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Fire Department High-Rise Operations



Long Beach Public Safety Committee 4/30/2019



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Objectives

- Describe the various types of high-rise occupancies in Long Beach
- Describe the challenges faced by firefighters in high-rise operations
- Identify latest technologies available for high-rise firefighting



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DEFINITION of a HIGH-RISE

- Buildings having floors for human occupancy located more than 75' above the lowest floor level having Fire Department access





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High-rise classifications(GENERAL)

- Existing – Buildings where construction had commenced prior to July 1974
- New – Buildings where construction had commenced after July 1974



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Existing high-rise

- No Fire Sprinklers unless retrofitted
- Interior Water Systems (standpipes)
- Fire alarm system
- Fire escapes





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New high-rise

- Fully fire sprinklered /standpipes
- Life safety systems
- Onsite water storage
- Fire command room
- Emergency helipad
- Smoke removal systems
- Voice evacuation system





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City of Long Beach

- 75 high-rise buildings in the City (as of July 2018)
- 29 of the existing high-rise buildings are non-sprinklered
- The majority of high-rise buildings are located downtown





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Challenges

- Delivering Firefighters to the fire floor
- Delivering water to the Fire Floor
- Support and Logistics for Firefighters





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Delivering Firefighters to the Fire Floor

- Elevators may only be used if the elevator shaft is clear of fire, smoke, and water.
- Each hose-line requires two-3 person teams to be placed into operation
- Teams must be rotated every 15 minutes for extended operations.



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Delivering Water to the Fire Floor

Standpipe: A system of piping, valves and outlets designed to provide firefighters with a means of fire extinguishment in buildings of considerable height or area.



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Support and Logistics for Firefighters

- Communications
- Breathing Air Supply
- Incident Intelligence



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Communications

- Public Safety Distributed Antenna Systems (DAS) provide wireless service via an antenna system installed in the building.
- Portable repeaters



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Firefighter Breathing Air

- **Firefighter Air Replenishment System or (FARS)**
A distribution system for breathing air permanently installed in a building.



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Incident Intelligence

- Using GIS to visualize Risks and Hazards
- Drone Technology



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Questions ?

