What to Expect from Bullseye Glass

COLOR VARIATION

While Bullseye strives for consistent colors, our glass is a handmade product and colors may vary between production runs (and from images in this resource). Some colors may change upon repeated firing or with extensive heatwork. We recommend that you test samples of glass using the same firing cycles and processes to be used in finished pieces. When close color matches are needed, we recommend testing new dates first to ensure the range of color between batches will meet the needs of your project. Bullseye glasses are formulated for fired color. Unfired glass color may vary.

More questions? See ***About Our Glass*** for working notes and performance characteristics of specific glasses. See also ***TechNotes 3: Compatibility of Glasses.***

COLORS THAT STRIKE

Bullseye produces many glasses that appear pale or even colorless in their cold form but "strike" or mature to a target color when fired to the right temperature. These styles are marked with a ◑.

Kilnformers: When choosing a style, focus on the fired sheet color. Like ceramic glazes, the color will emerge after sufficient heatwork.

Stained Glass and Mosaic Makers: Be aware of strikers. Use only if you're willing to pre-fire the glass before use, or select it in person. The unfired sheet colors for strikers vary widely.

EXAMPLES OF STRIKERS AT VARIOUS PROCESS TEMPERATURES

Unfired	Low-Temp Slump 1150 °F (621 °C)	Standard Slump 1250 °F (677 °C)	Tack Fuse 1375 °F (746 °C)	Full Fuse 1480 °F (804 °C)

Orange Transparent (001125-0030-F)

Gold Purple Opalescent (000334-0030-F)

Translucent White Opalescent (000243-0030-F)

Light Celery Green Ring Mottle, Non-Fusible (006021-0000-P)

Approximate color before firing

Color after a full fuse firing. A solid sample indicates no change from unfired to fired. Each sample is 8″ (20 cm) wide.

Sample key illustrations, such as the one at left, indicate which styles differ from color to struck form. Keep in mind that struck color may vary depending on temperature, atmosphere, and amount of heatwork. For example, failing to hold Ruby Red Tint (001824-0030-F) for an adequate time during the pre-rapid heat stage of a firing cycle can prevent the glass from striking correctly. This results in a blue-brown cast (or sapphirine effect) instead of a true ruby red color. See our ***QuickTip: Gold-bearing Pink Tints*** for more information.

COMPATIBILITY

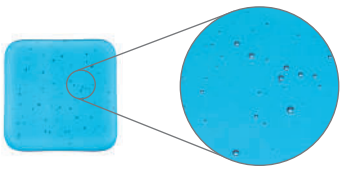
Bullseye glasses are well known for reliable compatibility. But it's important to understand the conditions of our factory testing, especially if you intend to fire glass under unusual conditions.

At Bullseye, we test glasses known to be fairly stable by firing them to a temperature of 1500 °F (815 °C) and then holding for 15 minutes before annealing. Once cooled, these tests are viewed for stress through a polarized light filter and graded accordingly. We fire glasses known to be less stable three times to make sure they'll perform well under multiple firing conditions, such as those used to fuse and slump a plate.

If you are using a heat process that involves an extra-high temperature or an unusually long firing time, we recommend that you test the glass yourself, under conditions specific to your project. For example, if you want to include flameworked elements in a kilnformed project, remember that flamework takes glass to temperatures exceeding the compatibility tests we do at the factory and that some glasses are more sensitive to extensive work in the flame. Therefore, it will be important not to overwork your glass during flameworking and to test the flameworked components for compatibility using the full range of kilnforming processes planned for the finished project.

Also Note: some processes that may not appear to exceed the parameters of the compatibility test actually do exceed it. For example, holding some glasses for long times at temperatures around 1400 °F (760 °C), which is in the devitrification range, can cause the glass to change dramatically.

Many artists (the late Klaus Moje, for example) are able to push Bullseye glass to high temperatures for long times with exceptionally good results, but their success is ensured by testing. No manufacturer can guarantee glass to perform as expected under all imaginable working conditions. Testing is a wise practice with whatever glass you use.



At Right: "Champagne" bubbles are a normal feature of kiln-glass. See ***TechNotes 5: Volume & Bubble Control*** at **bullseyeglass.com**.