# MAKE IT: Inline Plate

# Inline Plate Pack (8520) Includes:

1 tube each:

- Burnt Orange Stringer, 2mm (000329-0072)
- Butterscotch Stringer, 2mm (000337-0072)
- Petal Pink Stringer, 2mm (000421-0072)
- Opaque White Stringer, 2mm (000013-0072)
- Clear Stringer, 2mm (001101-0072) 8 sheets:
- Tekta, 3mm, 10" x 10" (001100-0380-F)

The pack contains enough glass for two  $9" \times 9"$  and two  $8" \times 8"$  finished pieces.

#### Tools

- Basic glass cutting tools
- Neo GC Cutter
- Slumping Mold # 8634

# Non-glass Consumables

- GlasTac
- Shelf primer (not ThinFire or shelf paper)
- Butcher or Kraft paper to use as a clean workspace

# Other Handy Items

- Ultra Fine Point Sharpie pen
- Small cups or blocks to elevate the piece during the design phase
- 120 grit diamond pad

# **Professional-style Options**

 Coldworking equipment/ grinder/belt sander

## **Recommended Reading**

- Improve Your Glass Cutting
- Glass Cleaning Basics
- TipSheet 7: Platemaking
- Tips for Using Bullseye Slumping Molds

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



## PREPARE THE SHEET GLASS

- 1. Cut two pieces of 3mm clear Tekta (001100-0380-F) to 9" x 9".
- 2. Clean one of them and trace its border with a pencil on a piece of butcher paper to serve as a template and clean workspace. Set the sheet glass aside.

### PREPARE THE STRINGER

- 3. Set out enough stringers to cover the 9" x 9" template you have drawn. It takes approximately 116 2mm stringers to cover a 9" x 9" square end to end (an average of 23 stringers or about a half-tube of each color). Don't worry about color placement just yet.
- 4. Now you are going to measure, mark, and cut all of the stringers at the same time to make sure they are uniform in length and have "clean" ends. Start by aligning the stringers so that ¼" or less hangs over one edge of the template. (Full-length stringers will overlap the opposite side of

the template by about 81/4".) Using the template as a guide, place the 9" x 9" piece of clean Tekta on top of the stringers. Next, run an Ultra Fine Point Sharpie pen along an edge of the sheet glass, leaving a cutting mark on each stringer. Before marking the stringers on the other side of the Tekta, move the Tekta over ever so slightly to cover the first row

Set materials on your paper template from Step 1

Tekta

Trace the sheet glass edu

Trace the sheet glass edge to mark your stringers

of marks. Doing this will produce a more accurate measurement. Remove the Tekta sheet. Now your stringers are ready to cut.

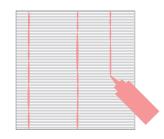
Note: If using stringers that already have one nicely cut end, set the "clean" ends flush with one side of the template instead of cutting them.



5. Cut the stringers, using the marks as a guide. A disc nipper like the Neo GC will work great.

# **CREATE THE DESIGN (SET THE STRIPES)**

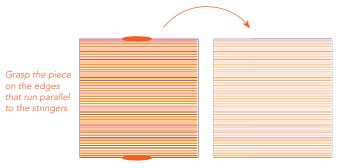
- 6. Set a single piece of clean Tekta (rough side up) on small inverted cups or blocks—to elevate it from the work surface. The slight elevation will make handling and moving the piece much easier.
- 7. Place a drop of GlasTac at each corner and set down a few stringers to determine the ends.
- 8. Fill in with the remainder of the stringers, arranging them to your liking. You'll know the surface is covered when you can't add a stringer without another one falling off. Keep an eye out for stringers that might need to be re-cut. Adjust stringers to make them flush with the edge of the sheet glass.
- 9. Once your design is complete and all of the stringers are in place, draw a few beads of GlasTac across the stringers, making contact with each one. While the GlasTac is still wet, gently press down on the



- stringer layer to make sure it is only a single stringer deep and that all of the stringers are touching the sheet glass underneath. It is important for Glastac to flow between the stringers to the sheet glass.
- 10. Allow the GlasTac to dry completely. This is very important, as you will see when you get to step 11. Minimally, it should be left to dry overnight.

#### **ASSEMBLE THE LAYERS & FUSE**

11. Once the piece is dry, you are going to turn it over and transfer it to a primed kiln shelf—a very delicate maneuver. Holding the edges that run parallel with the stringers, gently pick the piece up, turn it over and place it with the stringer layer touching the shelf. This is best done in close proximity to the firing surface, spending minimal time holding the inverted piece. If the GlasTac is not set and dry, the stringers will slide off, taking you back to step 7. Be gentle in both



Flip so stringer side faces the shelf

handling and placing the piece, leaving the primed shelf surface even and free of scratches. (Keep in mind that with this design, the shelf side becomes the front of the piece.)



- 12. Cap the piece with the other 9" x 9" sheet of Tekta. The Tekta should be clean and placed with the smoother side facing up (to create a smooth-to-rough interface with the base sheet).
- 13. Now you are ready to program the kiln, double-check everything and fire the piece. (See fuse firing schedule.)

# **SLUMP FIRING**

- 14. 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.
- 15. Clean the piece thoroughly and load it onto (primed) Mold 8634 with the shelf-side texture facing up. Elevate the mold to promote even heating and cooling.
- 16. Now you are ready to program the kiln, double-check everything and fire the piece. (See slump firing schedule.)

## **NOTES FOR FUTURE PROJECTS**

Consider using a single piece of 6mm clear (001100-0680-F) instead of 2 layers of 3mm sheet glass for fewer bubbles and greater clarity.

# SUGGESTED FIRING SCHEDULES

# **Fuse Firing**

	RATE*	TEMPERATURE	HOLD
1	400°F (222°C)	1225°F (663°C)	:45
2	600°F (333°C)	1480°F (804°C)	:10
3	AFAP	960°F (516°C)	1:00
4	100°F (56°C)	700°F (371°C)	:01
5	AFAP**	70°F (21°C)	:00

## Slump Firing (with mold # 8634)

	RATE*	TEMPERATURE	HOLD
1	300°F (167°C)	1225°F (663°C)	:05
2	AFAP	960°F (516°C)	1:00
3	100°F (56°C)	700°F (371°C)	:01
4	AFAP**	70°F (21°C)	:00

<sup>\*</sup> Degrees per hour

<sup>\*\*</sup> Allow kiln to cool at its natural rate unless that is greater than 500°F (277°C) per hour.