Quick Tip: Powder Power for Bubble Control



A thin layer of powder has power! Light Turquoise and Clear Powder (001101-0008-F), unfired.



Same, capped with Tekta Clear & fired with schedule provided. Minimal bubbles.



For comparison, same sheet glass lay-up fired without powder to a basic full fuse. Typical champagne bubbles.

Want to minimize the look of bubbles in fused pieces? Here's a technique—used in kilnforming circles for many years—that's also worked well for us.

Add a light application of Clear powder between the layers with a modified full-fuse firing schedule. That's right: between the layers! You'll actually trap more bubbles, but they'll be smaller than the usual "champagne" bubbles and to that we say, "Cheers!"

Tip: Place black construction paper under the unfired sheet. It makes is easier to see your powder application.

Modified Firing Schedule

Rate	Temperature	Hold
300°F (167°C)	1200°F (649°C)	:20
25°F (14 °C)	1250°F (677°C)	:20
300°F (167°C)	1490°F (810°C)	:10

Anneal and cool based on thickness.

Note that the glass reaches full-fuse temperature in a different way with this cycle. Specifically, you fire more slowly through the 1200°F to 1250°F temperature range than in a standard full fuse. The glass softens in this range and, as the layers settle, the air is squeezed out. Then the schedule moves on to a full fuse. We've tested this extensively on 6" x 8" tiles. For larger works, you may want to extend the hold time at 1250°F.



Angelita Surmon, Oak Island Reflections (detail), 8 x 12 x .25 inches, 2012. Surmon uses a variation of this bubble control technique to draw attention to imagery and quiet the negative spaces in her kilnformed landscape works.