
	STANDARD OPERATING GUIDELINE				
	OPERATIONS				
	HIGH-RISE OPERATIONS				
	Effective: 01/Feb/91	Revised: 28/DEC/2020	S.O.G. #: O-321	Page: 1 of 5	

1.0 Objective

- 1.1 The purpose of this guideline is to establish procedures for operations at high-rise buildings.
- 1.2 High-rise fires present some particular problems in firefighting operations. Most of these are related to the difficulties of access, the complexities of construction, and the number of occupants in these structures. By virtue of these considerations, any situation in a high-rise structure is more complicated than the same situation occurring in a low-rise environment.

2.0 Responsibility

- 2.1 It is the responsibility of all Department personnel to understand the procedures documented in this Standard Operating Guideline.

3.0 Life Safety



- 3.1 The life safety aspects of a fire in a high-rise structure are always of primary concern for the Incident Commander.
- 3.2 The strategic plan must include an evaluation of the conditions in each area of the structure and the tenability or need for evacuation. Large numbers of occupants may be involved in these decisions.
- 3.3 Command must make the decision to remove occupants, when necessary, and the plan for evacuating or relocating occupants must be coordinated with the fire control strategy.

4.0 Immediate Priorities

- 4.1 An aggressive coordinated attack has been proven to be the most effective tactical option in the majority of high-rise operations.
- 4.2 The construction of most high-rise buildings effectively shields the interior from the outside. Even with “nothing showing,” an assumption of a concealed fire should be made by Command.
- 4.3 The initial arriving companies should be concerned with:
 - 4.3.1 Identifying the fire floor.
 - 4.3.2 Providing an attack on the fire by enough companies to control the situation.
 - 4.3.3 Providing for the life safety of persons in immediate danger.
 - 4.3.4 Providing water supply for the initial attack.
 - 4.3.5 Establishing lobby control.
 - 4.3.6 Making a size-up of conditions on the fire floor, the floor above the fire, and the ventilation needs.

5.0 Establishing Command

- 5.1 In most high-rise situations, the need for establishing Command is secondary to the urgency of getting an Officer and crew up to the fire floor.
- 5.2 A single company, arriving alone, should prepare to go up to the building with basic equipment. The first arriving company should give an arrival report, announce its actions, and pass Command to the next arriving Officer.

	STANDARD OPERATING GUIDELINE			
	OPERATIONS			
	HIGH-RISE OPERATIONS			
	Effective: 01/Feb/91	Revised: 28/DEC/2020	S.O.G. #: O-321	

- 5.3 When several units arrive simultaneously, the Officer of the first arriving Engine or Truck Company does have the option of assuming or passing Command. Remember, at least one Officer must go up to lead the attack.
- 5.4 Once the initial attack crew enters the building, another Company Officer or the Battalion Chief will assume Command on the exterior of the building.

6.0 Initial Attack



- 6.1 The initial attack should be made with the companies provided according to Highland Park Fire Department Standard Operating Guidelines. The level of response is a Code 4.
- 6.2 As soon as the fire floor is reached and identified, the Officer will give Command a report of conditions on the fire floor, immediate needs, and a confirmation of the actual floor number. Command should then designate the fire floor as the Interior Sector.
- 6.2 As additional companies arrive, a priority will be made to establish a Lobby Sector and immediately gain control of all elevators using the emergency recall or manual override features.
- 6.3 The Lobby Sector must maintain an accountability of all attack companies and their method of ascent up to the fire floor. See the Personnel and Equipment Log Sheet found at the end of the guideline.

7.0 Command Priorities

- 7.1 Once the initial attack companies have started up to the fire floor, Command must be concerned with the following:
 - 7.1.1 Provide an early water supply for the attack companies. Assign Engine Company(s) to provide water to the standpipes. When there are multiple standpipe systems, pump to all of the standpipe inlets to insure a water supply to all standpipes in the building.
 - 7.1.2 Assign a Truck Company to check the floor above the fire floor. Command must get a report of conditions above the fire as quickly as possible, indicating fire extension possibilities, smoke conditions, need for evacuation, and resource requirements.
 - 7.1.3 Establish Lobby Control. A full company is needed for Lobby Control and to assist the Lobby Sector Officer in controlling elevators, alarm systems, and stairways. Additional personnel may be assigned as time and staffing permit.
 - 7.1.4 Call for additional resources. Any type of working fire will quickly utilize an entire first alarm assignment. Request additional alarms as soon as the need is identified.
 - 7.1.5 Begin to establish supporting systems. A fire which is not controlled by the initial attack companies will require a larger attack force and a supporting structure including Staging, Resource, Rehab and a variety of other Sectors.
 - 7.1.6 Establish a Ventilation Sector early. Early positive pressure ventilation of the attack stairwell is desirable. Additional stairwells may also require positive pressure ventilation.

8.0 Working Fire Situations



- 8.1 A strong organization is required to support a firefighting force above ground. The principle objective of this supporting organization is to provide the firefighting Sectors with staffing and equipment to operate effectively and to assist in solving some of the major problems involved in high-rise structures.
- 8.2 Command must start to identify and build this organization as quickly as possible after assigning companies needed for the initial attack. These elements can be expanded upon as the availability of personnel increases.
- 8.3 The major elements which need to be considered in most working high-rise situations include:

	STANDARD OPERATING GUIDELINE				
	OPERATIONS				
	HIGH-RISE OPERATIONS				
	Effective: 01/Feb/91	Revised: 28/DEC/2020	S.O.G. #: O-321	Page: 3 of 5	

- 8.3.1 Fire Floor Sector (Interior, may change as fire escalates).
- 8.3.2 Lobby Sector.
- 8.3.3 Floor above the fire, looking for extension.
- 8.3.4 Resource Sector.
- 8.3.5 Staging.
- 8.3.6 Floor below the fire, property conservation.
- 8.3.7 Ventilation, top floor, stairwells are the priority.
- 8.3.8 Evacuation.
- 8.3.9 Rapid Intervention Company
- 8.4 In addition to the elements, many (or all) of the Sector functions associated with standard firefighting operations may be required.

9.0 Sector Responsibilities

- 9.1 Staging Sector:
 - 9.1.1 Staging should be established by Command when requesting multiple alarms through the M.A.B.A.S. system, and a Staging Area should be designated.
 - 9.1.2 Any apparatus that is parked in close proximity to the building by companies assigned to the interior should be moved to the Staging Area as time permits, if the apparatus is not being utilized.
 - 9.1.3 No apparatus should be parked within 200 feet of the building.
 - 9.1.4 All apparatus should remain in the Staging Area unless needed for a specific purpose and requested by Command.
- 9.2 Lobby Control Sector Responsibilities:
 - 9.2.1 The Lobby Control Sector is responsible for the control of elevators and stairway access, for the operation of alarm panels, communication systems, building controls located at ground level and for stockpiling and dispatching equipment from the Lobby Sector to the Resource Sector. Again, this Sector maintains a log of all these activities.
 - 9.2.2 Other Lobby Control Sector responsibilities include:
 - 9.2.2.1 Elevator control(s).
 - 9.2.2.2 Air handling system(s).
 - 9.2.2.3 Stairwell(s) access.
 - 9.2.2.4 Prioritize equipment movement to the Resource Sector.
 - 9.2.2.5 Maintain log to check personnel in/out.
 - 9.2.2.6 Direct civilians to a safe location.
 - 9.2.3 Equipment to gather in Lobby Sector.
 - 9.2.3.1 Breathing apparatus with lifelines.
 - 9.2.3.2 Forcible entry tools and equipment.
 - 9.2.3.3 Portable radios and spare batteries.
 - 9.2.3.4 Fire extinguishers.

	STANDARD OPERATING GUIDELINE				
	OPERATIONS				
	HIGH-RISE OPERATIONS				
	Effective: 01/Feb/91	Revised: 28/DEC/2020	S.O.G. #: O-321	Page: 4 of 5	

9.2.3.5 Attic ladder and bolt cutters.

9.2.3.6 High-rise packs.

9.2.4 Maintain all records.

9.2.5 Communicate with the Incident Commander, Staging Officer, Resource Sector, and Logistics.

9.3 Resource Sector Responsibilities:

9.3.1 The Resource Sector should be established in a convenient location providing good access to the fire operations area. Two floors below the fire floor (or other safe environment) is usually a good location. All spare S.C.B.A. bottles, hose, nozzles, and other material will be stockpiled at this Sector.

9.3.2 This Sector acts as a forward staging area and provides a supply of personnel and equipment to provide direct support to firefighting operations.

9.3.3 If not already in operation, a company relieved from firefighting duties should be assigned by Command to establish this Sector. A Command Level Officer should be assigned to this Sector as soon as possible.

9.3.4 Other responsibilities include:

9.3.4.1 Manage resource area, two floors below the fire floor.

9.3.4.2 Check resource floor for safety, open all doors, windows for ventilation, and have a hose line for safety.

9.3.4.3 Establish communications with the Lobby Control Sector and Staging. Have a radio with multiple frequencies or have more than one radio. If the building is equipped with a telephone system, utilize this equipment.

9.3.4.4 Establish an equipment staging area.

9.3.4.5 Maintain records. Check crews in and out. Log equipment.

9.3.4.6 Provide adequate lighting through the building system or portable lighting with floodlights. Also, have spare hand lights available.

9.3.4.7 Establish a rest area. Provide medical treatment for firefighters. Provide cold drinks and bathroom facilities.

9.3.4.8 Request appropriate resources, anticipating needs.

9.3.4.9 Control the personnel that come in and out of this area.

9.3.4.10 Keep Command aware of operations within the Sector.

9.4 Ventilation Sector Responsibilities



9.4.1 The initial attack stairwell must receive positive pressure ventilation as soon as possible. Additional stairwells may also require positive pressure ventilation. The Ventilation Sector will coordinate all ventilation activities at the fire.

10.0 Evacuation

10.1 Building occupants may require evacuation. Occupants should first be taken to three floors below the fire and then be removed from the building as time and resources permit.

10.2 In some situations, a significant number of occupants may need to be evacuated or re-directed to safety. It may be advantageous to separate this area of responsibility from firefighting and assign companies under the control of an Evacuation Sector Officer to accomplish this function.

10.3 The evacuation routes available to occupants of a high-rise building are normally limited to two stairways. The stairways are also the prime access routes for the fire fighting forces to make the attack.

	STANDARD OPERATING GUIDELINE				
	OPERATIONS				
	HIGH-RISE OPERATIONS				
	Effective: 01/Feb/91	Revised: 28/DEC/2020	S.O.G. #: O-321	Page: 5 of 5	

- 10.4 Occupants in the immediate fire area should first be evacuated as quickly as possible to three floors below the fire floor. Further evacuation should be predicated on the risk to the occupants since premature evacuation often hinders fire control efforts and adds to the general confusion at the scene. The determination of risk and the decision to evacuate should be made by the personnel on the fire floor.
- 10.5 Subsequent evacuations should be made to avoid interference with operations as much as possible. If sufficient police personnel are available at the scene, they may be utilized in assisting with the evacuation. Police personnel may be most valuable in controlling evacuees in the lobby and preventing re-entry.
 - 10.5.1 If Command is considering a total evacuation of the building, then weather conditions, shelter, and transportation must also be considered.

11.0 Communications Systems

- 11.1 Fire alarm and/or one or two-way communications systems are required for all high-rise buildings. These provide a method of sounding alarms or making announcements on individual floors selectively or to the entire building. The Lobby Control Sector will have the responsibility for operating these systems at the main panel if the building is so equipped.
- 11.2 The construction of most high-rise buildings will tend to shield radio transmissions particularly between dispatch and portable radios inside of the structure. A company outside of the structure should be able to communicate with units inside and relay messages.
- 11.3 The internal communications systems in many buildings may be used in addition to normal radio communications. Command will need to establish direct communications between the control panel and the Command Post.

12.0 Reference

- 12.1 Highland Park Fire Department

Approved:  Fire Chief