Mixing and Firing Abbots Mid-Fire Glazes

ABBOTS guide to Mixing and Firing Abbots Mid-Fire Glazes

Most potters will mix the glazes to suit their preferred application style and thickness required. Most of the Abbots glazes give best results on their own when thick. Ash glazes will give best results when thin. Some glazes such as the iron glazes and Sea Urchin are quite fluid and application thickness should be controlled to avoid messy runs! When layering glazes the final thickness should be more or less that of one normal coat. It follows then that each individual layer should be thinner so both the glaze density and dipping time (if dipping) need to be adjusted. – Thinner and faster.

Remember, glaze pickup on bisque will depend on body porosity which in turn depends on the body in use, the bisque firing temp and sometimes the thickness of the piece. Dipping a test shard in the glaze is the best way to establish what to expect when glazing. If the glazed piece stays wet for a long time dip faster or add more water!

In general, you should expect to mix 1.0 – 1.50 litres of water to 1 Kg of glaze. Pass through an 80# sieve once or twice.

It is a good idea to label each glaze bucket with this info:

Glaze name, Date mixed, Batch Number (written by hand on each pack), Specific Gravity/Litre Weight as measured.

Most Abbots glazes are very well suspended unless mixed with too much water. If you wish to enhance the suspension qualities you can do this by cautious incremental additions of epsom salts (easily bought from the supermarket and easy to use), calcium chloride, or plaster of paris before sieving.

Firing Abbots Mid-fire Glazes
We suggest a schedule along these lines.

End temperature	Ramp rate
200C	100C per hour
1050C - 300C per hour	300C per hour
1200C - 80C per hour	80C per hour
1200C - 30 minutes	0C per hour
You can switch off here if you like	

Some potters may wish to explore developing the best iron red colours. They might like to try this cooling schedule if their kilns allow. Lots more info on this topic on the internet.	
1200C to 1050C - 80C per hour (fire down)	
1050C to 900C - as fast as possible (applies to iron glazes)	
900C - soak for 1 hour (applies to iron glazes)	
Cool	

This firing just bends cone 6 in our kiln. If you follow a similar routine and also bend cone 5 or 6 you should get similar or identical results. You may have to set your controller anywhere between 1180C and 1220C to duplicate these results – all kilns are different.

Some glazes may respond better to different regimes and a wide array of results is possible. The iron red glazes respond well to a fast cool from 1200C to 900C with a 1-hour hold at 900C. We have not yet tested every option.

The iron glazes are very fluid, but work best with a thick application. Experiment with a sacrificial catch-tray under pots until you have mastered them – and bat-wash your shelves!

Do experiment with multiple layers of different glazes for unique results.