

CONFINED SPACE RESCUE SKILLS

LEVEL I



Reference Source: 2013 NFPA 1006, Technical Rescuer Professional Qualifications

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CERTIFICATION REQUIREMENTS

Confined Space Rescue Level I

Requirements

In order to certify as a Technical Rescuer Confined Space Level I (NFPA 1006, Chapter 7, 2013 Edition) program, a firefighter must fulfill the following requirements:

1. Complete fire department (AHJ) entrance requirements.
2. Maintain records of training.
3. Train on the required written and practical objectives.
4. Meet any other training requirements/prerequisites as defined by the Fargo Fire Department Certification Committee.
5. Pass both written and practical skills examinations administered by the Fargo Fire Department Certified Testers. Initial testing is to be completed with Pro Board Credentialed Testers.

The Fargo Fire Department acknowledges the importance of and the need for entrance requirements as listed in the NFPA 1001, *Standard on Fire Fighter Professional Qualifications*.

Physical Fitness Requirements:

The requirements listed in NFPA 1001, Chapter 4 are:

1. Meet the minimum educational requirements established by the Fargo Fire Department or the AHJ.
2. Meet the medical requirements of NFPA 1582, *Standard on Comprehensive Occupational Medical Program for Fire Departments*.
3. Physical fitness requirements for entry-level personnel shall be developed and validated by the Fargo Fire Department or the AHJ. Physical fitness requirements shall be in compliance with applicable Equal Employment Opportunity regulations and other legal requirements.

Emergency Medical Care Requirements

The following additional training requirements **must** be met before certification at the Confined Space Rescue Level I will be issued by the Fargo Fire Department Certification Committee.

Emergency Medical Care – Candidates for certification at the Confined Space Rescue Level I must hold a current CPR certification and have received medical training. Medical training should include infection control, bleeding control and shock management.

DEPARTMENT TRAINING

Confined Space Rescue Level I requires a high level of skill and knowledge. The training given to and received by firefighter candidates should be of the highest quality and degree. All training received must meet the requirements of NFPA 1006, Chapter 7, 2013 Edition and the skills as approved by the Fargo Fire Department Certification Committee contained within the Fargo Standard. All training received must be documented and recorded on the training record. All testing for will be conducted following the policies and procedures of the Fargo Fire Department Certification Committee.

Training for Confined Space Rescue is conducted at the department level or could be received through a joint training agreement between departments on a regional level. Regardless of where the training is received, it must prepare the candidate to be a competent and effective Confined Space Rescue Technician Level I.

The course material should be referenced to the following textbooks to prepare the candidate to successfully pass the Confined Space Rescue Level I certification examination.

Written Objectives

The written objectives for Confined Space Rescue Level I (Chapter 7) are covered in the following textbooks:

1. NFPA 1006, Rescue Technician Professional Qualifications, 2013 Edition Chapter 7
2. Delmar, Technical Rescuer: Confined Space, Levels I & II (2013 Standard)
3. CMC, Confined Space Entry and Rescue, 2nd Edition
4. Jones and Bartlett, First Responder, 4th Edition
5. Brady, Prehospital Emergency Care, 6th Edition

Manipulative Objectives

Each candidate must be trained and evaluated in the performance of all manipulative skills as outlined by the Fargo Fire Department in the Confined Space Rescue Level I objectives. Each of the manipulative skills shall be completed safely and with competence as defined below:

- **Safely** – Each manipulative skill objective must be completed safely. Actions that could injure an individual or damage equipment are unacceptable. Equipment should be checked prior to skill testing or training to see that it is safe and functional.
- **Competence** – Each manipulative skill objective is performed in accordance with the Fargo Fire Department Standard. This includes performing the proper steps in sequence. Competence will be measured in accordance with the Fargo Fire Department manipulative skill objectives.

Department Training Records

Each candidate shall have a training record on file with the department which indicates whether he/she has trained on all manipulative skill objectives. This record shall be signed off or initialed by a department training officer. Training records must indicate the date, instructor, and total number of hours trained for each manipulative skill objective. The training record check-off for Confined Space Rescue Level I is provided in Appendix A of this document.

CERTIFICATION EXAMINATIONS

After completion of the training process the candidate may test for certification.

Written Examinations

The written examination is a randomly generated **75-question** test covering the written objectives Chapter 7, Level I of the NFPA 1006 standard. A minimum score of 70% is required to pass the certification examination. Firefighters failing the first attempt of the written exam will be permitted to retest the next time test is administered. A candidate who passes the written test will have up to two years or a minimum of two offerings, to complete the manipulative skills portion of the testing.

SAMPLE WRITTEN EXAMINATION QUESTIONS:

The transfer of heat by the movement of air or liquid would be considered?

- | | |
|---------------|-------------------------|
| a. Conduction | c. Convection |
| b. Radiation | d. Direct-flame contact |

The technical rescuer's common goal is to?

- | | |
|--|--------------------------------|
| a. Problem solve | c. Cut corners |
| b. Research and buy the safest equipment | d. Perform rescue at all costs |

Manipulative Skills Examination

This is a two-step examination. The first step is a department records check and the second step is a manipulative skills examination. Certification testers certified to Tester II or Tester III by the Fargo Fire Department conduct the examination. Initial testing will be conducted by outside Pro Board certified testers

Training records are checked. If records are inadequate, corrective action must be taken before proceeding to the next step. The records must meet minimum requirements and are checked for the following:

1. Candidate has completed all training requirements for Technical Rescuer Confined Space Level I (Chapter 7) from the NFPA 1006 standard, 2013 Edition.
2. The training officer has signed off each manipulative skill.
3. The total number of hours trained on each manipulative skill.

The manipulative skills examination is graded on a 100% pass/fail basis. The test is graded in the following areas:

- **Safely** – Each manipulative skill objective must be completed safely. Actions that could injure an individual or damage equipment are unacceptable. Equipment should be checked prior to skill testing or training to see that it is safe and functional.
- **Competence** – Each manipulative skill objective is performed in accordance with the Fargo Standard. This includes performing the proper steps in sequence when required. Competence will be measured in accordance with the Fargo Fire Department manipulative skill objectives.

Candidates are tested on **three (3) manipulative skills**. No prior notification of the skills being tested will be given.

No training, teaching, or coaching is allowed during the test.

This is a 100% pass/fail test. Candidates are allowed to fail a skill one time and have an opportunity to retest a second time to pass the skills test. If they fail a second time, this will be a failure for the entire skills testing portion of the examination.

Candidates who fail the manipulative examination will be required to complete further training on those areas that they were not successful in the testing. They would be eligible to test the next time it is offered at no extra charge. Candidates returning for testing will be tested on a new set of skills for the new testing period, that may or may not include the skill missed in the previous testing.

Prerequisites for Tech Confined Space Rescue Level I (Chapter 7)

Prior to certification at the level, firefighters must be Pro Board certified at the Hazardous Materials First Responder- **Awareness** level and Hazardous Materials First Responder- **Operations** level.

Firefighters must be **Pro Board Certified -Technical Rescue Job Performance Requirements (JPR's)/Rope Rescue Level I** through the Fargo Fire Department Certification system. This is a single certification.

CERTIFICATION CHECKLIST

CONFINED SPACE RESCUE LEVEL I

ENTRANCE REQUIREMENTS:

- Each candidate has met requirements listed in NFPA 1001, Chapter 4 or those established by the authority having jurisdiction.
- Each candidate has met the additional requirements of CPR and medical training.
- Each candidate provides an application/affidavit for testing signed by the candidate and Chief/Head of the Department verifying that all pre-requisites have been completed.
- Each candidate provides a record showing that they are certified through the Fargo Fire Department system that they are **Pro Board Certified as a Technical Rescuer in Job Performance Requirements/Rope Rescue Level I**. This is a single certification.

DEPARTMENT TRAINING RECORDS:

- Each participant has a training record for review that shows:
 1. A learning experience in each manipulative skill objective.
 2. Dates of training.
 3. Initials of instructors.
 4. Total number of hours trained in each manipulative skill objective.

ADDITIONAL TRAINING/PREREQUISITE REQUIREMENTS:

- Each participant is certified at the Hazardous Materials Awareness and Operations level.
- Complete IS-700: Introduction to ICS.
- Complete IS-100: Introduction to ICS.
- Complete IS 200; Basic ICS

CERTIFICATION EXAMINATIONS:

- Each participant has passed the Fargo Fire Department Pro Board written examination.
- Each participant has passed the Fargo Fire Department manipulative skills testing administered by an approved Certification Tester.

CERTIFICATION:

- Certification Coordinator has reviewed records for completeness.

NFPA 1006, 7.1.1 b

Skill 1: Conduct Monitoring of the Environment

Instructions to Tester- Safety is Paramount!

1. The candidate shall conduct monitoring of the environment, given monitoring equipment reference material, personal protective equipment, accurately calibrated detection and monitoring equipment and size up information, so that a representative sample of the space is obtained, accurate readings are made, readings are documented, and effects of ventilation in determining atmospheric conditions and the conditions of the space have been determined for exposures to existing or potential environmental hazards.
2. The candidate will not be allowed to review the performance steps at the time of testing.
3. Prevent or prohibit any unsafe acts.
4. Remember that you are an evaluator, not an instructor.

Instructions to Candidate

1. The candidate will conduct monitoring of the environment, given monitoring equipment reference material, personal protective equipment, accurately calibrated detection and monitoring equipment and size up information so that the listed performance steps are completed.
2. The skill will end when you state or indicate to the tester that you have completed all the identified steps.
3. Contact the tester at any time with any questions you may have.

Preparation and Equipment

1. Proper PPE
2. Monitoring equipment
3. Ventilation equipment

NFPA 1006, 7.1.1 b

Skill 1: Conduct Monitoring of the Environment

| Skill | 1 st Att | 2 nd Att |
|--|---------------------|---------------------|
| 1. Uses and confirms calibration of detection and monitoring equipment | | |
| 2. Acquires a representative sample of the space | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

PERFORMANCE RATING ON THIS SKILL

PASS **FAIL**

First Attempt _____

Second Attempt _____

Candidate Signature _____

Tester Signature 1st Attempt _____

Tester Signature 2nd Attempt _____ Date _____

NFPA 1006, 7.1.2 b

Skill 2: Prepare for Entry Into Confined Space

Instructions to Tester- Safety is Paramount!

1. The candidate shall prepare for entry into the confined space, given a confined space and a confined space rescue tool kit, so that victim communication is established when possible, continuous atmospheric monitoring is initiated, rescuer readiness is verified, rescuers' limitations are identified and evaluated, rescuers unsuitable for entry operations are reassigned and replaced, route and methods of entry are determined and rescuer evacuation is planned.
2. The candidate will not be allowed to review the performance steps at the time of testing.
3. Prevent or prohibit any unsafe acts.
4. Remember that you are an evaluator, not an instructor.

Instructions to Candidate

1. The candidate will prepare for entry into the confined space given a confined space rescue tool kit, so that the listed performance steps are completed.
2. The skill will end when you state or indicate to the tester that you have completed all the identified steps.
3. Contact the tester at any time with any questions you may have.

Preparation and Equipment

1. Proper PPE
2. Monitoring equipment
3. Confined space tool kit
4. Rescue personnel

NFPA 1006, 7.1.2 b

Skill 2: Prepare for Entry Into Confined Space

| Skill | 1 st Att | 2 nd Att |
|---|---------------------|---------------------|
| 1. Operates monitoring equipment | | |
| 2. Performs rescuer pre-entry medical exam | | |
| 3. Evaluates rescuer capabilities and limitations | | |
| 4. Victim communication need established | | |
| 5. Evaluates for point and route of entry | | |
| 6. Selects evacuation methods | | |
| | | |
| | | |
| | | |

PERFORMANCE RATING ON THIS SKILL

PASS **FAIL**

First Attempt _____ _____

Second Attempt _____ _____

Candidate Signature _____

Tester Signature 1st Attempt _____

Tester Signature 2nd Attempt _____

Date _____

NFPA 1006, 7.1.3 b

Skill 3: Enter a Confined Space

Instructions to Tester- Safety is Paramount!

1. The candidate shall enter a confined space, given personal protective equipment, safety, communication and operational protocols, and a confined space tool kit, so that the victim is contacted, controlled entry is established and maintained, atmosphere is continuously monitored, the victim's mental and physical condition is further assessed, patient care is initiated, the patient is packaged to restrictions of space and removal can be initiated.
2. The candidate will not be allowed to review the performance steps at the time of testing.
3. Prevent or prohibit any unsafe acts.
4. Remember that you are an evaluator, not an instructor.

Instructions to Candidate

1. The candidate will enter a confined space, given personal protective equipment, safety, communication, and operational protocols, and a confined space rescue kit, so that the listed performance steps are completed.
2. The skill will end when you state or indicate to the tester that you have completed all the identified steps.
3. Contact the tester at any time with any questions you may have.

Preparation and Equipment

1. Proper PPE
2. Confined space tool kit
3. Medical equipment
4. Rescue personnel

NFPA 1006, 7.1.3 b

Skill 3: Enter a Confined Space

| Skill | 1 st Att | 2 nd Att |
|--|---------------------|---------------------|
| 1. Uses and applies personal protective equipment and rescue related systems and equipment | | |
| 2. Implements safety, communication and safety protocols | | |
| 3. Uses medical protocols to determine treatment priorities and uses medical equipment specific to confined space victim needs | | |
| 4. Reassesses and confirms mode of operation | | |
| | | |
| | | |
| | | |
| | | |
| | | |

PERFORMANCE RATING ON THIS SKILL

PASS

FAIL

First Attempt

Second Attempt

Candidate Signature _____

Tester Signature 1st Attempt _____

Tester Signature 2nd Attempt _____

Date _____

NFPA 1006, 7.1.4 b

Skill 4: Package the Victim for Removal from the Confined Space

Instructions to Tester- Safety is Paramount!

1. The candidate shall package the victim for removal from a confined space, given a confined space rescue tool kit, so that damage to the rescue/retrieval equipment is prevented, the victim is given the smallest possible profile and further harm to the victim is minimized.
2. The candidate will not be allowed to review the performance steps at the time of testing.
3. Prevent or prohibit any unsafe acts.
4. Remember that you are an evaluator, not an instructor.

Instructions to Candidate

1. The candidate will package the victim for removal from a confined space, given a confined space rescue tool kit, so that the listed performance steps are completed.
2. The skill will end when you state or indicate to the tester that you have completed all the identified steps.
3. Contact the tester at any time with any questions you may have.

Preparation and Equipment

1. Proper PPE
2. Confined space tool kit
3. Sked stretcher
4. Rescue personnel
5. Full body harness
6. Backboard and spinal immobilization equipment

NFPA 1006, 7.1.4 b

Skill 4: Package the Victim for Removal from the Confined Space

| Skill | 1 st Att | 2 nd Att |
|--|---------------------|---------------------|
| 1. Immobilizes victim's spine | | |
| 2. Packages victim in harness, lowering profile devices and litters | | |
| 3. Recognizes and performs basic management of various traumatic injuries and medical conditions | | |
| 4. Supports respiratory efforts | | |
| 5. Performs cardiopulmonary resuscitation as required based on environment | | |
| | | |
| | | |
| | | |
| | | |

PERFORMANCE RATING ON THIS SKILL

PASS

FAIL

First Attempt

Second Attempt

Candidate Signature _____

Tester Signature 1st Attempt _____

Tester Signature 2nd Attempt _____

Date _____

NFPA 1006, 7.1.5 b

Skill 5: Remove All Entrants from a Confined Space

Instructions to Tester- Safety is Paramount!

1. The candidate shall remove all entrants from a confined space, given personal protective equipment, rope and related rescue and retrieval systems, personnel to operate rescue and retrieval systems, and a confined space rescue tool kit, so that internal obstacles and hazards are negotiated, all persons are extricated from the space in the selected transfer device, the victim and rescuers are decontaminated as necessary and the victim is delivered to the emergency medical services provider.
2. The candidate will not be allowed to review the performance steps at the time of testing.
3. Prevent or prohibit any unsafe acts.
4. Remember that you are an evaluator, not an instructor.

Instructions to Candidate

1. The candidate will remove all entrants from a confined space, given personal protective equipment, rope and related rescue and retrieval systems, personnel to operate rescue and retrieval systems, and confined space rescue tool kit, so that the listed performance steps are completed.
2. The skill will end when you state or indicate to the tester that you have completed all the identified steps.
3. Contact the tester at any time with any questions you may have.

Preparation and Equipment

1. Proper PPE
2. Confined space tool kit

NFPA 1006, 7.1.5 b

Skill 5: Remove All Entrants from a Confined Space

| Skill | 1 st Att | 2 nd Att |
|--|---------------------|---------------------|
| 1. Selects and uses personal protective equipment | | |
| 2. Selects and operates rescue and retrieval systems used for victim removal | | |
| 3. Utilizes medical equipment | | |
| 4. Uses equipment and procedures for documentation | | |
| | | |
| | | |
| | | |
| | | |
| | | |

PERFORMANCE RATING ON THIS SKILL

PASS **FAIL**

First Attempt _____ _____

Second Attempt _____ _____

Candidate Signature _____

Tester Signature 1st Attempt _____

Tester Signature 2nd Attempt _____

Date _____

Appendix A

| Confined Space Technician Training Record | | | | | | |
|--|------|-------|----------------------|------|-----|---|
| Level I | | | | | | |
| Training Record | | | In House Exam | | | Manipulative Skill Demonstrated |
| Date | Inst | Hours | Date | Inst | P/F | |
| | | | | | | 1. Conduct monitoring of the environment |
| | | | | | | 2. Prepare for entry into confined space |
| | | | | | | 3. Enter confined space |
| | | | | | | 4. Package the victim for removal from a confined space |
| | | | | | | 5. Remove all entrants from a confined space |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Confined Space Tool Kit

| |
|---------------------------|
| Supplied air rescue cart |
| Breathing air line |
| Sked |
| Mechanical hand winch |
| Tripod |
| Skippy board |
| Stokes basket and harness |
| Electric ventilation fan |
| Taglines |
| 2 inch pulleys |
| 4 inch pulleys |
| Steel "o" rings |
| 2 inch double pulleys |
| 4 inch double pulleys |
| Locking carabiners |
| Body harnesses |
| Ascenders |
| 540 belay |
| Prusiks |
| Utility rope and webbing |
| Steel anchor plates |
| 4 gas meter |
| Lock out tag out kit |
| IMS vests |
| Radios |
| Barrier tape |
| Long backboard |
| Head immobilizer |

| |
|-----------------------------------|
| Edge rollers/ protectors |
| Measuring tapes |
| Brake bar racks |
| Adjustable anchor straps |
| SCBA's |
| Hard hats |
| Extension cords with ground fault |
| Portable generator |
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