


<b>🌀 FIRE GROUND SAFETY INITIATIVE 🌀</b>	
<b>-Standard Operating Guideline-</b>	<b>-Number-</b>
Elevator Operations at Structure Fires	SOG # 010
 <b>St. Louis County</b> <b>FGSI</b> <b>Fire Ground Safety Initiative</b>	<b>Date Approved by the Fire Chiefs Association:</b> 5-8-18
	<b>Date Last Revised:</b> 5-7-18
	<b>Next Revision Date:</b>
	<b>Review Date:</b> <i>SOG Shall be reviewed annually by the AHJ</i>

**Purpose**

The intent of this document is to provide for the seamless integration of the use of elevators into the First Alarm Structure Fire and High Rise Fire Operations SOG’s.

**Scope**

The SOG covers the use of elevators with Firefighters’ Emergency Operation (Fire Service) capabilities during fire suppression operations. This guideline is not intended for non-fire rescue incidents or service calls. The use of elevators is not recommended when there is no tactical benefit.

**Procedures**

**1. Elevator Size-Up Considerations**

- a. The reported location of the fire.
  - Elevators should not be used initially when the destination floor is five (5) floors or less above the entrance level.
  
- b. Proximity of the elevator to the fire.
  - It is safer to use stairways if the location and extent of the fire is unknown.
  
- c. Visible conditions in the elevator shaft.
  - Flames and heat can damage elevator components.
  - Smoke can infiltrate elevator cars and indicate the shaft is functioning as a ventilation point.
  - Check for water entering the elevator shaft or car, or water raining down from the sprinkler system.
  
- d. Pre-plan knowledge of the building.
  - Does the building have fire service equipped elevators? Firefighters should avoid using elevators that DO NOT have a “Fire Service” feature.
  - Does the building have elevators divided into banks?
  - Know the location of stairways.
  - Use extreme caution when using freight elevators. In some cases these elevators are not equipped with the same safety features and functions as others.

## 2. Phase I Operation

- a. Upon arrival, obtain the fire service key.
- b. Obtain a fire service phone.
- c. If all elevators have not automatically recalled, place elevators in Phase I operation by inserting the key into the control switch (usually located in the lobby) and turning it to the "ON" position.
- d. Remove and retain the key for Phase II use.
- e. In the event that the alarm is originating from the main entrance floor, the elevator car will recall to an alternate level.

## 3. Phase II Operation

- a. Enter the elevator car with full PPE, SCBA, firefighter phone, and forcible entry tool.
- b. Using a flashlight, check the elevator shaft for smoke, fire, or water. If any are present, use the stairs.
- c. Note the location of the stairwell in relation to the elevator car should the need to retreat to the stairs becomes necessary.
- d. Limit the passengers to one crew per car so there are firefighters available for rescue if needed. Be observant of the posted weight limit of the elevator car.
- e. Utilizing the same elevator key, turn the key switch in the car to the "on" position.
- f. Select a floor number no closer than two floors below the reported fire floor.
- g. Press and hold the "Door Close" button until the doors are fully closed.
- h. Upon arrival at the selected floor, press and hold the "Door Open" button until the doors are fully open.
- i. Check the shaft for smoke, fire, or water. If present, notify Command to have following crews use the stairs.
- j. The entire crew should exit the car with all equipment, return the key to the "Off" position (leave the key in the car), and allow the car to return to the ground floor so that other crews can use it.
- k. Locate the stairs and ascend to the reported fire floor.
- l. Incident Command should assign a firefighter to operate elevators.

### *Key elements-*

Use "bank" elevators when the destination is five floors or less above the termination point.

If traveling ten floors or greater, the elevator shaft should be checked every five floors for smoke, fire, or water until conditions on the reported fire floor are known. The first stop allows the crew to check the operation of the elevator car. Should the car not work as expected, exit the elevator car and retreat to the stairwell.

If the "Door Open" or "Door Close" button is released prior to the completion of the operation, the door will return to its starting position.

## **Definitions**

Firefighters' Emergency Operation (Fire Service) equipped elevator:

- An elevator which has its operating controls so modified that it may be removed from normal automatic operation, either automatically or manually, by means of a keyed switch located in the lobby of the building or other approved location, and which will then respond only to the manual controls in the car.

Fire Service phases:

- Phase I – Emergency Recall Operation: All elevators will return directly to the main entrance level (generally the lobby) by a fire alarm initiating device, or manually by a keyed switch. In the event that the alarm is originating from the main entrance floor, the elevator car will recall to an alternate level.
- Phase II – Emergency In-Car Operation: Allows manual control only from within the elevator car.

“Bank” of elevators:

- Two or more elevators serving different floors of a building.

## **References**

NFPA 72, National Fire Alarm Code, 2016 Edition

American Society of Engineers (ASME) A17.1, Safety Code for Elevators and Escalators, 2016 Edition.