

KILN SAFETY BULLETIN

BACKGROUND

Kilns are used in schools and community centers within arts and ceramics programs. Using kilns poses fire and safety risks if not properly maintained, used, or supervised. In fact, Connecticut has experienced several fires that resulted from staff not adhering to the safety instructions found on the manufacturer's tag affixed to the power cord. Much damage is due to overloading the kiln, improper storage, or not adhering to the manufacturer's safety instructions.

The primary hazards that are associated with the use of kilns in schools include, but are not limited to:

- High-operating temperatures
- Inhalation of toxic fumes
- Electrical malfunctions
- Improper ventilation

Fire incidents related to kilns can result in loss of life, injuries, or property damage. Proper training, maintenance, inspections, and following the safety protocols found in the Standard Operating Procedures (SOP) can significantly reduce these risks and ensure the safety of persons and property.

RECOMMENDATIONS

- Ensure the kiln is installed in a properly ventilated room dedicated to kiln use.
- Ensure the kiln is installed with enough clearance from the walls and other structures.
- Consider maintaining a 3-foot clearance from any combustible materials near kilns.
- Consider ensuring that an extinguisher is available within 25 feet of a kiln.
- Consider conducting regular maintenance and inspections of electrical connections, damaged wires, or loose connections.
- Ensure routine servicing, as per the manufacturer's specifications.
- Ensure that the kiln operator is properly trained/qualified.
- Consider installing and maintaining fire suppression systems in accordance with the local Fire Marshal.
- Consider changing ordinary fire sprinkler heads to high-temperature-rated ones to prevent accidental activation of the sprinklers.
- Ensure that an emergency shutoff/stop button is available in an easily accessible location.
- Consider unplugging the kiln when not in use, per the manufacturer's specifications.
- Use Lockout/Tag-out (LOTO) procedures during maintenance and cleaning to prevent accidental startup.
- Consider installing a digital control device on manual kilns to ensure it doesn't overheat beyond safe operating limits.
- Ensure ceramics are thoroughly dried before loading the kiln.
- Ensure that the kiln is plugged directly into a wall outlet or a dedicated circuit and outlet installed by a qualified electrician. Avoid using surge protectors or extension cords as the source of power.