The Dairy Barn Ceramic Studio



Potter's Wheel Rental Info Packet

Health and Safety for Clay at Home

Hazards

- There have been known cases of silicosis, or "potter's rot, from chronic inhalation of large amounts of free silica during clay mixing. Symptoms of silicosis include: shortness of breath, dry cough, emphysema, and high susceptibility to lung infections such as tuberculosis. The disease may take years to develop. Silica dust exposure is not hazardous by skin contact or ingestion.
- 2. Bags of clay and glaze materials can be very heavy, and lifting can cause back problems.
- 3. Hypersensitivity pneumonia, asthma, or other respiratory problems may occur with exposure to molds growing in wet clay that is being soured or aged in a damp place, in slips that stand for months, or with inhalation of dry aged clay. Molds can cause or exacerbate skin problems and change the workability of clay.
- 4. Throwing on a potter's wheel for long periods of time can result in carpal tunnel syndrome because of the awkward position of the wrists. Pain, numbness and/or pins and needles in the thumb and first three fingers, are common symptoms. Back problems can occur from bending over the potters wheel for long periods of time.
- 5. Hand contact with wet clay can result in abrasion and dryness of fingertips and hands. Moving parts and tools can cause cuts and abrasions.
- 6. Clay scraps on the floor, bench and other surfaces can dry and pulverize, producing an inhalation hazard due to the presence of free silica. Similarly, reconditioning clay by pulverization and sanding finished green ware, can create very high concentrations of hazardous silica dust.

Precautions

- 1. Use premixed clay to avoid exposure to large quantities of clay dust.
- 2. Clay storage and mixing should take place in a separate room if possible. Bags of clay (and other pottery materials) should be stacked on pallets or grids off the floor for easier clean-up.
- 3. Wear separate work clothes while in the studio. Choose clothes of material and design that don't trap dust. Wash these clothes weekly, and separately from other laundry.
- 4. Avoid contact of clay with broken skin. Use a skin moisturizer.
- 5. To prevent back problems, always lift with knees bent. Consider elevating electric wheels to a height that doesn't require bending over. Exercise and massage may relieve minor muscular pain.
- 6. Keep wrists in an unflexed position as much as possible to prevent carpal tunnel syndrome. Take frequent work breaks.
- 7. Recondition clay by cutting still-wet clay into small pieces, letting them air-dry, and soak in water.
- 8. Finish green ware while still wet or damp with a fine sponge instead of sanding when dry.
- 9. Wet mop floors and work surfa¹ces daily to minimize dust levels and prevent dry scraps from becoming pulverized.

¹ Published by Princeton University Environmental Health and Safety

TOP EIGHT POTTERY WHEEL SAFETY TIPS

1). Clean your workspace daily to prevent airborne clay dust.

2). If dust is present use wet clean up methods (i.e. wet sponges and mop rather than brooms and dustpans).

3). If dust is present consider wearing a mask or respirator during clean up.

4). Be sure to turn the wheel off when not in use.

5). Do not allow young children to use the wheel unsupervised.

6). Run electric cords out of the way to prevent tripping hazards.

7). Always lift with your knees.

8). Pay attention to your body position while throwing and take breaks as needed.

Tips for Setting Up Your Home Studio

Wheel

- 1. Choose a place that you can clean with water, wet mopping etc.
- 2. Good lighting and temperature control are also important to consider.
- 3. Plug wheel into a grounded 120v outlet on a 15amp (minimum) circuit breaker.
- 4. Level the wheel by placing a bubble level directly on the aluminum wheel head. Level on two planes North/South and West/East.
- 5. If the wheel is not level make incremental adjustments by adding shims under the legs as needed. Use cardboard, or cut up thin plastic discs like a yogurt container for more durability.

Wedging

- 1. Some materials that can make a suitable wedging surface include...
 - a. A table or piece of plywood that has been stretched with canvas
 - b. A large enough piece of cement board (i.e. Hardibacker Board)
 - c. A large enough piece of drywall board (it is a good idea to tape any raw edges so that gypsum doesn't accidentally contaminate your clay.)
 - d. A durable plaster work surface.
 - e. Any other smooth surfaced absorbent material like a high quality plywood, masonite, etc.
- 2. Your wedging surface can be pushed up against a wall or clamped to a sturdy table for stability.

Clean-up and Reclaim

- 1. It is a good idea to keep as much clay out of your home plumbing system as you can.
- 2. Use a large 5 gallon bucket of water to clean hands, tools etc. multiple times instead of repeated using a sink.
- 3. Let any throwing water or clean up water settle so that you can decant the cleanest water and dispose of or recycle the remaining clay properly.
- 4. Reclaim clay as much as you can...
 - a. Clay slop or too wet clay can be dried out to a proper consistency and re-wedged to use again.
 - b. Clay that is too dry to use can be sliced or cut into manageable pieces and allowed to air dry completely. Add water to slake the dry clay into a homogeneous slurry that can be dried out and re-wedged like above.
- 5. Use plastic sheeting as necessary to protect interior surfaces or furniture from clay and dust.
- 6. Use wet sponges to clean up clay regularly to prevent it drying and becoming dusty.
- 7. Wet mop floors as needed. Treading on dry clay creates airborne silica, a respiratory hazard.
- 8. Use clean up buckets to pre-wash clay covered towels and clothing so minimal amounts of clay are put into your washing machine.
- 9. Because clay is non-toxic and a natural material, it can be okay to dispose of it outside in some cases.

Transporting Green Ware

So...you have made a bunch of wheel thrown or handbuilt clay objects at home and now you have to get them back to The Dairy Barn to be fired. Here are some tips and tricks for transporting fragile greenware with minimal loss.

- 1. First thing, there may be some losses. As is the nature of working with clay...it keeps us humble!
- 2. Consider transporting work while it is still in the leatherhard stage of drying. The pieces will be a little less fragile than when they are completely bone dry.
- 3. It is not advisable to stack pieces on top of one another, where the dry clay of one piece has to support the weight of other things.
- An exception is when you can safely nest smaller pieces inside larger ones to save space. Be careful that they don't knock around inside against fragile rims or walls.
- 5. A common strategy is to place a single layer of ware slightly spaced out on the floor of a container. Then drape the tops and sides with towels so that nothing can topple over or into each other with the movement of the vehicle.

Traveling successfully with greenware is more of an art than a science, use your intuition and knowledge of the material and the forms you created to plan a system that works for you.

See Next Page for Photo Examples

