# Bullseye Glass: What to Expect

### **COLOR VARIATIONS**

While Bullseye strives for consistent colors, our glass is a hand-made product. Colors may vary slightly from images in this catalog, and color may vary slightly between production runs. Some colors may change slightly upon repeated firings or with extensive heatwork. We recommend that artists test samples of the glass using the same firing cycles and processes that will be used in finished pieces.

# **COLORS THAT STRIKE**

To provide the largest and most interesting palette of colors to the kilnworker and the torchworker, Bullseye produces some glasses that appear pale or colorless and "strike" (i.e. change) to the target color only after reheating.



Some (but not all) of Bullseye's glasses appear pale but "strike" to the target color only after reheating. This example shows pieces of Light Pink Striker (001215-0030-F) and Orange (001125-0030-F) in the cold sheet (I), and after firing (r).

Whenever practical, catalog illustrations indicate which styles have a different color in the cold form compared to the struck color. Keep in mind that the resulting color may vary depending on variations in the temperature, atmosphere or amount of heatwork. For example, rapidly heating Ruby Red Tint Striker (001824-0030-F) during the initial stages of a firing cycle can prevent the glass from correctly striking and give it a blue-brown cast (the sapphirine effect) as opposed to the Ruby Red color that develops with more conservative initial rates of heat.

For projects that are especially color-sensitive, we recommend fusing or torchworking a small sample of your glass before use, to best understand the final color result.

### **COMPATIBILITY**

Bullseye glasses are well known for reliable compatibility. But understanding the conditions of our factory testing is important, especially for anyone firing glass under unusual or extreme conditions.

At Bullseye, glasses known to be fairly stable are tested by firing to a top temperature of 1500°F (815°C) and soaking for 15 minutes before annealing. Once cooled, these tests are viewed for stress through polarized light and graded accordingly. Other glasses known to be less stable are fired three times with this cycle to insure good performance under typical multiple fusing and slumping conditions, such as those used in making a simple plate.

For those using a heat process that involves an extra-high temperature or an unusually long firing time, we recommend that you test the glass again, under the conditions specific to your project. For instance, consider Bullseye rods: these are designed primarily for flameworking though they can also be used in other ways. Flameworking glass brings it to temperatures that exceed the kilnforming tests performed at the factory. The compatibility of certain glasses will be more sensitive than others to extensive work in the flame. This might be an issue, especially if you plan to fuse with these flameworked components. Artists who succeed in crossing processes this way are careful not to overwork glasses in the flame and to test the flameworked components using the full range of processes they have planned, before including these in a larger kilnformed project.

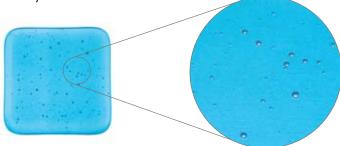
Some processes that may not immediately appear to exceed the parameters of the test for compatibility actually do. Holding some glasses for long times at temperatures around 1400°F/760°C, which is in the devitrification range, can cause the glass to change dramatically.

Many artists (Klaus Moje, for example) are able to push Bullseye glass to high temperatures for long times with exceptionally good results, but their success is insured by their own testing before making large or complex pieces. This is a wise practice with whatever glass you use. No manufacturer can guarantee glass to perform as expected under all imaginable working conditions.

# MORE QUESTIONS?

See our FAQs at www.bullseyeglass.com/products/faq

To learn about the performance characteristics of specific glasses, visit www.bullseyeglass.com/education/glasstips



"Champagne" bubbles are a typical feature of kilnformed art glass. For information on encouraging or minimizing bubbles in your work, see "TechNotes 5: Volume & Bubble Control" at www.bullseyeglass.com/education