

TWO WAY COMMUNICATION SYSTEM AT ELEVATORS

1009 Accessible Means of Egress

Summary

R-2 Occupancy 5 story and taller buildings with NFPA 13 sprinkler system:

1. [Is a two-way communication needed at all elevators regardless if they are part of the accessible means of egress or not?](#)
2. An area of refuge is not required in stairs in R-2 Occupancy Group buildings. 1009.3 e8
3. An Accessible elevator is not required if a horizontal exit is provided on that floor. 1009.2.1 e1
4. 1009.8 requires all elevators... to have two-way communication system...
5. The building on the other side of the horizontal exit becomes the "area of refuge". Should we provide a map?
6. If elevator is not part of the accessible means of egress it does not require backup power source
7. Do we want people waiting by the elevator during a life safety event?
8. What is the difference in a service elevator and a freight elevator? 1009.8 e3 and e4

1009.2.1 Elevators Required. In buildings where a required accessible floor is four or more stories above or below a level of exit discharge, not less than one required accessible means of egress shall be an elevator complying with Section 1009.4.

Exceptions:

1. [In buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a horizontal exit and located at or above the levels of exit discharge.](#)
2. In buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a ramp conforming to the provisions of Section 1012.

Commentary:

On a flat site, "buildings with four or more stories above the level of exit discharge" would typically be a [five-story](#) building. The level of exit discharge is the entire first story level (not merely the plane or level of the first floor); therefore, the fifth floor is the fourth story above the level of exit discharge.

Exception 1 establishes that accessible egress elevator service to floor levels at or above the level of exit discharge is not necessary under specified conditions. The conditions are that the building is equipped throughout with an automatic sprinkler system in accordance with NFPA 13 or NFPA 13R (see Section 903.3.1.1 or 903.3.1.2) and that floors not serviced by an accessible egress elevator are provided with a horizontal exit. The presence of an automatic sprinkler system significantly reduces the potential fire hazard and provides for increased evacuation time. The combination of automatic sprinklers and a horizontal exit provides adequate protection for the occupants despite their distance to the level of exit discharge.

1009.3 Stairways. In order to be considered part of an accessible means of egress, a stairway between stories shall have a clear width of 48 inches (1219 mm) minimum between hand-rails and shall either incorporate an area of refuge within an enlarged floor-level landing or shall be accessed from an area of refuge complying with Section 1009.6. Exit access stair-ways that connect levels in the same story are not permitted as part of an accessible means of egress.

Exceptions:

1. Exit access stairways providing means of egress from mezzanines are permitted as part of an accessible means of egress.

2. The clear width of 48 inches (1219 mm) between handrails is not required in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

3. The clear width of 48 inches (1219 mm) between handrails is not required for stairways accessed from a refuge area in conjunction with a horizontal exit.

[4. Areas of refuge are not required at exit access stair-ways where two-way communication is provided at the elevator landing in accordance with Section 1009.8.](#)

[5. Areas of refuge are not required at stairways in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.](#)

6. Areas of refuge are not required at stairways serving open parking garages.

7. Areas of refuge are not required for smoke-protected assembly seating areas complying with Section 1029.6.2.

[8. Areas of refuge are not required at stairways in Group R-2 occupancies.](#)

9. Areas of refuge are not required for stairways accessed from a refuge area in conjunction with a horizontal exit.

1009.4 Elevators. In order to be considered part of an accessible means of egress, an elevator shall comply with the emergency operation and signaling device requirements of Section 2.27 of ASME/CSA B44 A17.1. [Standby power](#) shall be provided in accordance with Chapter 27 and Section 3003. The elevator shall be accessed from an area of refuge complying with Section 1009.6.

Exceptions:

1. Areas of refuge are not required at the elevator in open parking garages.

[2. Areas of refuge are not required in buildings and facilities equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.](#)

3. Areas of refuge are not required at elevators not

required to be located in a shaft in accordance with Section 712.

4. Areas of refuge are not required at elevators serving smoke-protected assembly seating areas complying with Section 1029.6.2.

[5. Areas of refuge are not required for elevators accessed from a refuge area in conjunction with a horizontal exit](#)

1009.8 Two-way communication. [A two-way communication system complying with Sections 1009.8.1 and 1009.8.2 shall be provided at the landing serving each elevator or bank of elevators on each accessible floor that is one or more stories above or below the level of exit discharge.](#)

Exceptions:

[1. Two-way communication systems are not required at the landing serving each elevator or bank of elevators where the two-way communication system is provided within areas of refuge in accordance with Section 1009.6.5.](#)

2. Two-way communication systems are not required on floors provided with ramps conforming to the provisions of Section 1012.

3. Two-way communication systems are not required at the landings serving only [service elevators](#) that are not designated as part of the accessible means of egress or serve as part of the required accessible route into a facility.

4. Two-way communication systems are not required at the landings serving only [freight elevators](#).

5. Two-way communication systems are not required at the landing serving a private residence elevator.

Commentary:

Unless provided in areas of refuge, in multistory buildings a two-way communication system must be located at the elevator landing of each accessible floor level other than the level of exit discharge. The system is intended to offer a means of communication to individuals with mobility impairment, either permanent or temporary, who need assistance during an emergency situation. Such a system can be useful not only in the event of a fire, but also in the case of a natural or technological disaster by providing emergency responders with the location of individuals who will require assistance in being evacuated from floor levels above or below the discharge level. The ability of emergency responders to locate persons needing assistance quickly is an important part of the fire and safety plan. The two-way communication system is a critical element in that plan.

BUILDING PLAN WITH ELEVATOR AND HORIZONTAL EXITS THROUGH A FIRE WALL

