

Creative Paradise Inc.

Supplies: GM79 Cylinder Dam Mold, GM80 Angle Dam Mold, Quality Glass Separator, 6" x 6" Thin Fire, various rods, stringers, noodles, sheet glass (COE 96), Cutting tools, suitable kiln, Ring Saw or other sturdy diamond bladed cutting saw.



Pattern bars can be made and sliced to create fascinating repeated patterns. The cylinder and angled dam molds form round and square patterns that can be arranged in a large variety of exciting patterns. The images and details below came from the formation of a snowflake pattern formed from both round and square patterns bar pieces. The same technique can be used with other colors to create vivid and

striking glass pieces as displayed in figure X.

Begin by coating the molds with a quality glass separator. The artist in this tutorial used Primo Primer. One solid coat Drive the moisture from the mold after applying the water based glass separator.

Cut a 6" x 3" strip of Thin Fire Paper and line the cavity of the mold with the paper. Trim the paper such that the edge of the Thin Fire is not coming above the top of the mold cavity. The Thin Fire helps to assure a clean glass surface once the glass is demolded. Additionally, some opal glass can attach to glass separator very aggressively when fired to these temperatures and held. The Thin Fire is your insurance policy against a mishap.

Begin to fill the mold cavities with various 6" long strips of sheet glass, noodles, stinger and rods. Double Thick Clear cut into 1/2" thick x 6" long strips works nicely to provide clear areas in the pattern. The snowflake photographed was made from Double Thick Clear and Sky Blue Transparent sheet glass strips, noodles stingers and rods of White Opal, Sky Blue Transparent and Deep Aqua Transparent. The pieces were placed in the mold length wise and the pattern was random (figure 2).

Fill the mold such that a mound of strips, stringers, rods, noodles is piled in the center of the mold coming out of the top of the mold cavity as indicated in figure 3. This is necessary because the glass will melt and fill the voids between the glass pieces. The mound of glass in the center assures a full cavity after fusing.

Fire the glass in the mold using the following firing schedule:

Segment	Rate	Temp (F)	Hold (min)
1	250	1360	20
2	250	1470	10
3	9999	960	75
4	100	815	5

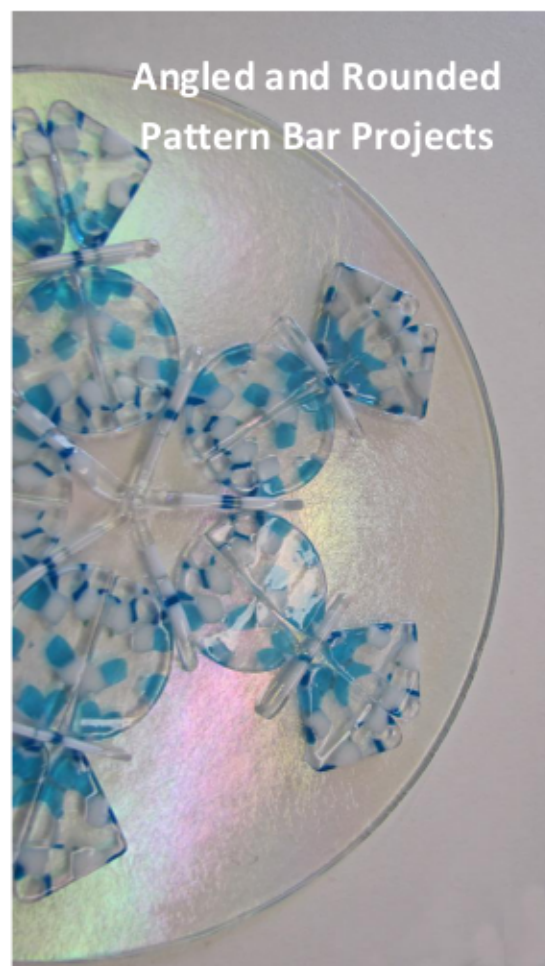


Figure 1



Figure 2



Figure 3

Allow the glass to cool naturally. Invert the mold to demold the shaped pattern bars of glass. Note that the glass is not entirely flat on the top surface. This rounded surface can be cut to create a flat edge.

These glass pieces are thick. To cut slices from them a very sturdy saw is required. The artist in this tutorial used a Taurus III Ring Saw with a Mega Blade. A diamond blade on a tile saw can also work and there are many devices on the market designed to cut thick pieces of glass.

Cut the pattern bars $\frac{1}{8}$ " to $\frac{1}{4}$ " thick across the pattern. To create a perfect mirrored pattern when the two slices are placed together, cut the rounded top surfaces of the slices to make them flat (figure 6).

The patterns formed by placing the flat edges together can be arranged in a wide variety of designs. The snowflake pattern was created by paring $\frac{1}{2}$ round slices with each other and $\frac{1}{2}$ square slices with each other. The thin pattern strips used here and there in the snowflake pattern came from the cut rounded edge of the pattern slices. All of the pattern pieces were placed on a 8" round clear iridized piece of COE 96 glass and tack fired using this firing schedule:

Segment	Rate	Temp (F)	Hold (min)
1	250	1100	5
2	250	1380	5
3	9999	960	60
4	100	815	5

If a more fused finished is desired, add heat to the arrival temp in segment 2.

The creative possibilities are endless using a wide variety of glass colors. The coasters below help to demonstrate how fun and interesting pattern bar work can



Figure 4



Pattern bar with a slice removed from top

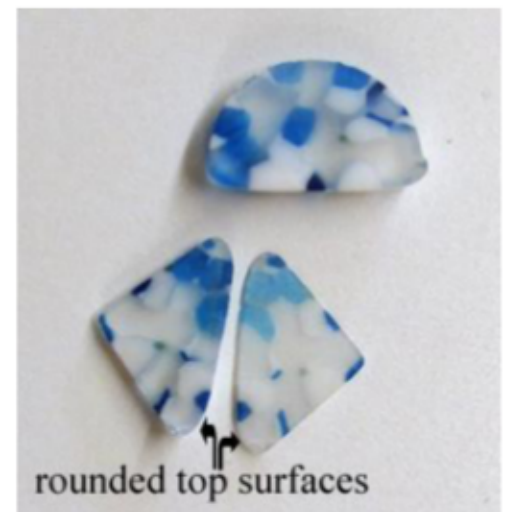
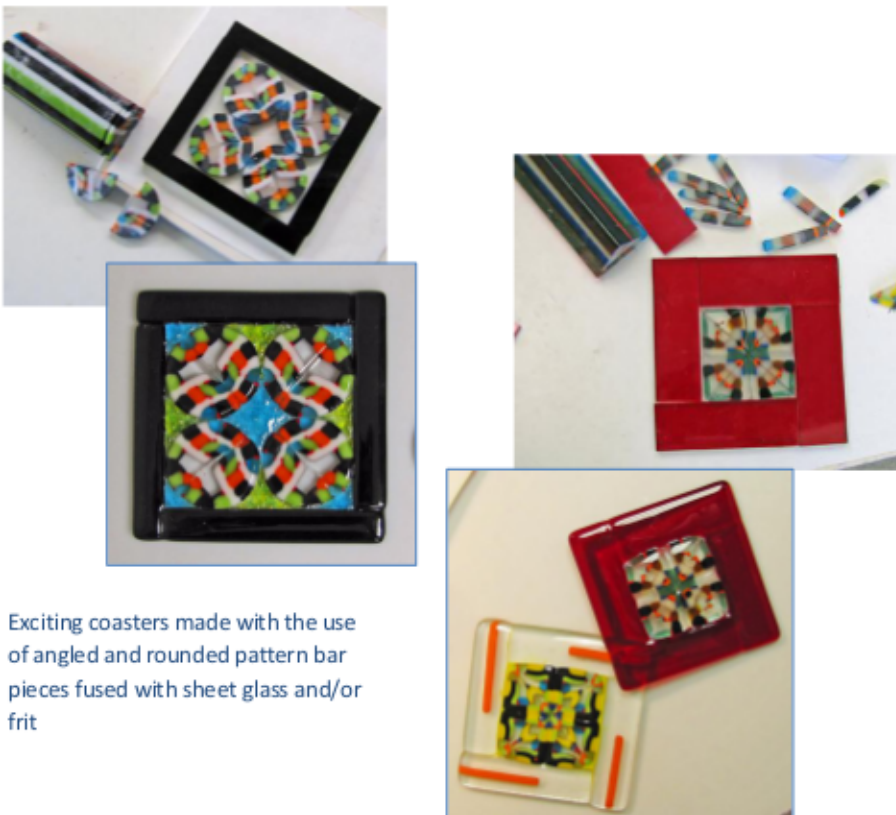


Figure 5



Exciting coasters made with the use of angled and rounded pattern bar pieces fused with sheet glass and/or frit