



Icicles

Easy-to-make and fun to give, these icicles are great holiday decorations on trees and in windows.

Use the recommended firing schedule to get realistic icicles with a lumpy-and-bumpy surface on both sides of the finished piece. Thread ribbon through the integrated loop at the top of each icicle to hang.

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). For this mold and the technique described, we strongly recommend ZYP, but understand there are circumstances where this product is unavailable. When removing used primer - ei-

ther ZYP or Primo - from a mold it is always advisable to wear a dust mask.

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.

It is best to apply ZYP in a well-ventilated area or outside. Hold the can and the mold upright about 10 to 12 inches from apart. Apply a light coat using a three to four-second burst of spray in a sweeping pattern across the mold's cavities. Make sure to rotate the mold so that the posts and the cavities get complete coverage. 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 three to four-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 Icicles

The Icicles are filled with two meshes of frit. Medium frit is used to fill the loop at the top of each icicle. This results in a rounded loop with a finished appearance. The body of the icicle is filled with coarse frit. This produces the greatest clarity by minimizing the number of bubbles trapped in the cast glass. Further, the combination of the coarse frit and the included firing schedule yields a lumpy-bumpy surface on both

Tools

- ✓ Colour de Verre Icicle mold
- ✓ Digital scale
- ✓ Assorted measuring spoons

Supplies

- ✓ Hotline Primo Primer™ or ZYP BN Lubriccoat (formerly MR-97)
- ✓ Clear Medium and Coarse frit

sides of the finished piece which results in a more natural look.

For each icicle, there are two fill weights shown in the Fill Weight table. One is for the coarse frit for the icicle body. The other; medium frit for the loop.

Fill Weights (Grams)

Icicle	Body	Loop
Largest	20	4
Larger	17	4
Smaller	15	4
Smallest	13	4

Note: If Primo is being used instead of ZYP, use fine frit in the loop and medium frit in the icicle body.

For each icicle, start by filling the body of the icicle with the amount of coarse frit specified in the Fill Weights table. Next, fill the loop with the amount of medium frit specified. Use a soft artist's brush to evenly arrange the frit pieces. Make sure the tops of the cones are uncovered.



Once the four cavities have been filled, fire according to the Casting Schedule.

Hanging the Icicles

One of the nicest ways to hang the finished icicles is with ribbon. Choose a ribbon ½ inch (1 cm) wide. Cut a section about 15 inches (38 cm) in length. Loop the ribbon and push the loop a few inches through the ring at the top of the icicle.



Pass the cut ribbon ends through the loop of ribbon and pull tight. Tie a bow in the ribbon or tie directly on a Christmas tree.

Variations

The icicles can also be used as embellishments. To create icicles for embellishments, fill only the lower portion of each icicle with coarse frit. It is not necessary to fill the entire icicle cavity. Leave the

loop empty. Fire according to the Casting Schedule.



Partially filled for embellishments



Laying out the design

We chose to make Round Votives and Oval Votives. Start by cutting panels of Uroboros' Clear Streamer Bits on Clear glass. (For sizes and more detailed instructions, download *Round Votive* and

Casting Schedule*

Segment	Ramp	Temperature	Hold
1	300°F/165°C	1400°F/760°C	10-20 minutes
2	AFAP	960°F/515°C	30 minutes. Off

Tack Fusing Schedule*

Segment	Ramp	Temperature	Hold
1	300°F/165°C	1275-1300°F / 690-705°C	10-15 minutes
2	AFAP	960°F/515°C	60 minutes
3	50°F/30°C	850°F/455°C	0 minutes
4	100°F/55°C	600°F/315°C	Off. No venting

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

Oval Votive project sheets from our website.)

Position the icicles on the glass and glue into place with a few small drops of white glue.



Panel ready to slump

Next, sprinkle medium Clear frit onto the panels to add to the icy effect. *Hint: Use a little pump hair-spray to hold the frit in place.*

Fire according to the Tack Fusing Schedule.

Once the panels have cooled, follow the instructions in the *Round Votive* and *Oval Votive* project sheets to setup the panels. Instead of the slumping schedules in these documents, use the Extra Slow Slump Schedule of this document to shape the panels. These have a wide range of thicknesses and it is important to heat and cool the panels slowly. Cast the bases and assemble the votives as usual.

Extra Slow Slump Schedule*

Segment	Ramp	Temperature	Hold
1	150°F/85°C	300°F/150°C	15 minutes
2	200°F/110°C	1000°F/540°C	0 minutes
3	300°F/165°C	1275°F/690°C	10 minutes
4	AFAP	960°F/515°C	60 minutes
5	50°F/30°C	850°F/455°C	0 minutes
6	100°F/55°C	600°F/315°C	Off. No venting

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



Oval Votive with icicles



Round Votive with icicles