Aralia Leaf Lamp

The warm light this lamp emits is a welcome addition to almost any living space. While the project might look complex, it is broken down into a series of easily manageable steps that can be completed over a few days.

There are four steps in making this lamp:

1. Cast the aralia leaf. Even though the Aralia Leaf is one of our largest designs, it is filled and fired not a great deal differently than our smaller, embellishment molds.
2. Design the panels. The cast leaf is tacked fused to one of the glass sheets along with noodle borders. An interesting background is created using frit. The back panel is created using only frit and noodles in the same firing.
3. Slump the panels. Fire these "slow and low" to make sure not to shock the glass.
4. Assemble the lamp.

Priming the Mold

There are two products you can use with Colour de Verre molds: Hotline Primo Primer™ and ZYP BN Lubricoat (formerly MR-97).

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 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. For more information visit www.colourdeverre.com/go/primo

The first time ZYP is used on a mold, it is necessary to apply two coats of the product. Hold the can 10 to 12 inches from the mold. Apply the first, light coat using a five-second burst of spray in a sweeping pattern across all the mold's cavities. Do not saturate the surface. Set the mold aside for five minutes so it can dry. Once dry, apply a second coat using another five-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. For more information visit www.colourdeverre.com/go/mr-97

Availability

Colour de Verre molds are available at fine glass retailers and many online merchants including our online store, www.colourdeverre.com.

Tools

- ✓ Colour de Verre Aralia Leaf and 10" Oval Panel Former molds
- ✓ Medium primer brush
- ✓ Digital scale
- ✓ Larger, lidded container
- ✓ Sifter
- ✓ Assorted measuring spoons

Supplies

- ✓ Hotline Primo Primer™ or ZYP BN Lubricoat (formerly MR-97)
- ✓ Assorted powder and fine frits
- ✓ White sheet glass
- ✓ Oval Lamp Hardware Kit
- ✓ Medium Amber noodles

Filling the Aralia Leaf

The suggested fill weight for the Aralia Leaf mold is 350 to 400 grams.

To accentuate the mold's details, one to two grams each of Black, Light Orange, and Cherry Red powder are sifted into the mold. (It is always best to wear a dust mask when working with glass powders or other fine particles.)

Place a small sifter on a piece of paper and load the sifter with Black powder. Hold the sifter over the mold and tap the sifter to distribute a fine layer over the mold's entire surface. Use a small paintbrush to brush away any errant powder from the mold's top edge.

Using the same technique, apply Cherry Red powder to the leaf's tips. Again, use a small paintbrush to remove any extra material from the mold's edge. Finally, apply the Light Orange powder, "feathering" between the leaf's tips and the center.

In a large, lidded container, combine 35 grams of fine Tangerine frit and 315 grams of fine Water Clear frit. Shake the container. Since glass dust is created by mixing the two frits, put on a dust mask before opening the container.

Use a small spoon to layer the frit mixture into the mold without disturbing the powder.

Fire the mold according to the Casting Schedule. The firing schedule's low target temperature and long hold will prevent the frit from becoming too liquid and balling up due to surface tension.

Creating the Panels

Cut two pieces of single-thickness White glass to 10.5" wide by 9" tall (26.7 cm by 23 cm).

On one of the panels, place the cast aralia leaf. Use a few drops of Aleene's Tacky Glue to hold the leaf in place. Frame the two panels with eight Medium Amber noodles. (We find the easiest way to cut the noodles is with a mosaic tile cutter.) Glue the noodles into

place with a few drops of glue. Combine two parts of medium Pale Amber and one part of medium Medium Amber in a large, lidded container. Shake the

Casting Schedule*

Segment	Ramp	Temperature	Hold
1	300ºF/165ºC	1300-1320ºF/705-715ºC	45-60 minutes
2	AFAP	960ºF/515ºC	60 minutes
3	100ºF/60ºC	700ºF/370ºC	Off. No venting

Tack Fusing Schedule*

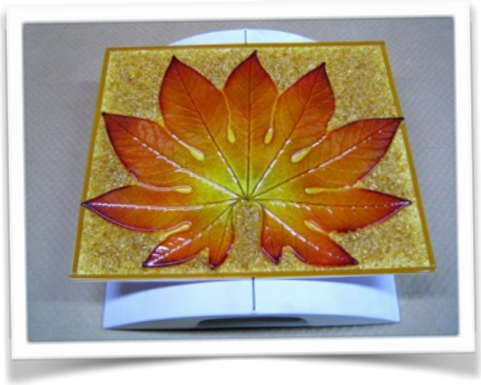
Segment	Ramp	Temperature	Hold
1	200ºF/110ºC†	1200ºF/650ºC	30 minutes
2	200ºF/110ºC†	1260ºF/680ºC	10 minutes
3	AFAP	960ºF/515ºC	90 minutes
4	50ºF/25ºC	800ºF/425ºC	No hold
5	100ºF/55ºC	600ºF/315ºC	Off. No venting

* Schedule for COE 96. For COE 90, increase casting temperature by 15ºF/8ºC. AFAP means "As Fast As Possible", no venting.

† Schedules were developed for side element kilns. Slow ramps by 50ºF/30ºC for top element kilns

container to combine the two frits completely.

Evenly distribute the frit on both panels and make sure that the White glass is completely covered and no stray frit is on the noodles or leaf. Place the two panels on a primed kiln shelf or a piece of kiln paper on a kiln shelf. Fire the panels using the Tack Fusing Schedule.



Remove the cooled panels from the kiln and make sure the frit, noodles, and leaf are securely bonded to the White glass.

Slumping the Panels

The panels are next slumped over the 10" Oval Panel Former. Follow the instructions that came with the former. If you lost the instructions you can find a copy at our website, www.colourdeverre.com/go/instructions

Use the Panel Slumping Schedule shown below.

One thing that can't be stressed enough: Don't rush the slump firing. Between the frit, noodles, and cast leaf there is quite a variation in the panels' thicknesses. They require a slow ramp and cool down to avoid thermal shock.

Assembling the Lamp

Instructions to mount the panels onto the 10" Oval Lighting Hardware can be found in the hardware's box. Choose a lamp wattage that complements the final piece. For more information, check out "Successful Lighting Projects" in our website's Learn section, www.colourdeverre. com/go/learn

Other Considerations

If your aralia leaf doesn't sit flat against the glass sheet, it might be difficult to surround the leaf with frit without the frit slipping underneath the leaf. The easy solution is to re-fire the leaf to flatten it. Place the leaf, flat side down, on a primed kiln shelf and fire according to the Flattening Schedule.

Panel Slumping Schedule*

Segment	Ramp	Temperature	Hold
1	100ºF/55ºC†	300ºF/150ºC	30 minutes
2	100ºF/55ºC†	1200ºF/650ºC	10 minutes
3	AFAP	960ºF/515ºC	90 minutes
4	50ºF/25ºC	800ºF/425ºC	No hold
5	100ºF/55ºC	600ºF/315ºC	Off. No venting

Flattening Schedule*

Segment	Ramp	Temperature	Hold
1	200ºF/110ºC	1200ºF/650ºC	5 minutes
2	AFAP	960ºF/515ºC	60 minutes
3	100ºF/55ºC	600ºF/315ºC	Off. No venting

* Schedule for COE 96. For COE 90, increase casting temperature by 15ºF/8ºC. AFAP means "As Fast As Possible", no venting.

† Schedules were developed for side element kilns. Slow ramps by 30ºF/15ºC for top element kilns