

Vermont School Kiln Safety Assessment Guide

This guide helps Vermont schools assess the safe installation, operation, and maintenance of ceramic kilns. Schools should consult their local fire marshal and kiln manufacturers for specific requirements.

Kiln Room Safety and Ventilation

1. Are kiln fumes and heat vented directly outdoors?

Recommended Actions:

- Verify exhaust systems vent directly outside.
- Ensure adequate room ventilation and makeup air.
- Follow manufacturer requirements and applicable codes.

2. Is the kiln room free of combustible materials?

Recommended Actions:

- Remove unnecessary combustible materials.
- Do not store paper, cardboard, wood, fabric, or chemicals near the kiln.
- Store and handle ceramic and glazing materials safely.
- Maintain current Safety Data Sheets (SDS).

3. Is there at least 18 inches of clearance around the kiln?

Recommended Actions:

- Maintain a minimum 18-inch clearance from walls, storage, furniture, and other materials.
- Follow manufacturer requirements if greater clearances are specified.

4. Is the kiln located in a dedicated or secure area?

Recommended Actions:

- Install the kiln in a designated area intended for kiln operation.
- Restrict access to authorized personnel.
- Secure the area when unattended.

Fire Protection

5. Is a fire extinguisher available near the kiln?

Recommended Actions:

- Provide an appropriately rated extinguisher.
- Inspect and maintain it regularly.
- Train staff in its use.

6. Has fire protection been evaluated for the kiln area?

Recommended Actions:

- Consult local fire marshal for requirements.
- Ensure compliance with applicable fire and building codes.

7. Do walls and room construction meet fire safety requirements?

Recommended Actions:

- Consult local fire marshal regarding required fire-resistance ratings.
- Seal penetrations with approved fire-rated materials where required.

8. Has the local Fire Marshal been notified?

Recommended Actions:

- Notify the local Fire Marshal of kiln installation and operation.
- Follow required inspections and approvals.

Equipment Condition and Maintenance

9. Are electrical connections in good condition?

Recommended Actions:

- Inspect wiring, receptacles, disconnects, and connections regularly.
- Repair or replace damaged components promptly.
- Use a licensed electrician for electrical work.

10. Does the kiln door close and seal properly?

Recommended Actions:

- Inspect seals, hinges, and latches.
- Repair or replace damaged components.

11. Is the kiln free of significant damage?

Recommended Actions:

- Inspect brick, casing, controls, cords, and structure.
- Repair defects according to manufacturer recommendations.

12. Are temperature and safety controls functioning properly?

Recommended Actions:

- Test thermostats, limit controls, and safety shutoffs regularly.
- Document inspections and repairs.

Training and Administrative Controls

13. Are kiln operators properly trained?

Recommended Actions:

- Provide training on kiln operation, emergency procedures, fire prevention, ventilation, and chemical safety.
- Maintain training records.

14. Is safety signage posted and visible?

Recommended Actions:

- Post operating procedures, warning signs, emergency contacts, and PPE requirements.
- Clearly identify restricted-access areas.

Annual Review

Schools should conduct and document an annual kiln safety review that includes:

- Ventilation inspection
- Fire protection review
- Electrical inspection
- Kiln condition assessment
- Staff training verification
- SDS review and update
- Consultation with local fire marshal, as appropriate