

## SECTION 704 FIRE PROTECTION SYSTEMS

**[F] 704.1 General.** All systems, devices and equipment to detect a fire, actuate an alarm, or suppress or control a fire or any combination thereof shall be maintained in an operable condition at all times in accordance with the *International Fire Code*.

**[F] 704.1.1 Automatic sprinkler systems.** Inspection, testing and maintenance of automatic sprinkler systems shall be in accordance with NFPA 25.

**[F] 704.2 Smoke alarms.** Single- or multiple-station smoke alarms shall be installed and maintained in Groups R-2, R-3, R-4 and in dwellings not regulated in Group R occupancies, regardless of *occupant* load at all of the following locations:

1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of *bedrooms*.
2. In each room used for sleeping purposes.
3. In each story within a *dwelling unit*, including *basements* and cellars but not including crawl spaces and uninhabitable attics. In dwellings or *dwelling units* with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level. Single- or multiple-station smoke alarms shall be installed in other groups in accordance with the *International Fire Code*.

**[F] 704.3 Power source.** In Group R occupancies and in dwellings not regulated as Group R occupancies, single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

**Exception:** Smoke alarms are permitted to be solely battery operated in buildings where no construction is taking place, buildings that are not served from a commercial power source and in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or *basement* available which could provide access for building wiring without the removal of interior finishes.

**[F] 704.4 Interconnection.** Where more than one smoke alarm is required to be installed within an individual *dwelling unit* in Group R-2, R-3, R-4 and in dwellings not regulated as Group R occupancies, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all *bedrooms* over background noise levels with all intervening doors closed.

**Exceptions:**

1. Interconnection is not required in buildings which are not undergoing alterations, repairs or construction of any kind.
2. Smoke alarms in existing areas are not required to be interconnected where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or *basement* available which could provide access for interconnection without the removal of interior finishes.