

BUILDING MANAGEMENT & EMERGENCY SYSTEMS

In addition to the procedures outlined throughout this manual, Building Management is responsible for the following relative to life safety issues:

- Authorizing any building occupant to activate fire alarms and notify fire department if fire is detected and utilize fire extinguishers for small fires.
- Providing all building occupants with the building emergency procedures contained in this manual.
- Conducting tenant meetings, training and evacuation drills.
- Contacting and coordinating with authorities in the event of a building emergency if they have not already been contacted.
- Assisting in evacuations, directing people to safe refuge area.
- Inspecting all equipment and mechanical areas, storage areas, construction areas, loading areas and stairwells to prevent accumulation of debris combustible materials.
- Informing occupants of known hazards or threats made to the building. This ranges from informing occupants about rules regarding flammable holiday decorations to informing occupants of bomb threats.
- Maintaining list of floor wardens and mobility impaired individuals with information provided by tenants for use during evacuations.
- Enforcing the no smoking policy.
- Maintaining and repairing fire life safety equipment which consists of the following:

1. Fire Alarm Devices (All fire alarm devices are tested annually by outside vendor)

- Fire alarm control panel: Edwards IRC 3 panel; monitors all smoke and heat devices, water flow switches, pull stations and any fire pump troubles or activity.
- Monitoring panel: Silent Knight panel; receives trouble and alarm signals from fire alarm panel and dials outside monitoring company, who contracts fire department if alarms are activated, building management if troubles are detected.
- Annunciator panel: Edwards; located at guard station and chief engineers' office. Receives and displays fire alarm troubles and alarms and their location.
- Smoke detectors: Edwards photo electric eye detectors; located in all elevator lobbies, electrical rooms and machine rooms, also located in specific locations of floors per fire department.
- Duct detectors: Edwards photo electric eye detectors; located in all building supply fans, equipment room AC units and at return air dampers on all floors.
- Pull Stations: Edwards; located at each stairwell door.
 - Speaker Strobes: Edwards; located throughout the building; provide visual and audio notification of alarms, also used for public address system. The alarm system is designed to activate alarms 3 floors at a time – on the floor where fire/smoke is detected, one floor above and one floor below. This is a common design in high rise office buildings, because it has been determined that most alarms are activated by small fires that are easily and quickly put out. To evacuate an entire building for such an occurrence puts the occupants in danger of injury while evacuating for an event that would otherwise put them in no danger. Because the alarms are very loud, occupants on non-alarmed floors may hear the alarm from the floors that are in alarm. People on non-alarm floors do not need to evacuate. However, if there is any reason to believe the occupants of non-alarmed floors are in danger, the occupants should evacuate.
- Fire phones and phone jacks: Edwards; jacks are located in all floor lobbies and at each stairwell door; phones are located in stairwells on every 4th floor. Phones and jacks are for fire department to contact the building fire command center.

BUILDING MANAGEMENT & EMERGENCY SYSTEMS

- Valve tamper switches: Located on all sprinkler system valves; initiates trouble signal to fire alarm panel if valve is moved from full open.
- Flow switch: Located on fire sprinkler system's main feed and main feed to each floor; initiates signal to fire alarm panel if water flow is detected and indicates floor.
- Fire alarm printer: Provides a printed record of all troubles and alarms, their location, time and date.

2. Fire Sprinkler System & Devices

- Fire pump: Peerless centrifugal 750GPM pump driven by a Cummins 240HP diesel engine; supplies water to building and garage standpipes. Pump and engine are tested weekly by engineering staff and annually by outside vendor.
- Fire system jockey pump: Pacific 125 GPM pump driven by a 10 hp electric motor. Maintains system pressure during minor fluctuation. Tested weekly and semiannually by engineering staff.
- Standpipes: 6" pipe in each stairwell with fire hose connections and main feed for sprinklers on each building floor.
- Sprinklers: Concealed type sprinkler heads throughout all floors. Water discharged at when air temperature reaches 155 degrees.

3. Other Emergency Equipment & Devices

- Emergency generator: Caterpillar diesel generator 520KW; supplies emergency power to emergency lighting on floors, stairwells, elevators, fire alarm panel and all smoke control systems and associated equipment. Tested monthly by engineering staff and annually by outside vendor.
- Pressurization fan: 125HP axial fan; for pressurization of all non-smoke floors during fire. Tested quarterly by engineering staff.
- Smoke exhaust fan: 50HP electric exhaust fan; for smoke removal on floors that have fire/smoke alarm. Tested quarterly by engineering staff.
- Air compressor 1 & 2: 20HP Quincy compressors; during fire situation it supplies air to make smoke dampers and controls function. In the event of power loss, it will be fed by the emergency generator.
- Fire extinguishers: Two all-purpose fire extinguishers per floor, one located at each stairwell door. Visually inspected weekly by security, tested annually by outside vendor.
- Stairwell door locks: In the event of any fire alarm, all stairwell door locks will be released and will stay released until alarm is reset.
- Elevator recall control panel: In the event of a power outage all cars will return to the 1st floor one at a time and the doors will open. Once all cars are at the 1st floor, car #1 will answer calls on the low side and car #5 will answer calls on the high side. In the event of a smoke alarm going off in any elevator lobby, all cars will return to 1st floor, doors will open, at this point the cars will not operate without a fireman's key.
- Elevator emergency phones: Located in each elevator cab for use in the event of elevator malfunction. When button is pushed, automatically dials elevator company's emergency answering service who will dispatch closest elevator technician to evacuate the personnel. Tested weekly by security personnel.

4. Fire Alarm Sequence of Events

- Water flow alarm: Monitoring panel will send signal to monitoring company which will dispatch fire department. At the same time, speaker strobes will be activated, and all stairwell doors will unlock. Taped message will be activated. Fire pump will sense water

BUILDING MANAGEMENT & EMERGENCY SYSTEMS

pressure loss and will supply water to fire floor.

- Smoke alarm: Monitoring panel will send signal to monitoring company which will dispatch fire department. At the same time, speaker strobes will be activated, and all stairwell doors will unlock. Taped message will be activated. Pressurization fan will start and pressurize all non-smoke floors; smoke exhaust fan will start and evacuate smoke from fire floor. Elevators will continue running unless smoke detector in elevator lobby detects smoke.
- Pull station activation: Monitoring panel will send signal to monitoring company which will dispatch fire department. At the same time, speaker strobes will be activated, and all stairwell doors will unlock. Taped message will activate.