



### Big Skulls

*Skulls are just a wonderful design motif. With our mold; some frit, billet, or scrap sheet glass; and one firing; you can create a beautiful objet d'art.*



Our Big Skull mold is so easy to use. Prime it, fill it, fire it and you get great results. For extra clarity try billets, or broken-up 6mm sheet glass. This document includes instructions for fusing a piece of CBS dichroic sheet glass to the back of the finished faces. This gives the skull a jaw-dropping glow.

#### 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 Lubricat.

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.)

To use ZYP, hold the can 10 to 12 inches from the mold. Apply a light coat using a three-second burst of spray in a sweeping pattern across the mold's cavity. Do not saturate the surface causing drips to form. 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 three-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.

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 with either primer



#### Filling the Big Skull

The fill weight for the Big Skull mold is 300 grams. This is the optimal amount of glass to put in each cavity to get superior results.

We find using pale, transparent, coarse frit or billet pieces gives best results. If you wish to blend frits to create a new color, consider using medium mesh frit to get the best compromise of clarity and even color mixing.

To fill the mold, measure out the correct fill weight and load the mold evenly making sure the top surface is level. If Primo Primer has been used, make sure to create a small quarter inch trough in the

### 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 Big Skull mold
- ✓ Digital scale
- ✓ Artist's brushes

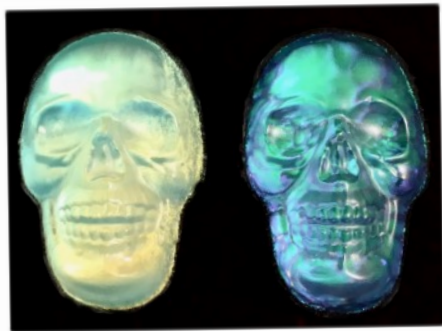
#### Supplies

- ✓ Hotline Primo Primer™ or ZYP BN Lubricat
- ✓ Assorted frits, billets, or broken-up sheet glass

frit around the cavity's edge. This will reduce casting spikes.

Fire the mold according to the Regular Casting Schedule.

*Note: When working with frits, it is always advisable to wear a dust mask.*



*The addition of dichroic glass makes the Big Skulls glow.*

### Billet Pieces/6mm Glass

Using larger glass pieces reduces the number of trapped bubbles in final work. Convenient materials to use are billet chunks, or broken-up 6mm sheet glass. Casting with these products requires more finesse as the glass pieces are often sharp and care needs to be taken not to scratch away the mold's primer when loading it.



*Hint: Grind away sharp edges from the bottom billet to avoid scraping the primer coat.*

6mm glass cut into chunks can be used produces excellent castings, but there are limited colors available. Simply weight out the correct amount of 6mm chunks, and load the cavity as evenly as possible.

Billets produce the clearest castings and are available in a rainbow of colors. Below is the method to calculate where to cut a billet to obtain a piece of a specific weight. This method works with square and rectangular billets:



1. Weigh the billet on a gram scale. We will call the result BW, for billet weight.
2. Measure the billet's length in inches or centimeters. It works

### Regular Casting Schedule (Bullseye Frit)\*

Segment	Ramp	Temperature	Hold
1	300°F/165°C	1250°F/675°C	30 minutes
2	300°F/165°C	1445°F/785°C	10-15 medium frit 20-25 coarse frit
3	AFAP	900°F/485°C	60 minutes
4	100°F/55°C	100°F/40°C	0 minutes. Off

### Billet Pieces/6mm Sheet Casting Schedule\*

Segment	Ramp	Temperature	Hold
1	150°F/85°C	300°F/150°C	0 minutes
2	250°F/140°C	1250°F/675°C	30 minutes
3	300°F/165°C	1475°F/800°C	30-45 minutes
4	AFAP	900°F/485°C	60 minutes
5	100°F/55°C	100°F/40°C	0 minutes. Off

### Dichroic Fusing Schedule\*

Segment	Ramp	Temperature	Hold
1	150°F/85°C	300°F/150°C	30 minutes
2	250°F/140°C	1100°F/595°C	30 minutes
3	100°F/55°C	1400°F/760°C	15-25 minutes
4	AFAP	900°F/485°C	60 minutes
5	100°F/55°C	100°F/40°C	0 minutes. Off

\*Schedule for Bullseye. For COE 96, decrease target temperature by 25°F/14°C. Anneal at 960°F/515°C. AFAP means "As Fast As Possible", no venting.

either way. We will call this BL for billet length.

3. FW is the mold's fill weight. Again, you will find this on the mold's packaging or on our website.

4. Pull out your calculator and enter the following:

$$FW / BW \times BL =$$

5. Note the calculator's result and measure this far down the billet and make your score.

6. If the billet does not fit in the mold, cut it into smaller pieces to stack in the mold.

*Note: Questions about cutting billets can be answered by a wonderful video produced by Bullseye Glass. You can find that video at [www.colourdeverre.com/go/billets](http://www.colourdeverre.com/go/billets).*

Fire the mold according the Billet Pieces/6mm Sheet Casting Schedule. The extra heat-work of this schedule will make sure that the glass flows into the entire design.



Once the kiln cools to room temperature, remove casting from the mold. Wash away any primer from

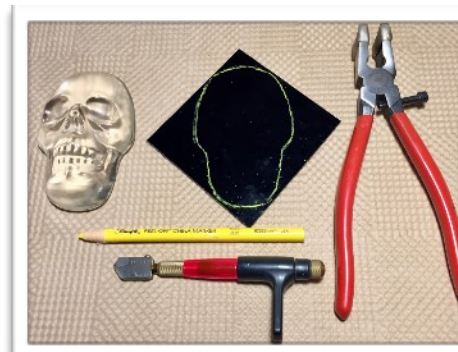
the finished casting with dishwashing soap and kitchen brush with stiff nylon bristles.



*There seems to be an infinite choice of dichroic sheet glass from CBS Dichroic.*

### Dichroic Skulls

A sheet of dichroic fused to the Big Skull casting gives it a beautiful glow. Choose a piece of dichroic on clear or black glass.



*Use a grease pencil to trace the shape of the skull onto the backside of the dichroic glass*

Weigh out 250 to 275 grams of either billet or 6mm sheet glass and fire using the Billet Pieces Casting Schedule below. Once fired and cooled, remove the casting from the mold and clean with soapy water.



Place a sheet of dichroic glass, dichroic side down, on your work bench.

*Hint: You may wish to protect the dichroic by putting a piece of paper towel between the bench surface and the glass.*

Place the Big Skull casting on the glass and trace its outline with a Sharpie or a grease pencil. Use a ring saw, or traditional glass cutter and grinder to produce a shape. Clean away any marks from the grease pencil or Sharpie.

Place the skull casting back into a freshly primed mold. Top it with the dichroic shape with the dichroic surface down. Center the dichroic sheet on the casting. Add a small amount of medium, clear frit around the edges to stabilize the dichroic backing. Fire according to Dichroic Fusing Schedule.

