



**ARCADIA FIRE DEPARTMENT
STANDARD OPERATING GUIDELINE**

WAREHOUSE BUILDING RESPONSE

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PURPOSE: To promote safe and efficient Fire Company operations at fires involving large warehouse-type buildings (a.k.a. “wide rise” or “concrete tilt-up”) in the City of Arcadia.

COMMON FEATURES OF WAREHOUSES:

These large buildings typically share the following characteristics:

A. CONSTRUCTION/LAYOUT

- Expansive interior floor space.
- Subdivided office and warehouse space. May have a second or mezzanine floor constructed in some areas of the building.
- Concrete “tilt-up” walls approximately 35’ in height.
- Lightweight panelized roof. A rooftop solar photovoltaic (solar panel) system may be present which can affect firefighter access, travel and ventilation efforts.
- Skylights, some may be self-opening.
- Office area “business” entrance.
- Steel “man doors” that access warehouse from exterior, may be up to 400’ apart.
- Roll-up metal doors serving the loading docks and truck-yard area.

B. FIRE PROTECTION

1. Fire detection and alarm system, panel typically found in the office area.
2. Fire suppression system including the following:
 - a. Fire sprinklers, may have Early Suppression Fast Response heads.
 - b. Fire pump powered by a diesel engine and/or an electric motor. The location of this pump varies with the design of the building and may be located off-site serving multiple buildings within proximity of each other. These pumps serve to augment the city water system pressure to the buildings fire sprinklers, standpipes/house-lines and yard hydrants.
 - c. Yard hydrants, located around the building’s exterior within the property boundaries.



PRECAUTIONS

The search of a smoke-filled warehouse, whether for casualties or for fire origin, is a high-risk operation. Low to zero visibility conditions, if present, can cause an individual or crew to become lost or disoriented. Asphyxiation, following the depletion of air within the S.C.B.A., is a major cause of firefighter fatalities at warehouse fires. Any search of a warehouse under these conditions should be done with heightened situational awareness and supported by strong personnel accountability and R.I.C. procedures.

OPERATIONAL PROCEDURES/CONSIDERATIONS

A. WORKING FIRE WITH KNOWN LOCATION/ORIGIN:

Current A.F.D. Standard Operating Guidelines describing fire ground operations shall be implemented. Incident specifics (fire location and spread, materials involved, degree of involvement, access etc.) shall dictate the general Command Mode implemented as well as strategic and tactical objectives assigned by the Company Officer/I.C.

B. INVESTIGATION OF A REPORTED FIRE OR FIRE ALARM ACTIVATION:

Initial investigation by the first-in Company shall include an interior recon of the buildings' office and warehouse areas. Building entry/access may best be accomplished through the use of the Knox Box keys to the office area and then the warehouse area. Forcible entry through man-doors or loading dock doors may be required.

Subsequent arriving units should be used to assist with the initial investigation. The use of a second unit to perform a mobile "hot-lap"/reconnaissance of the building is suggested. Units performing this exterior recon will be looking for indications of smoke or fire, fire sprinkler water runoff from doors, fire pump activation, listening for audible alarms or water gong activations, etc.

When the investigating personnel encounter possible IDLH conditions, the company officer shall communicate an updated interior report and ensure that adequate personnel are in position to safely support interior operations (Stand-by team, R.I.C., etc.). Interior operations shall be coordinated by the Incident Commander along with the appropriate request for additional resources.

Companies may be assigned divisional or geographical areas of responsibility to access, investigate and search for the fire location/origin. The I.C. should consider the use of door numbers or other easily recognizable identifiers when designating interior divisions.

C. CONSIDERATIONS FOR CREWS WITH INTERIOR ASSIGNMENTS:

1. Crews should travel along the line of the loading dock doors to maintain building orientation and possible rapid exit.



2. Loading dock doors should be opened as crews progress through the building. This aids in ventilation and provides additional exit points.
3. **Deep travel into a possible IDLH atmosphere without the initiation of ventilation efforts should be avoided.**
4. Companies involved in investigation/ventilation operations should perform the following tool strip;
 - B**-Bolt Cutters
 - I**- Irons (Flat-head Axe and Halligan)
 - L**- Lights
 - T**- Thermal Imaging Camera

ASSIGNMENTS

The following pre-designated assignments **may** be utilized by the first alarm assignment when investigating a reported fire or alarm activation at a warehouse-type building:

A. 1st Engine Company: Investigation/Attack

Size up.

Obtains information from alarm panels, occupants or tenants.

Investigation of office and warehouse areas.

Report on interior conditions.

Depending upon conditions encountered, establish Command and direct incoming resources to begin multi-company investigation/ventilation and fire attack.

B. 2nd Engine Company: Visualize entire building exterior/ R.I.C.

Perform mobile “hot lap” of building exterior, report on conditions noted.

Assist initial company with investigation as needed.

Prepare to perform R.I.C. duties.

C. 3rd Engine Company: Investigation/Attack/ Water Supply

Assist initial company with investigation as needed.

Once fire location has been determined, proceeds to best access point and prepares for a reverse hose lay. Establishes water supply.

Provides initial attack lines as needed.



D. 1st Truck Company: Forcible Entry/ Ventilation

Assist initial company with investigation.

Provide forcible entry as needed for building access.

Perform ventilation as needed. **Note: Horizontal ventilation methods may be most effective due to building construction features and size.**

E. 1st Battalion Chief: Incident Commander

Conducts size up.

Establishes Incident Command Post.

Manages incident and orders resources.

COMMUNICATIONS

Building size and type of construction may adversely affect digital trunked radio transmissions to or from the interior. The IC or initial company officer may find it necessary to move all tactical radio communications to a direct conventional frequency.