Art Glass Supplies Create Inspire Fuse



Peach Blossom Box

Peach blossoms, branches, and leaf castings are tack fused to the lid of an elliptical box creating a look reminiscent 1920's European glass. Very pale, translucent colors were chosen as not to distract from the classic design.

There are four steps to completing this piece.

- 1. The box base and lid are cast.
- 2. The components the leaves, branches, and blossoms are cast.
- 3. The components are shaped or slumped.
- 4. The components are tack fused to the lid.

The reader is invited to modify this project by choosing a different box mold, choosing different elements, or creating his or her own frit mixture.



Getting Started

Always start the same way: Clean the Elliptical mold with a stiff, nylon brush to remove any old kiln wash. A dry, non-scratch, nylon, kitchen scouring pad, e.g. Scotch-BriteTM, can be used to remove stubborn kiln wash. (This step can be skipped if the mold is brand new.) Mix one part dry primer powder with four parts water. Next, give the box molds *five* coats of Hotline Primo PrimerTM. Give the Branches, Small Leaves, and Blossom molds each four coats of primer. While there are plenty of good shelf primers and kiln washes on the market, Colour de Verre only recommends Hotline Primo PrimerTM for the Colour de

Verre molds. It always releases and is easy to remove after firing.

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

Apply the Primo PrimerTM with a soft artist's brush and use a hair dryer to completely dry each coat before applying the next. The mold should be totally dry before filling.



Making the Lid and Base

The fill weights for each box design is listed on the insert packaged with the molds. 375 Grams of frit is required to the fill the base and 180 grams fill the lid.

Tools

- √ 6" Elliptical Box, Branches, Assorted Small Leaves, Blossoms, molds
- ✓ Large primer brush
- √ Digital scale
- ✓ Lidded, plastic container
- √ Stiff, nylon brush

Supplies

- √ Hotline Primo PrimerTM
- √ Medium and fine Clear and Champagne Pink frit
- √ 1/4" kiln paper
- √ White glue

This means we will need 555 grams of frit to fill both the base and lid. After some testing a 50/50 mixture of Pink Cham- pagne and Clear was chosen. Me- dium mesh frit was selected to re- duce trapped air and bubbles in the final casting.

Place 275 grams of medium Pink Champagne and 280 of medium clear frit into a lidded container. Shake the container to combine the frits. Wear a dust mask before opening the container.

Place the base mold on the digital scale. Tare (zero) the scale and add frit to the base mold until the scale reads 375 grams. Repeat the process with the lid mold. However, this time, filling the lid mold with 180 grams of frit mixture.

Leave the frit mixture slightly mounded. This will reduce and, in most cases, eliminate any casting spurs.

Fire both pieces according to the Box Casting Schedule.

Making the Components

The components are made with fine frit rather than medium mesh frit. The reasons for this are two fold:

- 1. Thinner and better detailed castings can be made with fine frit and lower heat.
- 2. The fine frit will catch tiny air bubbles and create com-

ponents with a softer look.

Rather than using the fill weights from the Branches, Small Leaves, and Blossoms molds' packaging, use the "Thin Fire" fill weights from "Fill Weights at a Glance" document on the Company's website. These lighter weights, in combination with the cooler firing schedule, will result in more delicate castings. For more information see "Tips for Thin Casting" on the website.

The Branches require 4, 12, and 18 grams (34 grams total). The Small Leaves require 2, 3, 4, 5, and 7 grams (21 grams total). The Blossoms require 4, 4, 6, 6, 8 and 8 grams (36 grams total).

Into the lidded container mix 50 grams of fine Clear and 50 grams of fine Pink Champagne frit.

As before, use the digital scale's tare function to fill the molds according to the fill weights. If your scale doesn't have a tare function, use a small piece of paper to weigh frit and transfer it to the mold.

Place the filled mold into the kiln and fire according to the Component Casting Schedule.

Box Casting Schedule*

Segment	Ramp	Temperature	Hold
1	300°F/165°C	1250°F/675°C	30 minutes
2	300°F/165°C	1410-1430°F/765-775°C	30-60 minutes
3	AFAP	960°F/515°C	90 minutes
4	50°F/30°C	800°F/425°C	None
5	100°F/60°C	600°F/315°C	Off. No venting

^{*}Schedule for COE 96. For COE 90, increase casting temperature by 25°F/15°C. AFAP means "As Fast As Possible", no venting.

Component Casting Schedule*

Segment	Ramp	Temperature	Hold
1	300°F/165°C	1350-1375°F/730-745°C	5-10 minutes
2	AFAF	960°F/515°C	30 minutes. Off. No
			venting

^{*}Schedule for COE 96. For COE 90, increase casting temperature by 25°F/15°C. AFAP means "As Fast As Possible", no venting.

Component Shaping Schedule*

Segn	nent	Ramp	Temperature	Hold
1		300°F/165°C	1225-1250°F/660-675°C	5-10 minutes
2		AFAF	960°F/515°C	30 minutes. Off. No
				venting

^{*}Schedule for COE 96. For COE 90, increase casting temperature by 25°F/15°C. AFAP means "As Fast As Possible", no venting.

Shaping the Components

The castings from Small Assorted Leaves molds can be made to look much more realistic by slumping the pieces on the former on the mold's reverse sides.



Give the Small Assorted Leaves mold's reverse side three coats of primer using the above techniques.

Arrange the leaves on the slumping surface and fire according to the Component Shaping Schedule

Tack Fusing Components To Lids

Place the lid in a freshly primed mold. (This prevents the lid from warping.) Arrange the branches, blossoms, and leaves on the lid. If your branch is too long, score the backside of the branch with a glass cutter and break it. A drop or two of white glue can be used to temporarily hold the pieces in place.



Since tack firing temperatures are hotter than slumping temperatures, there will be a tendency for the components to flatten. To prevent this from happening, cut small wedges of thick kiln paper. Slide the wedges under the folds in the components. Fire according to the Tacking Schedule. Note the slow ramp and the long annealing time. It is important to follow these slow ramps to avoid stressing and, perhaps, cracking the piece.



Finishing

Give the box a professional finish with the addition of feet. Use peel-and-stick, silicon cabinet bumpers, e.g. 3M BumponTM, available from most hardware stores. This will also protect tabletops.



Variations

Don't be afraid to try new color and component combinations. Different effects can also be achieved by combining different frit mesh for the box base and lid. For example, the whole project could be cast using only fine frit. The same firing schedules can be used. Above are some samples made with Colour de Verre's Anemone, Lotus, and Leaves (3) molds

Tacking Schedule*

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Segment	Ramp	Temperature	Hold		
1	200°F/110°C	1250-1275°F/675-690°C	5-10 minutes		
2	AFAP	960°F/515°C	90 minutes		
4	50°F/30°C	800°F/425°C	None		
5	100°F/60°C	600°F/315°C	Off. No venting		

^{*}Schedule for COE 96. For COE 90, increase casting temperature by 25°F/15°C. AFAP means "As Fast As Possible", no venting.