Make It: Opaline Sushi Set

Glass

- 3 sheets of Opaline Striker, 3mm, 10” x 10” (000403-0030-F)
- 1 sheet of Canary Yellow, 3mm, 10” x 10” (000120-0030-F)
- Partial sheet of Fuchsia, 3mm, 10” x 10” (001332-0030-F)
- Partial tube of Charcoal Gray Stringer, 1mm (001129-0107)

Produces one 9” x 9”, one 6” x 6”, three 3 1/4” x 3 1/4”, and multiple chopstick rests.

Tools

- Basic glass cutting tools
- Slumping Mold (#8634)
- Slumping Mold (#8996)
- Slumping Mold (#8998)

Non-glass Consumables

- Shelf primer
- GlasTac

Other Handy Items

- Ultra Fine Point Sharpie pen
- Tweezers
- 120 grit diamond pad

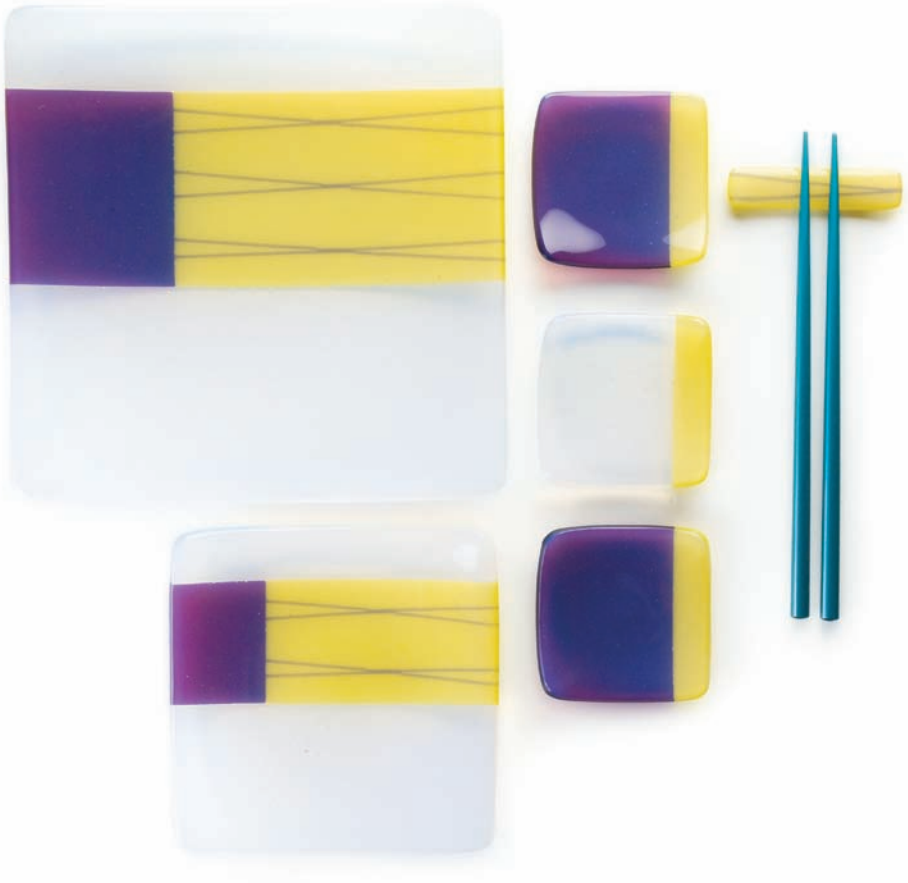
Professional-style Options

- Coldworking equipment/grinder/belt sander

Recommended Reading

- Glass Cleaning Basics
- Improve Your Glass Cutting
- TechNotes 5: Volume & Bubble Control
- TipSheet 7: Platemaking
- Tips for Using Bullseye Slumping Molds

Articles can be found at www.bullseyeglass.com/education



WHY THIS PROJECT WORKS

Opaline Striker transforms Canary Yellow and Fuchsia into an exciting, modern palette with unique effects in both reflected and transmitted light. Embed a stringer design between the layers (without trapping lots of bubbles) through multiple firings.

PREPARE & FUSE THE PART SHEET

Purpose: The stringers are pre-fired to a base, forming a relatively smooth sheet that layers well in subsequent firings. Cutting through this part sheet facilitates a cleaner-looking design.

1. Trim the rolled edge from the Canary Yellow sheet. Then cut a 3/4” strip from the same side and cut it into three 3 1/4” lengths. Set these pieces aside to complete the smaller dishes. The remaining piece will be approximately 8 3/4 ” x 10”. Clean the sheet and place it smooth-side up on inverted cups or blocks (for easy handling).

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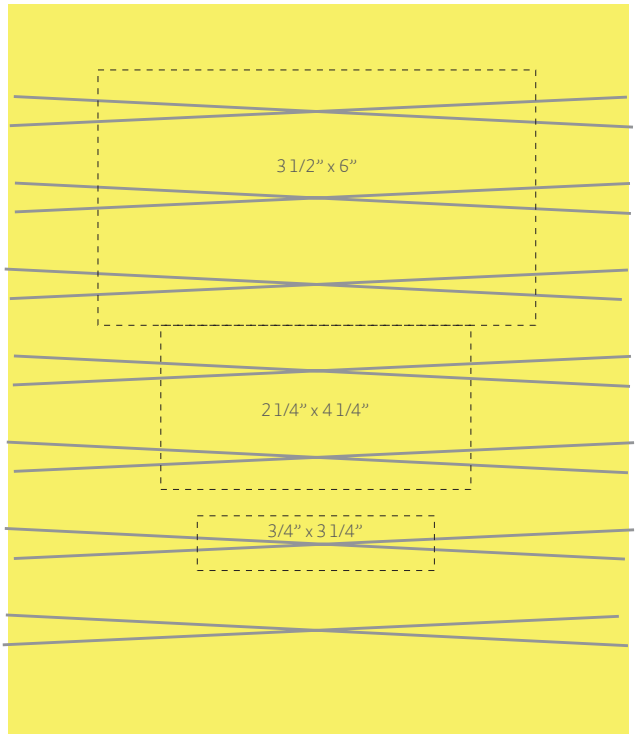
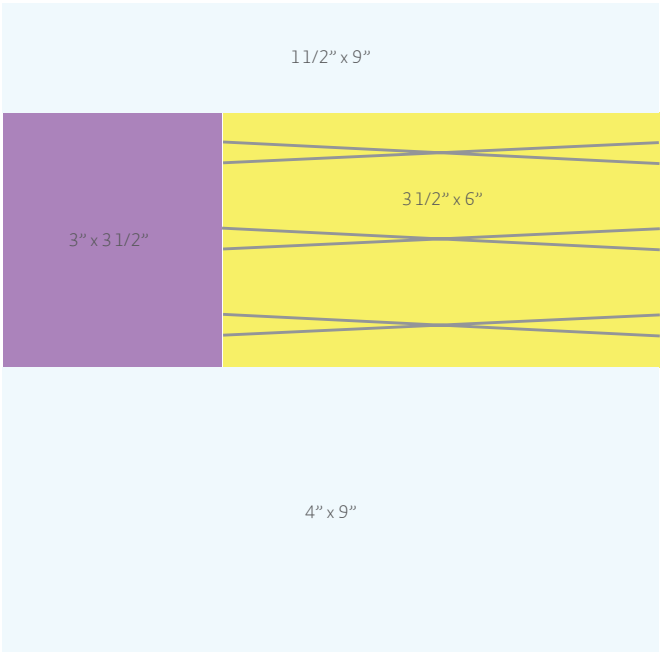


Part sheet layup and cutting guide.

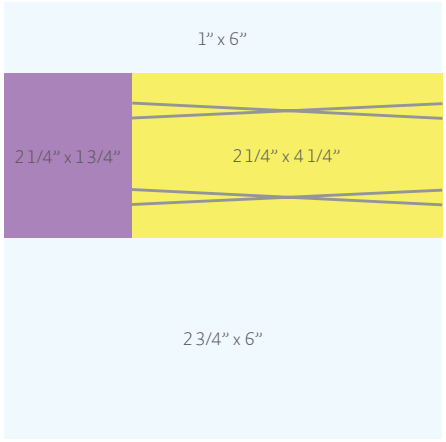


Base layup for 9" x 9" piece. Cap with Opaline.

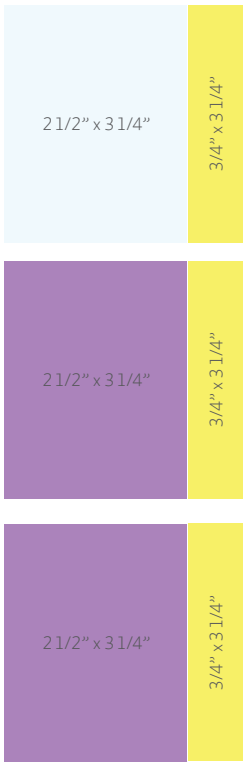
2. Break 14 of the stringers into 9" lengths. Place 7 of the lengths parallel and equidistant to one another (about 1 1/8" to 1 1/4" apart) on the Canary Yellow base. For the design on our sample, place the stringers on an angle, such that when the next layer of 7 stringers is placed on top, they intersect down the center of the sheet. Use GlasTac on the ends to hold in place.
3. Place the remaining 7 stringers across the first layer, forming a wide X with intersections along the center of the sheet. Apply GlasTac where the stringers touch the sheet and at the center of the X.
4. Once the GlasTac is set, transfer the piece to a prepared firing surface. Because the edges of the base glass will pull in as the material responds to heat, shelf primer is the preferred separator.
5. Program the kiln, double-check everything and fire the piece. (See Part Sheet Firing schedule)

PREPARE THE SHEET GLASS
For the 9" x 9" piece:

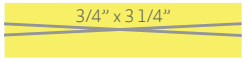
6. Cut a 9" x 9" square of Opaline Striker for the top layer. (If the removed piece is 1" wide, save it for the 6" x 6" project.)
7. Cut a 9" section from a second piece of Opaline Striker. From that piece, cut two pieces: 1 1/2" x 9" and 4" x 9".
8. Cut a 3" strip from the Fuchsia sheet. Then cut it to 3" x 3 1/2".
9. Using an Ultra Fine Point Sharpie pen, mark a 3 1/2" x 6" section on the part sheet and center three of the X formations. (Remember: a 2 1/4" x 4 1/4" piece will be cut later.) To cut the part sheet, a well-lubricated score is crucial. Consider brushing a thin layer of oil to the path prior to scoring. The relatively smooth, flat top surface of the part sheet is appropriate for scoring.



Base layup for 6" x 6" piece. Cap with Opaline.



Base layup for 3 1/4" x 3 1/4" pieces. Cap with Opaline.



Base layup for chopstick rest. Cap with Opaline.

For the 6" x 6" piece:

10. Starting with the part sheet, cut a 2 1/4" x 4 1/4" section. Center two X formations.
11. Using the third 10" x 10" of Opaline Striker, cut a 6" section. From that piece, cut two pieces: 6" x 6" and 2 3/4" x 6".
12. Using the strip of Fuchsia left over from step 8, cut a piece that is 2 1/4" x 1 3/4".
13. Cut a 1" x 6" strip of Opaline Striker from the 1" strip left over from step 6. If that strip is not wide enough, cut it from one of the remaining pieces.

For three 3 1/4" x 3 1/4" pieces:

14. From the remaining pieces of Opaline Striker, cut:
    (3) 3 1/4" x 3 1/4" (for the top layers)
    (1) 2 1/2" x 3 1/4" (bottom layer + Canary Yellow)
15. From the remaining pieces of Fuchsia, cut:
    (2) 2 1/2" x 3 1/4" (bottom layer + Canary Yellow)
16. Include the three 3/4" x 3 1/4" Canary Yellow strips from step 1 to complete the parts.

Chopstick rests (variable amount):

17. Layer two pieces that are 1" x 3 1/4". For slumping, use the center of Mold #8998.

ASSEMBLE THE LAYERS & FUSE

18. It is best to build these projects directly on a prepared firing surface. Clean the base layer pieces and place smooth side face-up, with minimal sliding (especially on a primed shelf.) If necessary, use diamond pads to remove material for a better fit. Then clean and set the caps in place with the smooth sides face-up. If firing several projects, leave at least 1/2" between them.
19. Program the kiln, double-check everything and fuse the pieces (see Fuse Firing schedule).

SLUMP FIRING

20. Prior to slumping, address any sharp points or edges with a wet diamond pad. Professional-style option: remove material from the edges/coldwork for a cleaner-looking edge.
21. Clean the pieces and load them onto corresponding (primed) slump molds. Elevate the molds to promote even heating and cooling.
22. Program the kiln, double-check everything and fire the pieces. (See Slump Firing schedule.)

NOTES FOR FUTURE PROJECTS

Layering with Opaline Striker makes possible an entire new palette of colors. Experiment and document. In using the remaining part sheet, remove about 1/2" from the rounded edges. They are thicker than 3mm and hard to lay-up next to straight sheet glass.

SUGGESTED FIRING SCHEDULES

Part Sheet Firing

	RATE*	TEMPERATURE	HOLD
1	400°F (222°C)	1225°F (663°C)	:15
2	600°F (333°C)	1480°F (804°C)	:10
3	AFAP**	900°F (482°C)	:45
4	150°F (83°C)	700°F (371°C)	:01
5	AFAP**	70°F (21°C)	:00

Fuse Firing

	RATE*	TEMPERATURE	HOLD
1	300°F (167°C)	1225°F (663°C)	:30
2	600°F (333°C)	1490°F (810°C)	:10
3	AFAP**	900°F (482°C)	1:00
4	100°F (56°C)	700°F (371°C)	:01
5	AFAP**	70°F (21°C)	:00

Slump Firing

	RATE*	TEMPERATURE	HOLD
1	300°F (167°C)	1225°F (663°C)	:05
2	AFAP**	900°F (482°C)	1:00
3	100°F (56°C)	700°F (371°C)	:01
4	AFAP**	70°F (21°C)	:00

(with mold # 8634, # 8996, and # 8998)

* Degrees per hour

** As fast as possible.
Allow kiln to cool at its natural rate with the door closed.