Art Glass Supplies Create Inspire Fuse

REUSABLE MOLDS FOR GLASS CASTING



Offset Pendants The Offset Square Pendants and Offset Round Pendants can be filled in a multitude of ways creating everything from simple, everyday jewelry to dramatic, one-of-a-kind pieces.

Preparing the Molds

The molds must be primed so the glass doesn't adhere to the ceramic material from which the molds are made. There are two choices for primers: Hotline Primo[™] Primer and ZYP BN Lubricoat (formerly MR-97). The ZYP is 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 pieces. Castings created using ZYP have exceptionally smooth surfaces and almost never require grinding or "cold work."

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 big advantages are it's low cost and availability.

Brief instructions for each option follow:

To apply ZYP, hold the well-shaken can 10 to 12 inches from the mold. Hold both the can and the mold completely upright. Apply the first, light coat using a two to three-second burst of spray in a sweeping pattern across all the mold's cavities. Do not saturate the surface. If it is the first time ZYP has been applied to this 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 two to threesecond burst of spray. In either case, let the mold dry for ten to fifteen minutes before filling. Again, the double coat of ZYP need be only applied the first time. Thereafter, only one coat is necessary. For more information about ZYP, visit our. There, down-load and read Priming with Boron Nitride Aerosol.

If you choose to use Primo Primer, give your mold three to four thin, even coats of Hotline Primo Primer kiln wash. Use a soft artist brush to apply the Primo Primer and a hair dryer to completely dry each coat before applying the next. Again, more detailed instructions can be found on our website. See *Tricks of the Trade.* When using Primo Primer, best results are obtained when using fine frit. Larger frit can produce excessive casting spurs that require cold work.



Filling the molds

Frit can either be used straight from the manufacturer's container or blended. However, we find the best results are usually obtained by "diluting" colored frit with clear frit. Even dark, opaque colors like blacks and browns become much more rich when mixed with clear frit. See our document *Creating Frit*

Tools

- \checkmark Small artist's brushes
- \checkmark Digital scale
- ✓ Colour de Verre Offset Square and Offset Round molds
- \checkmark Small measuring spoons

Supplies

- \checkmark Fine or Medium Frit
- \checkmark Dichroic sheet glass
- ✓ ZYP BN Lubricoat (formerly MR- 97) or Hotline Primo[™] primer



Design	Grams of Frit per Cavity
Large square	20
Medium square	15
Small square	7
Large round	14
Medium round	9
Small round	6

"Paint Chips") It is important to remember that, when using frit, to wear a dusk mask.

Fill each cavity according to the chart. Use a small artist's brush to generally level the frit. Make sure there is a little less frit in the area above the post that creates the hole in the final piece. This will result in a better proportioned casting.

While the Offset Round and Offset Square molds are primed and filled exactly the same way, the firing schedules differ. Notice how the Offset Square has a slightly lower target temperature and longer hold. The slightly lower temperature prevents the corners of the square pieces from rounding too much due to surface tension.



Of course, the perfect firing schedule for your kiln will depend on ambient temperature, glass color, kiln load, kiln age and whether the kiln has top or side elements. If you notice that that the corners of your Offset Square Pendant castings are significantly rounder than those of the mold, reduce the target temperature in subsequent firings.

Reusing the Molds

Clean mold thoroughly after each firing with a stiff, nylon bristle

brush. Avoid breathing any dust by wearing a proper dust mask. Reapply primer before subsequent firings.

If correctly primed and fired, a Colour de Verre mold will yield many castings.



Variations

A favorite variation is to make the pendants with CBS's Borderline Patterns dichroic glass on either black or clear glass. The technique preserves the beautiful patterns *without* requiring the drilling of any holes. The technique does require a power glass grinder.



Cut out the templates that are on the final page of this document. If you are using CBS' Crinklized Dichroic patterns, choose sheets

Segment	Ramp	Temperature	Hold
1	300°F/165°C		10 minutes for fine frit 20-25 minutes for medium frit 25-35 minutes for coarse frit
2	AFAP	960°F/515°C	30 minutes. Off

Offset Square Firing Schedule

Segment	Ramp	Temperature	Hold
1	300°F/165°C		10-15 minutes for fine frit 20-30 minutes for medium frit
2	AFAP	960°F/515°C	30 minutes. Off

* Schedule for COE 96. For COE 90, increase casting temperature by 20°F/10°C. AFAP means "As Fast As Possible", no venting.

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