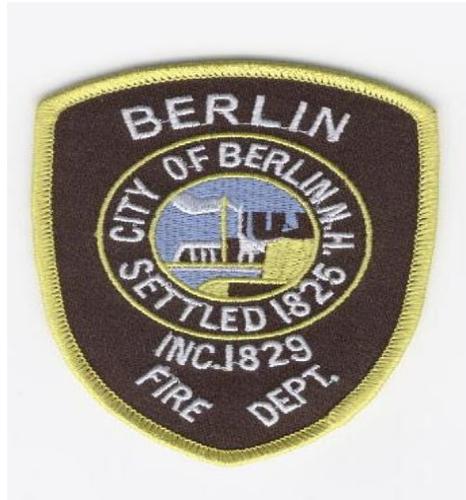


CITY of BERLIN FIRE DEPARTMENT



INSPECTION REQUIREMENTS GUIDEBOOK

for

Multi-Family Residential Dwellings

The purpose of the guidebook is to provide the owners and prospective owners of multi-family dwellings information regarding their responsibilities in providing quality, affordable and safe residential housing in Berlin. The Guidebook uses best practices, relevant Codes and Standards, City Ordinances and State law to assist the building owner in complying with the law and in providing proper building maintenance.

Multi-family units range from 3 family homes to large apartment/condominium complexes and provide a wide array of building and safety issues that need to be addressed.

This Guidebook will review the major points that must be addressed in order to maintain building safety.

Detection and Safety Systems
Means of Egress
Hazardous Conditions
General Building Safety

DETECTION SYSTEMS:

Fire Alarms and Carbon Monoxide Detectors:

Your building may contain a complete interior fire alarm or may have standard smoke detectors for the living and common areas. State law requires that smoke detectors be provided in all common areas and in each living unit. The law further requires that the detectors be wired directly into the buildings electrical system and be properly maintained.

There shall be a detector in all common hallways, staircases and in common rooms such as basements or laundries. Smoke detectors in the individual living units (a minimum of one) should be located just outside of the sleeping areas.

Under [New Hampshire State Law Section 153:10-a](#)

Carbon Monoxide Detectors are required to be installed in all new construction buildings as of July 1, 2011 and in all existing buildings as of July 1, 2013. These units shall be hardwired and placed correctly in each

building. If you have any questions please contact the fire department regarding placement of these devices.

In buildings containing full interior fire alarm systems, the smoke detection requirement may be met by that system. Certain buildings in Berlin are required to install a full interior fire alarm. Check with the fire prevention office to see if your building meets this requirement and the type of system that is to be installed. Full interior fire alarm systems (where installed) must be tested annually by a qualified fire alarm technician and a report forwarded to the Berlin Fire Department for review.

Fire Sprinkler Systems:

Fire sprinkler systems are required in certain buildings or may be installed as an option by the property owner. Where sprinkler systems are installed, they must be properly maintained and tested annually to ensure their proper operations. A test report should be forwarded to the Berlin Fire Department. In most cases, spare sprinkler heads are required to be available in the event of a head activation.

It should be noted that the installation of sprinkler systems can significantly reduce the fire and smoke loss and the damage from the water release will usually cost less than 10 percent of the fire damage. The Code also allows for significant reductions in other areas where sprinklers are used. Most insurance companies also provide reduced premiums for sprinklered buildings.

MEANS OF EGRESS:

Exits:

Each apartment building unit must be provided with two (2) separate means of egress (exit).

In certain cases, a single exit from a dwelling unit, meeting the provision of the Code may be compliant. Contact the Berlin Fire Department for additional information.

A secondary means of escape must also be provided from each sleeping room. This can be a door leading directly to the outside of the building,

provide access through another, unlockable space leading to an exit or be a window which meets certain requirements for size and access. As a general rule, windows used for egress must meet the following conditions:

- Be a minimum of 20-inches wide
- Be a minimum of 24-inches high
- Be no higher than 44-Inches above the finished floor
- Be accessible from the inside without the use of tools or excessive force.
- Have a clear open width of 5.7 Sq. Ft.
- Open to an exterior balcony, be no more than 20-feet above grade or be accessible to fire department apparatus (ground ladders)

Exits Pathways:

Exit Pathways (corridors) must provide a minimum 30-minute fire separation.

Usually interior plaster lath and sheetrock walls, in good condition will provide this separation. Damaged walls may need to be evaluated for compliance to this provision of the Code.

Doors adjoining exit pathways (corridors) must provide a minimum 20-minute fire separation.

Doors leading into the exit pathway (corridor) must be self-closing and latching.

Doors or walls with transoms, louvers or transfer grills are not permitted.

Common path of travel (the point leading to where two exit options are available) within apartment buildings should not exceed 35-feet. The travel distance from within a unit to the corridor door should not exceed 75-feet. Dead-end corridors shall not exceed 15-feet.

These distances may be increased with the installation of fire sprinkler systems.

Exit Marking and illumination:

Exits must be clearly marked, accessible and unobstructed. Exits must terminate at the exterior of the building and be provided with an outdoor path leading to a public way. Sufficient illumination must be provided at the floor or path level to assist in evacuation. Automatic, motion sensor type lighting may be used in a means of egress as long as the system is equipped with a fail-safe mechanism.

Corridor illumination must be set up where the failure of one lighting unit does not significantly reduce the available lighting.

In buildings of 12 units or more, emergency lighting and illuminated exit signage is required along all egress pathways, unless each unit has a door leading directly to the outside of the building.

Exit signage is required in buildings requiring more than one exit and may be internally or externally illuminated.

HAZARDOUS CONDITIONS:

Separation from Hazards:

Certain rooms within apartment buildings may require a fire-rated separation. These rooms include, but are not limited to:

- Boiler rooms containing a heating plant for multiple units
- Workshops and hazardous storage areas
- Trash collection rooms

Exit Stairways:

Internal exit stairways may be required to be separated from the building by a fire-rated separation depending on the number of floors/units served. An individual building analysis may be required.

Electrical Safety:

Electrical panels must be clearly marked and be accessible at all times. Storage in front of electrical panels is prohibited.

Extension cords may not be used in place of permanent wiring.

Ground-fault electrical outlets or panels may be required in certain locations under the *National Electrical Code*.

Building lighting fixtures should have the light bulbs protected by a dome cover to prevent accidental electric shock.

Units should have sufficient permanent receptacles to provide safe power connections within the unit.

Smoking Safety:

Smoking materials must be properly disposed of. Ashtrays and non-combustible containers are encouraged. Care should be taken when emptying ashtrays or other hot ashes into refuse containers.

Heating Systems:

Keep combustible storage away from heating systems, water heaters or other appliances that produce heat or have open flames.

Check the fuel storage tanks and tubing for leaks or damage. Contact the fire department in the event of a fuel or gas leak within the building.

Heating systems should be inspected on an annual basis to ensure proper performance. A carbon monoxide detector (CO) is required.

Unvented, fuel-fired heaters are prohibited. Gas heaters are exempted.

Gas or Charcoal Grills:

Gas and charcoal grills are prohibited from balconies or within 10 feet of any combustible overhanging part of the building.

Please use the guidebook to assist you in evaluating your property and in educating your residents to the importance of fire and life safety in their building.

A self-inspection form is included in this guidebook for your use.

BERLIN FIRE DEPARTMENT
263 Main Street
Berlin, NH 03570
603-752-3135
MULTI-FAMILY SELF-INSPECTION CHECKLIST

PROPERTY OWNER: _____

ADDRESS: _____

INSPECTION CONDUCTED BY: _____

Fire Protection Systems

- Smoke detectors operational
- Smoke detectors located in common areas and within each unit, near the sleeping rooms
- Smoke detectors powered of the household electrical service
- Fire alarm tested within past 12-months (where applicable)
- Sprinkler system tested within past 12-months (where applicable)
- Carbon Monoxide detectors operational*
- Carbon Monoxide detectors shall be located on every occupiable level, including basements and outside of each separate sleeping area in the immediate area of the bedrooms*

Exits and Emergency Lighting

- Exit corridors and doors are properly lit, visible and unobstructed
- Two exits provided from each unit, exits may not pass through other lockable portions of the building
- Secondary means of escape (door or egress window) is provided from each sleeping area
- Windows are a minimum of 20" wide, 24" high, less than 44" above finish floor and 5.7 sq.ft. clear opening
- Egress windows require no special effort to open (open freely)
- Emergency lighting and/or EXIT signage is provided (where required)
- Travel distance to an exit is no more than 75 feet
- Exit way walls provide a minimum 30-minute fire barrier (plaster/lath, sheetrock walls in good condition)
- Doors in exit way a minimum of 20-minute rated
- No transoms, door or wall louvers or transfer grills are present
- Doors in exit ways are self-closing and latching. Doors held open by fire alarm system close upon activation

Electrical

- Extension cords not used in place of permanent wiring, sufficient outlets are provided.
- Electrical system is properly installed and all electrical control boxes properly marked.

General Safety Requirements

- No excess storage of combustible noted in or around building. Heating plant area clear of combustibles
- No gas or charcoal grills are located on decks or within 10 feet of any combustible building overhang.
- Hazardous areas: furnace rooms (serving > 1 unit), shops, storage areas separated by fire rated enclosure
- No unvented, fuel-fired, heaters are present (gas appliances are exempted)
- Heating system is properly maintained and inspected
- Smoking materials are properly disposed of
- Residents are provided information on fire signals, evacuation procedures and practice exit drills
- Lead paint has been abated or is not present in the building

Buildings which do not have attached garages, loading docks, or **any fuel-fired or solid fueled appliances (furnaces, gas ovens/ranges, woodstoves and so forth) are exempt from the requirements.*

COMMENTS: