

## Procedure for Firing Raku Kiln during State Fair

The crew firing the Raku kiln during the fairs have a responsibility to do everything possible to have pots purchased by patrons at the WAC Raku booth be intact and returned to them once they are fired. The crew must sign a waiver and follow safety practices while working in the firing area. Thank you for volunteering. We could not participate in AV without you!

### Safety and Preparation:

- The firing staff must wear long pants and shoes with enclosed toes while working.
- Assume all objects are HOT. Wear gloves when moving pots and shelf pieces.
- No one except WAC volunteers, staff, or the firing crew may be in the firing area. A barrier will be set up to designate the firing area.
- The garbage cans need to be filled with burnable material. Newspaper should be shredded or crumpled and put in garbage cans. Fill the can to  $\frac{1}{4}$  to  $\frac{1}{3}$  full. Fill as many cans as possible while waiting for the first load of pots.
- After pots are removed from the garbage cans, empty the ashes in the large garbage can in the firing area. Be sure to keep the lid on the large garbage can after depositing the ashes; unburned material may flare up. Refill the smaller garbage can with burnable material after the hot ashes have been dumped.
- Firing staff may not fire personal ware, unless it was purchased from the WAC booth.

### Firing the kiln:

- **Pots in the first firing** or in a cold kiln may be placed directly on the floor shelf in the kiln. The kiln needs to be fired to 1900 degrees. The thermocouple will indicate the temperature in the kiln.
- **Kiln Temp:**
  - The temperature of the kiln should gradually increase to 1050 degrees. Although preheating offsets some of the risks to the pieces, going too fast may cause pots to break.
  - Often the temperature will remain quite hot after being reloaded. Reduce the flame to a low setting for about ten minutes. Then check the temperature and gradually bring it up to 1050 degrees. Once the temperature reaches 1050 degrees, it is safe to increase the flame and rapidly heat the kiln.
  - When the kiln temperature reaches 1850 to 1875 degrees, the pots on top of the kiln should be moved to a location on the ground or on the cement blocks.

- **Pot Removal:** Once the pots have reached the desired temperature, they are ready to be removed from the kiln.
  - Plan ahead to ensure you have an adequate number of garbage cans with burnable material ready to receive the pieces.
  - One person should turn down the gas to reduce the flame, while the other person opens the kiln.
  - One person should remove the pots from the kiln to the garbage cans while the other person directs where the pots should go and cover the garbage can with the lid once the can is loaded.
  - Use discretion for the number of pots placed in each can and use care not to allow hot, out-of-the-kiln pots to touch each other.
  - After all the pots have been loaded into the garbage cans, the cans should be pulled away from the kiln. They will smoke, so they will need to be far enough away that the kiln can be reloaded without having to breathe the smoke.
  - The freshly loaded **garbage cans will be hot!** Gloves need to be worn while moving the cans and placed on a non-burnable surface.
  - Allow time for cooling in the reduction cans before removing pieces. There should be no more visible smoke coming from the cans. Usually, twenty to thirty minutes is needed to allow pieces to cool to the point where they can be removed.
  - Let the pieces cool further on the ground. Do not dunk the pieces into water until they can be handled without gloves.
  
- **Once the kiln is empty, any hot shelf pieces need to be removed and replaced with cool shelf pieces after EACH fire.**
  - The preheated pots may then be put in the kiln. Take care not to let the pots touch each other or the sides of the kiln.
  - Lower the kiln lid.
  - Pots waiting to be fired should be placed around the top vent of the kiln to dry and preheat. If the pots are wet from glazing, do not place them too close to the vent. Allow them to dry thoroughly before moving them closer to the vent.
  - **Never put a wet pot into the hot kiln.**

## **Managing the Pots and Tickets:**

The firing crew is responsible for keeping **batches of pots and their accompanying tickets** in order. Ticket batches need to follow their group of pots from the time they wait to be fired, until the time they are matched after they have cooled. Switch the clamped ticket batch from one process to the next.

- Pots are brought to the firing area and placed on the ware shelves and their tickets are placed in a clamp.
- Be sure to check that the **customer's name and phone number are on the ticket, along with identifying number and description** (i.e., "dog," "vase," "cup," etc.).
- Batches of eight to ten pots can be fired in a load, depending on their size. Pots should be grouped as they come in.
- If a family has several pots, try to arrange for them to be fired in the same load.
- Use the clamp with the tickets to separate batches. It is imperative to keep the tickets with their batch through the firing process.

- The clamps are identified as:

----shelf

---on the kiln

---in the kiln

---out of the kiln (in the buckets)

---out of the bucket or cooling

????????????? Transporting Pots....?

- After the pots are cool enough to handle without gloves, they are matched with their ticket information and put on the customer pick up table for customer pick up.
- Customers will need to verify their pots with their receipts.

If you have questions or concerns, call or text:

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**Again, Thank You so much for volunteering!**

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