

## **ISSUE F**

### ***ITEM #24: Command and Control Systems***

**403.12 Stairway door operation.** Stairway doors other than the exit discharge doors shall be permitted to be locked from stairway side. Stairway doors that are locked from the stairway side shall be capable of being unlocked simultaneously without unlatching upon a signal from the fire command center.

**403.12.1 Stairway communication and monitoring systems.** The following stairway communication and monitoring systems shall be installed at every fifth floor of each required stairway and connected to an approved constantly attended station: -

1. A Telephone or other two-way communications [system connected to an approved constantly attended station shall be provided where the doors to the stairway are locked - ;
2. Video cameras.

**707.14 Elevator and dumbwaiter shafts.** Elevator hoistway and dumbwaiter enclosures shall be constructed in accordance with Section 707.4 and Chapter 30.

**707.14.1 Elevator lobby.** Elevators opening into a fire-resistance-rated corridor as required by Section 1016.1 shall be provided with an elevator lobby at each floor containing such a corridor. The lobby shall separate the elevators from the corridor by fire partitions and the required opening protection. Elevator lobbies shall have at least one means of egress complying with Chapter 10 and other provisions within this code. In high-rise buildings, the elevator lobby shall be provided with video camera coverage.

Exceptions:

1. In office buildings, separations are not required from a street-floor elevator lobby provided the entire street floor is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.
2. Elevators not required to be located in a shaft in accordance with Section 707.2.
3. Where additional doors are provided in accordance with Section 3002.6. Such doors shall be tested in accordance with UL 1784 without an artificial bottom seal.
4. In other than Group I-3, and buildings more than four stories above the lowest level of fire department vehicle access, lobby separation is not required where the building, including the lobby and corridors leading to the lobby, is protected by an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1 or 903.3.1.2.

**707.14.2 Elevator hoistway monitoring.** In high-rise buildings, the elevator hoistway shall be provided with a video camera at the top of the each elevator hoistway.

**911.1 Features.** Where required by other sections of this code, a fire emergency command center for fire department emergency operations shall be provided. The location and accessibility of the fire command center shall be separated from the remainder of the building by not less than a 1-hour fire-resistance-rated fire barrier. The room shall be a minimum of 96 square feet (9m<sup>2</sup>) with a minimum dimension of 8 feet (2438 mm). A layout of the fire command center and all features required by the section to be contained therein shall be submitted for approval prior to installation. All systems and equipment except #10, #12, & #13 connected to the emergency command center shall be provided with redundant circuitry during normal and emergency operating modes and have the ability to transmit and communicate to an off-site facility, alternate remote location in the building or off-site location including mobile access if required by the fire department. The fire command center shall comply with NFPA 72 and shall contain the following features.

1. The emergency voice/alarm communication system unit.
2. The fire department communications unit.
3. Fire detection and alarm system annunciator unit.
4. Annunciator unit visually indicating the location of the elevators and whether they are operational.
5. Status indicators and controls for air-handling systems.
6. The firefighter's control panel required by Section 909.16 for smoke control systems installed in the building.
7. Controls for unlocking stairway doors simultaneously.
8. Sprinkler valve and water-flow detector display panels.
9. Emergency and standby power status indicators.
10. A telephone for fire department use with controlled access to the public telephone system.
11. Fire pump status indicators.
12. Building emergency resource manual approved by the fire department that includes emergency operation plans and Schematic building plans indicating the typical floor plan and detailing the building core, means of egress, fire protection systems, HVAC systems, elevator controls, communication systems, utilities, fire-fighting equipment and fire department access.
13. Worktable.
14. Generator supervision devices, manual start and transfer features.
15. Public address system, where specifically required by other sections of this code.
16. Video monitoring for video camera used to service the building.

**911.2 Location.** The location of any emergency command center locations or mobile facilities shall be approved by the Fire Department and other emergency management agencies having jurisdiction.

**911.3 Separation.** The fire command center shall be separated from the remainder of the building by not less than a 2-hour fire-resistance-rated fire barrier. Fire command center

enclosures, including but not limited to, connections and supporting members, shall be capable of resisting a uniform pressure of not less than 2 pounds per square inch (psi) applied perpendicular to both the interior and the exterior face of the enclosure.

**911.4 Off-site or alternate fire command center and transmission.** The off-site facility shall not be located adjacent to the building that contains the primary fire command center.

**3006.4 Machine rooms and machinery spaces.** Elevator machine rooms and machinery spaces shall be enclosed with construction having a fire-resistance rating not less than the required rating of the hoistway enclosure served by the machinery. Openings shall be protected with assemblies having a fire-resistance rating not less than that required for the hoistway enclosure doors. In high-rise buildings, the machine room shall be provided with temperature sensors and video cameras.