

Kawartha Potters' Guild Technical Standards

Revised February 2017

Purpose of Technical Standards

The technical standards outlined in this document are designed to assist each potter in assessing their work and provide a common standard toward maintaining the Kawartha Potters' Guild's reputation for quality pottery. Each potter has a personal responsibility to help maintain this high standard by critically checking each piece of work submitted for sale using the standards outlined in this document.

The technical standards in this document are based on our current technical knowledge. John Hesselberth & Ron Roy's book, Mastering Cone 6 Glazes: Improving Durability, Fit and Aesthetics, was used as a main resource.

Additionally, clearly delineated standards will help to inform and educate consumers regarding quality of work and limitations of different types of pottery-making techniques and clay bodies.

Standards Committee

The Standards Committee's mandate is to jury work submitted by members for any sale associated with the Kawartha Potters' Guild.

Technical standards 2017 will be used as the framework for jurying all work.

The Standards Committee will consist of at least 7 members. Committee members must be experienced potters and in good standing as members of the Kawartha Potters' Guild.

Selling work at the Kawartha Potters' Guild Gallery

To be eligible to have work sold in the gallery, 3 to 5 pieces must be juried by 2 members of the Standards Committee and/or the Guild's Gallery Administrator. Once a member's work has been accepted to the gallery, all subsequent work brought in for sale must be checked by the Gallery Administrator or a member of the Standards Committee before being placed in the gallery for sale.

Each member is responsible for checking their work against the standards prior to placing their work for sale.

Standards for All Work

- the principal medium will be clay,
- the item will have no cracks or chips,
- any slip-cast molds used by a potter must be made by that potter,
- clays, glazes and designs will be appropriate for the intended use of the piece,
- walls and base will be proportionally correct for the pot's function,
- handles must be substantial for the intended use of the pot.

Functional Pottery

It is each potter's responsibility to ensure that all their functional pottery has;

- form that matches its function; (e.g. pouring containers that can be filled to capacity, spouts that do not drip),
- stable glazes that fit the clay body,
- both clay and glazes fired to maturity,
- no glaze flaws; i.e. blistering, bloating, crawling, crazing, pin-holes, pitting that are detrimental to function. (Appendix A; Common Glaze Faults,)
- no shivering or dunting,
- smooth rims and bases,
- a steady base,
- properly fitting lids,
- secure and functional handles,
- decoration, joints and additions that are clean and secure
- no toxic elements (e.g. lead, cadmium, barium) in liner glazes that touch food or liquid,
- matte glazes that have been tested for leaching (see Appendix A).

Decorative/Non-functional Pottery

Decorative or Non-functional pottery is defined, for the purpose of this document, as pottery that does not have a utilitarian use. Examples of decorative/non-functional pottery are wall-hangings, sculpture, raku and other alternately fired pottery.

All decorative/non-functional pottery must have;

- smooth edges so as to not cause injury,
- permanent post-firing treatments (e.g. paint will not flake off).

Alternate Firing: (below 1000°C)

Raku, Pit and Smoke Fired Pottery

All alternately fired pottery must;

- be clean and free of debris,
- include written information explaining the limitations of the alternate firing (Appendix B; Descriptive Labels),
- have the appropriate Descriptive Label placed in the pot or securely attached to the pot by the potter.

Electric Lamps

All electric lamps must have a CSA approval label attached to the lamp.

Sale Procedures

All members of The Kawartha Potters' Guild will have pottery being submitted to the KPG Gallery and all sales and functions associated with the guild juried using the Technical Standards 2017.

All members having item(s) removed from a sale associated with the Guild based on the Technical Standards 2017 will be able to resubmit the item(s) once the difficulty has been corrected (e.g. rough foot rim sanded smooth).

If the reason for the removal of the item(s) cannot be fixed, the item(s) cannot be included in the sale or Gallery

All pottery submitted for sale at the KPG Gallery must be labeled by the potter. The label will include the following: KPG assigned code, item number and price.

All pottery submitted for sale at the KPG sales (i.e. Christmas sale, Spring sale) must be labeled by the potter. The label will include the following: KPG Code and price.

Common Glaze Faults

Blistering:

Blistering is a glaze defect that involves bubbles on fired glaze surface that frequently burst and creates hard craters. Blistering is a glaze defect similar to pinholing and pitting. As the glaze melts, gases vaporize out of the clay and glaze. In essence, blisters are the result of the glaze being frozen in the midst of boiling. *Source: Creative Glossary, Victoria Park Medispa, www.creativeglossary.com*

Bloating:

Bloating is a firing defect where blisters form within a clay body, raising large lumps on the surface. Caused by expansion of gases within clay, as a result of excessive early reduction (trapped carbon—carbon coring), excessively fast bisque-firing (trapped carbon and sulfur), or over-firing (volatization of fluxes). *Source: [Clay: A Studio Handbook](#)*

Crawling:

Crawling is a glaze defect where the glaze separates during drying and/or sintering and leaves an area that is bare of glaze. *Source: [Hesselberth, John. and Ron Roy, 2002, Mastering Cone 6 Glazes: Improving Durability, Fit and Aesthetics. Brighton, Ontario: Glaze Master Press.](#)*

Crazing:

Crazing is a glaze defect that results when the glaze is “too small” for the body. Said another way, the glaze contracts more than the body during cooling and the resulting stresses cause the glaze to form a network of cracks. This is an undesirable defect on functional pottery; however, it is often done purposefully for decorative effect on nonfunctional work. When intentional and used decoratively, it is called crackle. *Source: [Hesselberth, John. and Ron Roy, 2002, Mastering Cone 6 Glazes: Improving Durability, Fit and Aesthetics. Brighton, Ontario: Glaze Master Press.](#)*
[Peterson, Susan. 1996, The Craft and Art of Clay, Woodstock, New York: The Overlook Press](#)

Dunting:

Dunting is the cracking of pottery caused by stresses, which build up during heating or cooling. Can occur either with bisque or glazed ware. Often caused by too rapid or uneven cooling, excess free silica in the clay body or poor glaze/body fit. Dunting of glazed ware always occurs when the glaze has solidified and, therefore, dunting cracks have sharp edges. *Source: [Hesselberth, John. and Ron Roy, 2002, Mastering Cone 6 Glazes: Improving Durability, Fit and Aesthetics. Brighton, Ontario: Glaze Master Press](#)*

Pinholing and Pitting:

A pinhole is a tiny smooth-edged hole in a fired glaze surface. Gas bubbles that work their way up through the molten glaze and burst cause pinholes. Slow firing and soaking at peak temperature can give pinholes time to heal over. [Source: Hesselberth, John. and Ron Roy, 2002, *Mastering Cone 6 Glazes: Improving Durability, Fit and Aesthetics*. Brighton, Ontario: Glaze Master Press](#)

Shivering:

Shivering is a glaze defect that occurs when the glaze is “too big” for the body, i.e. when the body contracts more than the glaze during cooling. Said another way, the coefficient of expansion of the glaze is too low when compared to that of the body. Shivering is a dangerous condition that can result in sharp splinters of glaze flaking off a pot resulting in cut fingers or tongues and angry customers – don’t even think about what might happen if a splinter of glaze gets into a person’s digestive tract. [Source: Hesselberth, John. and Ron Roy, 2002, *Mastering Cone 6 Glazes: Improving Durability, Fit and Aesthetics*. Brighton, Ontario: Glaze Master Press](#)

Leaching:

Leaching is when toxic materials in glazes are absorbed by foods touching the dish.

The following points have been taken from *DIGITALFIRE.com Reference Library/ Are Your Glazes Food Safe*.

If the glaze employs metallic colorants (other than iron) or other minerals containing lithium, barium, lead, chrome, etc., then safety and legal liability becomes a concern.

A glaze must be mature to resist leaching.

Crazing is often a tip-off that the glaze is potentially leachable.

- Make sure your glazes melt well enough to form a good stable glass (enough flux).
- Use as much alumina and silica as your glazes will take and still melt well.
- Make sure glaze melts are not too runny, this indicates either too little alumina or too much flux, both are leaching hazards.
- If it contains an oxide that has a reputation for destabilizing a glaze against leaching (i.e. copper), have it tested.
- If any metallic oxide colorants are used, be wary of large percentages.
- Be wary of glazes with oxides that are known to have human effects (i.e. barium, lithium, manganese).
- Be wary of recipes that 'don't look right' (e.g. 60% feldspar is too much, glazes with no clay are very suspect, glazes that employ frits that you know nothing about).
- Use liner glazes.

Commercially prepared glazes must indicate that they have been tested for leaching.

Each potter is responsible for ensuring the glazes they make are tested for leaching. A number of simple tests can be found in the article from *DIGITALFIRE.com Reference*

Library/ Are Your Glazes Food Safe, as well as in Hesselberth, John. and Ron Roy, 2002, Mastering Cone 6 Glazes: Improving Durability, Fit and Aesthetics. Brighton, Ontario: Glaze Master Press.

Descriptive Labels

Descriptive Labels must be applied to the following items by the potter.

Raku

Label: Raku – porous – decorative use only

Smoke/Pit-Fired

Label: Smoke/Pit-fired – porous – decorative use only

Unglazed Earthenware

Label: Unglazed earthenware – porous – specialized use and care

Earthenware

Label: Earthenware – may not be dishwasher or oven safe

Crackle Glaze

Label: Crackle Glaze – may stain in crackle – may not be food safe

Crystalline

Label: Crystalline Glaze – may have surface texture – soft glaze may mark

Technical Reference: Hesselberth, John. and Ron Roy, 2002, *Mastering Cone 6 Glazes: Improving Durability, Fit and Aesthetics*. Brighton, Ontario: Glaze Master Press