



Orange County Fire Authority

Community Risk Reduction

INFORMATIONAL BULLETIN 05-16

Subject: Elevator Recall and Fire Alarm Interface Requirements/Firefighter Emergency Operations (FEO)

Scope: New elevators that have a travel rise that exceeds 80 inches will require FEO recall in accordance with this bulletin. For existing elevators, FEO features will be required to be retrofitted to these latest requirements only when significant changes are proposed to the existing recall alarm equipment or controllers. (This bulletin is a supplement to The OCFA Fire Alarm Signaling Guideline D-03).

Purpose: The information below is required to be shown on fire alarm and water flow monitoring system plans, when submitting plans for approval to the OCFA Planning and Development Section.

Requirements and Sequence of Operations for Plan Review:

Phase One Automatic and Manual Recall:

- Phase One cab recall to a predetermined floor level needs to be automatically activated by the hoistway, machine room, or elevator lobby smoke detectors; and elevator pit water flow switch signals, when installed (NFPA 72 conditions of the exception must be met).
- Phase One recall shall also be designed for firefighters to activate manually, by using a key switch located at the elevator lobby, annunciator key pad and/or fire alarm control panel.

Phase Two Manual Recall Key Switch Operation:

- Phase Two recall overrides Phase One, and is manually activated from inside the cab by using a key switch. Firefighters are required to press and hold buttons to command the elevator operations.

Firefighter's Hat Lamp and Sounder Indications during Phase One and Phase Two Recall:

- Phase One activation in the cab causes the firefighter hat lamp to glow, and a sounder to activate.
- Upon smoke detector activation within the elevator hoistway or machine room, the Firefighter's hat lamp in the cab will change from a steady glow to flashing off and on. This alerts firefighters to exit the cab and not use the elevator(s) for FEO.

Heat Detector and Power-Shutdown (Shunt Trip Mechanism):

- Heat detector(s) in the machine room shall activate first to prevent sprinkler head activation.
- Hoistway Heat detector(s) are only required when sprinkler system water would damage elevator related equipment enough to make the elevator unsafe to use.
- Heat detector activation shall cause a shunt trip mechanism to shut down the power to the elevator(s) to prevent FEO usage completely, to ensure firefighter safety.

Smoke Detection:

- Smoke detectors are not allowed in the hoistway without sprinklers present.
- If the elevator lobby, hoistway, or machine room detectors are only dedicated to activating recall, then the signal is supervisory and therefore does not cause building evacuation.
- Unless codes specifically require a smoke detection system, common area detectors, door holders, or duct detectors just activate a supervisory signal. Other circumstances identified during plan review may be allowed for common area detectors to cause building evacuation and/or emergency response.

Associated Alarm Devices and Panel Operations:

- Manual pull boxes do not recall elevators unless mandated by OCFA during plan review. Manual pull boxes shall cause evacuation and an emergency response.
- Dedicated recall devices shall be connected to the fire alarm or water flow panel. If there is no fire alarm or water flow panel, a dedicated stand-alone and signed recall panel is required to be installed.