types of glass etching processes, and then show you some of the glass objects that you can etch in Part 2. In Part 3, I will show you the basic steps it takes to etch glass with a few of the most common processes used in the industry.

# **Part 1: Etching Types**

#### **Cream Etching**



This is the most popular way to etch glass because it is very easy to do and doesn't require a lot of supplies. You would only need a bottle of acid cream, stenciling supplies, an applicator, and a piece of glass. The cream is typically made up of the mild chemicals: Barium Sulfate, Sulfuric Acid, Sodium Bifluoride, and Ammonium Bifluoride.

You can order a bottle on Amazon here: <a href="http://amzn.to/WRIH0J">http://amzn.to/WRIH0J</a>

This process doesn't provide the best professional quality, but in the later pages, I will show one of my methods to enhance these. If you prefer a professional look or are selling these items, I strongly recommend that you look at the rest of the processes mentioned.

#### **Hydrofluoric Acid Etching**

This is another chemical etching process, except it is made up of a much more dangerous acid which is abbreviated as HF. The chemical properties of this chemical actually allows the liquid to etch deep into the glass. It can produce professional results, but I don't recommend it because it is scary stuff when it comes in contact with your skin.

#### **Engraving**



There are a few types of engraving methods within this category such as rotary, wheel, and hand engraving.

- Rotary engraving is the most typical method which uses a Dremel type tool with small bits to grind into the glass.
- Wheel Engraving has a stationary copper or diamond wheel that spins around. Then you move the glass around the wheel to grind shapes into the surface.
- Hand Engraving uses scribe type tools to mark or scratch the glass. Some of those tools are stipple and point engravers.

#### **Sandblasting**



Using this process has a lot of advantages. It is safer than hydrofluoric acid and produces professional looking results with many techniques to choose from.

Sandblasting glass is becoming one of the most popular types today. It works by using compressed air to propel fine abrasives onto the glass which it abrades. A stencil simply exposes the pattern to be abraded, which lightly chips away the surface to produce a frosted looking finish.

# Part 2: Etching Project Ideas

There is a large possibility of glass objects that people can etch. Some people don't realize it, but you can also etch other types of materials also. To keep it to the basics, I will only be talking about glass in this ebook.

This section will show some project ideas to get your mind thinking of all the possibilities of what you can do.

Please see some of the glass etching project ideas that are listed below:

### 1. Etching Glass Mugs and Cups:







# 2. Wine / Champagne Glass Set



## 3. Cake Dish, Baking Dish, & Cookie Jar Glass



### 4. Etched Glass Mirror

- a. For Bar
- b. Home Decoration
- c. Business Signs





# **5. Plain Flat Glass Decoration / Lighted Displays**





- **6. Corporate and Business Awards**
- 7. Glass Name Plates for Office Desk
- 8. Christmas Glass Ornaments



## 9. Glass Paper Weights

## 10. Car Window Customization & VIN etching



### 11. Glass Shower Bathtub Doors

### 12. Glass Coasters



- 13. Flower Vases
- 14. Shot Glasses
- 15. Glass Table Tops

### 16. Personalized Candles



### 17. Privacy Glass Windows / Doors

### 18. Storefront Windows

### 19. Picture Frames & Photo / Halftone Etching





#### 20. Wine Bottle Gift

- a. For Wedding Present
- b. Anniversary Present
- c. Birthday Gift





# **Part 3: Glass Etching Tutorials**

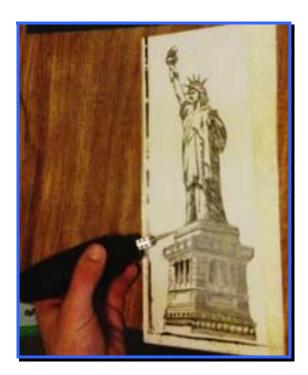
Now, I want to provide a few tutorials on some of these types.

# **How to Rotary Engrave Glass**

- 1. First, find a pattern or draw one using computer programs such as photo editing software. I decided to pick a pattern depicting the Statue of Liberty.
- 2. I measured my glass and sized the pattern up to those dimensions in photo editing software. Then, you just print out the pattern onto paper.
- 3. Now, place and align the paper behind the glass so you can see it from the other side. Apply a strip of masking tape to the edge of the paper and glass. This will ensure that the paper doesn't move while engraving. It also allows you to lift the glass away from the pattern at times so you can get a better look at how well the glass is being etched.



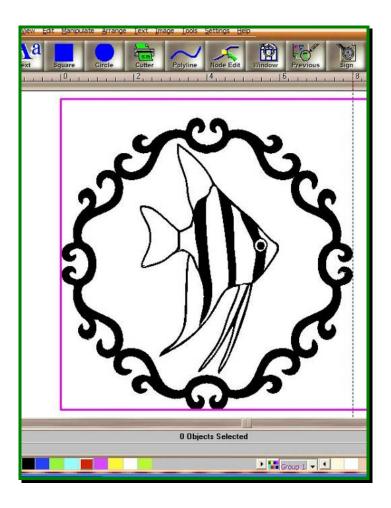
4. Run the engraving tool over the lines and be sure to wear safety glasses. This tutorial only shows the basics, but you can do more advanced techniques by switching up the engraver bit with other styles. There are a few different sizes that you can choose from.



That's it!



## **How to Etch Glass with Cream**



- 1. First, you will need to find a design or pattern to mimic. You can design one in a graphic editing program which will allow you to include text, a combination of patterns, and utilize other helpful editing tools.
- 2. Second, you need to draw, trace, or print out the design onto a resist material such as vinyl or rubber. You can use contact paper for cream etching which is a low cost solution which is typically sold at nearby hobby stores.



**3.** Third, you will need to cut out the pattern by using a sharp knife such as a hobby knife. You basically just follow your traced lines.

For this example, I used cutter equipment to manually cut out the design to size before I used a squeegee to apply the stencil onto the glass.

Depending on the stencil process, you can cut out the design before or after the stencil is placed on the glass.

After the design is cut, just pull out any of the cut pieces for areas that you want to expose for etching.

Now, place the newly cut stencil resist onto the glass by smoothly burnishing it over the glass with its adhesive backing facing down. If it doesn't have an adhesive backing, then you will need to apply glue to the stencil resist.



**4.** Once in place, you're ready for etching. Take the etching cream, and evenly spread a thick layer over the stencil with an applicator.

You can use a brush or any flat piece instrument such as cardboard. Lately, I have been using flat items to apply the cream because it smoothes an even layer better.

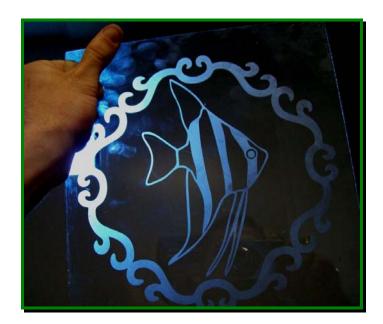




**5.** A lot of times, cream doesn't look very consistent. I found that by waiting about 5 minutes and remixing it on the glass will produce more consistent results.

After this, wait an additional 5- 10 minutes to allow the cream to etch.

Then, wash off the cream, peel the resist stencil off, and clean up.



**6.** And that is all it takes to etch glass with acid cream. Using etching cream is probably the easiest way to etch glass, but it is also hard to see at times. It is not my favorite method, but there are some ways to improve it and I will be showing you one of my methods next.

### **How to Make Your Cream Etching Stand Out**

Other than my tips mentioned in the above tutorial, there are some additional ways to improve the visibility of the cream etched areas and establish a more quality looking etching. One of my ways is to use this rub on type paint called "Rub N' Buff" which you can get on Amazon here: <a href="http://amzn.to/TeTVZo">http://amzn.to/TeTVZo</a>

I don't particularly like the idea of painting an etching because in my opinion having art made up of nothing but the glass itself is very elegant. But this stuff is an exception, and if you do it the way I use it, people probably won't be able to see that it is covered in paint. Also, the company sells a few different colors which you can experiment with here: <a href="http://amzn.to/SPHvgY">http://amzn.to/SPHvgY</a>

To make it look most like an etched glass finish, I suggest you stick with the white color only.

Also, the Rub N' Buff is actually considered a "wax metallic finish", so it's not necessarily considered a paint.

#### My Methods

As I stated, you want the glass to look like it is etched with no other additives. In order to do that, I suggest that you rub on a very light coating of the Rub N' Buff. You can do this either way described below or a combination of both:

- Dilute the Rub N' Buff- By diluting the finish, you will make it look less obvious that an additional substance is on the etching, and it will still allow light to show through which is a characteristic of professionally etched glass. This is also known as thinning, and the company recommends that you thin it by using Mineral Spirits. This is a typical chemical found in the painting & chemical section at home improvement stores.
- Apply Small Amounts & Rub Out Most- The other way is to simply apply a small amount to the etching and rub out as much as possible. Using this method alone can be hard because sometimes it produces an inconsistent coating.

Below you can see the before and after pictures when I was applying the Rub  $N^{\prime}$  Buff.

# **Before**



# After



### **How to Sandblast Glass**

My favorite way to etch glass is through the process of sandblasting. Most people think this has to cost a lot of money to get set up, but it doesn't have to if you use some of my solutions. There are also supplies available that use smaller sandblasters which are fairly inexpensive. So in this section, I will show you a step by step **tutorial on how to sandblast glass**.

1. Just like most etching processes, in the first step you will need to find a pattern and make a stencil. Typically you will need a thicker stencil material, but it depends on the air pressure that you will be blasting. A 3 mil stencil thickness will work for most applications. I simply find a pattern to use in a black and white format. For this stencil, I used my computer and cutter, but you can hand cut it out also.



2. Second, I removed the backing paper from the stencil and aligned it on the flat piece of glass. You can see that I then used a squeegee to smoothly place the vinyl stencil while preventing any air pockets from developing. Make sure it's masked off around the edges to prevent over blast.



3. Third, take any type of sandblaster to surface etch the glass over the cut out areas of the stencil. Be sure to use abrasives that are as hard as the glass such as sand, aluminum oxide, or silicon carbide. I used about 30 pounds per square inch for the air pressure (30 PSI).



4. After it's etched evenly, peel off the stencil and masking tape.



5. And here is the finished product below.



### **Extras Free**

Thank you so much for reading my ebook!

As a special gift, I am giving away a whole bunch of etching patterns that you can use. Plus, a free video series. So, after signing up, you will receive the following:

- A bundle of free etching patterns to use
- Video 1 about low cost glass items to etch
- Free downloadable report cover Video 1 with links
- Video 2 covering all the different etching techniques
- Video 3 covering ways to reduce costs & start a business

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