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| ***REPLACE WITH YOUR MASTHEAD*** | | |
| **VFIS logo black JPG** | **SOG Title:** | |
| **SOG Number:** | |
| **Original Date:** | **Revision Date:** |
| **ABC Fire Department General Operating Guideline** | | |

**Structural Collapse Search & Rescue Operational Guideline**

***This is a sample of a standard operating guideline (SOG) on this topic. You should review the content, modify as appropriate for your organization, have it reviewed by your leadership team and if appropriate your legal counsel. Once adopted, make sure the SOG is communicated to members, implemented and performance monitored for effective implementation.***

**Purpose:**

To ensure a safe working environment during the removal of victims, from structural collapses.

**Personal Protective Equipment (PPE):**

Shall be dictated by the scope of the incident and the hazards/atmosphere involved. At a minimum PPE shall consist of, but not limited to; jump suit, PASS device, hearing and eye protection, helmets and boots.

**Procedure:**

* All vehicles responding to a collapse or potential collapse incident shall stage a safe distance, at least the height of the building away.
* No personnel shall enter the structure until a size-up is complete, and hazards are addressed.
* Establish a “hazard or collapse zone” around the perimeter of the structure. Use fire line tape to mark perimeter.
* If the building is un-occupied, no rescue needed, secure the area and tum it over to its owner. If the building is occupied, and rescue is required, start written documentation, get plans of the structure, establish and maintain contact with some that knows the building very well. Request the proper level of technical assistance necessary to resolve the incident.
* Determine the potential for secondary collapse, walls out of plumb, smoke or water moving through bricks, beams pulling away, buckled steel beams, large cracks, load/contents/age of building, and listen for sound of movement or shifting.
* Victims found on top of debris or slightly buried should be removed first. Rescue efforts should be directed to the victims who can be seen or heard. Rescue efforts should be directed to reach those victims whose location is known, even if you cannot see or hear them.
* Seek out victims by looking in areas, which could have afforded a reasonable chance of survival. For example:
  + Spaces under stairways
  + Basement and cellar locations
  + Locations near chimneys or fireplaces
  + Void spaces created by building components or its contents
  + Undemolished areas where egress is blocked
* Place rescuers in “call” and “listen” positions, where rescuers take turns calling out and maintain a period of silence to listen for response
* Once communications with the victim are established, it should be maintained
* In some instances, breaching and shoring may reach victims
* When possible try to avoid breaching walls, it may affect the structural integrity
* It is safer to cut holes in floors and use a shaft approach
* Anytime you cut a hole, cut a small one first, to assure that you are not entering a hazardous area
* Shoring may be used to support walls and or floors
* Shores should not be used to restore structural components to their original position
* An attempt to force beams or wall into place may cause additional collapse
* If you decide to shore keep the following in mind:
  + Keep timber shores as short as possible
  + The strength and stability is dependent on where it is anchored
  + Shoring should NEVER be removed once in place
* Remove debris from the top down from selected areas where information suggests that victims might be
* If extrication is required from within the collapse, only move what is necessary, and only as far as necessary to free the victim, one movement could cause several counter movements
* Packaging the victim may not always be possible, treat and immobilize victim as the space and path of egress dictate

**Guidelines for Structural Collapse Task Performance -Operational & Technical Level Training**

1. Demonstrate ability to categorize construction types, evaluate structural stability and hazards, and implement scene management/ control.
2. Demonstrate ability to determine search area and potential victim locations.
3. Demonstrate ability to utilize size-up information implements an incident management system, monitor-changing conditions; identify special resources needed .Provide written documentation.
4. Demonstrate ability to implement action plan, initiate hazard mitigation objectives, request specialized resources, initiate rescue objective, establish perimeter security.
5. Demonstrate ability to conduct a search in a collapsed structure, given size-up info, potential victim locations and hazards are identified.
6. Demonstrate ability to stabilize a collapsed light frame structure, and mitigate associated hazards.
7. Demonstrate ability to stabilize a collapsed heavy construction type structure, and mitigate associated hazards.
8. Demonstrate ability to manage resources, set up lighting, initiates environmental controls, and set up rehabilitation for rescuers.
9. Demonstrate ability to package and remove victim from a collapse, manage airway, care for soft tissue trauma, and stabilize C-spine and /or fractures.
10. Demonstrate ability to lift and stabilize a heavy load.
11. Demonstrate ability to breach structural components so that the opening supports rescue operations.
12. Demonstrate ability to cut through structural steel, protect victim and rescuer, and control fire associated with the cutting.
13. Demonstrate ability to construct cribbing system, evaluate integrity of system and stability of the load.
14. Demonstrate ability to coordinate use of heavy equipment as part of the rescue operation.

***This is a sample guideline furnished to you by VFIS. Your organization should review this guideline and make the necessary modifications to meet your organization’s needs. The intent of this guideline is to assist you in reducing exposure to the risk of injury, harm or damage to personnel, property and the general public. For additional information on this topic, contact your VFIS Risk Control representative.***

**References:**

King of Prussia (PA) Volunteer Fire Company SOG KP0079 Structural Collapse Search and Rescue Operational Guidelines