



Customized Glass Molds & Textures

By Michael Harbridge

Materials List

Glass Enamels by Colors for Earth

www.colorsforearth.com

817-677-5020

Glass by Spectrum System 96

www.spectrumglass.com

Brushes by Royal & Langnickel

www.royalbrush.com

219-660-4170

Moist Ceramic Clay

Low-Fire White Earthenware (Available through most pottery suppliers)

Earthenware Casting Slip

(Available through most pottery suppliers)

Form

Ceramic Bisque, slump mold or paper plate

Texture Materials of Choice

Contact the artist

info@claypuzzling.com

715-281-6450

This technique uses ceramic clay to make glass molds. The nice thing about clay is you can make virtually any pattern, texture, or design, and when the clay is dry and ready to fire, it does not need any separator the first time. If you plan to use the mold more, you will need to use a separator. This is ideal for one-time patterns like personalized handprints. Clay can also be used to make shapes like the tree design, and glass can be slumped over the back to fit the design.

Tree Method

Step 1) Press moist clay against a ceramic bisque plate to make the design. Clay should be about a half to three quarters inch thick, and fairly uniform in thickness. Thicker areas will take longer to dry, and since clay shrinks as it dries, this can cause cracking when thin areas dry quicker. Press the clay together tightly where pieces meet. Use a piece of fabric (washcloth) to press and add texture. If working with a surface that does not absorb moisture, place fabric or paper between the clay and the surface to prevent it from sticking. Remove clay shape once firm enough to stand on its own. Place on a surface that will absorb moisture.

Step 2) Allow clay to dry completely. Firing moist clay will cause it to explode in your kiln. Generally, a week is sufficient, but in damp or humid conditions it may take longer.

Step 3) Glass should be slightly larger than any areas that are open on the tree pattern (when places on the back side), but should not go over edge of clay. Clean glass with vinegar and dry.

Step 4) Mix enamel colors with medium and add a few drops of water to make them more fluid. Dab the colors on the glass starting with the yellow, going about three quarters of the way up the glass.

Immediately dab the orange along the top edge of the yellow, allowing it to bleed into the yellow. Dab the orange up to the top of the glass, and lightly dab into the yellow to get a gradual blend. Immediately dab the red along the top edge of the glass, right into the orange, and randomly dab to get a blend.

Step 5) Allow the colors to dry. Remove any glass color from the back side of the glass and along edges with damp sponge or towel.

Step 6) Place the glass on the back side of the clay tree with the painted side facing up. Do not fire with the painted side against the clay.

Recommended firing schedule for System 96 Glass used in class. (Slump)

Ramp 1: 150 degrees F per hour to 300. Hold for 15 minutes.

Ramp 2: 300 degrees F per hour to 1100. Hold for 30 minutes.

Ramp 3: 150 degrees F per hour to 1225 to 1250. (Every kiln fires differently, so your final temperature may vary slightly.) Hold for 15 minutes.

Ramp 4: 999 degrees F per hour to 950 degrees. Hold for 60 minutes.

Ramp 5: 150 degrees F per hour to 800 degrees. Hold for 10 minutes.

Ramp 6: 300 degrees F per hour to 100 degrees. No hold and allow to cool to touch before removing.

Step 7) Remove tree and glass from kiln, and your glass should not stick. Paint tree with acrylic colors of choice and glue glass to back.

Color Techniques with Colors for Earth Enamels

These colors come as a powder and need to be mixed with medium for liquid application. Just mixing with medium will work fine but adding a little water will make them more fluid to achieve the marble effects and more flowing methods. If you add too much water, the colors will just blend together and turn to mud. Experiment with different amounts of water. Water will also make them more transparent. Powder form can also be used by sifting or sprinkling on glass. Here are some basic facts and tips about the product to keep in mind when creating your items.

- Colors are intermixable.
- Colors do not require capping but should be fired with the color side facing up. Be sure all color is removed from back of glass and edges before firing.
- Colors can be capped.
- Most colors are food safe but see website for specifics. www.colorsforearth.com.
- Colors can bleed into one another when placed next to each other.
- Puddle colors on for best coverage. Light application can cause colors to “burn out” or be streaky.
- Colors are compatible with any COE glass.

Making Molds

Roll out slabs of moist clay. This can be done on canvas, or craft foam. Use dowels and a rolling pin for uniform thickness. Press textures of choice into clay and remove. Allow the clay slabs to dry thoroughly before placing glass on top and firing to slump or full fuse, depending on desired look. Always allow clay molds to dry on a surface that will absorb moisture. You can also turn slabs into slump molds and drape molds.

Get more free techniques at www.learnfiredarts.com.