

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents

IFSTA

Fire Service Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

The Certification Program offers two (2) levels of Structural Collapse Rescue Certification:

- Level I shall apply to individuals who identify hazards, use equipment, and apply **limited** techniques specified in this standard to perform technical rescue operations.
- Level II shall apply to individuals who identify hazards, use equipment, and apply **advanced** techniques specified in this standard to perform technical rescue operations

Structural Collapse Rescue Level I

The applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the SFFMA Rescue Apprentice
AND
2. Applicants must complete the following:
 - a. SFFMA Structural Collapse Rescue Level I coursework; or
 - b. Structural Collapse Rescue Level I as defined by NFPA 1006; or
 - c. TEEX Structural Collapse Rescue I.

Structural Collapse Rescue Level II

The applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rescue Apprentice; AND
 - b. Structural Collapse Rescue Level IAND
2. have completed or hold one of the following:
 - a. SFFMA Structural Collapse Rescue Level II coursework; or
 - b. Structural Collapse Rescue Level II as defined by NFPA 1006; or
 - c. TEEX Structural Collapse Rescue II

Curriculum for Structural Collapse Rescue Level I

- SC-01.01 Conduct a size-up of a light frame collapsed structure, given an incident and specific incident information, so that existing and potential conditions within the structure and the immediate periphery are evaluated, needed resources are defined, hazards are identified, construction and occupancy types are determined, collapse type is identified if possible, the need for rescue is assessed, a scene security perimeter is established, and the size-up is conducted within the scope of the incident management system.
NFPA 1006 9.1.1
- SC-01.02 Determine potential victim locations in light frame construction collapse incidents, given size-up information, a structural collapse tool kit, the type of construction and occupancy, time of day, and collapse pattern, so that search areas are established and victims can be located.
NFPA 1006 9.1.2
- SC-01.03 Develop a collapse rescue incident action plan, given size-up information and a light frame collapsed structure, so that initial size-up information is utilized, an incident management system is incorporated, existing and potential conditions within the structure and the immediate periphery are included, specialized resource needs are identified, work perimeters are determined, collapse type/category and associated hazards are identified, construction and occupancy types are determined, incident objectives are established, and scene security measures are addressed.
NFPA 1006 9.1.3
- SC-01.04 Implement a collapse rescue incident action plan, given an action plan and a light frame collapsed structure, so that pertinent information is used, an incident management system is established and implemented, monitoring of dynamic conditions internally and externally is established, specialized resources are requested, hazards are mitigated, victim rescue and extraction techniques are consistent with collapse and construction type, and perimeter security measures are established.
NFPA 1006 9.1.4
- SC-01.05 Search a light frame collapsed structure, given personal protective equipment, the structural collapse tool kit, an assignment, operational protocols, and size-up information, so that all victim locations and potential hazards are identified, marked, and reported; protocols are followed; the mode of operation can be determined; and rescuer safety is maintained.
NFPA 1006 9.1.5
- SC-01.06 Stabilize a collapsed light frame structure as a member of a team, given size-up information, a specific pattern of collapse, a basic structural collapse tool kit, and an assignment, so that strategies to effectively minimize the movement of structural components are identified and implemented; hazard warning systems are established and understood by participating personnel; incident-specific personal protective equipment is identified, provided, and utilized; physical hazards are identified; confinement, containment, and avoidance measures are discussed; and a rapid intervention team is established and staged.
NFPA 1006 9.1.6
- SC-01.07 Implement collapse support operations at a rescue incident, given an assignment and available resources, so that scene lighting is adequate for the tasks to be undertaken, environmental concerns are managed, personnel rehabilitation is facilitated, and the support operations facilitate rescue operational objectives.
NFPA 1006 9.1.7

- SC-01.08 Release a victim from entrapment by components of a light frame collapsed structure, given personal protective equipment and resources for breaching, breaking, lifting, prying, shoring, and/or otherwise moving or penetrating the offending structural component, so that hazards to rescue personnel and victims are minimized, considerations are given to crush syndrome, techniques enhance patient survivability, tasks are accomplished within projected time frames, and techniques do not compromise the integrity of the existing structure or structural support systems.
NFPA 1006 9.1.8
- SC-01.09 Remove a victim from a light frame collapse incident, given a disentangled victim, a basic first aid kit, and victim packaging resources, so that basic life functions are supported as required, victim is evaluated for signs of crush syndrome, advanced life support is called if needed, methods and packaging devices selected are compatible with intended routes of transfer, universal precautions are employed to protect personnel from blood-borne pathogens, and extraction times meet time constraints for medical management.
NFPA 1006 9.1.9
- SC-01.10 Lift a heavy load as a team member, given a structural collapse tool kit and a load to be lifted, so that the load is lifted; control and stabilization are maintained before, during, and after the lift; and access can be gained.
NFPA 1006 9.1.10
- SC-01.11 Move a heavy load as a team member, given a structural collapse tool kit, so that the load is moved the required distance to gain access and so that control is constantly maintained.
NFPA 1006 9.1.11
- SC-01.12 Breach light frame structural components, given an assignment, personal protective equipment, various types of construction materials, and a structural collapse tool kit, so that the opening supports the rescue objectives, the necessary tools are selected, structural stability is maintained, and the methods utilized are safe and efficient.
NFPA 1006 9.1.12
- SC-01.13 Construct cribbing systems, given an assignment, personal protective equipment, a structural collapse tool kit, various lengths and dimensions of construction-grade lumber, wedges, and shims, so that the cribbing system will safely support the load, the system is stable, and the assignment is completed.
NFPA 1006 9.1.13

Curriculum for Structural Collapse Rescue Level II

- SC-02.01 Conduct a size-up of a collapsed heavy construction-type structure, given an incident and specific incident information, so that existing and potential conditions within the structure and the immediate periphery are evaluated, needed resources are defined, hazards are identified, construction and occupancy types are determined, collapse type is identified if possible, the need for rescue is assessed, a scene security perimeter is established, and the size-up is conducted within the scope of the incident management system.
NFPA 1006 9.2.1
- SC-02.02 Determine potential victim locations in a heavy construction-type incident, given size-up information, a structural collapse tool kit, the type of construction and occupancy, time of day, and collapse pattern, so that search areas are established and victims can be located.
NFPA 1006 9.2.2
- SC-02.03 Develop a collapse rescue incident action plan, given size-up information and a heavy collapsed structure, so that initial size-up information is utilized, an incident management system is

incorporated, existing and potential conditions within the structure and the immediate periphery are included, specialized resource needs are identified, work perimeters are determined, collapse type/category and associated hazards are identified, construction and occupancy types are determined, incident objectives are established, and scene security measures are addressed.

NFPA 1006 9.2.3

SC-02.04 Implement a collapse rescue incident action plan, given an action plan and a heavy construction-type collapsed structure, so that pertinent information is used, an incident management system is established and implemented, monitoring of dynamic conditions internally and externally is established, specialized resources are requested, hazards are mitigated, victim rescue and extraction techniques are consistent with collapse and construction type, and perimeter security measures are established.

NFPA 1006 9.2.4

SC-02.05 Search a heavy construction-type collapsed structure, given personal protective equipment, the structural collapse tool kit, an assignment, operational protocols, and size-up information, so that all victim locations and potential hazards are identified, marked, and reported; protocols are followed; the mode of operation can be determined; and rescuer safety is maintained.

NFPA 1006 9.2.5

SC-02.06 Stabilize a collapsed heavy construction-type structure as a member of a team, given size-up information, a specific pattern of collapse, a basic structural collapse tool kit, and an assignment, so that strategies to effectively minimize the movement of structural components are identified and implemented; hazard warning systems are established and understood by participating personnel; incident-specific personal protective equipment is identified, provided, and utilized; physical hazards are identified; confinement, containment, and avoidance measures are discussed; and a rapid intervention team is established and staged.

NFPA 1006 9.2.6

SC-02.07 Implement collapse support operations at a rescue incident, given an assignment and available resources, so that scene lighting is adequate for the tasks to be undertaken, environmental concerns are managed, personnel rehabilitation is facilitated, and the support operations facilitate rescue operational objectives.

NFPA 1006 9.2.7

SC-02.08 Release a victim from entrapment by components of a heavy construction-type collapsed structure, given personal protective equipment and resources for breaching, breaking, lifting, prying, shoring, and/or otherwise moving or penetrating the offending structural component, so that hazards to rescue personnel and victims are minimized, considerations are given to crush syndrome, techniques enhance patient survivability, tasks are accomplished within projected time frames, and techniques do not compromise the integrity of the existing structure or structural support systems.

NFPA 1006 9.2.8

SC-02.09 Remove a victim from a heavy construction-type collapse incident, given a disentangled victim, a basic first aid kit, and victim packaging resources, so that basic life functions are supported as required, victim is evaluated for signs of crush syndrome, advanced life support is called if needed, methods and packaging devices selected are compatible with intended routes of transfer, universal precautions are employed to protect personnel from blood-borne pathogens, and extraction times meet time constraints for medical management.

NFPA 1006 9.2.9

- SC-02.10 Lift a heavy load as a team member, given a structural collapse tool kit and a load to be lifted, so that the load is lifted; control and stabilization are maintained before, during, and after the lift; and access can be gained.
NFPA 1006 9.2.10
- SC-02.11 Move a heavy load as a team member, given a structural collapse tool kit, so that the load is moved the required distance to gain access and so that control is constantly maintained.
NFPA 1006 9.2.11
- SC-02.12 Breach heavy structural components, given an assignment, personal protective equipment, various types of construction materials, and a structural collapse tool kit, so that the opening supports the rescue objectives, the necessary tools are selected, structural stability is maintained, and the methods utilized are safe and efficient.
NFPA 1006 9.2.12
- SC-02.13 Construct cribbing systems, given an assignment, personal protective equipment, a structural collapse tool kit, various lengths and dimensions of construction-grade lumber, wedges, and shims, so that the cribbing system will safely support the load, the system is stable, and the assignment is completed.
NFPA 1006 9.2.13
- SC-02.14 Stabilize a collapsed heavy construction-type structure as a member of a team, given size-up information, hazard-specific personal protective equipment, an assignment, a specific pattern of collapse, a structural collapse tool kit, specialized equipment necessary to complete the task, and engineering resources if needed, so that hazard warning systems are established and understanding by team members is verified, all unstable structural components that can impact the work and egress routes are identified, alternative egress routes are established when possible, expert resource needs are determined and communicated to command, load estimates are calculated for support system requirements, all shoring systems meet or exceed loadbearing demands, shoring systems are monitored continuously for integrity, safety protocols are followed, a rapid intervention crew (RIC) is established and staged to aid search and rescue personnel in the event of entrapment, an accountability system is established, atmospheric monitoring is ongoing, and progress is communicated as required.
NFPA 1006 9.2.14
- SC-02.15 Cut through structural steel, given a structural collapse tool kit, personal protective equipment, and an assignment, so that the steel is efficiently cut, the victim and rescuer are protected, fire control measures are in place, and the objective is accomplished.
NFPA 1006 9.2.15
- SC-02.16 Coordinate the use of heavy equipment, given personal protective equipment, means of communication, equipment and operator, and an assignment, so that common communications are established, equipment usage supports the operational objective, hazards are avoided, and rescuer and operator safety protocols are followed.
NFPA 1006 9.2.16