



STATE OF NEW HAMPSHIRE DEPARTMENT OF SAFETY
Richard M. Flynn, Commissioner



Division of Fire Safety
OFFICE OF THE STATE FIRE MARSHAL
J. William Degnan, State Fire Marshal

Office: Richard M. Flynn Fire Academy, Route 106, Concord, NH
Mailing Address: 33 Hazen Drive, Concord, NH 03305
603-271-3294, FAX 603-271-1091

September 14, 2006

Principal Karen Parsells
Marlborough School
23 School Street
Marlborough, NH 03455

Dear Principal Parsells,

On August 28, 2006 a fire and life safety inspection by the State Fire Marshal's Office was conducted at your school at the request of Chief Manning and yourself. Contained within the attached report are a number of issues found during that walk-thru that will need to be addressed.

You are hereby requested to take proper corrective action within thirty (30) days to correct the listed violations. In the event that you are unable to make these corrections within the thirty (30) day time frame, you must submit a written plan of action outlining how and when the remaining violations will be corrected to the Marlborough Fire Department and the State Fire Marshal's Office. Upon receipt of this plan of action, a review shall be conducted to determine its acceptability.

In an effort to promote Fire and Life Safety, the State Fire Marshal's Office and the Marlborough Fire Department are willing to work with you to achieve compliance. If you have questions or concerns don't hesitate to contact Chief Manning or myself.

Sincerely,

Keith A. Rodenhiser
Investigator
NH State Fire Marshal's Office

Cc: NHFMO - File
Chief Manning, Marlborough Fire Department
James H. Vezina, Business Administrator – SAU 29

**NEW HAMPSHIRE STATE FIRE MARSHAL'S OFFICE
CONTINUATION OF INSPECTION REPORT**

CASE #: 2060156	INVESTIGATOR: Keith Rodenhiser	ID#: 909	TOWN: Marlborough
---------------------------	--	--------------------	-----------------------------

The following code requirements are required under the NH State Fire Code. Specifically, NFPA 101 Life Safety Code 2003 Edition - Chapter 15 Existing Educational Occupancies, and NFPA 1 Uniform Fire Code 2003 Edition.

1. Emergency Egress and Relocation Drills – No Documentation.

Emergency egress and relocation drills shall be conducted as follows:

- (1) Not less than one emergency egress and relocation drill shall be conducted every month the facility is in session, unless both of the following criteria are met:
 - (a) In climates where the weather is severe, the monthly emergency egress and relocation drills shall be permitted to be deferred.
 - (b) The required number of emergency egress and relocation drills shall be conducted, and not less than four shall be conducted before the drills are deferred.
- (2) All occupants of the building shall participate in the drill.
- (3) One additional emergency egress and relocation drill, other than for educational occupancies that are open on a year-round basis, shall be required within the first 30 days of operation.
- (4) All emergency and relocation drill alarms shall be sounded on the fire alarm system.

2. Egress – Fire Escape potential life safety hazard. All exits and exit pathways must remain clear.

Exterior fire escape stairs need an engineering assessment to ensure structural integrity and safety are still in-place.

It shall be the duty of principals and teachers to inspect all exit facilities daily to ensure that all stairways, doors, and other exits are in proper condition.

3. Furnishings and Decorations – Assessment to ensure compliance needs to be done.

Where required by the applicable provisions of this Code, draperies, curtains, and other similar loosely hanging furnishings and decorations shall be flame resistant as demonstrated by testing in accordance with NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.

SIGNATURE: Keith A. Rodenhiser	PAGE 1 OF 6	DATE: 8/28/06
---------------------------------------	--------------------	----------------------

**NEW HAMPSHIRE STATE FIRE MARSHAL'S OFFICE
CONTINUATION OF INSPECTION REPORT**

CASE #: 2060156	INVESTIGATOR: Keith Rodenhiser	ID#: 909	TOWN: Marlborough
----------------------------------	---	---------------------------	------------------------------------

4. Artwork – Ongoing housekeeping issue; extra care around the holidays should be taken.

Artwork and teaching materials shall be permitted to be attached directly to the walls in accordance with the following:

(1) The artwork and teaching materials shall not exceed 20 percent of the wall area in a building that is not protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 13.3.

5. Fire Detection, Alarm, and Communications Systems – No current maintenance and testing documentation. System lacks proper coverage and notification devices.

To ensure operational integrity, the fire alarm system shall have an approved maintenance and testing program complying with the applicable requirements of NFPA 70, National Electrical Code®, and NFPA 72®, National Fire Alarm Code®.

All required documentation regarding the design of fire detection, alarm, and communications systems and the procedures for maintenance, inspection, and testing of fire detection, alarm, and communications systems shall be maintained at an approved, secured location for the life of the system.

Testing and maintenance records required by NFPA 72®, National Fire Alarm Code®, shall be maintained at an approved, secured location.

6. Windows for Rescue – Several classroom windows do not meet this minimum standard and/or all the components required for exception.

Every room or space greater than 23.2 m² (250 ft²) and used for classroom or other educational purposes or normally subject to student occupancy shall have not less than one outside window for emergency rescue that complies with the following, unless otherwise permitted by 15.2.11.1.2:

(1) Such windows shall be operable from the inside without the use of tools and shall provide a clear opening of not less than 510 mm (20 in.) in width, 610 mm (24 in.) in height, and 0.5 m² (5.7 ft²) in area.

(2) The bottom of the opening shall be not more than 1120 mm (44 in.) above the floor and any latching

SIGNATURE: Keith A. Rodenhiser	PAGE 2 OF 6	DATE: 8/28/06
---------------------------------------	--------------------	----------------------

**NEW HAMPSHIRE STATE FIRE MARSHAL'S OFFICE
CONTINUATION OF INSPECTION REPORT**

CASE #: 2060156	INVESTIGATOR: Keith Rodenhiser	ID#: 909	TOWN: Marlborough
---------------------------	--	--------------------	-----------------------------

device shall be capable of being operated from not more than 1370 mm (54 in.) above the finished floor.

(3) The clear opening shall allow a rectangular solid, with a width and height that provides not less than the required 0.5-m² (5.7-ft²) opening and a depth of not less than 510 mm (20 in.), to pass fully through the opening.

This requirement shall not apply to the following:

(4) Where the room or space complies with the following:

- (a) Doors shall exist that allow travel between adjacent classrooms.
- (b) Where doors are used to travel from classroom to classroom, they shall provide one of the following:
 - i. Direct access to exits in both directions
 - ii. Direct access to an exit in one direction and to a separate smoke compartment that provides access to another exit in the other direction
- (c) The corridor shall be separated from the classrooms by a wall that resists the passage of smoke, and all doors between the classrooms and the corridor shall be self-closing or automatic-closing.
- (d) The length of travel to exits along such paths shall not exceed 46 m (150 ft).
- (e) Each communicating door shall be marked in accordance with Section 7.10.
- (f) No locking device shall be permitted on the communicating doors.

7. Protection of Vertical Openings – Penetrations or nonexistent barriers will not prevent the propagation of smoke and fire gases.

Any vertical opening, other than unprotected vertical openings in accordance with 8.6.8.2, shall be enclosed or protected in accordance with Section 8.6.

Openings through floors shall be enclosed with fire barrier walls, shall be continuous from floor to floor, or floor to roof, and shall be protected as appropriate for the fire resistance rating of the barrier.

Where required fire-rated gypsum wallboard walls or ceilings are damaged to the extent that through openings exist, the damaged gypsum wallboard shall be replaced or returned to the required level of fire

SIGNATURE: Keith A. Rodenhiser	PAGE 3 OF 6	DATE: 8/28/06
---------------------------------------	--------------------	----------------------

**NEW HAMPSHIRE STATE FIRE MARSHAL'S OFFICE
CONTINUATION OF INSPECTION REPORT**

CASE #: 2060156	INVESTIGATOR: Keith Rodenhiser	ID#: 909	TOWN: Marlborough
---------------------------	--	--------------------	-----------------------------

resistance using a listed repair system or using materials and methods equivalent to the original construction.

Buildings with unprotected openings in accordance with 8.6.6 shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.

8. Protection from Hazards – Room(s) contain significant combustible loads and are generally not properly separated or fire rated.

Rooms or spaces for the storage, processing, or use of materials shall be protected in accordance with the following:

- (1) Separation from the remainder of the building by fire barriers having a fire resistance rating of not less than 1 hour or protection of such rooms by automatic extinguishing systems as specified in Section 8.7 in the following areas:
 - (a) Boiler and furnace rooms, unless such rooms enclose only air-handling equipment
 - (b) Rooms or spaces used for the storage of combustible supplies in quantities deemed hazardous by the authority having jurisdiction
 - (c) Rooms or spaces used for the storage of hazardous materials or flammable or combustible liquids in quantities deemed hazardous by recognized standards
 - (d) Janitor closets
 - (b) Maintenance shops, including woodworking and painting areas

9. Interior Wall and Ceiling Finish – Existing wood decking does not prevent flame spread and smoke development.

Interior wall and ceiling finish materials complying with Section 10.2 shall be permitted as follows:

- (1) Exits — Class A
- (2) Corridors and lobbies — Class A or Class B

10. Corridors – Separations and doors noncompliant in some areas.

Corridors shall be separated from other parts of the story by walls having a 1/2-hour fire resistance rating in accordance with Section 8.3, unless otherwise permitted by the following:

SIGNATURE: Keith A. Rodenhiser	PAGE 4 OF 6	DATE: 8/28/06
---------------------------------------	--------------------	----------------------

**NEW HAMPSHIRE STATE FIRE MARSHAL'S OFFICE
CONTINUATION OF INSPECTION REPORT**

CASE #: 2060156	INVESTIGATOR: Keith Rodenhiser	ID#: 909	TOWN: Marlborough
---------------------------	--	--------------------	-----------------------------

- (1) Where the corridor ceiling is an assembly having a ½-hour fire resistance rating where tested as a wall, the corridor wall shall be permitted to terminate at the corridor ceiling.
- (2) Lavatories shall not be required to be separated from corridors, provided that they are separated from all other spaces by walls having not less than a ½-hour fire resistance rating in accordance with Section 8.3.
- (3) Existing doors in ½-hour fire resistance-rated corridor walls shall be permitted to be 44-mm (1¾-in.) thick solid-bonded wood core doors or the equivalent.

11. Electrical Systems – Numerous potential electrical problems exist. State Electrical Inspector would be required for specific violations and remedies.

Electrical wiring and equipment shall be in accordance with NFPA 70, National Electrical Code®, unless such installations are approved existing installations, which shall be permitted to be continued in service.

Extension cords shall not be used as a substitute for permanent wiring.

Extension cords shall be plugged directly into an approved receptacle, power tap, or multiplug adapter and shall, except for approved multiplug extension cords, serve only one portable appliance. The ampacity of the extension cords shall not be less than the rated capacity of the portable appliance supplied by the cord. The extension cords shall be maintained in good condition without splices, deterioration, or damage. Extension cords shall be grounded when servicing grounded portable appliances. Extension cords and flexible cords shall not be affixed to structures; extend through walls, ceilings, or floors, or under doors or floor coverings; or be subject to environmental or physical damage.

12. Commercial Cooking Equipment – No automatic extinguishing system.

Commercial cooking equipment shall be in accordance with NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, unless such installations are approved existing installations, which shall be permitted to be continued in service.

SIGNATURE: Keith A. Rodenhiser	PAGE 5 OF 6	DATE: 8/28/06
---------------------------------------	--------------------	----------------------

**NEW HAMPSHIRE STATE FIRE MARSHAL'S OFFICE
CONTINUATION OF INSPECTION REPORT**

CASE #: 2060156	INVESTIGATOR: Keith Rodenhiser	ID#: 909	TOWN: Marlborough
----------------------------------	---	---------------------------	------------------------------------

Fire-extinguishing equipment for the protection of grease removal devices, hood exhaust plenums, and exhaust duct systems shall be provided. [96:10.1.1] Cooking equipment that produces grease-laden vapors and that might be a source of ignition of grease in the hood, grease removal device, or duct shall be protected by fire extinguishing equipment. Fire-extinguishing equipment shall include both automatic fire-extinguishing systems as primary protection and portable fire extinguishers as secondary backup. [96:10.2.1]

Where a fire alarm signaling system is serving the occupancy where the extinguishing system is located, the activation of the automatic fire-extinguishing system shall activate the fire alarm signaling system. [96:10.6.2]

Class K Fire Extinguishers for Cooking Oil Fires. Fire extinguishers provided for the protection of cooking appliances that use combustible cooking media (vegetable or animal oils and fats) shall be listed and labeled for Class K fires.

SIGNATURE: Keith A. Rodenhiser	PAGE 6 OF 6	DATE: 8/28/06
---------------------------------------	--------------------	----------------------