

Section 903 of the code is deleted and replaced with the following:

**A. Fire sprinklers.**

**(1). Plan certification for fire alarm systems and occupant notification.** All fire alarm and occupant notification system plans submitted to the fire marshal and building official for review and approval shall bear a review certification of a minimum level III NICET in fire alarms.

**(2) Plan certification for fire sprinkler systems.** All fire sprinkler plans submitted to the fire marshal and building official for review and approval shall bear a review certification of a minimum level III NICET in fire sprinklers.

**(3) Plan certification for all other fire protection systems.** Plan certification for all other fire protection systems will be accompanied by a certification of competence when required.

**(4) On-site plans.** Plans and specifications shall be submitted to the fire marshal and building official for review and approval prior to construction. One set of approved plans shall be on the job site for each inspection.

**B. Fire sprinklers -- where required.**

**1. Where required.** An automatic sprinkler system shall be installed in accordance with this section throughout all levels of all new group A, B, E, F, H, I, M, R, S and U occupancy classifications of more than zero (0) square feet. This subsection shall become effective for one- and two-family dwellings on January 1, 2009. For all other occupancy classifications, this subsection becomes effective January 1, 2008.

a. **All buildings – in every story or basement.** Fire-resistive substitutions may be allowed in accordance with provisions in the International Building Code, provided that the automatic sprinkler is not otherwise required throughout the building by any other provision or section of the building code.

b. **At the top of rubbish and linen chutes and in their terminal rooms.** Chutes extending through three or more floors shall have additional sprinkler heads installed within such chutes at alternate floors. Sprinkler heads shall be accessible for servicing.

c. **In rooms where nitrate film is stored or handled.** See section 306 of the International Building Code.

d. **In protected combustible fiber storage vaults.**

e. **In any building that has a change in occupancy classification as defined in the building code.** For example, an automatic sprinkler system shall be installed if a building is converted from the Group E (Educational) occupancy classification to the Group M (Mercantile) occupancy classification.

**2. Exception.** The following accessory structures shall be exempt from fire sprinkler requirements.

- a. Gazebos and ramadas for residential and public use.
- b. Independent rest room buildings that are associated with golf courses, parks and similar uses.
- c. Guardhouses for residential and commercial developments.
- d. Detached non-combustible carports for residential and commercial developments with covered parking less than 15,000 square feet (1394 m<sup>2</sup>).
- e. Barns and agricultural buildings for private, residential, non-commercial use, not exceeding 1,500 square feet (139.35 m<sup>2</sup>) with no habitable areas.
- f. Detached storage sheds for private, residential, non-commercial use, not exceeding 1500 square feet (139.35 m<sup>2</sup>).
- g. Detached 1, 2 and 3 car garages (without habitable spaces) in existing residential lots for replacement only within 400 feet hydrant spacing.
- h. Fuel dispensing canopies exceeding 15 feet in clear height.
- i. Open shade horse stalls of non-combustible construction for private, residential, non-commercial use, not exceeding 5,000 square feet (464.52 m<sup>2</sup>) and no storage of combustible products, vehicles, or agricultural equipment.
- j. Detached one story accessory building used as tool and storage shed of non-hazardous materials, and not exceeding 200 square feet (11.15 m<sup>2</sup>).
- k. Special use non-combustible structures as approved by the Fire Marshal and Building Official.

**3. Groups A, E, F, H, M, S-1, Repair Garages, S-2 Occupancy Classifications, Commercial Parking Garages, Group B Occupancy Classifications.** An automatic sprinkler system shall be installed in accordance with NFPA 13 installation of sprinkler systems.

**4. Group I.** An automatic sprinkler system shall be installed throughout all group I occupancy classifications in accordance with NFPA 13 installation of sprinkler systems.

**a. Exception:** In jails, prisons and reformatories, the piping system may be dry, provided a manually operated valve is installed at a continuously monitored location. Opening of the valve shall cause the piping system to be charged. Sprinkler heads in such systems shall be equipped with fusible elements or the system shall be designed as required for deluge systems in the building code.

**5. Group R, Installation Requirements.** An automatic sprinkler system shall be installed throughout all group R occupancy classifications in accordance with NFPA 13, 13-R, or 13D installation of sprinkler systems. This subsection shall become effective for one- and two-family dwellings on January 1, 2009. For all other group R occupancy classifications, this subsection becomes effective January 1, 2008.

**6. All group R-3 and U occupancy classifications.** An automatic sprinkler system shall be installed throughout all group R-3 and U **occupancy** classifications in

accordance with NFPA 13 or 13-D installation of sprinkler systems. This subsection shall become effective for one- and two-family dwellings on January 1, 2009. For all other group R-3 and U **occupancy** classifications, this subsection becomes effective January 1, 2008.

### **C. Fire sprinklers – specific requirements**

**1. Hose threads.** Fire hose threads used in connection with automatic sprinkler system shall be National Standard Threads.

**2. Fire department connections.** Fire department connections shall be located within four (4) feet (1219.2 mm) to eight (8) feet (2438.4 mm) of the curb line of an access road or public street, or as otherwise specified, or as approved by the Building Official and Fire Marshal. The fire department connection line shall be a wet line with the check valve at the hose connection above grade. The access to the fire department connection shall be at curb grade.

**3. Wall mounted.** Systems may have wall mounted fire department connections only on light and ordinary hazard group 1 systems when there are no structural openings or combustible overhangs within 15 feet (4572 mm) horizontally or vertically from inlet connection.

**4. Sprinkler system monitoring and alarms.** All valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperature, critical air pressure and water-flow switches on all sprinkler systems shall be electrically supervised.

#### **5. Exceptions:**

- a Automatic sprinkler systems protecting one- and two-family dwellings.
- b Limited area systems serving fewer than 20 sprinklers for E, H, and I occupancy classifications and more than 100 sprinklers in all other occupancy classifications.
- c Automatic sprinkler systems installed in accordance with 13R where a common supply main is used to supply both domestic and automatic sprinkler systems and a separate shutoff valve for the automatic sprinkler system is not provided.
- d Jockey pump control valves that are sealed or locked in the open position.
- e Paint spray booths or dip tanks that are sealed or locked in the open position.
- f Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
- g Trim valves to pressure switches in dry, pre-action and deluge sprinkler systems that are sealed or locked in the open position.

**6. Alarms.** Approved audible devices shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the

system. Alarm devices shall be provided on the exterior of the building in an approved location. An interior alarm to alert the occupants shall be provided in the interior of the building in a normally occupied location when off-site monitoring is required. Where a fire alarm system is installed, activation of the automatic sprinkler system shall actuate the building fire alarm system.

#### **D. Installation Standards.**

**1. Installation standards.** Standpipe systems shall be installed in accordance with this section.

**2. Building area.** In buildings exceeding 10,000 square feet (929 m<sup>2</sup>) in area per story, class I automatic wet standpipes shall be provided and where any portion of the building's interior area is more than 200 feet (60.96 m) of travel, vertically and horizontally, from the nearest point of fire department vehicle access.

#### **3. Exceptions:**

- (a) Required wet standpipes may be an integral part of an approved sprinkler system and may be connected to the sprinkler systems horizontal cross mains. Calculations for required hose demand shall be submitted with sprinkler plans.
- (b) Unless required by the Fire Marshal and Building Official, a manual hose connection is not required in group R-3 occupancy classifications.

**4.** Stages greater than 1,000 square feet in area shall be equipped with a class I wet standpipe system with 2.5 inch (64 mm) hose connections on each side of the stage supplied from the automatic fire sprinkler system and shall have a flow rate of not less than that required for class 1 standpipes.