

HIGH RISE SOG

I. DEFINITIONS

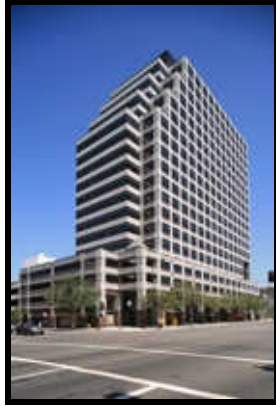
HIGH RISE: A building with occupied floors 75 feet or higher above fire department access. For the purpose of this guideline any building four (4) stories or more can constitute a high rise. There are two main types of high-rise buildings. These are residential high-rise buildings or commercial high-rise buildings.

RESIDENTIAL HIGH-RISE BUILDING: May be hotels, apartment houses or condominiums. These occupancies are generally characterized by center hall corridors with numerous interior compartments.

COMMERCIAL HIGH-RISE BUILDING: These are characterized by center core construction consisting of elevators, stairwells and mechanical/electrical chases. These typically have more open spaces around the perimeter than residential high-rise building. Civilian population density is usually greater in commercial buildings than residential buildings, with the greatest concentration during business hours.

MODERN HIGH-RISE BUILDING: Newer high-rise buildings (post 1974) are more likely to have advanced fire protection systems and occupant safety considerations.

SEALED HIGH-RISE BUILDING: windows are not designed to open.



101 N. BRAND
Commercial/Modern/Sealed



800 N. BRAND
Commercial/Modern/Sealed



222 MONTEREY
Residential/Modern



102 N. GLENDALE
Residential

II. OPERATIONS

A. KEYS TO INCIDENT RESOLUTION

1. STOP HORIZONTAL & VERTICAL SPREAD OF FIRE AND SMOKE

- Rapid deployment of initial attack line(s) to locate, confine, and extinguish fire to the room/floor of origin.
- Fire Department control of the **H**eating **V**entilation **A**ir **C**onditioning.
- Systematic and coordinated smoke removal.

2. SEARCH, RESCUE AND EVACUATION

The search, rescue and evacuation of a high rise, or the management of building occupants during an incident can be one of the top priorities in effectively managing and controlling a high-rise emergency.

- Rapid attack on the fire will limit the need for rescue.
- Coordinated & systematic search & rescue.

THESE ARE SOG'S NOT DEPARTMENT POLICY

- Coordinated & systematic evacuation.
- Anticipate a significant need for ALS/BLS resources (significant MCI potential).
- Relocating building occupants to a “safe” area of refuge.
- Determine the scope of the evacuation or rescue potential.

3. LOGISTICAL SUPPORT & PLANNING

Early recognition of the scope and potential of the high-rise emergency is key to successful resolution. Supporting the firefighting efforts in high-rise operations is labor intensive, time consuming and broad in its demands.

- Outside agency resources needed (Gas Co, GPD, GWP, Red Cross, etc.)
- Develop a plan that is appropriate to the anticipated duration of the incident.

<h2>B. FIRST ON SCENE – SUMMARY</h2>

1. ENROUTE CONSIDERATIONS

- Time of day/day of week.
(Commercial buildings may have 24 hour security).
- Base locations for apparatus and additional RA's.
- Reference available pre-plans.
- Consider structure type and construction (if known)
- Consider approach and incoming apparatus.

2. SIZE UP

- Make a clear and concise size-up that provides a description of the building type, the type and severity of conditions present, the location of conditions and the actions being taken. Example: *“E21 is on scene of a (modern, residential, commercial, sealed) high rise, we have smoke showing from the upper third (middle/lower third) portion of the building on the alpha side. E21 will be instituting the high-rise Incident Command System. E21 will be fire attack.”*
- If feasible, attempt to do a 360 of the building and provide an updated size-up if appropriate. If unable to make a full 360, consider sending a company to the rear to determine if access/egress is present and to report on conditions.
- Make additional assignments to incoming companies until relieved of command or command is passed or assumed (i.e. Lobby IC or BC).
- Request additional resources as needed and provide a Base location.

3. STRUCTURE CONSTRUCTION – CONSIDERATIONS

- Modern high-rise
- Sealed high-rise Vs Unsealed

- c. Residential Vs Commercial high-rise

4. COMPANY ASSIGNMENT – CONSIDERATIONS

- a. Make assignments as needed.
b. Designate Alpha, Bravo, Charlie, and Delta for exterior sides of the structure.
c. Assign “divisions” and “groups” as necessary.
d. Specific assignments and communications are discussed under *tactical objectives*.

5. SAFETY CONSIDERATIONS

1. ***MAINTAIN SITUATIONAL AWARENESS***
2. ***CONSIDER WEATHER HAZARDS*** - (Wind)
3. ***AVOID OVERHEAD HAZARDS*** - (Laddering, falling debris, etc.)
4. ***HAZARDOUS MATERIALS*** - (Contents that may escalate the fire, toxicity, etc.)

C. TACTICAL OBJECTIVES

ALS BASE Attack – Lobby – Staging – **Base** / Water Supply
SMOKE CONTROL
SEARCH & RESCUE
EVACUATION
RAPID INTERVENTION COMPANY(S)

The first arriving fire company will provide a size up and initiate the high-rise incident command system. It is the responsibility of the first arriving company officer to deploy the initial alarm, request additional resources if necessary, and assume the ICS position of Fire Attack.

1. FIRE ATTACK / DIVISION SUPERVISOR

- a. **Objectives:** Assume Command until relieved by a Chief Officer or Lobby Control. Determine the location of the fire, best access to the fire and scope of the emergency. Initiate fire attack.
- b. **Communications:**
- Until a Chief Officer arrives and assumes command, fire attack/division supervisor will be subordinate to Lobby Control Unit Leader.
 - Once a Chief Officer assumes command, Fire Attack reports to Ops - I.C.
- c. **Tactical Priorities:**
- Assume radio designation “FIRE ATTACK”.
 - Determine safe route into the building.
 - Check Fire Alarm Control Panel for status and communicate to all responding companies.
 - Determine best stairwell to access the fire floor.

- Consider separating the fire attack companies and ascending different stairwells and/or leapfrogging floors and communicate actions.
- If fire attack companies separate during ascent, ensure they are reunited prior to attacking the fire.
- Obtain one set of keys from the Knox Box. Remaining keys to be left in the Knox Box.
- Locate and identify the fire and determine the scope of the emergency.
- Determine fire/smoke extension to upper floors.
- Initiate the transfer to a Division Supervisor once the fire floor has been determined.
- Initiate Fire Attack with the tactical objective of confining fire to the area, room or floor of origin.

d. Resource Considerations :

- The size and complexity of the structure may dictate the deployment of one or more companies to assist the “Fire Attack” company in the investigation.
- The investigation should include a floor clear for staging and conditions above the fire floor.
- Identifying the fire location and the extension of fire or smoke to upper floors is crucial to containing the incident to as little of the structure as possible. The incident commander needs this information to deploy the appropriate resources as early as possible.
- Request additional resources early to assist in confining the fire to the floor of origin. This will require assigning companies as Divisions to the floors above the fire as well.

e. Communicate Benchmark Priorities ASAP

- Safe access points into the building.
- Fire Alarm Control Panel information.
- Stairwell access/ egress point.
- Floor that is clear for staging. Two floors below the fire is desirable.
- *C.A.N.* Fire floor - *Conditions, Actions and Needs.*

f. Tactical Considerations:

- Hose line selection becomes critical once the fire has been located. Generally speaking, a 2½ hose line with a 1¼ tip (325gpm) will provide the fire attack team the G.P.M., penetration and reach necessary to keep the fire in check or provide for knockdown. The additional benefit is the reduced friction loss in the hose line and lower nozzle pressure. This may be critical in a high-rise fire as domestic and/or pump pressure may be regulated with little initial control by fire personnel.
- The 1¾ hand line will provide the fire attack team with more maneuverability and the ability to easily provide a second line from the

“we” connection. This decision will be at the discretion of the fire attack/division supervisor.

- In addition to hose selection, the fire attack team will inherently be understaffed and will require the fire attack commander to choose between attacking the fire with two lines simultaneously or with just one line. The later, selecting to attack the fire with one line, has proved successful on several high rise fires as it allows for a fire attack team and a back up fire attack team that is in place and prepared to relieve the first team when they have exhausted their air supply. This will ensure a constant attack on the fire with less of a chance of losing ground if both companies are forced to retreat to change bottles.

2. **LOBBY CONTROL “UNIT LEADER”**

- Objectives:** Assume command of the incident upon arrival in the absence of a Chief Officer. Establish the position of Lobby Control Unit Leader.
- Communications:** Lobby reports to Logistics-I.C.
- Tactical Priorities: (not in order)**
 - Request needed resources
 - Establish entry/exit control at all building access points
 - Establish personnel accounting system for personnel entering/exiting the building - “T-Card”
 - Assume control of elevators and provide elevator operators.
 - Direct personnel to the appropriate stairways/elevators for assignment and direct evacuees and exiting personnel to safe areas or routes from the building.
 - Monitor the Fire Alarm Control Panel.
 - Evaluate the need to establish a System Control Unit Leader
 - Assume the responsibilities of the System Control Unit Leader if position in not filled.
 - Provide briefings and information to the Incident Command Post.
 - Evaluate the safe use of “banked” elevators.
- Communicate Benchmark Priorities ASAP**
 - Access and Egress points
 - Stairwell access for firefighters and civilian evacuation
 - F.A.C.P. status
 - Request a Systems Control Unit Leader be established if needed
 - Communicate the presence or the lack of a 13th floor.
- Tactical Considerations:**

Lobby control is critical to incident success. The early and organized control of fire personnel coming in and the orderly evacuation of civilians will set the tone for the incident. The Lobby Control Unit Leader needs to evaluate early his/her resource needs and the need to establish Systems Control Unit Leader if the

incident requires. A building engineer or after hours contact for the building should be requested as soon as possible to assist with systems.

3. **SYSTEMS CONTROL (SMOKE CONTROL) “UNIT LEADER”**

- a. **Objectives:** Monitor and maintain built-in fire control systems, fire life safety systems, environmental controls (HVAC), communications and elevator systems. The Systems Control Unit Leader may operate, support or augment the systems as required to support the incident plan. *System Control Unit functions may be performed in the initial stages or in less complex buildings by the Lobby Control*
- b. **Communications:** Systems Control Leader reports to Logistics – I.C.
- c. **Tactical Priorities:**
 - Establish communication with the Building Engineer or his/her designee.
 - Have needed technical specialist/assistance en route or available. (i.e. GWP/Gas Co. etc.)
 - Establish a meeting location for building/facility technical staff and other specialists, and advise the I.C.P. and Lobby Control Unit of the location.
 - Monitor and Operate system display/control panels. Personnel assigned should understand the panels and their operation.
 - Evaluate and monitor the operation of the fire and domestic water pumps and water supply.
 - Evaluate and operate the heating, ventilating and air conditioning system (HVAC) and the smoke removal and stairwell protection system. Operation of these systems must be closely coordinated with the Operation Section/Fire Attack to minimize smoke and fire spread, and protect occupants and firefighters. If possible, utilize building management for assistance.
 - Evaluate, support and control as needed the building electrical system and emergency power. GWP personnel should be positioned early to control, and restore power as required by the I.C.
 - Evaluate and support, as needed, the public address, telephone, emergency phone and other building communications systems.
- d. **Tactical Consideration:**

The Fire Life Safety Systems of a modern high rise are extremely complicated and the efficient and proper use of the buildings system is best operated under the direction of the building engineer or his designee. Depending on the time of the incident the response of building personnel may be delayed. It is important to request such personnel early in an incident.

4. **STAGING “AREA MANAGER”**

- a. **Objectives:** Establish a Staging Area layout and identify/post each function area as appropriate to the incident size and expected duration: crew ready area, air cylinder exchange, equipment pool and rehabilitation/medical.
- b. **Communications:** Staging reports to Operations - I.C.
- c. **Tactical Priorities:**
 - Select Staging Area Location/Floor. Ideally two floors below fire.
 - Provide personnel for check-in/check-out/accounting of crews, equipment and air cylinder exchange. Separate crews ready for deployment vs. crews in rehab.
 - Coordinate with Medical Unit for staffing and location of Rehabilitation/Medical.
 - Coordinate with the R.I.C. Supervisor for crew staging location.
 - Staging personnel must control stairwell access to the staging location to prevent companies from bypassing staging and to properly route arriving resources.
 - Post clear directional signs to Staging Area functional areas.
 - Determine adequate number of companies to have in reserve.
 - Provide for sanitation, drinking water and lighting.
- d. **Tactical Considerations:**

The key to a setting up Staging is the ability to separate personnel. Request enough resources to maintain the orderly transition from accepting personnel from the lobby to deploying those members to fire attack. Conversely, be prepared to accept members from the fire attack floor, replenish their air, provide rehab and prepare them for re-deployment. Drinking water is critical to the success of staging!

5. **BASE / WATER SUPPLY “MANAGER”**

- a. **Objectives:**

Base: Establish a Base location a minimum 200’ from the structure, which will allow for the efficient control of companies “in and out” of Base.
Water Supply: Secure water source(s) capable of supplying anticipated needs of the incident.
- b. **Communications:**

Water Supply (Engineer) reports to Base, Base reports to Logistics – I.C.
- c. **Tactical Priorities: (not in order)**
 - Request needed resources.
 - Establish water supply utilizing the appropriate F.D.C. (including sprinkler system). Pumping apparatus should be spotted away from the structure and hose protected from falling debris. Engineer will have radio designation of “water supply” and be subordinate to the Base Unit Leader.

- Establish base layout to allow for efficient movement of apparatus, equipment and personnel.
- Maintain company discipline while in base (companies must be in rigs, ready to respond)
- Maintain accounting of resources in Base and provide briefings to Planning Section or Logistics – I.C. if Planning Section not established.
- Direct personnel and equipment to designated locations. (i.e. Lobby)
- Establish Ambulance “staging” if needed.
- Provide for Base security utilizing GPD.

d. Communicate Benchmark Priorities ASAP

- Base location and access point.
- Advise I.C. when water supply is secured, its capability and limits.

e. Tactical Considerations:

The initial set up of base is critical. Moving base once the resources have arrived becomes nearly impossible. Apparatus should be parked diagonally for ease of movement and to maximize space. Like resources should be parked together. If ambulance staging is required this should be set up within base but separate of other fire apparatus. When possible, reversing lines from the building to the water supply is desirable to provide for the safety of pump operators and equipment. When more than one pumping apparatus is required it is best if the additional engine secure a different water source allowing for additional water mains to be accessed.

6. GROUND SUPPORT “UNIT LEADER”

a. Objectives: Provide transportation of personnel, equipment and supplies from Base to Staging.

b. Communications: Ground Support Unit Leader reports to Logistics – I.C.

c. Tactical Priorities:

- Post ground level safe movement routes and outside safe refuge areas.
- Establish Stairwell Support for equipment movement until elevators are deemed safe.
 - Minimum of 1 firefighter for every two floors
- Provide for air cylinder refilling.
- Provide for fueling of apparatus

7. GROUP FUNCTIONS

EVACUATION GROUP SUPERVISOR

a. Objectives: Manage the movement of building occupants through designated evacuation route(s) to a safe location.

- b. **Communications:** Evacuation Group reports to Operations – I.C.
- c. **Tactical priorities:**

Searching the Building

When a working fire in a high-rise building occurs, the whole building must be searched to ensure all building occupants are accounted for. People may be found in high-rise buildings at any time of the day or night and on weekends as well. Searching a high-rise building will be a time consuming process and could require a significant amount of resources. The search should be conducted on a priority basis, beginning in the immediate area of the fire and then advancing to the area above the fire that may have been exposed. A search is not concluded until the balance of the building above and below the fire is searched. This operation will be conducted under the direction of the Search Group Supervisor. Search teams must be provided keys to access individual floors from the stairwell. Individual room keys should be provided if possible. Strict control and documentation of the search will be necessary to ensure that each room on each floor is searched and duplication of effort is kept to a minimum. Each elevator car must be located, inspected, and verified empty. The Search Group Supervisor or Elevator Group Supervisor, if implemented, will check with the Lobby Control Officer or Systems Group Leader to determine the status and location of all elevator cars. Elevator cars located above the fire must be verified empty because of the significant danger to occupants who may be in the cars.

Our standard operating guideline will require the use of chalk/marker to indicate the progress of the search, the current location and identity of the searchers, and to prevent duplication of effort. As a search company enters a floor, a large, single, diagonal chalk line and the company designation shall be made on the entry door. When the office suite, or dwelling unit has been searched; a second diagonal line is placed on the door making a large "X". The door is left closed to minimize smoke and fire spread. When all rooms on the floor have been searched and marked, the company shall complete the "X" along with their company identification on the stairwell door of the floor just searched and move on to the next floor. It is important to designate one stairwell as the search stairwell to ensure all companies are marking the correct set of doors from the same stairwell. In addition, it is also important that all of the stairwells are searched from basement/parking garage to rooftop.

Relocation of Building Occupants to a Place of Safe Refuge

Attempting to totally evacuate a high-rise will impact fire suppression operations, as well as our ability to move those occupants to a place of safety that is actually threatened by the fire. However, responding personnel should be prepared for a spontaneous evacuation of building occupants and adjust operational objectives as the incident priorities dictate. An alternative is to relocate the minimum number of occupants to areas of safe refuge within the building. For a working fire,

relocate occupants from the fire floor and at least two floors above and two floors below the fire to a safe location. Preferably, this location should be below the fire to facilitate our operations. In most situations we can provide for occupant safety and Fire Department access by clearing five floors. If further relocation or evacuation is necessary, it must be controlled and implemented by the Fire Department and coordinated with the existing building evacuation plan. On rare occasions, the intensity of the fire may dictate that occupants of additional floors above the fire be relocated.

First arriving officers and ultimately the Incident Commander must determine as quickly as possible, whether or not an evacuation is necessary. This information needs to be communicated to building occupants by using the building's public address system or other means. This task is usually initially assigned to Lobby Control and might require the assignment of additional resources to assist specifically with evacuation. Close coordination between the Evacuation Group and Lobby Control is critical so correct information is broadcast over the building public address system. Verdugo must be notified of evacuation status and objectives. Building Emergency Plans, required for commercial high rise occupancies, require that an updated list be maintained indicating the name, location, and type of assistance needed for each physically challenged individual within the building. "Physically challenged" can be defined as "anyone who without the assistance of another person would have difficulty evacuating or relocating to a safe location either inside or outside the building, or slow down evacuation of other occupants within the building". The Incident Commander, Operations Section Chief, or the Search Group Supervisor, should identify and consider the prioritization of these individuals and assign personnel to assist in, or ensure, the relocation or evacuation of these occupants. The location of these physically challenged individuals may be communicated to the Command Post by the Building Emergency Plan, the building's Floor Warden, or communication through telephone reports to Verdugo.

Evacuation Underway Prior to Fire Department Arrival

Our success in controlling the fire and protecting the occupants will depend on our ability to control the stairwells. If an evacuation is underway upon our arrival, we must attempt to gain control of it. The Incident Commander will determine which stairwell is the most suitable for fire attack stairwell and should have roof access. The remaining stairwell(s) will be designated the evacuation stairwell(s). Multiple stairwells can be differentiated by using the stairwell number.

Beginning at the second floor, firefighters must make their way to each landing and attempt to control existing occupants. If firefighters cannot move in the stairwell due to the presence of occupants evacuating the building, the Incident Commander shall be notified of the delay. When firefighters are able to move in the stairwell, the occupants three or more floors below the fire should be managed until occupants above the fire can be evacuated. Occupants on floors three or more floors above the fire should also be managed and assisted in evacuation.

Occupants on the fire floor will likely have already evacuated the fire floor. Occupants of the two floors above and below the fire should be assisted to the remaining stairwell, which shall be designated as the evacuation stairwell. Once firefighters assigned to gain control of the fire attack stairwell have managed the flow of occupants into the stairwell at a specific floor, they must remain on that floors stairwell door to prevent occupants re-entering the stairwell. Company officers shall rotate among the floors controlled by their personnel, monitoring the situation on each floor and reassuring the occupants. It is critically important to the peace of mind of the occupants, and our ability to control them, that these members maintain a presence and project confidence and professionalism.

Gaining control of stairwells in a spontaneous evacuation situation may require a considerable amount of time and personnel. Elevators may present an alternative. If Fire Department personnel can ascertain that the elevator lobbies and shafts are not threatened by the fire, the elevators shall be switched to "firefighter service" and employed to transport Fire Department personnel and equipment.

Communications between the Fire Department and Building Occupants

Gaining control of an evacuation and providing information and direction to building occupants will be greatly simplified in those buildings, which are equipped with a public address system. These systems are usually controlled from the fire control room. These systems can be switched to speak to all floors simultaneously or to selected floors. The member assigned the responsibility for communications with the building occupants must be carefully chosen. This individual must be steady, mature, and project confidence. Consider repeating instructions in appropriate languages other than English. The designated Fire Department member will communicate with the building occupants on a periodic basis. The following scenario describes how this system might be used in an actual high-rise fire in a 30-story building. Again, close coordination is required between the Evacuation Group and Lobby Control.

To All Floors:

"Your attention please. This is not a drill. This is Firefighter Jones of the Glendale Fire Department. There is a fire on the 17th Floor. The Fire Department is here. Please remain in your present location, until the evacuation routes are secured for your safety. You are in no danger."

To Floors 17, 18 and 19:

"This is Firefighter Jones again. At this time we want you to relocate to the 14th Floor. Floor wardens are to implement the floor evacuation plan using the Number One Stairwell. The Fire Department is operating the Number Two Stairwell. Take your personal items with you and walk to the stairwell now. I repeat, you are to go down the Number One Stairwell to the 14th Floor."

Ideally, members of the Search Group will be situated in the evacuation stairwell to direct the occupants onto the 14th Floor. It may be necessary to relocate these occupants before Fire Department personnel can be deployed in the stairwell. In this situation, you may want to advise building occupants that firefighters are on the way to assist them.

To Floors 15 and 16, (after relocation described above has been accomplished)

"This is Firefighter Jones again. At this time we want you to relocate to the 13th Floor. Floor wardens are to implement the floor evacuation plan using the Number One Stairwell. The Fire Department is operating in the Number Two Stairwell. Take your personal items with you and walk to the stairwell now. You are in no danger. I repeat, you are to go down the Number One Stairwell to the 13th Floor."

To Floors 20 through 30:

"This is Firefighter Jones again. We are making good progress on the fire on the 17th Floor and expect to have it under control shortly. Do not be alarmed if you detect a faint smoke odor on your floor, this is normal in this situation, especially near the stairwell. If you have visible smoke on your floor, close the doors between it and any occupied area and report it to your floor warden. Floor wardens are to call 911 and report any unusual conditions to the Fire Dispatcher. Remain where you are, the Fire Department is using the stairwells to fight the fire."

Here again, it may be helpful to advise the building occupants that firefighters are on their way to their location to assist them. Dispatchers receiving calls from building occupants on the 911 lines will note the time, location of the caller, conditions reported, number of occupants at that location, and the call back number. This information shall be relayed to the Incident Commander, then to the Search or Evacuation Group supervisor, depending on the incident.

If Fire Department personnel will be delayed in reaching these people, Verdugo shall make every effort to stay on the line so that the Search Group Supervisor will set up a telephone link whereby concerned occupants can be periodically contacted and building occupants can be kept informed of the situation. During high rise fires in other jurisdictions, several callers were told the Fire Department is on scene and that they should not be concerned, to stay in place, and the call was terminated. Unfortunately, those same individuals entered a stairwell, were unable to return to a floor, and met their death. The Incident Commander shall ensure these telephone contacts are reconciled by the Search or Evacuation Group Supervisor.

To ALL floors:

"This is Firefighter Jones again. The fire on the 17th Floor is contained at this time. It is going to take some time to clear the smoke from the building. You are to stay where you are until we can clear the smoke and begin an orderly evacuation. When the time comes you will leave the building by traveling down the stairwell. The helicopters you may have seen are delivering Fire Department

personnel and equipment to the roof. We will not be evacuating people by helicopter. The air conditioning system was shut down to limit the spread of smoke through the building. We are working to isolate the 17th Floor and get the air conditioning system working again."

Handling Evacuees

When people are in the stairwells it is important to keep traffic moving smoothly. People in the stairwell may not be able to hear directions given over the public address system. The Search/Evacuation Group's function will be to provide simple directions to people in the stairwell and to keep bottlenecks from forming. Relocating occupants will be most effective when Fire Department personnel are available in the evacuation stairwell to direct them onto the appropriate floor. Evacuating occupants from the building requires some planning. You can expect that once occupants reach the terminus at ground level, they will stop to look around and talk to other individuals. This will result in a logjam at this point that will soon extend back into the stairwell and restrict the movement of those still attempting to exit the building.

To prevent the logjam and to reduce the risk of occupant injury from falling glass, a corridor should be established to lead occupants to an assembly area away from the building. This corridor, and the assembly area, may be defined with fire line tape or rope. Use Fire Department personnel and police officers if they are available to keep people moving all the way to the assembly area. When occupants reach the assembly area, use the floor wardens to make a roster of people under their supervision. The roster should show the names of all those evacuated, the floor, office/room they evacuated, and the time they arrived at the assembly area. This information will be especially important for those occupants who vacated the fire floor and the two floors above it. Once they have logged in, assuming they have no medical or other problems related to the incident, they may leave the assembly area. Be sure they understand they are not to return to the building. The decision whether or not to remain at the scene is between the people evacuated and their employers or building management. Advise them that we will provide periodic briefings at the assembly area as the incident progresses. Glendale Police Department personnel should be given the assembly area responsibility. Protecting the occupants of a high rise building in the event of a working fire will be a complex and challenging responsibility. Evacuation of these potentially large numbers of people will require a significant commitment of resources and time. Your ability to meet this challenge will be enhanced by your understanding of the procedures set forth in this Standard Operating Guideline.

VENTILATION GROUP SUPERVISOR

- a. **Objectives:** - Remember that most high-rise buildings are "sealed" buildings and are capable of containing extensive fire and smoke with "nothing showing" on the outside of the building. If there is a fire or smoke in the building, Lobby or Systems Control shall be responsible for the following:

- Smoke indicators for potential location and extension of fire.
- Building HVAC system -- If sufficient expertise is not available, ensure the system is in fire/auto mode or turned off. This will limit the potential extension of fire and/or contaminants and may be used for potential ventilation of contaminants.
- Building stair-shaft pressurization fans -- Activation (manual or automatic) will supply positive-pressure to stair-shaft(s) and assist in keeping the stair-shaft clear of contaminants. Primary emphasis shall be placed on the stair-shafts used for evacuation of occupants and/or access by Fire Department personnel.
- Determine the location, configuration and status of all stair-shafts within the building (are they clear, charged with smoke, being used for evacuation, etc.), and the stair-shafts that could be used for ventilation operations, if necessary. Emphasis should be placed on determining the stair-shafts that open to the roof of the building. These can be easily cleared of contaminants, facilitating the use of the stair-shaft for evacuation, access, or ventilation operations.

b. Ventilation Considerations:

Positive Pressure -When the preceding factors have been analyzed and a fire or significant smoke from a fire has been verified within a high-rise building, positive pressure can be utilized at the discretion of the Incident Commander.

Vertical Ventilation - by opening the bottom door to a stair-shaft and placing blowers to pressurize the door openings on each floor and stair-shaft, the following will be accomplished:

- Evacuate contaminants within the stair-shaft. This operation will require an opening (door, etc.) at the top of the stair-shaft to exhaust the stair-shaft contaminants to the exterior of the building.
- Stair-shaft pressurization fans may be utilized "with or without" blowers for this operation.
- Keep contaminants from entering the stair-shaft from fire-involved floors. This operation is most effective with no openings at the top of the stair-shaft. When air is flowing upward through and pressurizing a stair-shaft, contaminants will have difficulty accumulating within the stair-shaft.

Cross Ventilation - of a contaminated floor in a high-rise building can be effectively accomplished by utilizing blowers or a combination of blowers and stair-shaft pressurization fans to pressurize a stair-shaft and then directing the flow of pressurized air across the floor to be ventilated as follows:

- To windows on the contaminated floor that have been opened/broken by personnel or a fire. If windows must be opened/broken for ventilation purposes, utilize the windows on the leeward side of the building if possible. Hose lines must be in place for protection and to prevent fire lapping.

- To an opposing stair-shaft that opens to the roof of the building. The exhausting contaminants from the affected area will be vertically exhausted from the opposing unpressurized stair-shaft with the roof access door open.

RAPID INTERVENTION GROUP SUPERVISOR

The following information is an addendum to the Rapid Intervention Policy. Rapid Intervention at a high-rise incident should involve, at a minimum a, 4 member engine/truck company. Resources assigned to rapid intervention will initially report to ***IC/Operations***. As the incident escalates, the RIC should expand to a multiple companies on standby in staging.

Check in with the IC/Operations – Review the tactical worksheet for resources assigned to the IDLH.

Check in with Lobby – Identify yourself as the Rapid Intervention Company and then proceed to Staging.

Ascent – *Ascend and report to Staging. Remember, you are not a firefighting team. You are a RESCUE COMPANY designated for the sole purpose of rescuing downed firefighters.*

Reconnaissance – Staging is an appropriate location for RIC to locate, this will facilitate a rapid deployment to an emergency and will assist the RIC in locating and identify which firefighting companies occupy the floors and stairwells. This information should be documented and may also be written on the adjacent walls for quick reference. Checking the floor below staging, before reporting to staging, may provide an opportunity for RIC resources to become familiar with the floor plan.

MEDICAL UNIT LEADER

- Objectives:** Develop the emergency medical plan, providing medical care and transportation for injured and ill incident personnel and incident rehabilitation care. The Medical Unit may also assist Operations in supplying medical care and transportation to civilian injuries, but this is normally limited to situation where civilian injuries are few and not anticipated.

Note: If the incident presents with civilian injuries or the need for civilian medical care it is best handled at the division level. If there are multiple injuries or many in need of medical care the Incident Commander has the discretion of creating a Medical Branch to handle patient care.

- Communications:** Medical Unit Leader reports to Logistics - I.C.
- Tactical Priorities:**

- Assess situation and request needed resources, personnel and equipment/refreshments.
- Provide Basic Life Support (BLS) care to incident personnel in staging and Advanced Life Support (ALS) care at ground level location.
- Provide medical evacuation and transport for incident personnel.
- Provide rehabilitation care location in Staging for incident personnel. (Multiple rehabilitation locations may be required dependent on the incident.)

D. TYPICAL ASSIGNMENTS & PRIORITIES

Based on Size-Up & CAN Reports.

1ST ALARM ASSIGNMENTS

The first five companies should be assigned based on the needs of the incident. ALS Base + RIC are the priorities. The IC may need resources above the 1st alarm to successfully fill these priorities. Fill priority assignments in the order which the incident dictates.

- E21: “Engine 21 is on scene at 343 Pioneer of a modern residential hi-rise. Smoke showing from the upper third portion of the building, alpha side. E21 is initiating the hi-rise Incident Command System, E21 will be fire attack.”**
- E21: “Verdugo from E21, dispatch a 3rd alarm assignment and 4 additional Ambulances. Base is located at Central and Pioneer, dispatch PD for traffic control.”**
- E21: “T21 from fire attack, assist E21 with fire attack.”**
- E21: “T26 from fire attack, your assignment is lobby / IC.”**
- E21: “E26 from fire attack, your assignment is staging.”**
- E21: “E25 from fire attack, your assignment is base/water supply.”**

After E21 arrives on fire floor:

- E21: “All units from fire attack, we have active fire on the 8th floor with victims trapped. We will be initiating an attack on the fire from stairwell # 2. E21 will be known as “Division 8”. T21 is assigned to Division 8.”**
- BC2: “Verdugo, Battalion 2 on scene assuming command. This will be known as the Pioneer Incident, Battalion 2 will be known as Pioneer IC. Command post will be located across the street on Pioneer.”**

