

## BELMONT FIRE DEPARTMENT SPRINKLER SYSTEM REQUIREMENTS BFD-OFM-10-010



Fire Sprinkler System plan(s) MUST be reviewed and approved by the Belmont Fire Department prior to the start of construction. The design and any changes must be fully compliant with NFPA 1, NFPA 101, NFPA 72, and NFPA 13, local, state and nationally recognized regulations, ordinances, rules or codes and Belmont Fire Department reserves the right to require any changes by the Authority Having Jurisdiction (AHJ) or for regulatory compliance at any time.

- 1. The Belmont Fire Department utilizes NFPA 13®, Standards for the Installation of Sprinkler Systems. The following additional requirements are required by the Authority Having Jurisdiction.
- All gates/doors within the structure or providing access to the structure(s) if locked shall be keyed to a building's MASTER KEY and the master key placed into a Knox Key Box to provide keys for access to all doors in the building in the event of an emergency. Applications for the Key Box can be obtained from the Belmont Fire Department (603) 267-8333.
- 3. The Key Box shall be installed unobstructed outside of the door which leads directly to the Fire Alarm Control Panel (FACP) at a height accessible to emergency personnel (4 ft. To 5 ft. above the ground). Additional Key Boxes may be required depending on the size and configuration of the structure(s) and property.
- 4. A 30° Down turned elbow must be installed prior to the 4 inch stortz fitting with a 30° down turn at the Fire Department Connection (FDC). The FDC must be located to allow access for the approaching fire apparatus, (the main entryway road side of the building or parking lot). The FDC shall not be located in any alleyway or between buildings which is less than 20 feet in width.
- 5. Post Indicator Valve (PIV), a Wall Post Indicator Valve (WPIV) shall be installed on the sprinkler feed line to allow the sprinkler system to be shutdown for the building. The shutoff location must be approved by the Belmont Fire Department and indicated on the system plan. The shutoff MUST be locked and monitored with a tamper switch wired directly into the fire alarm control panel to signal a trouble alarm when the valve is closed.
- 6. Each floor and each apartment or residency, store or retail area, electrical room, mechanical room, common areas on each floor, and storage areas must have individual sprinkler system shutoff valves which will allow for the isolation of the sprinkler system for that area only without effecting the remainder of the buildings fire protection system in the event of an area problem. All shutoff



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valves must be equipped with tamper and flow switches tied directly to the fire alarm control panel.

- 7. All tamper switches on the sprinkler system must be connected to the internal fire alarm system and indicate a trouble alarm if activated. The auditable/visual alarm must be able to notify occupants in the building when passing by the fire alarm panel.
- 8. A sprinkler system requires a fire alarm control panel that must be connected to a Central alarm Company, such as Lakes Region Mutual Fire Aid Communication Center, via Radio Box capable of notifying responders in the event of an activation of the system for any trouble or fire condition. If a central alarm company other than Lakes Region Mutual Fire Aid Communication Center is used the company is required to report any activations to Lakes Region Mutual Fire Aid Communication Center.
- 9. A water motor gong must be installed outside the building to indicate water flow through the sprinkler system.
- 10. The sprinkler system must be tested and certified by a qualified installer 100% and documented prior to final acceptance by the Belmont Fire Department. For final acceptance test please notify the department at least 48 hours prior to the needed inspection.
- 11. A minimum of 48 hours notice to the Belmont Fire Department is required for the acceptance Inspection on the Rough Sprinkler piping system prior to closing in of walls and/or ceilings.
- 12. An open sprinkler head must be installed into the inspector discharge port at the furthest point in the system for the final flow test.
- Engineering Data and Test Certificate submission is required prior to the flow test acceptance.
- 14. The Fire Department Connection(s) (FDC) must be identified with a sign indicating its location with letter no smaller than three (3) inches in height. If the FDC is blocked by landscaping or other items the sign must be placed in front of the obstacles identifying the location to emergency responders.
- 15. A red strobe light (minimum 4 inches in diameter and 6 inches high) shall be located above the Knox Key Box indicating the location of the Knox Key box, access door to the building and the Fire Alarm Control Panel to expedite emergency access to the building.



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- 16. All buildings must be fitted with an exterior red strobe light (minimum 4 inches in diameter and 6 inches high) capable of notifying responding emergency personnel which building or location is in alarm (only if the key box strobe will not perform this function or is not visible from the road side of the building).
- 17. The sprinkler system plan review (new and modifications) must be submitted to the Belmont Fire Department for review prior to any permits being issued. Fees for plan reviews are dependant upon the current fee structure established by the towns governing body. Applications can be obtained at the Belmont Fire Department located at 14 Gilmanton Rd, Belmont NH.
- 18. All stairways shall be protected under with the required number of automatic sprinkler heads.
- 19. A licensed fire protection engineer shall stamp all sprinkler system design plans before submitting to the Belmont Fire Department for final approval and permit.