

# Modern Residential Structure Fire Tactical GUIDELINES

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## **Scope:**

This Standard shall regulate the management of all residential structure fires to which the Fire Department responds.

## **Purpose:**

This Standard is designed to:

- Establish rules and procedures to manage residential structure fires
- Produce standard and predictable residential structure fire results through improved risk assessment.
- Limit risk exposure and improve the safety and health of on scene firefighters

## **Operational Priorities:**

There are priorities that must be addressed at every residential structure fire to which the Department responds. These priorities are listed below and are discussed in the order of their importance.

Life Safety/Rescue: It shall be standard procedure to extend a primary search in all involved and exposed occupancies that can be safely entered, unless it is confirmed that the occupancies are unoccupied. The completion of the primary search process is reported utilizing the standard radio reporting term "Primary Search Complete." Rescue efforts should be extended in the following order:

- The most severely threatened.
- The largest number (groups) of people.
- The remainder of the fire area.
- The exposed areas.

Victim Survivability: Consideration should be taken of the fire and smoke conditions inside the structure and the likelihood of victim survivability. In no case should firefighters enter a structure for the purposes of primary search if a victim cannot possibly survive the conditions.

Fire Fighter Safety: Due to the hazardous nature of firefighting, the safety of fire fighters is of primary importance. Therefore, the following safety rules are to be observed:

- All persons involved in firefighting or other hazardous situations will wear full protective clothing and self-contained breathing apparatus ("S.C.B.A."). No one, regardless of rank, shall enter an IDLH atmosphere without a SCBA.
- Any interior mode of operation (interior attack mode, rescue mode, etc.) should include provisions for two in two out and/or initial rescue crews (IRIC), and responder accountability.
- The Incident Commander and Division/Group Supervisors shall be responsible for maintaining a constant and accurate accountability of the status and location of all firefighters and personnel operating on the fire ground.

- The incident commander is responsible for the safety of all personnel operating on fire scenes. On all fire scenes and as conditions or hazards dictate the incident commander should strongly consider appointing a dedicated safety officer.

## **INCIDENT PRIORITIES:**

The following priorities will guide decision making during the incident:

- Life Safety
- Incident Stabilization
- Property Conservation

### **When operating at structure fires, the following tactical goals shall apply:**

#### **S.L.I.C.E.R.S.**

- Sequential Actions
- Size up
- Locate the Fire
- Identify and Control Flow Path
- Cool the Space from Safest Location
- Extinguish the Fire

#### **ACTIONS of OPPORTUNITY**

- Rescue
- Salvage

### **SEQUENTIAL ACTIONS: To take place in order:**

#### **Size Up:**

Size-up must occur at every fire. As a result of the size-up, the resources available and situational conditions (weather, fire size and location, occupancy, building construction etc.) A tactical plan for that fire must be developed, communicated and implemented. First arriving officers/incident commanders are responsible for obtaining a 360 degree view of the structure involved. **Thermal imagers should be booted prior to arrival and at the ready for the initial 360 degree lap of the structure.** Where impractical because of building size or obstructions, the incident commander should delegate other arriving units to view parts of the structure unseen by the incident commander.

#### *Radio Benchmarks*

- *Initial Radio Report (Establish Command, Give size-up)*
- *Declare Operational Mode (Investigative Mode, Rescue Mode, Softening the Target Mode, Interior Attack Mode, Defensive Mode)*

#### **Locate the Fire:**

The location and extent of the fire in the building must be determined. Officers should use all means available to make this determination. **Thermal imagers should be**

**booted prior to arrival and at the ready for the initial 360 degree lap of the structure.** The location of the fire and current conditions will dictate the best location to attack the fire.

### **Identify / Control the Flow Path:**

The incident commander should identify the presence and/or location of the flow path. Effort should be taken to control ventilation and the flow path to protect potential building occupants and limit fire growth. If a flow path is visible, consider closing doors and windows to limit air flow. When closing doors and windows, firefighters should be aware of any potential rescues readily accessible via doors/windows.

### **Flow Path Control:**

- Anyone in the exhaust portion of the flow path – between the fire and the direction of its travel is in a high hazard location.
- Control the door – keeping doors closed allows less oxygen into the fire and equals lower temperatures.
- Control / Close windows – closing windows allows less oxygen into the fire and equals lower temperatures.
- Controlling the flow path improves victim survivability.

**Door Control:** The process of ensuring the entrance door providing access to the fire area is controlled and closed as much as possible after teams enter the structure. Whenever possible a firefighter(s) should be placed at the door to control flow path and egress for teams.

**Special Note on Ventilation:** Fire departments should manage, and control the openings to the structure to limit fire growth and spread and to control the flow path of inlet air and fire gases during tactical operations. All ventilation must be coordinated with suppression activities. Uncontrolled ventilation allows additional oxygen into the structure which may result in a rapid increase in the size and hazard of the fire due to increased heat release rates. Residential Assignment

### **Cool the Space from the Safest Location – “Soften the Target”:**

Given information obtained during the size up, locating the fire and identifying the flow path, the incident commander will determine if high heat conditions exist inside the structure. The incident commander will determine the safest and most direct way to apply water to the superheated space, or directly on the fire when available. The primary goal in this step is to reduce the thermal threat to firefighters and potential occupants as soon as reasonably possible.

### ***Radio Benchmarks***

- *Quick water applied (state location)* Update status (Provide progress reports to continually assess fire conditions and risk to on scene personnel)
- *Communicate method of new and/or continued operations*

**Note: Applying water to the fire as quickly as possible, regardless of where it is emitting from. This will lower heat conditions in the structure, and will improve overall conditions in the entire structure.**

### **Extinguish the Fire:**

Once the thermal threats have been controlled, the fire should be extinguished in the most direct manner possible. The incident commander should recognize the potential for the thermal threat to return and should move to extinguish the fire quickly. The incident commander should ensure the proper initial rescue crews (IRIC) are in place for interior fire attack operations and accountability of all personnel.

### *Radio Benchmarks*

- *Update status –*
  - *"Water on the Fire," when water is applied to seat of fire*
  - *Knockdown,(Control time)*
  - *Fire extinguished.*

### **ACTIONS OF OPPORTUNITY: May occur at any time**

#### **Rescue:**

The incident commander should consider the potential for rescues at all times. Firefighters should be prepared to remove occupants. It should be reinforced that often the best action the fire department can take is to suppress the fire. The incident commander and fire ground officers must make a rapid and informed choice on the priority and sequence of suppression activities versus occupant removal. As life safety is the highest tactical priority, rescue shall always take precedence. The incident commander must determine the best course of action to ensure the best outcome for occupants based on the conditions at that time.

#### **Salvage:**

Firefighters should use compartmentalization to control fire spread and smoke whenever possible.

#### **Property Conservation:**

After completing rescue and fire control considerations, it shall be standard procedure to commit whatever fire ground resources are required to reduce loss. All members are expected to perform in a manner that continually reduces loss during fire operations.

#### **Water Supply:**

- It is the responsibility of each engine company pumping on the fire ground, to establish and maintain an adequate supply of water.
- When in doubt, lay hose. Remember, it is better to pick up a dry line that was not used than to need a line and not lay it.

- Factors relating to type of line pulled in order to ensure adequate water supply for fire presented (Water vs. BTU's).
  - Size
  - Placement
  - Speed
  - Mobility
  - Supply
  - One and three quarters (1 3/4) inch hose lines will be the minimum size pulled on structure fires.

Operate heavy streams or hand lines greater than 1 3/4 if necessary to “soften the target”. Ensure coordination during all interior attacks. Ensure safety of interior attack crews during coordinated attack. Before heavy exterior streams are operated, the Incident Commander shall identify the intent over the radio to advise all personnel.