

HOOKSETT FIRE RESCUE

15 LEGENDS DRIVE
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RULES AND REGULATIONS FOR SPRINKLER AND STANDPIPE SYSTEMS INSTALLATION OR MODIFICATIONS

I. Permits and Regulations:

1. Sprinkler systems shall be installed where required by code or as required by Hooksett Town Ordinance and Hooksett Fire Department requirements.
2. Sprinkler systems shall be installed in accordance with NFPA 1, 13, 13D, 13R as required and shall be connected to the building fire alarm.
3. A complete set of plans shall be submitted to Hooksett Fire Department. Plans shall be drawn to scale. Hydraulic calculations shall also be included with the submittal package.
4. No work may start until Hooksett Fire Department has approved the plans.
5. Prior to installation, the sprinkler contractor shall obtain a permit from Hooksett Fire Department.
6. All sprinkler systems installed in the Town of Hooksett shall have a plumbing permit issued by the Town of Hooksett.
7. All buildings with sprinkler and/or standpipes shall have a fire alarm system connected to the sprinkler/standpipe system for alarm and trouble monitoring. The fire alarm system shall be connected directly to a UL listed central station monitoring company in accordance with Hooksett Fire Department fire alarm requirements.
8. A test certificate for above ground piping and for underground piping must be presented to the fire prevention bureau prior to inspection.
9. Prior to inspection the installer must provide certification that the system has been 100% tested and functions in compliance with the system specifications and NFPA requirements.
10. The Hooksett Fire Department shall witness all final tests associated with the system. This is to include fire pump test and hydrostatic testing of piping.
11. The fire department may impose additional requirements in order to meet specific life safety needs.

12. Any deviation from the approved specifications shall be submitted in writing to the fire prevention bureau for consideration and approval.

II. System Requirements for NFPA 13 and 13R Systems

1. A post or wall indicating valve shall be provided.
2. All post or wall indicating valves shall be supplied with system tamper switches.
3. A test header shall be provided for all fire pumps.
4. If provided, fire pumps shall report to the fire alarm control panel. Fire pump running must activate a separate supervisory signal. All other fire pump status indicators shall report as a supervisory signal.
5. All fire pumps shall report to the fire alarm control panel whenever there is a loss of power to the pump or pump controller.
6. A four (4) inch storz coupling shall be supplied on each on each fire department connection for sprinkler or standpipe systems. The fire department connection shall be installed in a location approved by the fire department with the base of the coupling at a minimum height of 32 inches and a maximum of 40 inches above finished grade.
7. If fire suppression control valves are located in a separate room or concealed space, a sign shall be provided on the entrance door or near concealed space. The lettering shall be a minimum of one (1) inch high in a contrasting color to the background.
8. All valves in the sprinkler system shall have permanent tags indicating purpose
9. A legend shall be placed at the main shut off valve indicating location of the shut off valves and inspection test valve.
10. A legend shall be placed at the main shut-off valve indicating location of the shut-off valves and inspectors test valve(s).
11. .All sprinkler risers shall have a water flow alarm device installed. Wet systems shall have either a vane type flow switch or an alarm valve trim type pressure switch. Dry systems shall have an alarm valve trim type pressure switch.
12. Sprinkler systems shall be separated into zones. The maximum sprinkler zone shall be one (1) floor or level of the building, unless modified and approved by the fire prevention bureau.
 - a. Each sprinkler zone shall be provided with a flow switch, inspector's test valve, and a floor control valve. Closing any floor control valve shall have no effect on the remainder of the system.

- b. The discharge from each inspector's test valve shall be piped to the outside of the building; the building owner must approve the location of the discharge. Hose connections will not be allowed.
 - c. All sprinkler systems shall be provided with an inspector's test valve.
13. All sprinkler risers shall have a low-pressure switch installed on the system side of the check valve. Low pressure shall be indicated as a trouble condition.
 14. All vane flow switches shall have a 0 to 60 second retard device to be set for 45 seconds.
 15. All water shut-off devices shall have tamper switches installed and connected to a fire alarm trouble circuit.
 16. Fire alarm activation shall occur within 60 seconds of opening the most remote inspector's test valve.
 17. All fire service mains shall be equipped with a backflow preventer approved by the appropriate water department.
 18. All sprinkler and standpipe systems shall be provided with an external mechanical water motor gong or electric bell. There shall be no shut-off valves on the alarm device.
 19. Pre-action systems shall be provided with a method to allow the manual operation of all pre-action valves.
 20. The system drain and water motor gong drain shall be located at least two (2) feet horizontally away from the centerline of the fire department connection.
 21. When a building is equipped with more than one fire department connection, a sign shall be permanently installed at each connection indicating the section of the building serviced by that connection.
 22. When determined by the fire department that the fire department connection may be susceptible to vandalism or tampering, tamper resistant covers shall be required.
 23. In addition to the supply of spare sprinklers and appropriate wrenches, materials must be provided in the sprinkler cabinet as necessary to seal the pipe threads associated with the sprinkler (pipe tape).
 24. In new construction or in buildings which undergo a renovation of more than 50% floor area or assessed value, a fire hydrant must be provided within 75 feet of the fire department connection. The location of said hydrant to be specifically approved by the fire department.

Exception: This does not apply to systems installed in accordance with NFPA 13D.

III. Security

1. All padlocks for sprinkler controls shall be a “Knox” padlock keyed for the Hooksett Fire Department.
2. All buildings with a sprinkler shall have a “Knox Box” key depository system installed. Contact Hooksett Fire Department for details.

IV. Requirements for NFPA 13D Systems.

All 13D systems shall meet the requirements of Section I, Permits and Regulations with the exception of Item 7, requiring a fire alarm system connected to a central station.

1. Water supply tanks shall be sized for a minimum 10-minute discharge time.
2. Design discharge shall not be less than 18 gpm for one (1) sprinkler and not less than 13 gpm per sprinkler for multi design sprinklers. The design discharge shall not be less than the listing of the sprinkler.
3. Sprinklers are required in all areas of the dwelling, including bathrooms of any size, closets with electrical fixtures or outlets and attached garages. Attics and other concealed spaces that are heated and/or have future possibility for living space shall also be sprinkle red.
4. Attached garages may be covered with either sidewall heads or antifreeze solution.
5. Water flow in the sprinkler system shall activate all audible smoke detector alarms in the dwelling within 15 seconds and continue to operate the alarms until water flow stops.
6. Water flow in the sprinkler system shall also activate a weatherproof horn/strobe assembly located on the outside of the building. The horn/strobe shall be mounted in an area easily seen from the street without obstruction from shrubs, trees, piled snow or parked vehicles.
7. A permanently piped water storage tank refill shall be provided. Refill may be by manual means only. Automatic refill with a float shut-off is not required.