Drop Ring Project

Drop ring projects are fascinating and fun. There are many variables to consider when dropping glass through a drop ring. The size of the drop ring and the desired height of the finished vase will determine the size and thickness of glass to be dropped. With every 2 inches of height in a vase, a good rule of thumb would be to add one standard thickness layer of glass to the “paddy” to be dropped. If the glass is too thin it can be stretched to the point of tearing. A hole will appear in the side of the vase while dropping. The glass to be dropped can be fused together in advance for the most control or the fusing and dropping can be done in one firing. For taller uniform vases, it is desirable to fuse the glass together in a separate firing and then dropping the glass through the drop ring in a secondary firing process. The firing schedule will vary depending on the thickness of the glass and the height of the drop ring and the desired flatness on the bottom of the vase. Obviously, one will have to hold the glass at the dropping temperature for a longer period of time for thicker glass dropping long distances. Below you will find the instructions for creating a uniform 6” wide by 6” tall drop ring.

Pre-Drop Fusing Instructions:

1. Cut a 6 inch square of double thick (or two pieces of standard thickness) clear transparent COE 96 glass and a 5” square of a colorful piece of COE 96 glass of choice. Spectrum Spirits and Uroboros Streakies work particularly well as the patterns in the glass will “fall” nicely to create interest.

2. Place the 5” square of colorful glass in the middle of the 6” square of clear glass on a 6.5” square piece of Thin Fire paper on a kiln shelf in a kiln. When using a programmable kiln full fuse according to the following firing schedule: Rate 1 - 350 Temp 1 – 1250 Hold 1 – 10 minutes / Rate 2 – 9999 Temp 2 – 1470 Hold 2 – 10 minutes / Rate 3 9999 Temp 3 960 Hold 3 60 minutes. If working with a cone operated kiln, fuse the glass to a cone 015 on “Low”, “Med.” And “High” in hour intervals. Allow to cool naturally. Wash and dry the glass with water.

Dropping the glass:

Apply MR97/ZYP glass separator to the GM14 6” dropout ring. Begin by treating the mold with the glass separator spray in a ventilated area. We recommend ZYP. Several light coats with a short waiting period between coats is preferable to one heavy coat. Shake the can well before use and hold the can upright while using to assure proper distribution of product. It is important to turn the mold to make sure you coat the mold cavity at all angles.

1. Place a 6” square of Thin Fire paper on a kiln shelf and prop the drop out ring on three 5.5” kiln posts over the Thin Fire paper in a kiln such a way that you can not see any of the kiln post when looking directly through the drop out hole. If the post can be seen through the hole, the glass may touch it while dropping through the hole.

2. Place a 6” square piece of un fused glass on the propped drop out ring and lay a level on the top of the glass. Check the level from corner to corner in two directions. If the glass is not level, “shim” the drop ring with a folded piece of thin fire paper to level the drop ring. This is important because you want the glass to drop evenly down the hole and not lean to one side while dropping.

3. Remove the un fused square of glass and place the pre-fused glass paddy on the drop ring.

4. Fire the project according to the following firing schedule: Rate 1- 300 Temp 1 – 1200 Hold 1 – 20 minutes / Rate 2 – 9999 Temp 2 – 1330 Hold 2 – 45 minutes / Rate 3 – 9999 Temp 3 – 960 Hold 3 – 60 minutes. (If using a cone operated kiln, use a cone 017 at low, medium and high in hour intervals). It will be necessary to carefully view the project in the kiln frequently after the kiln has reached 1330 degrees (after turning the manual kiln to “High”). It may be necessary to abbreviate or lengthen the hold time if the glass dropped more quickly or has not dropped enough. Look for the glass to touch the kiln shelf and begin to gather to create at least a 3” flat spot on the bottom of the vase such that the vase will stand on its’ own. If the glass is allowed to drop for too long, the
glass will gather at the bottom and become too large to remove from the drop ring and/or holes will develop in the walls of the vase from over stretching.

Please visit http://www.creativeparadiseglass.com/category-s/107.htm where you will find important firing notes that will help you effectively fire your piece.