

Introducing: Color Cues

Combinations of colors to stimulate your kilnworking creativity

Choosing color is one of the most exciting—and sometimes daunting—challenges to anyone working in glass.

With the release of COLOR CUES we hope to suggest eye-catching color combinations from the Bullseye palette and to show you how to expand those options with overlays or color mixes. This first set of four—Brights, Dusk, Spring Lake, and Pink Martini—is just the start. Watch for more COLOR CUES in the future.

GLASS COLOR: HOT & COLD

We've selected these color combinations and made usage suggestions based on kilnforming, but most of the information is also pertinent to cold glass. To blend colors, sheet glasses may be plated using lead or copper foil. The color combinations presented here will work equally well—although slightly differently—whether you attach your color with heat or lead line. Just note that some of the colors—the reds, yellows, oranges and pinks—are shown specifically in their fused state and may have slight variations from the cold sheet. Refer to your Bullseye sample set for guidance.

ECCENTRIC & EXCITING COLOR

Working with glass in a kiln can be both art and science. Our COLOR CUES are intended as suggestions. The chemistry that happens between glass color at 1500°F/816°C is never totally predictable. Use these sheets as a starting point. Then test small samples of the actual glasses you will use in your project. Keep these samples for later reference.

Glass is produced in batches, like ceramic tile, fabric or carpet. As with these other materials, there will be slight variations from one batch to the next. As soon as we put glass into a kiln and raise its temperature to levels of 1300-1500°F/704-816°C, other variations may emerge. Some of these are:

Reactions between colors: certain colors will react when fired in contact with one another. A glass containing sulfur fired adjacent to a glass containing copper will usually create copper-sulfate, a deep walnut brown shade along the interface. We've indicated these where they happen in our COLOR CUES palettes. To prevent the reaction, place a thin layer of clear glass between the reacting colors. In most butt joints, the reaction is so minimal as to not require buffering.

Striking or color changes: Certain glasses—reds, yellows, oranges, and gold pinks—deepen when they are reheated. You may find it necessary to select a piece of glass that in the cold sheet is lighter than desired in order to achieve the deeper color after firing. Again, small test chips will minimize unwanted surprises.

Opacification: Most opalescent glass will opacify further when fused. An interesting way to dilute the opacity in small areas is to fuse a piece of clear glass or grains of larger clear frit into the surface of the opal. Taken to a full fuse, the overlaid area will read as if watered down.

Compatibility changes: Taking certain glasses to excessively high temperatures, for extremely long periods or reheating them multiple times can cause their chemistry to change sufficiently to change their compatibility. Transparent reds, yellows and oranges are more prone to this than most other glasses. A transparent glass that opacifies is a strong indication that it has changed chemically and is likely no longer compatible.

Saturation: the density of color in a glass is often related to its thickness. But some glasses—many reds, yellows, and oranges again—show much less increase in saturation when stacked than other colors such as cobalt blues or manganese purples.

These are just a few of the idiosyncrasies of colored glass used in kiln work. You will no doubt find more as you work. Enjoy your research. And—once more—take notes!

FIRING SCHEDULE

The sample tiles that we created for COLOR CUES were fired in a Paragon GL24AD kiln on a simple schedule of:

500°F/HR to 1250°F 278°C/HR to 677°C	Hold for 30 minutes (to squeeze out air trapped between layers)
500°F/HR to 1480°F 278°C/HR to 804°C	Hold for 10 minutes
As fast as possible to 960°F As fast as possible to 516°C	Hold for 30 minutes
210°F/HR to 700°F 117°C/HR to 371°C	No hold
500°F/HR to room temperature 278°C/HR to room temperature	

To learn more about working with kilnformed glass and the wonderful color potential of the Bullseye palette, visit Bullseye's website:

www.bullseyeglass.com

If you're in Portland, drop by and see us at:

Bullseye Resource Center

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