PRODUCT USE Properly Pink, Purple & More—Know Your Gold Hold

Top Row: Fired with 'Gold Hold', showing intended color development.	001215	001824	001823	001234	Held at 1225°F /663°C 2 hours 'Gold Hold'
Bottom Row: Fired without 'Gold Hold', illustrating the heat sensitivity in this color palette.					Held at 1225°F/663°C 30 minutes

Color Development With and Without a Gold Hold

ABOVE: Fired samples of select gold-bearing glasses—Light Pink (001215), Ruby Pink Tint (001831), Ruby Red Tint (001824), Burnt Scarlet Tint (001823), and Violet (001234). Results may vary. For a complete list of styles that require a 'Gold Hold' see page 4.

Many of Bullseye's glass styles must be fired before they strike to their intended color. Of these "strikers," the pink/purple/coral family are made with gold as a coloring agent.

When firing transparent gold-bearing styles, we advise including a "Gold Hold" in their first firing. This is how they achieve their intended colors. See a list of styles on page 4.

GOLD HOLD BASICS

- Hold at 1225°F / 663°C for 2 hours during heating, or ramping up, in their first firing.
- Applies to all glass forms on the Gold Hold Recommended list—sheet, frit, billets, etc.

GOLD HOLD CONSIDERATIONS

- Hotter-than-average kilns: Results may vary depending on the particular kiln.
- Production batches: Results often vary depending on production batch of glass.
- First firing only: Repeating the Gold Hold can negatively affect some styles, especially reds, yellows, and oranges made with Cadmium.

520	RATE	I EMP				
1	*	1225 °F / 663°C	2:00			
2	600 °F / 333°C	1490 °F/810°C **	0:10			
3	AFAP †	900 °F / 482°C	\$			
 The initial successful initial rate of the projonation As fast as projonation 	rate of heat is not a critical factor in ly striking gold-bearing glasses. Choose an of heat appropriate to the scale and design ect that you are firing. possible.	 ** While we've provided a basic full-fuse process temperature, significant color development often takes place at lower temperatures. This is especially relevant when striking a single sheet o tack fusing. ‡ Remainder of cycle depends on the thickness of the piece. Consult the Bulleou Appading Check for 				



WHY TEST?

We've found that some of the gold-bearing batches of transparent pink are extra-sensitive and do not strike as expected in kilns that fire hotter than average. These kilns essentially overshoot the recommended Gold Hold temperatures, which can result in a color that is too blue.

We advise testing each production batch of our Best-to-Test colors in the kiln that will be used for your project. This list is a subset of the larger Gold Hold Recommended list on page 4.

Best-to-Test

- Light Pink 001215
- Ruby Pink Tint 001831
- Ruby Red Tint 001824
- Burnt Scarlet Tint 001823
- Special Production transparent striking pink styles

Billets: Color development of gold-bearing billets has shown to be more consistent than in their sheet glass counterparts. We recommend firing them with a Gold Hold and have not observed the need to test them prior to using them in a project.

HOW TO TEST

- 1. To be a good test, this needs to be the first firing of the glass. Cut a small piece of sheet glass (a rollededge works, too). Set it up to fire single layer/uncapped on a primed shelf or scrap of Thinfire. Note the glass style, production date, and kiln for your records.
- 2. Fire using the Gold Hold Test Firing Schedule on this document. It is designed to be a short firing with a Gold Hold.
- 3. Check your results. If color has not developed or is under-developed (usually too blue), repeat the test with another small, unfired piece from the same sheet and lower the Gold Hold temperature to 1200°F / 648°C. Most often, this minor adjustment is enough to achieve proper color development.
- **4.** Record your results for reference and make a note to store with that sheet glass.

Cold Hold Test Firing Schedule

Solu Hold Test Hilling Schedule					
SEG	RATE	ТЕМР	HOLD		
1	400 °F / 222°C	*	2:00		
2	600 °F / 333°C	1460 °F / 793°C **	0:05		
3	AFAP †	70 °F / 21°C			

* Temperatures: TEST 1—1225°F / 663°C TEST 2—1200°F / 648°C

- ** If the Gold Hold in the first segment is successful, 1460°F / 793°C at a 0:05 hold time is enough heatwork to achieve color development in the glass. If planning to fire to a tack fuse, try firing to that temperature and planned hold time. A range of process temperatures can develop proper color if the glass is heated correctly.
- **†** As fast as possible. The glass does not need to be annealed to get the information about color. It's okay to let the kiln cool naturally or to vent to speed things along.

This test can be performed in a single or multiple kilns based on your studio. For some larger kilns, consider testing in multiple areas.



POST TEST

If you find that your kiln fires relatively hot, as seen with Kiln A above, you should adjust the Gold Hold temperature in that kiln when using the glass you've tested. For 'hot' kilns, the adjustment is still effective for a bubble-squeeze. Here's an example of a full-fuse firing schedule for firing two layers of 3 mm glass, with the adjustment. As for adjusting other parts of the firing schedule, that's up to you. If you have a good history of firing to certain temperatures for different effects and you like the results, there is no need to change anything else.

Modified Full Fuse—'Hot' Kiln Example for firing **two layers** of -0030 (6 mm)

SEG	RATE	ТЕМР	HOLD
1	400 °F / 222°C	1200 °F / 648°C	2:00
2	600 °F / 333°C	1490 °F / 810°C	0:10
3	AFAP	900 °F / 482°C	1:00
4	100 °F / 56°C	700 °F / 371°C	0:00
5	AFAP	70 °F / 21°C	0:00

IN SUMMARY

When working with gold-bearing, striking-pink, purple, and coral glasses, mastering the Gold Hold is key to achieving desired colors.

Be aware of the Best-to-Test glass styles and remember to test each production batch prior to firing in a project. These styles have the potential to be extra-sensitive and kilns fire differently. Test ahead to avoid surprises.

Because color changes occur during the first firing and can't be corrected later, it is worth the effort to test upfront.

With the right approach, your pinks, corals, and purples will shine as intended. Test smart, fire with confidence, and enjoy brilliant results!

ADDITIONAL RESOURCES

<u>About Our Glass</u> <u>Annealing Thick Slabs</u> <u>Heatwork and Cadmium-Bearing Glass</u> <u>What to Expect from Bullseye Glass</u>



GOLD HOLD RECOMMENDED

- Light Coral (001205)
- Light Pink (001215)*
- Violet (001234)
- Sunset Coral (001305)
- Cranberry Pink (001311)
- Fuchsia (001332)
- Burnt Scarlet Tint (001823)*
- Ruby Red Tint (001824)*
- Ruby Pink Tint (001831)*
- Special Production transparent striking pink styles*
- Special Production transparent striking purple styles

*Best-to-Test