

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**§ 180-16. Automatic fire sprinkler, fire suppression and fire alarm systems and fire hydrants.**

[REDACTED]

[REDACTED]



- (2) Approved automatic fire sprinkler equipment shall be installed and maintained in all buildings, including the following: commercial, office, industrial, institutional, and government buildings and public buildings.

- [Redacted]
- [Redacted]
- [Redacted]

- (b) Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a central station 24 hours a day throughout the building and the alarm when activated sent to a central station.

- (3) Approved automatic fire sprinkler equipment shall be installed and maintained in the following accessory buildings and special principal buildings and building areas, except in mini storage buildings when in compliance with this chapter, and one- and two-family dwellings:

- (a) Garages and open parking structures as follows: garages and open parking structures within, attached to, above or below other occupancies and garages and open parking structures used as passenger terminals. Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a central station 24 hours a day throughout the building and the alarm when activated sent to a central station.

- [Redacted]

- [Redacted]

- [Redacted]

- (e) Nursing, convalescent, old-age, and adult living centers, community-based residential facilities (CBRF), and other similar institutional buildings: throughout all nursing, convalescent, old-age, and adult living centers, CBRF and other institutional buildings regardless of size. Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a central station 24 hours a day throughout the building and the alarm when activated sent to a central station.

- [Redacted]

- (g) Hotels, motels, dormitories, fraternities, and sorority houses: throughout all buildings, regardless of size. This applies to all new construction or renovations. Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a central station 24 hours a day throughout the building and the alarm when activated sent to a central station.

- (h) Adult and child day-care center: All new construction, regardless of size, shall have sprinklers. Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a central station 24 hours a day throughout the building and the alarm when activated sent to a central station.
- (i) Community-based residential facilities (CBRF): All new construction regardless of size shall have sprinklers. Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a central station 24 hours a day throughout the building and the alarm when activated sent to a central station.

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

- (l) Mini storage buildings are exempt from the requirements of fire sprinkler protection when the following criteria are met:
  - [1] No portion of the mini storage building shall exceed 2,000 square feet in size with the separation being a two-hour-rated fire separation. The location of the fire separation shall be identified on each exterior wall using a Fire & Rescue Department approved method.
  - [2] Each mini storage unit shall have a heat detector that, when activated, illuminates an indicator light outside of the unit; a strobe light on the building forward end; and transmits a fire alarm signal to a central station.
  - [3] The owner shall include with the leasing documents that the storage of vehicles, combustible or flammable liquids, ammunitions and explosives is prohibited.

- [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

H. How installed.

- (1) Incorporation of standards by reference. The most current printed editions of all NFPA documents are hereby incorporated by reference into this section.
- (2) Material and test certificates. All fire-protection systems installed in the Village shall be tested in accordance with the requirements of the Wisconsin state code and NFPA codes and standards. In the event that a conflict between these documents occurs, the fire-protection contractor shall comply with the most stringent requirements. Two copies of each material and test certificate shall be provided to the Department before an occupancy permit will be granted.
- (3) When using nonpotable water and/or a nonfreeze solution. Whenever nonpotable water is used to supply a fire sprinkler system and/or when a fire sprinkler system uses any type of nonfreeze solution, a backflow prevention device as required by the State of Wisconsin and the Village of Pleasant Prairie Water Utility shall be required as part of those systems.
- (4) Fire pump test header. Fire pump test headers shall be placed on the exterior of the fire pump room.
- (5) Safety factor. The safety factor for a hydraulically calculated sprinkler system shall be a minimum of 10% or five psi, whichever is greater.

■ [REDACTED]

■ [REDACTED]

I. Standpipes and hose connections.

- (1) Wet automatic standpipes shall be provided in all buildings three stories or more in height. Standpipes shall be sized and distributed as described in Subsection G(2).
- (2) When the Fire & Rescue Department or NFPA requires the installation of small hose and small hose valve connections, this Department will require the installation of two-and-one-half-inch hose valves in lieu of the former. The two-and-one-half-inch hose valves shall be supplied from a separate piping system or from adjacent sprinkler systems. The two-and-one-half-inch NST valve shall be capable of delivering 250 gpm at 75 psi measured at the hose valve. The standpipes shall be wet and placed first adjacent to the exterior exit doors and then move inward to provide the required coverage. Hose valves shall be no further than 150 feet apart, per floor.

J. Fire Department connection. The Fire Department connection (FDC) for both the sprinkler system and standpipe systems shall be located remote from the building, curbside to a street or driveway. The minimum distance from the building shall be equal to the height of the building. FDCs may be placed at a greater distance from the building if the building is of extra hazard occupancy. The location of the FDC shall be approved by the Fire Department. The FDC shall have an automatic drip for drainage of the waterline enclosed within an inspection pit and accessed through a manhole, when the automatic drip cannot be placed within the structure.

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]





■ [REDACTED]

■ [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

■ [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

■ [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] ■ [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] ■ [REDACTED]

O. Non-hydrant areas. For any building or areas of buildings which have been described herein and are built in a non-hydrant area of the Village (no public water mains), said building shall include an approved sprinkler system. Any approved sprinkler system must be connected to a sufficient water supply and sufficient pressure prior to occupancy. At such time municipal water becomes available to the site, connection to the municipal water system must be made within six months.

■ [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

■ [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] ■ [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

R. Additions, remodeled buildings, and change of use. All existing public buildings or places of employment and all additions shall conform to this section, as follows:

(1) More than 50% remodeled or added: if more than 50% of the gross area of a building is remodeled and/or added, the entire building shall be provided with the requirements in this section, provided that the Village determines the existing water supply is adequate.

■ [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

■ [REDACTED] ■ [REDACTED] ■ [REDACTED]  
[REDACTED]  
[REDACTED]

- (4) If the percentage remodeled or added is done from this date forward, all percentages are added together every time to get the total percentages remodeled.
  - (5) Change of use. If the use of an existing building is changed to a new use or the building undergoes physical remodeling, the entire building shall comply with this chapter.
- S. Exemptions. Rooms or buildings devoted to the manufacture or storage of aluminum powder, calcium carbide, calcium phosphate, metallic sodium or potassium, quicklime, magnesium powder, sodium peroxide or like materials where the application of water may cause or increase combustion are exempt from the use of automatic water sprinkling systems but are required to install other forms of fire-protection systems approved by the Fire Chief.
- T. Early warning detection.
- (1) Smoke and heat detection systems shall be installed throughout the following buildings. These systems shall be monitored 24 hours per day by a remote central station service. When activated, the systems shall send an alarm signal to the central station.
    - (a) Theaters and assembly buildings.
    - (b) Hospitals.
    - (c) Nursing homes.
    - (d) Convalescent homes.
    - (e) Homes for the aged.
    - (f) Adult living centers.
    - (g) Adult day-care facilities.
    - (h) Community-based residential facilities.
    - (i) Schools and other places of instruction.
    - (j) Hotels.
    - (k) Motels.
    - (l) Dormitories.
    - (m) Fraternities.
    - (n) Sororities.
    - (o) Child day-care facilities.
    - (p) Multifamily buildings.
  - (2) Location. Approved fire detection devices shall be located per NFPA 70 and 72 and any other applicable state or NFPA codes.
  - (3) Installation. Approved fire detection devices shall be installed per NFPA 70 and 72 and any other applicable state or NFPA codes.
- U. Automatic closing devices.
- (1) Where installed:
    - (a) Except on single- and two-family dwellings, there shall be an automatic closing device on all fire and smoke doors, except doors leading directly outside in all buildings, regardless of size.
    - (b) On all fire shutters and vents.

(c) Wired into the fire alarm system when a fire alarm system is required.

- (2) How installed: per National Fire Protection Association Standard 80, Standard for Fire Doors and Other Opening Protectives.
- (3) How maintained and inspected: per National Fire Protection Association Standard 80, Standard for Fire Doors and Other Opening Protectives.

V. Fire alarm systems.

- (1) All fire suppression and detection systems shall be monitored by an approved central station.
- (2) The signal for a fire alarm shall be sent to an approved central station. The signal for tamper and/or supervision shall be sent to the central station only.
- (3) A minimum of one fire alarm control panel (FACP) shall be placed in the fire sprinkler riser/fire pump room or a location approved by the Fire & Rescue Department.
- (4) The remote annunciator(s) alarm/indicator panel(s) shall be located in a location approved by the Fire & Rescue Department. All functions for alarm silence, reset and area identification shall be performed at this panel.
- (5) The fire alarm system and the annunciator panel shall be addressable.
- (6) The addressable system shall include fire detection and suppression systems, pull stations, tamper supervision, and audio/visual devices.
- (7) In places of public occupancy, pull stations shall be required in new construction and during remodel projects.

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

(10) The Central Station shall immediately retransmit the fire alarm to the Pleasant Prairie Dispatch Center, which shall be the first notification made.

█ [REDACTED]

█ [REDACTED]

X. Cooking hoods: shall be connected to the required fire alarm system.

Y. Exit lights and emergency lights.

- (1) Exit and emergency lights are required in all places of public occupancy.
- (2) Exit and emergency lights shall have battery backup unless connected to an emergency generator.
- (3) Combination exit and emergency lights are acceptable and recommended.
- (4) Emergency lighting shall be installed in the sprinkler riser or fire pump room.
- (5) Emergency lighting shall be installed in any electrical equipment rooms.

█ [REDACTED]

█ [REDACTED]