

TABLE 1103.4
VERTICAL OPENING PROTECTION REQUIRED

OCCUPANCY CLASSIFICATION	CONDITIONS	PROTECTION REQUIRED
Group I	Vertical openings connecting two or more stories	1-hour protection
All, other than Group I	Vertical openings connecting two stories	No protection required ^{a, b}
All, other than Group I	Vertical openings connecting three to five stories	1-hour protection or automatic sprinklers throughout ^{a, b}
All, other than Group I	Vertical openings connecting more than five stories	1-hour protection ^{a, b}
All	Mezzanines open to the floor below	No protection required ^{a, b}
All, other than Group I	Atriums and covered mall buildings	1-hour protection or automatic sprinklers throughout
All, other than Group B and M	Escalator openings connecting four or less stories in a sprinklered building. Openings must be protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13.	No protection required
Group B and M	Escalator openings in a sprinklered building protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13.	No protection required

- a. Vertical opening protection is not required for Group R-3 occupancies.
- b. Vertical opening protection is not required for open parking garages and ramps.

1103.5.2 Group I-2. An *automatic sprinkler system* shall be provided throughout existing Group I-2 *fire areas*. The sprinkler system shall be provided throughout the floor where the Group I-2 occupancy is located, and in all floors between the Group I-2 occupancy and the *level of exit discharge*.

1103.5.3 Basement access or sprinkler protection. An *approved automatic sprinkler system* shall be provided in the following occupancies located in basements when such areas exceed 2,500 square feet (232.3 m²) in size and do not have 20 square feet (1.86 m²) of opening entirely above the adjoining ground level in each 50 lineal feet (15 240 mm) or fraction thereof of exterior wall on at least one side of the building:

1. Group A occupancies used as commercial drinking and dining establishments.
2. Group A occupancies used as bowling alleys.
3. Group E occupancies used for student occupancy.
4. Group I occupancies.
5. Group R-1 and R-2 occupancies having dwelling units or guest rooms.

Openings required by this section shall have a minimum dimension of 30 inches (762 mm).

If any portion of the basement is located more than 75 feet (22.86 m) from required openings, the basement shall be provided with an *approved automatic sprinkler system* throughout.

1103.5.4 Existing rubbish and linen chutes. Existing rubbish and linen chutes that connect three or more stories shall be protected with automatic sprinklers installed and maintained in conformance with Section 903.2.11.2.

1103.6 Standpipes. Existing structures shall be equipped with standpipes installed in accordance with Section 905 where required in Sections 1103.6.1 and 1103.6.2. The *fire code official* is authorized to approve the installation of manual standpipe systems to achieve compliance with this section where the responding fire department is capable of providing the required hose flow at the highest standpipe outlet.

1103.6.1 Existing multiple-story buildings. Existing buildings with occupied floors located more than 50 feet (15 240 mm) above the lowest level of fire department access or more than 50 feet (15 240 mm) below the highest level of fire department access shall be equipped with standpipes.

1103.6.2 Existing helistops and heliports. Existing buildings with a rooftop helistop or heliport located more than 30 feet (9144 mm) above the lowest level of fire department access to the roof level on which the helistop or heliport is located shall be equipped with standpipes in accordance with Section 2007.5.

1103.7 Fire alarm systems. An *approved* fire alarm system shall be installed in existing buildings and structures in accordance with Sections 1103.7.1 through 1103.7.6.

In buildings containing mixed occupancies that are designed as separated uses (see Section 102.11), fire alarm and detection systems need only be installed in those occupancies where required by this section.

In areas protected by an *approved, supervised automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, automatic fire detectors required by Section 1103.7 need not be provided. Where Section 1103.7 requires smoke detectors, such protection shall be installed.

1103.7.1 Group A, general. A fire alarm system shall be installed in accordance with Sections 1103.7.1 through

1103.7.1.3.1 in existing Group A occupancies having an occupant load of 300 or more.

1103.7.1.1 Exemptions for Group A. A fire alarm system is not required in Group A occupancies having the following conditions:

1. Assembly areas used solely for worship purposes.
2. A fire alarm system is not required when an *approved* automatic fire-sprinkler system is installed throughout the building.
3. Assembly uses located inside Group E occupancies shall have alarms as required for the Group E occupancy.
4. A-5 occupancies.

1103.7.1.2 Initiation. Initiation of the fire alarm system shall be by automatic means. *Approved* automatic fire detectors shall be installed in laundry rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, kitchens, trash-collection rooms, storage rooms, and similar areas.

1103.7.1.3 Notification. The required fire alarm system shall activate an audible and visible notification appliance at a constantly attended location within the building for the purposes of initiating emergency action. A presignal feature and positive alarm sequencing in accordance with NFPA 72 are permitted. Occupant notification shall be by means of voice announcements, either live or prerecorded, initiated by the person in the constantly attended location.

1103.7.1.3.1 Exemption for voice evacuation. Where no constantly attended location exists, an automatic fire alarm system providing a general evacuation signal or an *approved* emergency voice/ alarm communications system is permitted.

1103.7.2 Group E, general. A fire alarm system shall be installed in accordance with Sections 1103.7.2 through 1103.7.2.4 in existing Group E occupancies having an occupant load of 50 or more.

1103.7.2.1 Exemption for single classroom. A fire alarm system is not required for a building with a maximum area of 1,000 square feet (93 m²) that contains a single classroom and is located no closer than 20 feet (15 240 mm) from another building.

1103.7.2.2 Initiation. Initiation of the fire alarm system shall be by manual and automatic means.

manual fire alarm boxes are only required in the main office and in a custodial area.

2. Where all corridors are protected by an *approved* automatic fire alarm system having smoke detection with alarm verification, manual fire alarm boxes are only required near exits serving shops, chemistry and physics laboratories, boiler rooms, industrial technology and industrial arts rooms, kitchens, custodian's offices, and main offices.

1103.7.2.3 Travel through adjoining rooms. Where the only *means of egress* travel from an interior room or rooms having an aggregate occupant load of more than ten occupants is through an adjoining or intervening room, automatic smoke detectors shall be installed throughout the common atmosphere through which the path of egress travel passes.

1103.7.2.3.1 Sprinkler protection. In buildings that are protected throughout by an *approved* automatic sprinkler system installed in accordance with Section 903.3.1.1, smoke detectors are not required in intervening or adjoining rooms.

1103.7.2.4 Notification. Activation of the fire alarm system or *automatic sprinkler system* shall initiate a general evacuation signal.

1103.7.3 Group I, general. A fire alarm system shall be installed in accordance with Sections 907.2.6 through 907.2.6.4.2 in existing Group I occupancies.

Existing Group I occupancy fire alarm requirements are the same as for new buildings. The occupants of these buildings are the most vulnerable.

1103.7.4 Group R-1, general. A fire alarm system shall be installed in accordance with Sections 1103.7.4 through 1103.7.4.4.1 in existing Group R-1 occupancies where:

1. Any *sleeping unit* or *dwelling unit* is located two or more stories above the story containing the lowest level of exit discharge.
2. Any *sleeping unit* or *dwelling unit* is located more than one story below the highest level of exit discharge of exits serving the *dwelling unit*.
3. The building contains 20 or more guest rooms or *dwelling units*.
4. The building is used as a congregate living facility.