turned on to their maximum heat settings and allowed to operate for 30 minutes.

[F] 904.14 Aerosol fire-extinguishing systems. Aerosol fire-extinguishing systems shall be installed, periodically inspected, tested and maintained in accordance with Sections 901 and 904.4, NFPA 2010, and in accordance with their listing.

Such devices and appurtenances shall be listed and installed in compliance with manufacturer's instructions.

SECTION 905 STANDPIPE SYSTEMS

[F] 905.1 General. Standpipe systems shall be provided in new buildings and structures in accordance with Sections 905.2 through 905.11. In buildings used for high-piled combustible storage, fire protection shall be in accordance with the *International Fire Code*.

[F] 905.2 Installation standard. Standpipe systems shall be installed in accordance with this section and NFPA 14. Fire department connections for standpipe systems shall be in accordance with Section 912.

[F] 905.3 Required installations. Standpipe systems shall be installed where required by Sections 905.3.1 through 905.3.8. Standpipe systems are allowed to be combined with *automatic sprinkler systems*.

Exception: Standpipe systems are not required in Group R-3 occupancies.

[F] 905.3.1 Height. Class III standpipe systems shall be installed throughout buildings where any of the following conditions exist:

- 1. Four or more stories are above or below grade plane.
- 2. The floor level of the highest *story* is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access.
- 3. The floor level of the lowest *story* is located more than 30 feet (9144 mm) below the highest level of fire department vehicle access.

Exceptions:

- 1. Class I standpipes are allowed in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.
- 2. Class I standpipes are allowed in Group B and E occupancies.
- 3. Class I manual standpipes are allowed in *open* parking garages where the highest floor is located not more than 150 feet (45 720 mm) above the lowest level of fire department vehicle access.
- 4. Class I manual dry standpipes are allowed in *open parking garages* that are subject to freezing temperatures, provided that the hose connections are located as required for Class II standpipes in accordance with Section 905.5.

- Class I standpipes are allowed in basements equipped throughout with an automatic sprinkler system.
- 6. Class I standpipes are allowed in buildings where occupant-use hose lines will not be utilized by trained personnel or the fire department.
- 7. In determining the lowest level of fire department vehicle access, it shall not be required to consider either of the following:
 - 7.1. Recessed loading docks for four vehicles
 - 7.2. Conditions where topography makes access from the fire department vehicle to the building impractical or impossible.

[F] 905.3.2 Group A. Class I automatic wet standpipes shall be provided in nonsprinklered Group A buildings having an *occupant load* exceeding 1,000 persons.

Exceptions:

- 1. Open-air-seating spaces without enclosed spaces.
- 2. Class I automatic dry and semiautomatic dry standpipes or manual wet standpipes are allowed in buildings that are not high-rise buildings.

[F] 905.3.3 Covered and open mall buildings. Covered mall and open mall buildings shall be equipped throughout with a standpipe system where required by Section 905.3.1. Mall buildings not required to be equipped with a standpipe system by Section 905.3.1 shall be equipped with Class I hose connections connected to the automatic sprinkler system sized to deliver water at 250 gallons per minute (946.4 L/min) at the hydraulically most remote hose connection while concurrently supplying the automatic sprinkler system demand. The standpipe system shall be designed to not exceed a 50 pounds per square inch (psi) (345 kPa) residual pressure loss with a flow of 250 gallons per minute (946.4 L/min) from the fire department connection to the hydraulically most remote hose connection. Hose connections shall be provided at each of the following locations:

- 1. Within the mall at the entrance to each *exit* passageway or *corridor*.
- 2. At each floor-level landing within *interior exit stairways* opening directly on the mall.
- 3. At exterior public entrances to the mall of a covered mall building.
- 4. At public entrances at the perimeter line of an open mall building.
- 5. At other locations as necessary so that the distance to reach all portions of a tenant space does not exceed 200 feet (60 960 mm) from a hose connection.

[F] 905.3.4 Stages. Stages greater than 1,000 square feet in area (93 m²) shall be equipped with a Class III wet standpipe system with $1^{1}/_{2}$ -inch and $2^{1}/_{2}$ -inch (38 mm and 64 mm) hose connections on each side of the stage.

Exception: Where the building or area is equipped throughout with an *automatic sprinkler system*, a 1¹/₂-inch (38 mm) hose connection shall be installed in