

Pattern Bar Projects

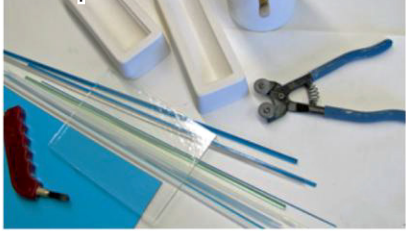
General Materials:

- [GM79 Cylinder Dam](#)
- [GM80 Angle Dam](#)
- Fusible Compatible Glass
(See Right for Glass Used in **Example 1**)
- Suitable Glass Separator/ZYP
- Thin Fire Paper
- Glass Cutting Tools
- Ring Saw or Other Suitable Sturdy
Diamond-Bladed Cutting Saw

Suggested Glass: (All COE96)

- Sheet Glass:
 - Double-Thick Clear
 - Sky Blue Trans.
- Noodles/Rods/Stringers:
 - White Opal
 - Sky Blue Trans.
 - Deep Aqua Trans.

Suggested Materials for
Example 1



Though this tutorial uses the **GM79 and GM80 Dam Molds specifically**, these methods can be used with [all deeper dam molds](#) to create pattern bars.

Pattern bars, once made, can then be sliced to create mesmerizing patterns that can be used in a myriad of

other projects. The GM79 Cylinder and GM80 Angle Dam molds create round and square-edged patterns respectively that can then be arranged in a wide variety of ways.

Begin by coating the molds thoroughly with suitable glass separator. We recommend spray-on ZYP. **If using a spray-on separator, always wear a mask during application.**

Once the separator has dried, cut two 6" x 3" strips of Thin Fire Paper, one for each mold. Line each mold with the paper and trim any edges extending beyond the top of the mold cavity. The Thin Fire Paper ensures a clean surface once the glass is fused and greatly simplifies de-molding.

Once lined, fill the mold cavities with various 6" long strips of sheet glass, noodles, stringers, and/or rods, making sure all the glass is compatible. Double-Thick Clear cut into 6" x 1/2" strips works well for adding clear areas to the pattern. Refer to the **"Suggested Glass"** box above for the colors and types used in **Example 1**. The pieces cut from these types were then placed randomly into the mold lengthwise (**Image 1**).

Continue to fill the mold so that the glass is mounded towards the center and extends just beyond the mold top (**Image 2**) to ensure a full cavity after fusing. Transfer the filled molds to a level shelf in the kiln and fire using the suggested schedule in **Table 1**, adjusted as needed for your kiln.

Table 1: Pattern Bar Fuse*

Seg.	Rate	Temp (°F)	Hold
1	250	1360	20
2	250	1470	10
3	9999	950**	75
4	100	815	05

**If using COE90, adjust this to 900°F

*Before firing, it's important to know your kiln to see if you need to adjust our suggested schedules.

For tips on that, [please click here to see our Important Firing Notes!](#)

Example 1

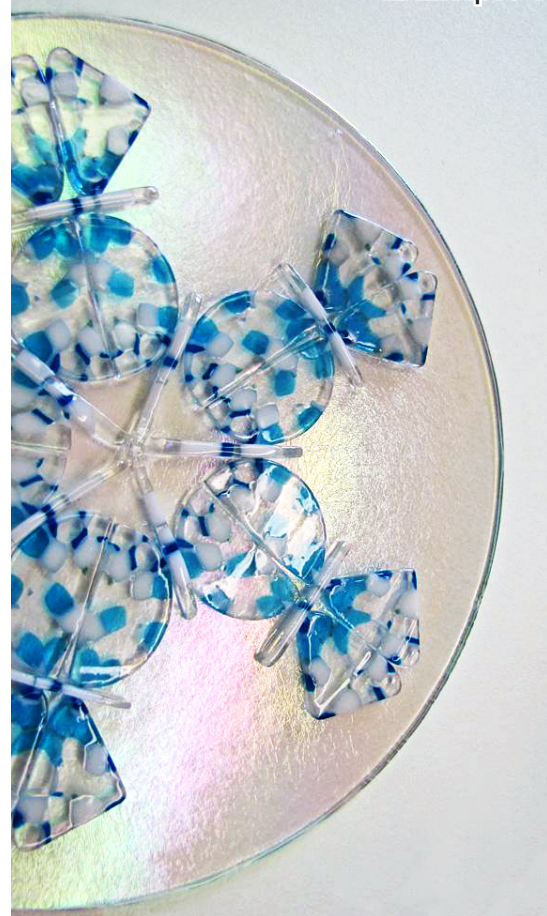


Image 1



Image 2

Allow the glass to cool down naturally after firing, then invert the molds onto a soft surface to remove the glass. Note that the bars will not be entirely flat on the top (**Images 3 & 4**). If desired, this rounded surface can be cut to create a flat edge.

These pattern bars are thick and require a sturdy saw for cutting. We used a Taurus III Ring Saw with a Mega Blade, but a diamond blade on a tile saw or similar will also work. **Remember to wear proper respiratory protection when cutting glass to avoid inhaling particulate matter.**

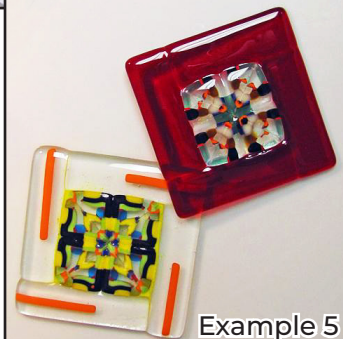
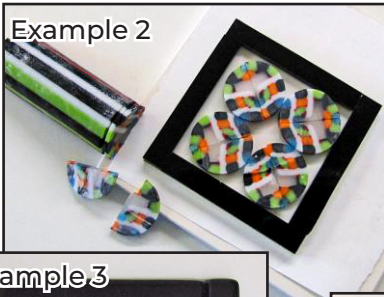
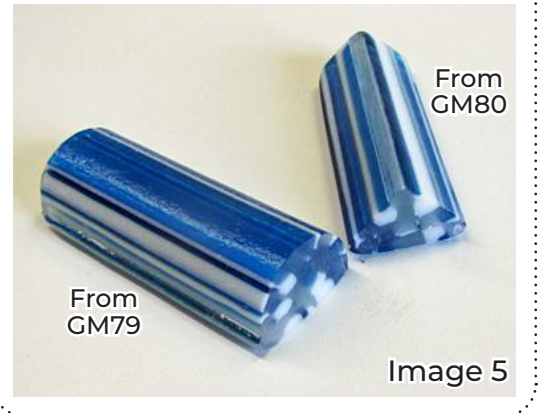
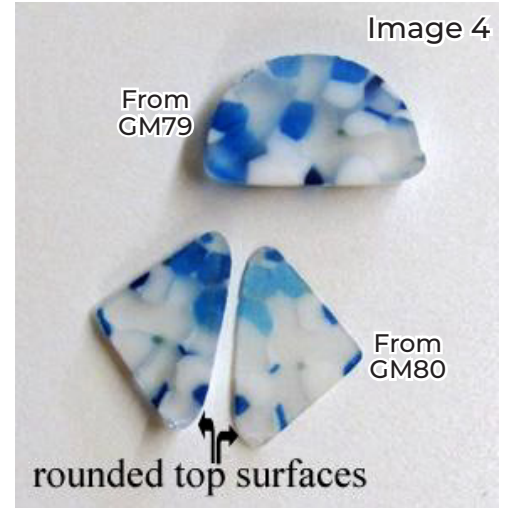
Cut the pattern bars across the pattern (**Image 5**) into 1/8" and 1/4" thick pieces. To create a mirrored effect, cut the rounded top surfaces of the pieces to make them lie flat against one another (**Image 4**). The snowflake in **Example 1** on **Page 1** was created by pairing round slices together and square slices together. The thinner strips seen elsewhere on the snowflake were made with the scrap cut edges from the bars.

The cut pattern bar pieces can then be arranged and fired onto another sheet of glass using the suggested schedule in **Table 2** or your own preferred Tack Firing schedule. The snowflake example in this project was Tack Fired onto an 8" circle of Clear Iridized Glass.

Seg.	Rate	Temp (°F)	Hold
1	250	1100	05
2	250	1380	05
3	9999	950**	60
4	100	815	05

**If using COE90, adjust this to 900°F

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These coasters used pattern bar pieces created using the same methods as the snowflake that were then fused on a sheet of Thin Fire Paper with pieces of various sheet glass arranged around the edges to create the coaster shape and size.