

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 Technical Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

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

Trench Rescue Level I

Applicants must:

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

Trench Rescue Level II

Applicant must:

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

Curriculum for Trench Rescue Level I

(NFPA 1670/1006 Awareness/Operations Level)

TR-01.01 Trainee shall conduct a size-up of a collapsed trench, given an incident and background information and applicable reference material, so that the size-up is conducted within the scope of the incident management system; the existing and potential conditions are evaluated within the trench and the rescue area; general hazards are identified; a witness or “competent person” is secured; the probability of victim existence, number, condition, and location is determined; potential for rapid, non-entry rescues or victim self-rescue is recognized; needed personnel, supply, and equipment resources are evaluated; and utility involvement and location are determined.

NFPA 1006 8.1.1

TR-01.02 Trainee shall implement a trench emergency action plan, given size-up information and a trench incident, so that initial size-up information is utilized; pre-briefing is given to rescuers; documentation is ongoing; the collapse zone is established; a risk–benefit analysis is conducted; rapid, non-entry rescues or victim self-rescues are performed; the rescue area and general area are made safe; strategy and tactics are confirmed and initiated for existing and potential conditions; rapid intervention team and operational tasks are assigned; other hazards are mitigated; rescue resources are staged; and a protective system is being utilized.

NFPA 1006 8.1.2

TR-01.03 Trainee shall implement support operations at trench emergencies, given an assignment, and equipment and other resources, so that a resource cache is managed, scene lighting is provided for the tasks to be undertaken, environmental concerns are managed, a cut station is established, supplemental power is provided for all equipment, atmospheric monitoring and ventilation are implemented, personnel rehab is facilitated, operations proceed without interruption, extrication methods are in place, and the support operations facilitate rescue operational objectives.

NFPA 1006 8.1.3

TR-01.04 Trainee shall support a nonintersecting straight wall trench of 2.4 m (8 ft) or less as a member of a team, given size-up information, an action plan, a trench tool kit, and an assignment, so that strategies to minimize the further movement of soil are implemented effectively; trench walls, lip, and spoil pile are monitored continuously; rescue entry team(s) remains in a safe zone; any slough-in and wall shears are mitigated; emergency procedures and warning systems are established and understood by participating personnel; incident-specific personal protective equipment is utilized; physical hazards are identified and managed; victim and rescuer protection is maximized; victim extrication methods are considered; and a rapid intervention team is staged.

NFPA 1006 8.1.4

TR-01.05 Release a victim from soil entrapment by components of a nonintersecting collapsed trench of 2.4 m (8 ft) or less in depth, given personal protective equipment, a trench rescue tool kit, and specialized equipment, so that hazards to rescue personnel and victims are minimized, considerations are given to crush syndrome and other injuries, techniques are used to enhance patient survivability, tasks are accomplished within projected time frames, and techniques do not compromise the integrity of the existing trench shoring system.

NFPA 1006 8.1.5

TR-01.06 Trainee shall remove a victim from a trench, given a disentangled victim, a basic first aid kit, and victim packaging resources, so that basic life functions are supported as required, the victim is evaluated for signs of crush syndrome, 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 8.1.6

TR-01.07 Trainee shall disassemble support systems at a trench emergency incident, given personal protective equipment, trench tool kit, and removal of victim(s), so that soil movement is minimized, all rescue equipment is removed from the trench, sheeting and shoring are removed in the reverse order of their placement, emergency protocols and safe zones in the trench are adhered to, rescue personnel are removed from the trench, the last supporting shores are pulled free with ropes, equipment is cleaned and serviced, reports are completed, and a post-briefing is performed.

NFPA 1006 8.1.7

Curriculum for Trench Rescue Level II
(NFPA 1670/1006 Technician Level)

TR-02.01 Trainee shall support an intersecting trench as a member of a team, given size-up information and an action plan, a trench tool kit, and an assignment, so that strategies to minimize the further movement of soil are implemented effectively; trench walls, lip, and spoil pile are monitored continuously; rescue entry team(s) in the trench remains in a safe zone; any slough-in and wall shears are mitigated; emergency procedures and warning systems are established and understood by participating personnel; incident-specific personal protective equipment is utilized; physical hazards are identified and managed; victim protection is maximized; victim extrication methods are considered; and a rapid intervention team is staged.

NFPA 1006 8.2.1

TR-02.02 Trainee shall install supplemental sheeting and shoring for each 2 ft (0.61 m) of depth dug below an existing approved shoring system, given size-up information, an action plan, and a trench tool kit, so that the movement of soil is minimized effectively, initial trench support strategies are facilitated, rescue entry team safe zones are maintained, excavation of entrapping soil is continued, victim protection is maximized, victim extrication methods are considered, and a rapid intervention team is staged.

NFPA 1006 8.2.2

TR-02.03 Trainee shall construct load stabilization systems, given an assignment, personal protective equipment, and a trench tool kit, so that the stabilization system will support the load safely, the system is stable, and the assignment is completed.

NFPA 1006 8.2.3

TR-02.04 Trainee shall lift a load, given a trench tool kit, so that the load is lifted the required distance to gain access; settling or dropping of the load is prevented; control and stabilization are maintained before, during, and after the lift; and operational objectives are attained.

NFPA 1006 8.2.4

TR-02.05 Trainee shall coordinate the use of heavy equipment, given personal protective equipment, means of communication, equipment and operator, and an assignment, so that operator capabilities and limitations for task are evaluated, common communications are maintained, equipment usage supports the operational objectives, and hazards are avoided.

NFPA 1006 8.2.5

TR-02.06 Trainee shall release a victim from entrapment by components of a collapsed trench, given personal protective equipment, a trench rescue tool kit, and specialized equipment, so that hazards to rescue personnel and victims are minimized, considerations are given to crush syndrome and other injuries, techniques are used to enhance patient survivability, tasks are accomplished within projected time frames, and techniques do not compromise the integrity of the existing trench shoring system

NFPA 1006 8.2.6