



### Northwoods Maple Leaf

*If you are looking to create a quick house gift for a friend, this design is for you. Create an autumn leaf by filling the mold with mixtures of red, oranges, and yellows or a spring version with greens. Flip the mold to discover a custom slumping surface that changes the cast leaf into a perfect plate.*



This project sheet describes two techniques. The first technique is to cast a leaf and then slump it into a plate ideal for salad or a cake slice. The second technique is to create decorative table or wall pieces.

Colour de Verre makes other “Big Leaf” designs including the Aralia Leaf, Kiwi Leaf, and Rain Forest

Leaf. Visit our website’s Learn section at [www.colourdeverre.com/go/learn](http://www.colourdeverre.com/go/learn) as the techniques described for those molds can be used with the Northwoods Maple Leaf design.

#### Priming the Mold

Always start by priming your molds. There are two products you can use: Hotline Primo Primer™ and MR-97 Boron Nitride Spray.

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.

The first time MR-97 is used on a mold, it is necessary to apply two coats of the product. Hold both

the mold and the can upright about 12 inches from each other. Apply the first, light coat using a four to five-second burst of spray in a sweeping pattern across 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 four to five-second burst of spray. Let the mold dry for ten to fifteen minutes. The mold is ready to fill. MR-97 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 MR-97.

#### Filling

The suggested fill weight for the Northwoods Maple Leaf mold is 300 to 320 grams.

To accentuate the mold’s details, one to two grams of Black powder is sifted into the mold. Before opening the jar, put on a dust mask as it always best to wear a mask when working with glass powders or other fine particles.

Weigh the mold and make a note of it.

Place a small sifter on a piece of paper and load the sifter with

### Availability

*Colour de Verre molds are available at fine glass retailers and many online merchants including our online store, [www.colourdeverre.com](http://www.colourdeverre.com).*

#### Tools

- ✓ Colour de Verre Northwoods Maple Leaf mold
- ✓ Medium primer brush
- ✓ Digital scale
- ✓ Sifter
- ✓ Assorted measuring spoons

#### Supplies

- ✓ Hotline Primo Primer™ or MR-97 Boron Nitride
- ✓ Black powder and transparent, fine frits
- ✓ Clear, fine frit

some of the powder. Hold the sifter over the mold and tap the sifter to distribute a fine layer over the mold's surface. Use a small paintbrush to brush away any errant powder from the mold's top edge.



The following colors worked well for making realistic Northwoods Maple leaves. Use fine mesh frit. All, excluding the Light Green, were first blended in a one-to-one mixture with Clear frit:

- Cherry Red transparent
- Yellow transparent
- Orange transparent
- Lemon Grass opal
- Moss Green transparent
- Tangerine transparent
- Light Green

Place the mold on the digital scale. Evenly add 150 grams of the frit mixtures to create a pleasing combination. (When the 150 grams has been added, the scale will read 150 plus the weight of the mold.)

Next "back" the colored frit by evenly adding 150 grams of clear frit.

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. This will keep the leaf thin and



delicate.

### Slumping Individual Leaves

The easiest way to shape individual Northwoods Maple Leaf cast-



ings is to use the integrated slumping surface on the mold's reverse side. Using the same methods described above, prime the slumping surface with either Hotline Primo Primer or MR-97. Position the leaf on the primed surface with the textured side up and place the mold into the kiln. Follow the Individual Leaf Slumping Schedule below.

To create bowls, use Colour de Verre's 7-10" Bowl Slumper and



follow the same Individual Leaf Slumping Schedule.

### Creating Larger Pieces

Multiple leaves can be tack fused to one another and then shaped.

### Casting Schedule\*

Segment	Ramp	Temperature	Hold
1	300°F/165°C	1300-1320°F/705-715°C	45-60 minutes
2	AFAP	960°F/515°C	60 minutes
3	100°F/60°C	600°F/315°C	Off. No venting

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

### Individual Leaf Slumping Schedule\*

Segment	Ramp	Temperature	Hold
1	300°F/165°C	1200-1210°F/650-655°C	10 minutes
2	AFAP	960°F/515°C	60 minutes
3	100°F/60°C	600°F/315°C	Off. No venting

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

To tack fuse multiple pieces together, start by protecting the kiln shelf with a good shelf primer (e.g. Hotline Primo™ Primer) or shelf paper (e.g. ThinFire™ or Papyrus™). Overlap the pieces in a pleasing manner and fire accord-



ing to the Multiple Leaf Tack Fusing Schedule.

Once the combined leaves have cooled, place them in a large, kiln-



washed slumping form and fire according to the Combined Multiple Leaf Slumping Schedule.

When tack fusing or slumping combined leaves, it is important to follow the slow ramps. The larger pieces will have a wide range of thicknesses and can crack if ramp speeds are too rapid.

### Multiple Leaf Tack Fusing Schedule\*

Segment	Ramp	Temperature	Hold
1	200°F/110°C †	300°F/150°C	10 minutes
2	200°F/110°C †	1000°F/535°C	30 minutes
3	200°F/110°C †	1200°F/650°C	45-60 minutes
4	100°F/60°C	1250-1260°F/675-680°C	10 minutes
5	AFAP	960°F/515°C	90 minutes (180 minutes for 4 or more leaves)
6	50°F/30°C	800°F/425°C	0 minutes
7	100°F/60°C	600°F/315°C	0 minutes
8	200°F/110°C	100°F/40°C	Off. No venting

### Combined Multiple Leaf Slumping Schedule\*

Segment	Ramp	Temperature	Hold
1	80°F/45°C ††	300°F/150°C	30 minutes
2	80°F/45°C ††	1000°F/535°C	85 minutes
3	50°F/30°C	1200°F/650°C	5 minutes
4	AFAP	960°F/515°C	90 minutes (180 minutes for 4 or more leaves)
5	50°F/30°C	800°F/425°C	0 minutes
6	100°F/60°C	600°F/315°C	0 minutes
7	200°F/110°C	100°F/40°C	Off. No venting

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

† Schedules were developed for side element kilns. Slow ramps by 50°F/30°C for top element kilns.

†† Slow ramps by 30°F/15°C for top element kilns and more than three leaves.

