COLOUR DeVERRE

REUSABLE MOLDS FOR GLASS CASTING



Open Hands Open Hands is a classic design with a modern twist. The final pieces are perfect for home decor, gifts, and craft fairs..

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Open hands is a great first project for a casting beginner. It is easy to fill and takes only two firing to complete. That said, experienced studio artist appreciate this design as the resulting pieces are great for craft shows.

Getting Started

Always start the same way: Clean your Colour de Verre Open Hands mold with a stiff, nylon brush to remove any old kiln wash. (This step can be skipped if the mold is brand new.)

There are only two choices for primers: Hotline PrimoTM Primer and ZYP BN LubricoatTM. ZYP is

Availability

Colour de Verre molds are available at fine glass retailers and many online merchants including our online store, www.colourdeverre.com. the easiest to apply and remove. It is an aerosol and, after firing, brushes off easily from the molds and can be washed off the glass pieces. Castings created using ZYP have exceptionally smooth surfaces and almost never require grinding or "cold work."

When applying or removing either of these two primers, it is advisable to wear a dust mask.

Primo is a traditional kiln wash that is applied with an artist's brush. It's a trusted and proven product, but requires a bit more "elbow grease" to remove after firing. Primo's advantages are its low cost and availability.

Brief instructions for each option follow:

To apply ZYP, work in a well ventilated area or outside, and hold the well-shaken can 12 inches from the mold. Hold both the mold and the spray can upright. Apply the first coat using a three to four-second burst of spray in a sweeping pattern across all the mold's cavities. While spraying, slightly tilt the mold back and forth and left and right to make sure the spray reaches all the inner surfaces. Do not saturate the surface. You should not see "pools" of product forming on the surface. If it is the first time ZYP has been applied to the mold, it is necessary to apply a second coat of the product.



Before applying the second coat, let the mold dry for five minutes. Apply the second coat using another three to four-second burst of spray. Let the mold dry for ten to fifteen minutes before filling. Again, the double coat of ZYP only need be applied the first time the mold is used. Thereafter, only one coat is necessary. For more information about ZYP, visit Colour de Verre website's Learn section. There, download and read "Advanced Priming with Boron Nitride Aerosol" and watch the video "Priming with ZYP BN Lubricoat."

If you choose to use Primo Primer, mix one part dry primer powder with four parts water. Next, give

Tools

- ✓ A Colour de Verre Open Hands mold
- ✓ Large artists' brush
- \checkmark Digital scale
- \checkmark Suitable slumping form

Supplies

 ✓ Hotline Primo Primer[™] or ZYP BN Lubricoat
✓ Assorted frits

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the molds *five* coats of Hotline Prime PrimerTM.

Apply the Primo PrimerTM with a soft artist's brush - not a hake brush - and use a hair dryer to completely dry each coat before applying the next. The mold should be totally dry before filling. The primer need not be pre-fired.

One important hint: This primer settles very quickly. Each time the brush is dipped, be sure to give the primer a good stir so all the ingredients stay in solution. If the primer has sat more than five minutes, the active ingredients will cake on the container's bottom. Make sure to stir these sediments back into solution.

Filling the Molds

The molds are intended to be used with COE 96 or COE 90 art glass. Colour de Verre molds should not be used with borosilicate, Pyrex, crushed bottles, or float glass. High temperatures can have negative effects on both the mold and the primers. When using frits, especially powders, it is advisable to wear a dust mask.





We find the best frit choices for Open Hands are powders, fine mesh, and combinations of the two. Other frit meshes can be used but it becomes challenging to completely melt the larges glass particles without introducing so much heat-work to cause the glass to ball up and pull away from the mold.

One technique that gives very nice results is to tint either white or clear fine frit with a colored powder. This results in a casting with a very uniform color.

Once you have chosen a frit color or created a frit mixture, weigh out 250 to 275 grams. Evenly distribute this into the mold. If the mold is filled with 275 grams, surface tension is less likely to pull the casting's edges away from the mold. Using 250 or less will result in a lighter, more delicate casting but will require more careful temperature control. Too much heat-work will result in a casting

Casting Schedule #1*

For Powder Frit

Segment	Ramp	Temperature	Hold
1	300°F/165°C	1350F/730°C	60 minutes
2	AFAP	900°F/480°C	60 minutes
3	100°F/55°C	600°F/315°C	Off. No venting

Casting Schedule #2*

For Fine Frit or Fine Frit Tinted w/ Powders

Segment	Ramp	Temperature	Hold
1	300°F/165°C	1375F/745°C	60 minutes
2	AFAP	900°F/480°C	60 minutes
3	100°F/55°C	600°F/315°C	Off. No venting

Slumping Schedule*

Segment	Ramp	Temperature	Hold
1	150°F/80°C	300F/145°C	0 minutes
2	250°F/140°C	1240°F/670°C	10 minutes
3	AFAP	900°F/480°C	60 minutes
4	100°F/55°C	600°F/315°C	0 minutes
5	200°F/110°C	100°F/38°C	Off. No venting

*Schedule for COE 90. For COE 96, decrease casting temperature by 20°F/12°C. Anneal at 960°F/515°C. AFAP means "As Fast As Possible", no venting.

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that pulls away from the mold's sides.



Suggested Frit Choices

Some great colors to consider are: Warm White (opal), Petal Pink (opal), Celadon (opal), Light Aquamarine Blue (transparent), Fuchsia (transparent), and Spring Green (transparent). These are Bullseye Glass colors but similar colors might be available in other manufacturers' palettes. These colors were all powders mixed with powdered clear or fine clear frit in a 25% to 50% concentration.



Casting

Place the filled mold into the kiln. Use either Casting Schedule #1 or Casting Schedule #2 depending on the materials used to fill the molds. Don't rush the schedule's slow cooling ramp as this allows for proper annealing. Also note that the schedules need to be modified for kiln load, COE, and glass color. Heating element position can also effect firings. Use lower temperatures when using a top element kiln.

Slumping

Remove the casting from the mold and wash with soap and water to remove any primer. Place the casting, textured side up, in a suitable, kiln-washed bowl slumping form. (Colour de Verre's 7-10" Bowl Slumper gives a nice, soft curve.) Fire according the firing schedule.

Reusing the Mold

After each firing, clean the mold with a brush with stiff, nylon bristles. Reprime before every use.

