



Addition of Sprinklers in a Hoistway and/or Machinery Space

Comm 18.1708(3) (a) 1 and Comm 18.1708(3) (b) 2
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When sprinklers are added to an elevator hoistway and/or a machinery space when they never had them before, Comm 18.1708(3) (a) 1 and Comm 18.1708(3) (b) 2 require the elevator to be upgraded to meet ASME A17.1- 2007 sections 2.27.3 through 2.27.8. These sections cover Firefighter's Emergency Operation (FEO) for Automatic Elevators, FEO for Nonautomatic Elevators, FEO for Automatic Elevators with Designated Attendant Operation, FEO Inspection Operation, FEO Operating Procedures and Switch keys.

This memo addresses Firefighter's Emergency Operation (FEO) for **Automatic Elevators**.

This required upgrade with the addition of sprinklers can involve two different extreme cases – an automatic elevator that has no Fire Service and that has an existing Phase I and Phase II Fire Service that is installed in accordance with the code that was in effect when the services were installed. This memo covers those two cases.

An Automatic Elevator that has no Fire Service.

The upgrade to this elevator has to meet all of the provisions set forth in ASME A17.1-2007 sections 2.27.3, 2.27.6 and 2.27.8. The upgrade would include, but not be limited to:

1. Phase I Emergency Recall Operation installed in accordance with s. 2.27.3.1. This includes the appropriate key switches, operation procedures, and illuminated visual and audible signaling systems.
2. Fire alarm initiating devices installed in accordance with section 2.27.3.2. This includes addition of fire alarm initiating devices (smoke or heat detectors, as applicable) installed in compliance with NFPA 72-2002, operation procedures, and the flashing fire hat required by s. 2.27.3.2.6.
3. Phase II Emergency in-Car Operation installed in accordance with s. 2.27.3.3. This includes the switches, buttons, visual signals, and operating instructions for the Phase II emergency in-car operations behind a locked panel in accordance with s. 2.27.3.3.7.
4. Inspection operations in accordance with s. 2.27.6.
5. Operating procedures in accordance with s. 2.27.7.
6. FEO-K1 switch key in accordance with s. 2.27.8.

An Automatic Elevator that has Phase I and Phase II Fire Service.

The upgrade to this elevator would have to meet all of the provisions set forth in ASME A17.1-2007 sections 2.27.3, 2.27.6 and 2.27.8, with the exception of item 6 below. The upgrade includes, but is not be limited to:

1. Phase I Emergency Recall Operation installed in accordance with s. 2.27.3.1. This includes the appropriate key switches, operation procedures, and illuminated visual (illuminated fire hat) and audible signaling systems.
2. Fire alarm initiating devices installed in accordance with section 2.27.3.2. This includes addition of fire alarm initiating devices (smoke or heat detectors, as applicable) installed in compliance with NFPA 72-2002, operation procedures, and the flashing fire hat required by s. 2.27.3.2.6.
3. Phase II Emergency in-Car Operation installed in accordance with s. 2.27.3.3. This includes the switches, buttons, visual signals, and operating instructions for the Phase II emergency in-car operations behind a locked panel in accordance with s. 2.27.3.3.7.

Exceptions:

- a). If the existing car operating panel has the switches, buttons, visual signals and operating instructions that meet s. 2.27.3.3.7, they need not be placed behind a locked cover.
- b). If the existing car operating panel does not have the STOP switch required by 2.27.3, one does not need to be added.

Note that there are available in-car fire service panels behind locked covers that will fit in existing car operating panels that meet ASME A17.1-2007. It may be a better installation and more economical using this retrofit panel.

4. Inspection operations in accordance with s. 2.27.6.
5. Operating procedures in accordance with s. 2.27.7.
6. FEO-K1 switch key in accordance with s. 2.27.8.

Miscellaneous:

Either of these installations will be required to have heat detectors or sprinkler flow switches installed in accordance with s. 2.8.3.3 1 and NFPA 72-2002.