



Robert L. Quinn  
Commissioner

# State of New Hampshire

DEPARTMENT OF SAFETY

*Division of Fire Safety*

*Office of the State Fire Marshal*

Office: 110 Smokey Bear Boulevard, Concord, NH 03301

Mailing Address: 33 Hazen Drive, Concord, NH 03305

Telephone: 603-223-4289 • Fax: 603-223-4294

[www.nh.gov/firesafety](http://www.nh.gov/firesafety)



Sean P. Toomey  
State Fire Marshal

To: Chief Stephen Heath

From: FPS Ron Anstey

Date: March 6, 2023

Re: 41 School St. Ashland

On February 15, 2023 you accompanied me on an inspection of the building at 41 School St. in Ashland. The purpose of the inspection was to identify any obvious building or fire code violations that may affect a possible change of use of the building.

The structure is a 3-story building. It appeared to be of ordinary (type 3) construction and is protected by and automatic fire sprinkler system and fire alarm. The current use is business on floors one and two and assembly on floor three. The building was originally a school, underwent a major renovation approximately ten years ago and was converted to its current use.

The structure has two vertical openings that serve as stair enclosures for purposes of egress. The stair enclosures serve all three floors.

#### Observations:

There does not appear to be any accessible entrances to the building, every entrance requires one to climb stairs to enter. There is an elevator in the facility that spans all three floors.

#### Basement:

There does not appear to be any fire-resistant separation assembly between the basement and first floor. Two of the structural brick support columns showed signs of deterioration and should be evaluated by an engineer. A temporary lally column was incorrectly installed and shows signs of buckling and should also be assessed.

The basement contains two oil fired boilers. Combustion air for oil fired units is calculated using the maximum input rating on the boilers. The boilers have a maximum input of 1.7 gallons per minute. This equals a total input of 476,000 btu's. There are two opening to the outside that provide combustion air for the boilers. The present openings are metal louvers, 9" X 9" which equals 2 81 square inches of openings. When metal louvers are installed, the effective opening is reduced by 25%. Consequently, the openings are credited with 61sq. in. of area each. NFPA 31, 5.4.2.3 requires that each opening have one sq. in. per 4000 btu's of input. The current units have an input of 476,000 btu's which would require two clear openings of 119 sq. in. each.

The stair treads in the basement were also in disrepair.

Floors 1 and 2:

The only observed violations on floors 1 and 2 were that some of the fire alarm NAC devices (strobes) candela settings were set too low for the areas being served.

Floor 3:

Floor 3 is an assembly space. The space has 2 remote exits. NFPA 101 requires the doors that are in the means of egress for spaces with an occupant load exceeding one hundred people will have panic hardware. Only one door in this space has panic hardware.

Code information:

During the inspection we discussed changing the use of floors one and two from office space to a library. The library representative in attendance indicated that the intent was to create a circulation desk on floor one. He stated that they intended to open the wall of the stair enclosure on the first floor to accomplish this task.

NFPA 101 7.1.3.2.1(8) says the following: "openings in exit enclosures shall be limited to door assemblies from normally occupied spaces and corridors and door assemblies for egress from the enclosure,..." Creating an opening to serve a circulation desk may violate this provision of the code.

The structure was originally designed as an educational facility. For reference, the floor load for a classroom is 40 lbs./sq. ft. The floor load for an office space is 50 lbs./sq. ft. The floor loading requirements for libraries are: Stack rooms: 150 lbs./sq. ft. Reading rooms: 60 lbs./sq. ft. Corridors above the first floor 80 lbs./sq. ft. (International Building Code section 1607.1)

As you can see the floor loading will have to be evaluated as well.

Please feel free to call me with any questions or if I can assist in any other way.

Best regards,



Ron Anstey, CBO, CFI, CFPS, CFEI  
Fire Protection Specialist.