GLAZE FLAWS

CRAZING

Fine cracks in the finished glaze, may develop over time. Makes a pinging noise, can be unsanitary on functional ware. Caused by tension between the glaze and clay body, a high co-efficient of expansion and contraction. May be caused by over firing, or induced by heat shock by removing wares from the kiln while it is still too hot.

Correct by adjusting any of the following (may need to experiment which works better)

- ✓Increase silica
- ✓Add more flint
- ✓Decrease feldspar (or any other ingredients that contain soda or potash)
- ✓Increase boric oxide
- ✓Increase alumina
- ✓substitute lead for potash or soda
- ✓Change the clay used

SHIVERING

The reverse of Crazing. Too much compression causes glaze to separate from the clay and peel off or shiver.

- ✓Do the opposite of what is recommended for Crazing
- ✓Increase high expansion oxides
- ✓Decrease flint and increase feldspar
- ✓Change clay body to one with less flint and more feldspar

CRAWLING

Glaze parts during melting and leaves exposed bare spots, or roll up into droplets or balls.

Can be caused by unclean bisque ware, grease, dust, too heavy glaze application, or application of glaze over heavy underglazes. Matt glazes generally are more susceptible to cawing than high gloss.

PITTING AND PINHOLING

May be caused by air pockets in glaze or slip.

- ✓Matt glazes are more susceptible than glossy ones.
- ✓Underfiring can also be a cause, when the glaze actually boils on the surface.
- ✓Glazes with too much zinc or rutile can cause pitting as well.
- ✓Heavy reduction firing may deposit carbon into the pores of the clay.
- ✓Lengthen firing cycle, apply glaze more thinly, add more flux to glaze, reduce zinc or rutile content

BLISTERING AND BLEBBING

- ✓Glaze too thickly applied
- ✓Lead glazes may blister in a reduction firing.
- ✓Air pockets from below the surface of the clay - make sure there is no trapped air in clay

UNDER OR OVER FIRING

Underfired - rough, scrtchy, harsh surface. Refire at proper temperature.

Overfired - shiny, thin, gathers around foot, runs off onto kiln shelf. All is lost ...

Both may have unexpected colour changes. Most glazes have a range of 2 - 3 cone spread.

APPLICATION FLAWS

Too thin, too thick, uneven application, lids stuck to containers,

KILN ACCIDENTS

- ✓Shelves can break and fall onto your work, support all shelves firmly
- ✓Pieces can lean and stick to the ones next to them
- ✓Bits of the kiln may fall onto the piece if struck or rubbed when loading

✓Volatile colour, such as chrome or copper, may migrate from one piece to another
✓Glaze can drip from one piece onto another
✓LOAD KILNS CAREFULLY

REFIRING If you don’t like what you see keep firing it. You never know what you might eventually come up with. you can add acrylic medium to any glaze to make it stick to your already fired pot, as it will burn out in the kiln refiring.
Alternately, is it really a flaw? Maybe you like the effect.