

Wisconsin Commercial Building Inspector Certification
Chapter IBC 9 Practice Questions

Answer Key 8

Chapter 9

A fire alarm system component such as a bell, horn, speaker, light or text display is defined as a **alarm notification appliance**.

NFPA 72 is the standard reference for fire protection system monitoring where required by an approved supervising station.

The **Class III system** requires a 1 ½ inch hose station to supply water for use by building occupants and 2 ½ inch hose connection to supply a larger volume of water for use by the fire department.

Group I-1 facilities shall allow an automatic sprinkler system installed in accordance with **section 903.3.1.2 or 903.3.1.3**.

A manual fire alarm system shall be installed in Group B occupancies having an occupant load of **500 or more** persons or more than **100 persons** above or below the lowest level of exit discharge.

The height of the manual fire alarm boxes shall be a minimum of **42 inches** and a maximum of **48 inches** measured vertically from the floor level to the activating handle of the box.

In buildings permitted to be other than fully sprinklered, the smoke control system shall be designed to achieve pressure differences at least **two times** the maximum calculated pressure difference produced by the design fire.

Where the provisions of this code required that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with **section 903.3.1.1**, sprinklers shall be installed throughout in accordance with NFPA 13.

Where buildings, or portions thereof, are divided into **fire areas** so as not to exceed the limits established for requiring a fire protection system, such **fire areas** shall be separated by fire barriers having a fire-resistance rating of not less than that determined in accordance with section 706.3.9.

An assembly incorporating the detector, the control equipment and the alarm-sounding device in one unit, operated from a power supply either in the unit or obtained at the point of installation is a **single-station smoke alarm**.

A defined area from which a signal can be received, an area to which a signal can be sent or an area in which a form of control can be executed is defined as a **zone**.

A system or portion of a combination system consisting of components and circuits arranged to monitor and annunciate the status of fire alarm or supervisory signal-initiating devices and to initiate the appropriate response is the **fire alarm system**.

In an E occupancy, an automatic sprinkler system is not required in any fire area or area below the level of exit discharge where every **classroom** throughout the building has at least one exterior exit door at ground level.

Dry standpipes shall not be installed except where subject to freezing and in accordance with NFPA 14.

In an R-1 occupancy equipped throughout with an automatic sprinkler system where notification appliances will activate upon sprinkler water flow and at least one manual fire alarm box is installed at approved locations, manual fire alarm boxes are not required **throughout** the building.

The **fire code official** is authorized to require the installation of listed manual fire alarm box protective covers to prevent malicious false alarms or to provide the manual fire alarm box protection from physical damage.

When evaluating the smoke control system the design fire shall be based on a rational analysis performed by the registered design professional and approved by the **fire code official**.

Smoke and heat vents shall be installed in the roofs of one-story buildings or portions thereof occupied as F-1 or S-1 having more than **50,000** square feet in undivided area.

The fire command center shall be separated from the remainder of the building by not less than **1-hour fire barrier**, **horizontal assembly** or both.

The fire command center will include controls for **unlocking** stairway doors simultaneously.

With respect to **hydrants, driveways, buildings and landscaping**, fire department connections shall be so located that fire apparatus and hose

connected to supply the system will not obstruct access to the buildings for other fire apparatus.

A **visible alarm notification appliance** alerts by the sense of sight.

An automatic sprinkler system serving **fewer than 20 sprinklers**, is not required to be monitored by an approved supervising station.

An approved system of devices and equipment which automatically detect a fire and discharges an approved fire-extinguishing agent onto or in the area of a fire is an **automatic fire-extinguishing system**.

Unless addressed by exception, all valves controlling the water supply for automatic sprinkler systems, pumps, tanks and water-flow switches on all sprinkler systems shall be **electrically supervised**.

A **class III standpipe system** shall be installed throughout buildings where the floor level of the highest story is located more than 30 feet above the lowest level of fire department vehicle access or where the floor level of the lowest story is located more than 30 feet below the highest level of fire department vehicle access.

An automatic sprinkler system is required in an **A-2** occupancy where the fire area exceeds 5,000 square feet, the fire area has an occupant load of 100 or more, or the fire area is located on a floor other than the level of exit discharge.

Where more than one smoke alarm is required to be installed within an individual dwelling unit in group R-2, R-3 or R-4, or within an individual dwelling unit or sleeping unit in group R-1, the smoke alarms shall be **interconnected**.