Make It: Opaline Sushi Set

GLASS

- 3 sheets of Opaline Opalescent, 3 mm, (000403-0030-F) 10″ × 10″
- 1 sheet of Canary Yellow Opalescent, 3 mm, (000120-0030-F) 10″ × 10″
- Partial sheet of Fuchsia Transparent, 3 mm, (001332-0030-F) 10″ × 10″
- Partial tube of Charcoal Gray Stringer, 1 mm (001129-0107)

TOOLS & SUPPLIES

- 3M Diamond Hand Lap 120 grit (7220)
- Basic glass cutting tools
- Bullseye Shelf Primer (8220)
- GlasTac (8234) or GlasTac Gel (8268)
- Square Slumper A 10.5″ Mold (8634)
- Square Slumper B 6.25″ Mold (8996)
- Square Slumper B 3.5″ Mold (8998)
- Ultra Fine Point Sharpie

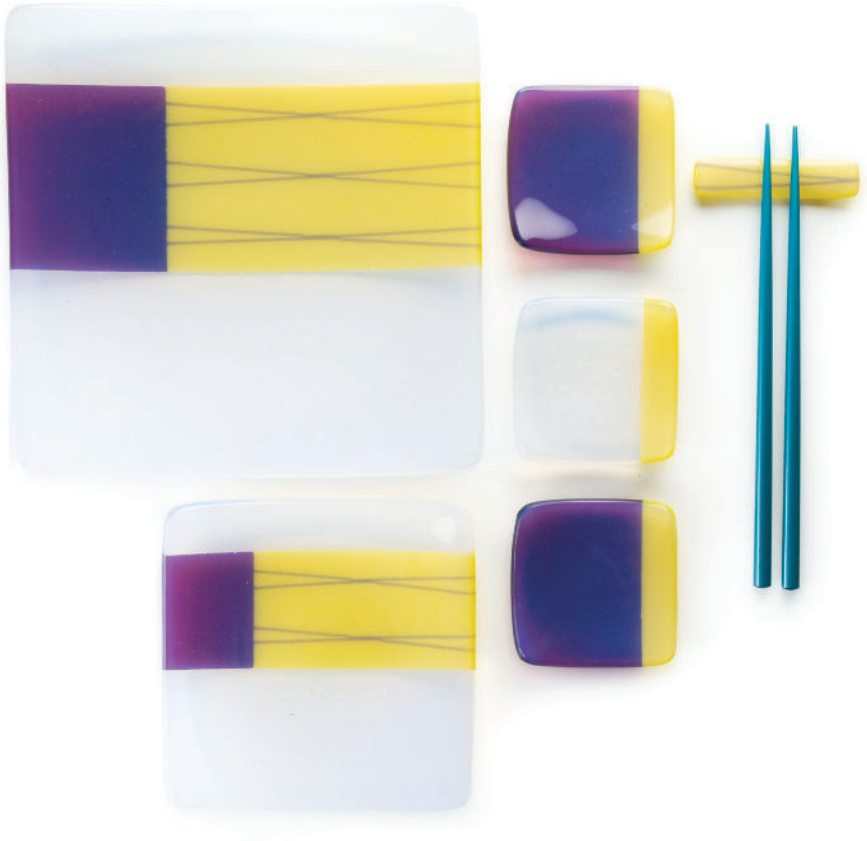
OPTIONAL

- Coldworking equipment / grinder / belt sander

HELPFUL RESOURCES

- Glass Cleaning Basics
- Improve Your Glass Cutting
- TechNotes 5: Volume & Bubble Control
- TipSheet 7: Platemaking Tips
- Tips for Using Bullseye Slumping Molds
- Video lesson: Designing with Part Sheets, 1 & 2 (subscription required)
- Video lesson: Opaline Overlays (subscription required)

View articles and videos at ***bullseyeglass.com***



How This Project Works

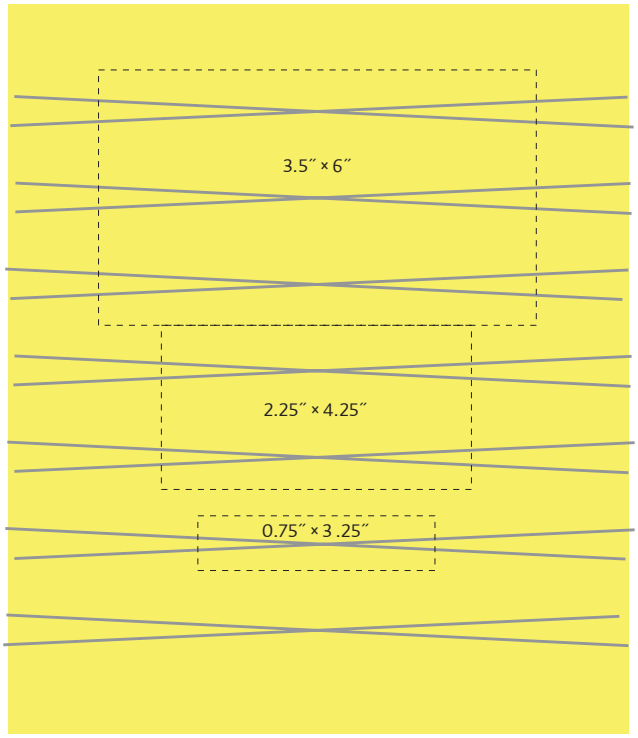
Opaline Striker transforms Canary Yellow and Fuchsia into an exciting, modern palette with unique effects in both reflected and transmitted light. Through multiple firings, you'll embed a stringer design between the layers (without trapping lots of bubbles).

This project produces one 9″ × 9″ (23 × 23 cm) plate, one 6″ × 6″ (15 × 15 cm) plate, three 3.25″ × 3.25″ (8 × 8 cm) plates, and multiple chopstick rests.

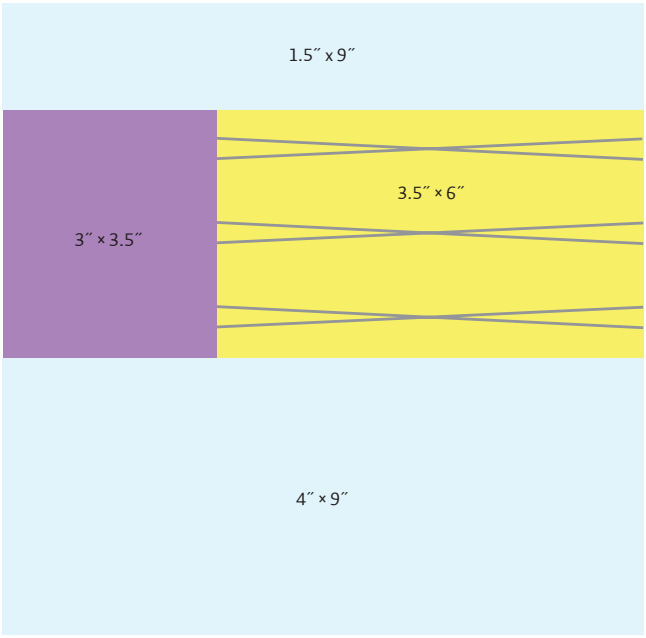
Prepare & Fuse the Part Sheet

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 0.75″ strip from the same side and cut it into three 3.25″ lengths. Set these pieces aside to complete the smaller dishes. The remaining piece will be approximately 8.75″ × 10″. Clean the sheet and place it smooth side up on inverted cups or blocks for easy handling.
2. Break 14 of the stringers into 9″ lengths. Place 7 of these on the Canary Yellow base parallel and equidistant to one another (about 1.125–1.25″ apart) and at an angle. Use GlasTac on the ends to hold them in place.



Part sheet layup and cutting guide.

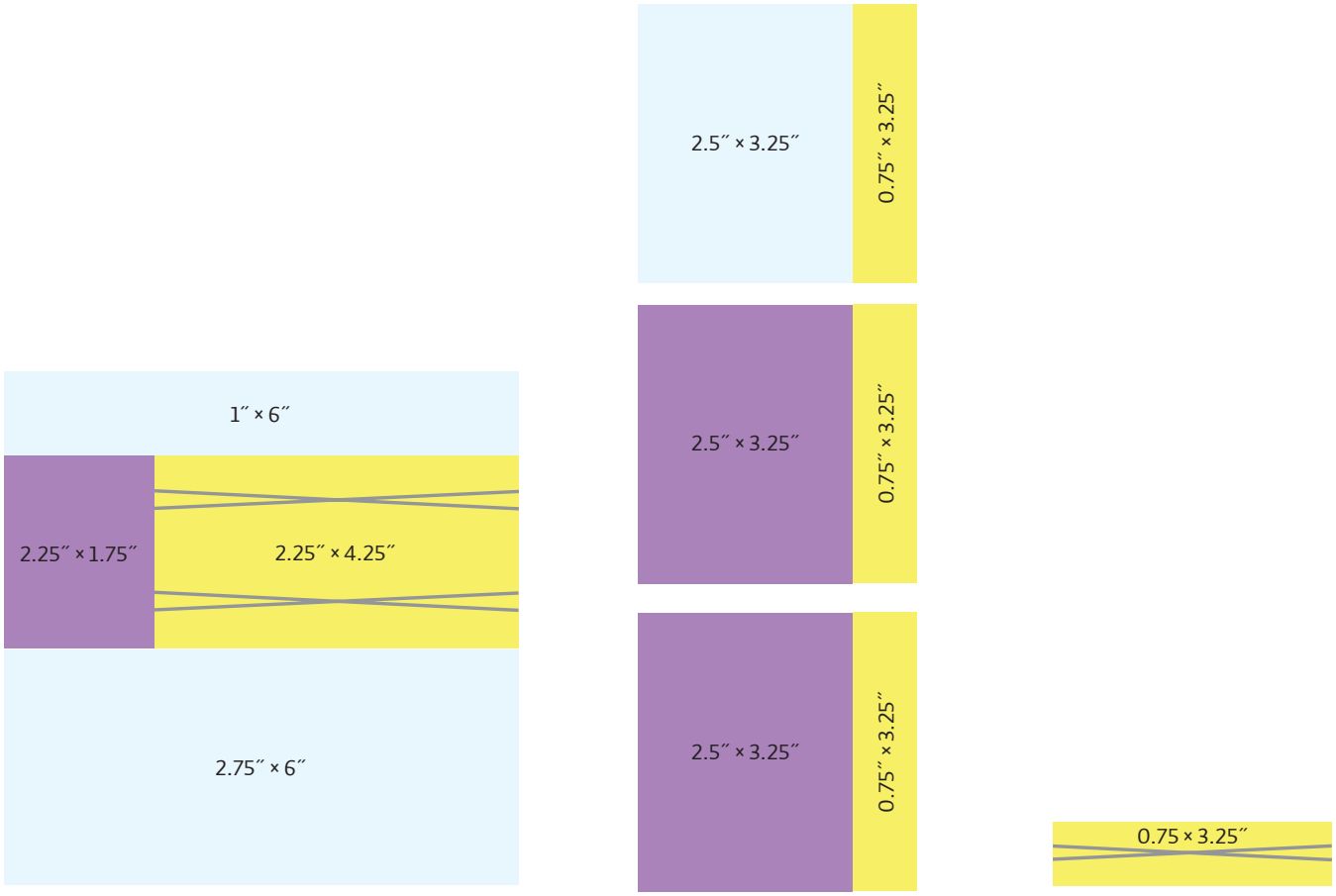


Base layup for 9″ × 9″ piece. Cap with Opaline.

3. Place the remaining 7 stringers across the first layer at the opposing angle, 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. We recommend a primed kilnshelf because the edges of the sheet will pull in as the material responds to the heat.
5. Program the kiln according to the Part Sheet Firing schedule on page 4 and fire the part sheet.

Prepare the Sheet Glass | 9″ × 9″ plate

1. Cut a 9″ × 9″ square of Opaline for the top layer. (If the removed piece is 1″ wide, save it for the 6″ × 6″ project.)
2. Cut a 9″ section from a second piece of Opaline Striker. From that piece, cut two pieces: 1.5″ × 9″ and 4″ × 9″.
3. Cut a 3″ strip from the Fuchsia sheet. Then cut it to 3″ × 3.5″.
4. Using an Ultra Fine Point Sharpie pen, mark a 3.5″ × 6″ section on the part sheet and center three of the X formations. (Remember: a 2.25″ × 4.25″ 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.



Left: Base layup for 6″ × 6″ piece. Cap with Opaline. Middle: Base layup for 3.25″ × 3.25″ pieces. Cap with Opaline. Right: Base layup for chopstick rest. Cap with Opaline.

Prepare the Sheet Glass | 6″ × 6″ plate

1. Cut a 2.25″ × 4.25″ part sheet section. Center two X formations.
2. Using the third 10″ × 10″ of Opaline Striker, cut a 6″ section. From that piece, cut two pieces: 6″ × 6″ and 2.75″ × 6″.
3. Using the strip of Fuchsia left over from Step 3 of the 9″ × 9″ plate, cut a piece that is 2.25″ × 1.75″.
4. Cut a 1″ × 6″ strip of Opaline Striker from the 1″ strip left over from Step 1 of the 9″ × 9″ plate. If that strip is not wide enough, cut it from one of the remaining pieces.

Prepare the Sheet Glass | 3.25″ × 3.25″ plate

1. From the remaining pieces of Opaline Striker, cut: three 3.25″ × 3.25″ pieces for the top layers, one 2.5″ × 3.25″ (bottom layer + Canary Yellow)
2. From the remaining pieces of Fuchsia, cut two 2.5″ × 3.25″ (bottom layer + Canary Yellow)
3. Use the three 0.75″ × 3.25″ Canary Yellow strips from step 1 of Prepare & Fuse the Part Sheet.

Chopstick rests (variable amount)

Layer two pieces that are 1″ × 3.25″. To slump, use the center of Square Slumper B 3.5″ mold (8998).

Assemble the Layers & Fuse

We recommend assembling these projects directly on a prepared firing surface.

1. Clean the base layer pieces and place them smooth side up, with minimal sliding. If necessary, use a diamond hand lap to remove material for a better fit.
2. Clean and set the caps in place with the smooth sides up. If firing several projects, leave at least 0.5˝ between them.
3. Program the kiln according to Fuse Firing schedule Program the kiln and fuse the pieces.

Slump the Plates

4. Before slumping, remove any sharp points or edges with a wet diamond hand lap. Optional: Coldwork edges for a cleaner-looking edge.
5. Clean the pieces and load them onto primed slumping molds. Elevate the molds to promote even heating and cooling.
6. Program the kiln according to Slump Firing schedule and slump the pieces.

Notes for Future Projects

Layering with Opaline makes an entire new palette of colors possible. Experiment and document. Before using the remaining part sheet, remove about 0.5˝ from the rounded edges. This area is thicker, which makes it difficult to lay-up next to 3 mm sheet glass and may also cause bubbles if capped.

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)	0:45
4	150°F (83°C)	700°F (371°C)	:00
5	AFAP†	70°F (21°C)	:00

Fuse Firing

	RATE*	TEMPERATURE	HOLD
1	400°F (222°C)	1225°F (663°C)	:45
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—mold (8634, 8996, and 8998)

	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

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