



### Feather

*Create feathers that are as fanciful or realistic as you like with Colour de Verre's Feather design. Once feathers are cast, they can be slumped into amazing decorative or functional pieces.*



Feathers are a design element that appears again and again in both decorative and functional pieces. Colour de Verre's Feather design has an abundance of detail that helps the artist produce highly crafted finished pieces.

#### Priming the Mold

Always start by priming Colour de Verre molds. There are two products that can be used: Hotline Primo Primer™ and ZYP BN Lubriccoat (formerly MR-97).

With either product, clean the mold with a stiff nylon brush and/or toothbrush to remove any old kiln wash or boron nitride. (This step can be skipped if the mold is brand new.)

If you are using Hotline Primo Primer, mix the product according to directions. Apply the Primo Primer™ with a soft artist's brush (not a hake brush) and use a hair dryer to completely dry the coat. Give the mold four to five thin, even coats drying each coat with a hair dryer before applying the next. Make sure to keep the Primo well stirred as it settles quickly. The mold should be totally dry before filling. There is no reason to pre-fire the mold.

To use ZYP, hold the can 10 to 12 inches from the mold. Apply a light coat using a four to five-second burst of spray in a sweeping pattern across the mold's cavity. Do not saturate the surface. Set the mold aside for five minutes so it can dry. If the mold has never been used with ZYP before, apply a second coat using another four to five-second burst of spray. Let the mold dry for ten to fifteen minutes. The mold is ready to fill. ZYP will result in fewer casting spurs and crisper detail.

See our website's Learn section for more instructions about priming Colour de Verre molds with ZYP.

#### Filling the Feather

The suggested fill weight for the Feather is 330 to 340 grams. The most simple way to fill the Feather mold is to weigh out 330 of fine frit and to evenly distribute the frit in the mold. Fire the mold and frit according to the Casting Schedule below. This design is also a perfect candidate for our Wafer-Thin technique. One can read more about this at [www.colourdeverre.com/go/wafer](http://www.colourdeverre.com/go/wafer).



More interesting and realistic castings can be made by combining frit colors and meshes and using the stencils that are on the last pages of this document.

Start by printing the stencils onto stiff paper stock. Cut the pages in half on the dotted lines and, using

### Availability

*Colour de Verre molds are available at fine glass retailers and many online merchants including our online store, [www.colourdeverre.com](http://www.colourdeverre.com).*

#### Tools

- ✓ Colour de Verre Feather mold
- ✓ Digital scale
- ✓ Sifters
- ✓ Artist's brush
- ✓ Assorted measuring spoons

#### Supplies

- ✓ Hotline Primo Primer™ or ZYP BN Lubriccoat
- ✓ Assorted powder and fine frits

a razor cutter or small scissors, remove the black portions. A further stencil is created by cutting from stiff paper a half-disk 6 inches (15 cm) in diameter.

Weigh the empty mold and, with a pencil, mark on the mold's side the weight in grams. We will use this weight later on to ensure the mold is completely filled.

To accentuate the mold's details, two grams of black powder will be sifted into the mold. *Note: We believe it is always important to wear a dust mask when working with glass powders or other fine particles.*



Place a small sifter on a piece of paper and load the sifter with the powder. Hold the sifter over the mold and tap the sifter to distribute a fine layer over the mold's surface. Once all the black powder is in place, tap the side of the mold with your hand in several places to cause the powder to collect in the detail.

Next, place the paper half-disk on the mold so that 1 to 1.5 inches (2.5 to 4 cm) of the tip is exposed. Load the sifter with about five grams of opal white powder. Sift

the white powder over the feather's tip. The disk will create a sharp, semicircular edge. Carefully remove the disk making sure none of frit on the disk falls into the mold. Use a small artist's brush to sweep the frit from mold's top surface.



Next, five black stripes will be added to the feather using four stencils. There are no rules for the placement or arrangement of the stripes. However, we have the following suggestions:

- Use the stencil labeled "Top Stencil" to create a stripe immediately under the white tip.

- Use one of the three more linear stencils to create a stripe about 1 inch (3 cm) from the feather's base.
- Add three more stripes equal distance between the top and bottom stripes.

To create each stripe, measure out seven to eight grams of black powder. Position the stencil and then sift the powder over the stencil. Carefully remove the stencil and use a soft artist's brush to sweep the extra powder from the mold's top surface.



Repeat the process to add as many stripes as you wish.

### Bullseye Casting Schedule\*

Segment	Ramp	Temperature	Hold
1	300°F/165°C	1345-1350°F/730-732°C	45-60 minutes
2	AFAP	900°F/482°C	60 minutes
3	100°F/60°C	600°F/315°C	Off. No venting

\* Schedule for Bullseye glass. For COE 96, decrease target temperature by 20°F/10°C. AFAP means "As Fast As Possible", no venting. Anneal at 960°F/515°C.

### Slumping Schedule\*

Segment	Ramp	Temperature	Hold
1	300°F/165°C	1200°F/650°C	10 minutes
2	AFAP	900°F/482°C	60 minutes
3	100°F/60°C	600°F/315°C	Off. No venting

\* Schedule for Bullseye glass. For COE 96, decrease target temperature by 20°F/10°C. AFAP means "As Fast As Possible", no venting. Anneal at 960°F/515°C.

Weigh out 10 to 15 grams of colored powder for each gap between pairs of black stripes. (For our samples we used Bullseye cobalt blue opal and umber opal powder.) Sift this evenly into the mold. Again, sweep the mold's top surface clean and tap the mold's side to cause any powder clinging to molds inner sides to drop to the cavity's base.



To determine the amount of additional glass needed to fill the mold, weigh the partial filled mold. Subtract the weight of the empty mold (the weight previously noted on the mold's side) from the weight of the partial filled mold. The result is the weight of the glass powder in the mold. Since the mold needs to have 330 to 340 grams in it to be completely filled, subtract amount of the glass currently in the mold from 335. This is the amount of glass that needs to be added to the mold.

Weight out the number of grams of fine, clear frit calculated above. Evenly distribute the clear frit across the mold using a spoon.

Fire the mold according to the Casting Schedule. The firing schedule's low target temperature and long hold will help prevent the frit from becoming too liquid and balling up due to surface tension. This will keep the feather thinner and more delicate.

### Slumping Feathers

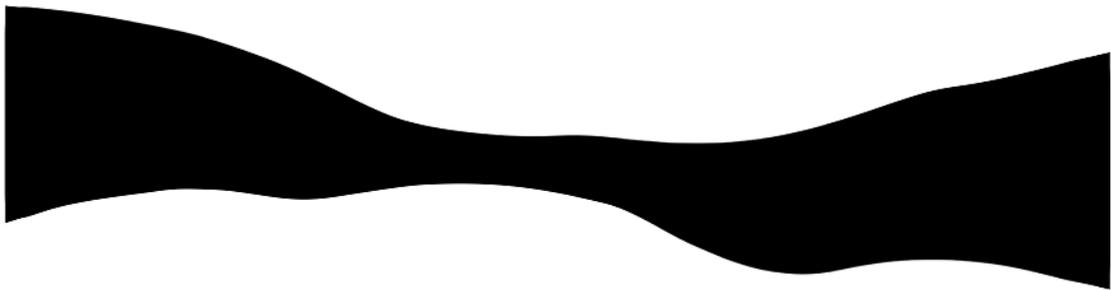
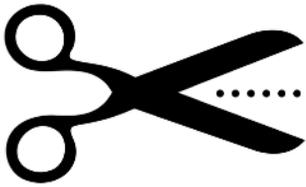
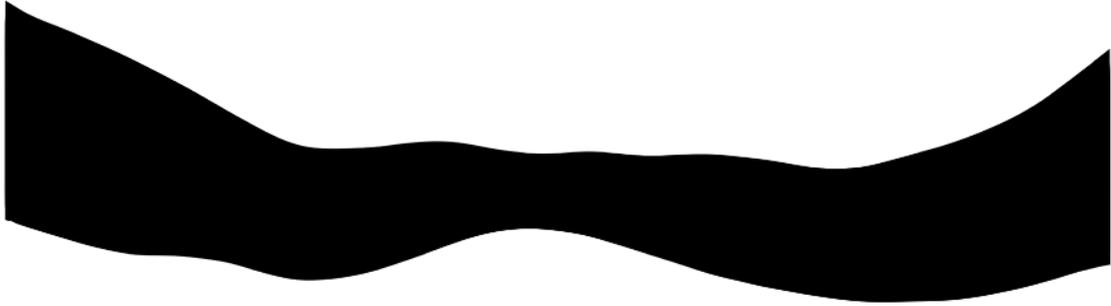
Cast feathers can be slumped into shallow bowls. We find a perfect slumper for this is Bullseye Glass Short Oval design, #8952 14.8 x 6.3 x 1.7 inches. (These slumping forms are marketed outside North America as Creative Ceramics.) Feathers can be slightly slumped to add more "life" to the finished piece. For this we used Bullseye Rectangular slumper #8924 12.62 x 7.62 x 1.87 inches. This is best done by placing a feather in a diagonal position across the slumping surface.

In either case, slump the feather using the Slumping Schedule.

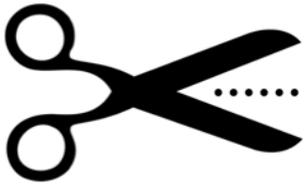


*Explore our Wafer-Thin technique to create gallery-style pieces*

# Stencils



# Stencils



Top Stencil