

Art Clay – Silver Glass

Deborah E. Love Jemmott © 2000

Glass can be combined with the Art Clay-Silver. This technique requires some practice and dedication. Any glass can be used. If different colors or kinds of glass are being used together, they **MUST** be compatible. Many glasses – especially reds and oranges - will change colors during the firing process. The firing temperature of the art clay silver - 1600°F is too high for many glass pieces and will result in a darkening of the glass. One solution to this problem is to create the piece in art clay silver, fire it, cool it and then re-fire it with the glass in place at a lower temperature (usually 1400°F - 1550°F).

If the glass and the art clay are to be fired at the same time, the glass should be “cabbed” first and the clay worked around the cab. To cab the glass, place it in the kiln on a sheet of Bullseye fire paper and bring the kiln to 1472°F. Allow the kiln to cool slowly with the kiln door closed until it is under 150°F. If necessary, grind the edges. Grinding glass should always be done under water, as the silica dust is dangerous.

One problem that occurs with mixing glass and metal is the stresses that are created where the two join. One solution is a rim of metal (or clay) to completely encircle the glass. The rim should be substantial – if it splits during the firing process, the glass may shear and crack. Make sure the joint in the rim is well joined with paste and will not split. Paste the joint both front and back – several times if necessary to insure a strong joint. After a rim is made and secured encircling the glass and it is thoroughly dry, exterior design elements may be added. It is not uncommon to have a yellow line form where the glass and metal meet. Covering the surface of the glass with permanent marker (Sharpie) will inhibit this yellow line formation. If the glass is not completely surrounded by clay, use kiln prop to keep the glass in place during the firing process.

If the clay and glass are being fired at the same time, do **NOT** completely back the glass. It can shatter due to stresses on it at a later date even if it makes it through the firing process. If a back on the glass is desired, use a fine silver sheet and work the art clay silver and the glass on the sheet.

The glass surface – front and back – should be free of any clay or paste or it will fuse into the glass.

Firing may be done on a bisque fired tile kiln shelf or on Bullseye glass firing paper. Fire using Ramp 3 (slower rise in temperature) to a temperature of 1472°F for 30 minutes. After the kiln beeps complete, there are two approaches to opening the kiln:

1. Push the button to make the kiln quit beeping. Walk away until the kiln has returned to room temperature (or no more than 150°F).
2. Push the button to make the kiln quit beeping. Crack the door, lower the kiln temperature to 1300°F, close the door and allow the kiln to cool to slowly to room temperature. Most glass anneals between 1150°F and 750°F. The kiln should **never** be opened while it is between these temperatures. It is best if it is not opened until it has cooled to room temperature.



ART CLAY WORLD, USA

Dichroic Cabochon Project

A. Materials: 10 gms clay, paste, dichroic cabochon, straw, olive oil, Teflon sheet, Fiber paper.

B. Equipment: paintbrush, programmable kiln, hairdryer or dehydrator, wire brush, burnisher.

C. TECHNIQUE:

1. Roll out clay to one millimeter thick and encircle the cabochon, making firm, well-constructed seams. Decorate and use oiled straw to create fold-over bail. Be sure to leave enough room around the cabochon to allow for shrinkage of silver, about .5 mm.
2. Dry completely using a hair dryer or dehydrator. The dried bezel should be able to be lifted from the cabochon easily.
3. Check the front and back and fill with paste and smooth with a damp brush. File, sand and smooth all areas using a wet wipe or make up sponge. Remove straw gently.
4. Fire the pendant on fiber paper with consideration for type of glass, using slow ramp up and slow cool down. With a Paragon SC-2 kiln, use Ramp 4, which is 1500 degrees per hour, take to 1472 degrees and hold for 30 minutes. Crash cool to 1000 degrees, close door and allow to cool below 300 degrees before reopening the door of the kiln.
5. Polish using a stainless steel brush and burnish as desired.

Tack Fusing Dichroic Cabochon Project

A. Materials: 10 gms clay, paste, dichroic cabochon, straw, olive oil, Teflon sheet,

B. Equipment: paintbrush, programmable kiln, hairdryer or dehydrator, wire brush, burnisher.

C. TECHNIQUE:

1. Roll out clay to one millimeter thick and create a design. Determine where you would like to tack fuse a dichroic cabochon and cut a hole the same size as the cabochon. Decorate and create fold-over bail with the lubricated straw.
2. Dry completely using a hair dryer or dehydrator.
3. Check the front and back and fill with paste and smooth with a damp brush. File, sand and smooth all areas using a wet wipe or make up sponge. Remove the straw gently
4. Fire the pendant using a torch or a kiln at 1600 degrees for 10 minutes.
5. Polish using a stainless steel brush and burnish as desired.
6. Place cabochon onto the finished piece and fire using Ramp 4, to 1450 degrees and hold for 3 minutes. Crash cool to 1000 degrees, close door and allow to cool below 300 degrees before reopening the door of the kiln.

TIP: To avoid the yellowing of clear or light colored glass cabochons, completely coat the cabochon with Black Sharpie marker prior to placing into the finished piece. Dry and coat again. Marker will burn off.