

EARTHENWARE GLAZE FIRING PROCEDURES

Technical Tips And
Product Information

#34

- Generally, earthenware glazes are fired to 1060 –1100°C (Orton Cone 3½).
- Glazed items are ideally bisque fired before glazing to pre-shrink the ware (to 'fit' with commercial glazes etc.) And to harden the ware (when items are dipped into glaze they don't fall apart or dissolve).
- If items have been bisque fired prior to glaze firing, the glaze firing can be run at a slightly faster rate than the bisque firing approximately 70-120°C per hour.
- When packing a glaze firing, pottery items must not touch other pottery items, the kiln walls or the thermocouple (kiln thermometer).
- Always ensure that the kiln shelves are batt washed before firing a glaze firing. Batt wash would be freshly applied every 6 months. Batt wash ensures that you are able to remove items which may have otherwise stuck to the kiln shelf from over application of glaze/over firing of glaze/careless application on the bottom of the pottery item. If worried about excessive glaze application, wash the glaze off completely, then reapply the next day when the bisque ware is dry to fire the pottery item sitting on stilts.
- Stilts are items of kiln furniture which sit between the kiln shelf and fully glazed earthenware pottery items. The stilt has small wire 'pins' sticking out of it which make direct contact with the glazed pottery. Because the contact area is very small (pin points), once the pottery is fired the stilt can be gently broken off the pottery to leave a relatively smooth surface which is fully glazed. Take care to adequately support the full pottery form with stilts – this may mean using multiple stilts under a large piece like a platter. Do not use stilts under pottery items fired above 1100°C as the pottery piece is likely to slump over the stilts during firing and deform.
- Tile and plate cranks or stackers are efficient ways to fire large numbers of the same shape without using lots of kiln shelves. Cranks and stackers are items of kiln furniture which lock/stack together to create 'systems' which support the forms in the kiln. Cranks and stackers are not cheap, but they become very economical by comparison with purchasing lots of extra kiln shelves and taking longer to fire a kiln (wasting energy heating all the kiln shelf mass).
- Never open a glaze firing until the kiln has cooled to approximately 100°C or the glaze is likely to craze (i.e. form networks of little cracks in the glaze surface).
- Observe the fired results in the kiln before removing any items – this often helps ascertain the cause of any firing problems. Of course, this is difficult if your kiln is a top loader, rather than a front loader.