



STAINED GLASS BUTTERFLY

(SILK SCREENING ON GLASS)



This design is 2 pieces of clear 96 COE glass. Color decoration is done with Colors For Earth Glass Colors, BubbleART Glass Color and Silk Screen black. Learn how to add dimension to your glass designs.

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Paula McCoy, Weatherford, Texas 76085 * Phone: 817-677-5020 * Fax: 817-221-9309
Web Site: www.colorsforearth.com
E-mail: ceramicsbypaula@prodigy.net

Supply List

Miscellaneous

Sponge
Tissue Paper
Pencil
Ceramic Tile (Palette)
Paint Well Palette
Water Bowl
Palette Knife
Toothpick
Painters Tape
Vinegar or Alcohol for cleaning glass

Brushes

#1 Taklon Liner

Suggested Ware:

2 - 96 COE 6" x 6" Squares Clear

Colors For Earth Products

Glass Colors:

GM-300 Glass Medium
G310 Vermillion
G322 Lemon Peel
G325 Curry
G361 Leaf Green
G362 Laurel Green
BA5051 Cerulean Blue
GS-504 Silver Sparkle
DB101 Detailing Black

Silk Screen Materials:

SSB101 Silk Screening Black
Squeegee
Silk Screen of Butterfly

Please read through all instructions before beginning project so that you have a better understanding of the technique. This may answer some of your questions before you get started. Should you have any questions or comments on this technique please don't hesitate to contact me.

Low-Fire/No-Fire Piping Paste: This paste can be used on many different surfaces which include paper, glass, fired underglaze, fired glazes including gloss and matt. It can also be used on glass ornaments, wood and scrapbooking designs. White and Black colors are available. Piping Paste can be put in pastry bag or small squeeze bottles with different size tips to dispense. Patterns can be free handed or can be transferred to ceramic surface using Saral transfer paper. Saral is a chalk based transfer paper and can be found in sheets or on a roll at craft stores.

Piping paste dries very fast. When using a brush to create texture and shape of petals, leaves, etc. you will need to make sure that you put GM300 Glass Medium into the brush before using it with paste. With fingers, gently press out the excess medium and flatten the hairs to look like a square shader. The glass medium helps remove paste and aids you in creating a soft look to the strokes on petals and leaves. If the brush has too much glass medium in it the paste will get too wet and run. After each leaf or petal wipe off excess paste on sponge or paper towel then re-apply the glass medium before doing your next stroke.

Piping paste will cure after 24 hours and does not need to be fired. On ceramic and glass surfaces it is recommended that you fire the paste. For a more durable surface it is recommended that you fire to witness cone 015-016. The paste can be tinted with glass colors before piping. Glass colors can also be used to paint over the piping paste. Piping Paste can also be used between 2 pieces of glass. If working on a non-fired surface you can use acrylic colors, Fash-N-Hues and foiling to decorate over paste.

Glass Color: Colors for Earth is proud to introduce our "Fired Glass Color" line. 28 of the colors are lead-free (non-toxic) and we have 2 colors that have a health warning. These colors are vibrant just like our translucent underglaze color line. The names and numbers of the glass line coordinate with our current product line so that you can easily create your glass projects to match your ceramic ones.

They are in a powder formula that is mixed with our GM300 Glass Color Medium. By mixing with medium it will insure an opaque glossy finish. The 28 colors are non-toxic/food safe. Do not use the 2 colors that have a health warning on any surface that will be in touch with food or drink.

The colors can be used on most types of glass including COE 90 and COE 96 as well as float (window) glass. They also can be used as an overglaze on glazed ceramic pieces. We have a Black Outline and White Outline which will allow you to create different looks.

When the colors are thinned they can be brushed, sponged, sprayed or applied with a pen or Gizmo. The dry colors can also be sifted over the glass for different techniques.

Firing is cone 015-016 or from 1416° to 1450° in a ceramic or a glass kiln. Our glass colors hold their color to a much higher temperature when used on ceramic or porcelain bisque.

BubbleART is a fired glass color that is a non-lead color. These 14 colors are translucent/transparent colors that were designed to be fused between two layers of glass to create bubbles. These colors are design dependent, meaning that where you put your design you can control the bubbles. If you use a liner brush and place lines on the glass and leave spaces between them you will get lines of bubbles. Solid areas will be all over bubbles. You can place dots of color and these will be small collections of bubbles.

BubbleART can also be used on top of glass. You will get a textured look and feel. Some colors will be transparent and others will be opaque when used on top of glass. Some of these effects are technique dependent. Mix 1 to 1 with GM300 Glass Medium. You can add more GM300 Glass Medium to change the consistency and your application which can change the color intensity and the size of the bubbles.

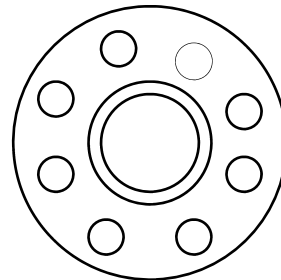
Shake jar before mixing with glass medium. These colors are much more gritty than the original glass color line. The gritty stuff will create intense color, if you don't want that you can pick it off the wet color before it dries.

The heavier the color is put on the darker it will be. The thinner it is put on the lighter in color it will be. When using float glass (window) you tend to get larger bubbles. When using 90 or 96 COE you will get smaller bubbles. The float glass can be fired between 1425-1550 F. The 96 COE glass when fired to 1485 F tends to shrink in but the bubbles are a little larger than a firing of 1450 F with a 2 minute hold.

96 COE glass fired to 1445-1465 F is a nice fuse of the 2 pieces of glass but the bubbles are very small. Each kiln is different and test should be done before starting a large project.

1. **Preparing Working Area:** You can either use paint pod or a Paint Well (white plastic palette with little cups) for mixing color. I like using the paint pods because there is no waste with your products/ When you are done you close the pod and when you are ready to use again just reconstitute with GM -300 Glass Medium. The paint well palette is also good if that is all you have because the product sits in a little cup and doesn't spread out on a tile and dry out before you know it. With the Paint Well it keeps the color moist and you don't waste as much product when you have to walk away. You can cover with plastic wrap or they make covers for these.

I put a damp sponge in the center of the Paint Well to blot my brush on as I am working and changing colors.



2. **Cut Glass:** Cut glass as indicated below:

2—6" x 6" Clear 96 COE Glass

3. **Cleaning Glass:** For this project we are using 96 COE. Clean with vinegar or alcohol or your favorite glass cleaning product. If using window glass clean both sides of the glass by scrubbing with powdered cleanser such as Comet. Rinse well. You will need to determine the correct side of the glass to paint on by watching the way the water comes off the glass. One side will sheet off and the other tends to bead up and fall off. You want to paint on the side that sheets off. When correct side is determined, dry with lint free paper towel keeping the correct side up. After cleaning, handle glass by the edges only, or use paper towel as your fingerprints will show after firing.
4. **Silk Screen Outline:** Mix **SSB101 Silk Screen Black** with **GM-300 Glass Medium** to a honey/ melted cream consistency with palette knife on a glazed tile or in jar.

Place finished silk screen on glass and position it where you want it. Tape down left side of screen with painters tape to hold in place.

With palette knife, apply some of the mixed black on left side of screen. You can also pour out of jar.

With squeegee, start at left side and work across to the right side, pressing down gently to drag the color across the screen and allow it to go through the outline of the design. Continue down the design until design is completely screened. Lift up from bottom right corner and check to see if your design has come through on all areas. If not, gently lay the screen back in place and add more black

color on left and repeat with a little more pressure. Repeat again if needed, until design looks solid. Lift and remove.

Allow to dry before painting.

Excess black can be placed in an air tight container and used again by re-working it up with the glass medium. This black used is a special black that is really black and designed specifically for screening.

NOTE: If you are piping the outline instead of screening it you will pipe both sides of the pattern with **BLFP Black Low-Fire/No-Fire Piping Paste**. All color is applied the same no matter which technique you use for outlining.

All colors are mixed with GM-300 Glass Medium to a Elmer's Glue consistency or slightly thinner. Mix all colors with brush or tool so that you can determine the right consistency.

It is recommended that you work on top of a light board so that you can see if your colors are touching the outline. If you don't have a light board you can use a white paper plate under your glass and it will allow the light to go under the glass and act like the light board.

5. **Leaves:** Leaves are flooded in with **G361 Leaf Green** and **G362 Laurel Green** on the top. Colors are applied between the screened lines making sure the color covers the area so that no light shows through. Allow to dry.

NOTE: You can work on top of a white paper plate where your glass sets up on the plate so that the plate acts as a light board for you. The light is able to go under the glass so that you can see if you are touching the lines and have no gaps between the color and the silk screened outline.



6. **Butterfly:** Flip glass over and apply the colors to the butterfly. Fill in the red areas with **G310 Vermillion**. Allow to dry so that the colors don't run together. On the yellow areas you will do a 2 color blend.

Use **G322 Lemon Peel** on the outer 1/2 of the wings and then **G325 Curry** on the other half, inside next to the red areas. Some of the **G310 Vermillion** can be added here also. Do a small section at a time so that you can blend the 2 colors together, wet on wet. Pull the colors through each other to blend.

Make sure you are pushing down to the glass so that this will show on the other side. Remember you are on the back of the glass.

7. **Background:** The background areas (blue) are flooded with BubbleART color **BA5051 Cerulean Blue**. Place this color only where you see the blue. Allow to dry.
8. **Body:** Flip glass back over and fill in body with **GS-504 Silver Sparkle** and the frame around the edge.
9. **Detailing:** With liner brush and **DB101 Detailing Black**, you can touch up any lines that you need to clean up that you might have went over on the silk screen or add other detail.

NOTE: When using the **DB101 Detailing Black** to touch up or accent on top of glass colors it will be shiny when fired. The silk screen black/paste or outline colors with fire out matt. So if you are touching up lines where your color has covered up you need to do some of the randomly all over the piece so that one shiny line doesn't stand out from the others. Allow to dry before firing.

10. **Firing:** Place your painted piece of glass on top of another piece of clear, with the screened side up. You need the second piece of glass so that the BubbleART can make bubbles. Place on thinfire paper and fire to a full fuse.

Degrees per hour	Temperature	Hold Time
400	900	5 minutes
500	1100	10 minutes
100	1250	20 minutes
Full(9999)	1425	5 minute
Full(9999)	900	60 minute
100	725	off

11. **Remove from Kiln:** When completely cool, remove from kiln. Rinse thin fire paper residue off piece.

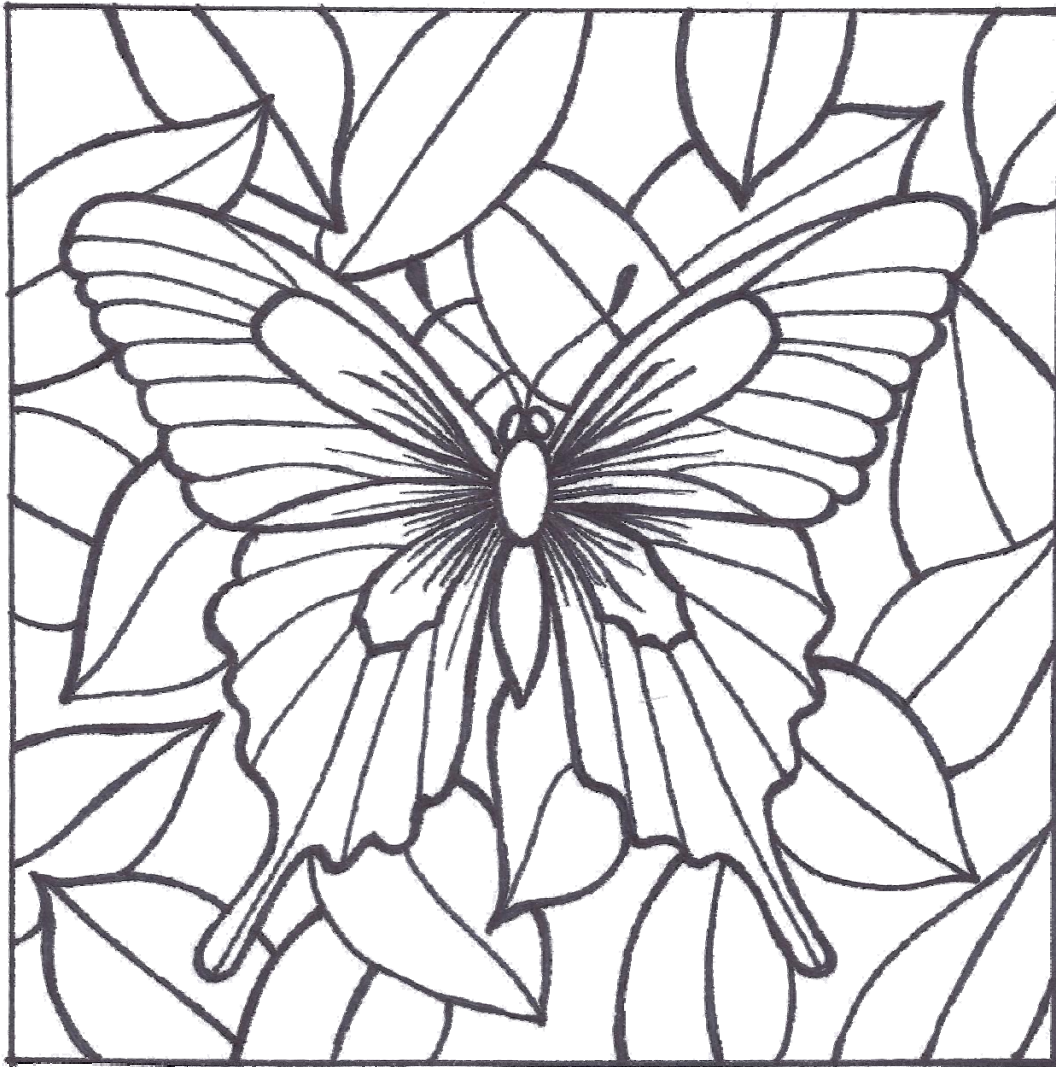
Happy Painting!

Stained Glass Butterfly

Pattern

By: Paula McCoy

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MAKING SILK SCREEN

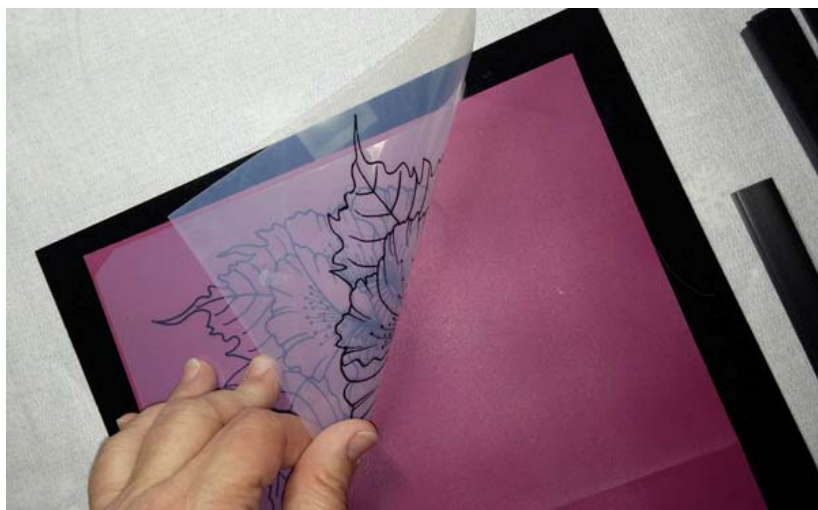


This photos shows different parts of the screen making process.

- Black & White Drawing
- Yellow Bug Light
- Exposure Unit
- Silk Screen
- Image on Ink Jet Photo Transparency Film
- Finished Silk Screen



This photo is of the dark side of the silk screen facing up on top of black acrylic photo unit and the photo transparency of poppy.



This photos show the printed side facing down on silk screen.

MAKING SILK SCREEN



This photo shows your exposure unit:

- Black Acrylic Frame on bottom
- Silk Screen (Dark side up)
- Printed Side down on Transparency
- Clear Acrylic Frame on top

Another view in dark room (yellow bug light in room with water, I use a bathroom)



This is the exposure unit clamped together ready to be exposed and screen burned.

- If close to a door that goes outside you can hold the unit close to your body with black side facing out, design facing your body. Or place in black trash bag, allowing no light to get in.
- Go outside (Sunny day, NO Clouds)
- Flip unit over so the design is facing the sun. DO NOT have your fingers in the way of the film. Hold on edges.
- Start your stop watch and face the sun for 17 to 20 seconds max for this design. Design with thicker outline will take 25 seconds. The thinner the line the less time in the sun. STOP
- Flip unit back over against body or put back in trash bag. Go back in to dark room/ yellow light room.
- Remove pink silk screen from exposure unit.
- Place plastic canvas/grid from kit in sink as shown on the left in sink. The canvas/grid keeps the screen flat for rinsing.
- Place exposed/burned screen on canvas/grid under warm running water.
- Flip it over every now and then to clean both sides. After about a minute you will start seeing the lines of the design showing up, they will look white. The water is rinsing away the pink where you burned the image on the screen. Continue to rinse until all lines are visible.

Running water in sink with canvas/grid under screen.





MAKING SILK SCREEN



This photo shows the screen that you have created and it is hanging up to dry. I hang mine up with clamps on a shower door. You can string a piece of rope up and hang with close pins also. You could lay it flat on a paper towel and place another paper towel on top.

The reason for another paper towel on top is to keep the edges from curling. If the edges are curled it makes it harder to keep the screen flat on your piece for screening process.

The screen needs to be completely dry before using.



View of screen when dry.