

# CONFINED SPACE RESCUE SKILLS

## LEVEL II



Reference Source: 2013 NFPA 1006, Technical Rescuer Professional Qualifications

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## CERTIFICATION REQUIREMENTS

### Confined Space Rescue Level II

#### Requirements

In order to certify as a Technical Rescuer Confined Space Level II (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 II will be issued by the Fargo Fire Department Certification Committee.

Emergency Medical Care – Candidates for certification at the Confined Space Rescue Level II 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 II 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 II.

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

#### **Written Objectives**

The written objectives for Confined Space Rescue Level II (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, 4<sup>th</sup> Edition
5. Brady, Prehospital Emergency Care, 6<sup>th</sup> 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 II 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 II 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 II 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 II (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 **two (2) 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 II (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 II**

**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, 7.2.1 b**

**Skill 1: Preplan a Confined Space Incident**

**Instructions to Tester- Safety is Paramount!**

1. The candidate shall preplan a confined space incident, given applicable guidelines and regulations and a preplan form, so that a standard approach is used during confined space rescue emergency, hazards are recognized and documented, isolation methods are identified and documented, all accesses to the location of the entry opening are identified and documented, all types of entry openings are identified and documented and internal configuration and special resource needs are documented for use by future rescuers.
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 preplan a confined space incident, given applicable guidelines and regulations and a preplan form, 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. Site to preplan
2. Preplan forms
3. Measuring tapes

**NFPA 1006, 7.2.1 b**

**Skill 1: Preplan a Confined Space Incident**

Skill	1 <sup>st</sup> Att	2 <sup>nd</sup> Att
1. Demonstrates the ability to select a specific preplan form		
2. Drafts or draws a sketch of the confined space		
3. Completes the supplied forms		
4. Identifies and evaluates various configurations of confined spaces, access points, entry openings, isolation procedures and energy control locations		
5. Recognizes general and site specific hazards		
6. Documents all data		
7. Applies all regulatory compliance references		

**PERFORMANCE RATING ON THIS SKILL** **PASS** **FAIL**

First Attempt \_\_\_\_\_ \_\_\_\_\_

Second Attempt \_\_\_\_\_ \_\_\_\_\_

Candidate Signature \_\_\_\_\_

Tester Signature 1<sup>st</sup> Attempt \_\_\_\_\_

Tester Signature 2<sup>nd</sup> Attempt \_\_\_\_\_

Date \_\_\_\_\_

**NFPA 1006, 7.2.2 b**

**Skill 2: Assess a Confined Space Incident**

**Instructions to Tester- Safety is Paramount!**

1. The candidate shall assess the incident, given a preplan or size-up information, information from technical resources, monitoring equipment and personal protective equipment required to perform the assessment, so that general area and space specific hazards are identified, bystanders and victims are interviewed, immediate and ongoing monitoring of the space is performed, the victims' conditions and location are determined, a risk-benefit analysis is performed, methods of ingress and egress for rescuer and victims are identified, rescue systems for victim removal are determined and emergency means of retrieval for rescue entrants is established.
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 assess the incident, given a preplan of the space or size-up information from technical resources, monitoring equipment and personal protective equipment required to perform the assessment, 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. PPE
2. Completed preplan forms
3. Person to interview
4. Monitoring equipment

**NFPA 1006, 7.2.2 b**

**Skill 2: Assess a Confined Space Incident**

Skill	1 <sup>st</sup> Att	2 <sup>nd</sup> Att
1. Demonstrates the ability to select and interpret preplan and size-up information		
2. Conducts interviews		
3. Chooses and utilizes personal protective equipment		
4. Operates monitoring equipment		
5. Identifies hazard mitigation options		
6. Identifies probable victim location		
7. Performs risk-benefit analysis		
8. Recognizes characteristics and hazards of the confined space		
9. Evaluates specific rescue systems for entry and retrieval of rescuers and victims for the confined space incident		

**PERFORMANCE RATING ON THIS SKILL**

**PASS**

**FAIL**

First Attempt

\_\_\_\_\_

\_\_\_\_\_

Second Attempt

\_\_\_\_\_

\_\_\_\_\_

Candidate Signature \_\_\_\_\_

Tester Signature 1<sup>st</sup> Attempt \_\_\_\_\_

Tester Signature 2<sup>nd</sup> Attempt \_\_\_\_\_

Date \_\_\_\_\_

**NFPA 1006, 7.2.3 b**

**Skill 3: Control Hazards at Confined Space Incidents**

**Instructions to Tester- Safety is Paramount!**

1. The candidate shall control hazards, given personal protective equipment and confined space tool kit, so that the rescue area is established, access to the incident scene is controlled, rescuers are protected from exposure to hazardous materials and atmospheres, all forms of harmful energy releases and physical hazards and victims are protected from further harm.
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 control hazards; given personal protective equipment and a confined space 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. PPE
2. Scene barrier tape
3. Lock out/tag out kit
4. Monitoring equipment

**NFPA 1006, 7.2.3 b**

**Skill 3: Control Hazards at Confined Space Incidents**

Skill	1 <sup>st</sup> Att	2 <sup>nd</sup> Att
1. Utilizes personal protective equipment		
2. Places scene control barriers		
3. Operates atmospheric monitoring equipment		
4. Isolates dangerous forms of energy (lockout tagout)		
5. Mitigates physical and atmospheric hazards		

**PERFORMANCE RATING ON THIS SKILL**

**PASS**      **FAIL**

First Attempt    \_\_\_\_\_    \_\_\_\_\_

Second Attempt   \_\_\_\_\_    \_\_\_\_\_

Candidate Signature \_\_\_\_\_

Tester Signature 1<sup>st</sup> Attempt \_\_\_\_\_

Tester Signature 2<sup>nd</sup> Attempt \_\_\_\_\_

Date \_\_\_\_\_



## 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



