



Trench Rescue Technician National Certification

Certification Preparation Guide

Referenced to:

NFPA 1006, Chapter 12, 2021 Edition

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NFPA 1006, Chapter 12, 2021 Edition

Ron "Z" Zawlocki and Craig Dashner (JBL)
Trench Rescue: Principals and Practices to NFPA 1006 and 1670
4th edition, 2023

Copies of this document may be downloaded from https://jayhawkglobal.ku.edu/kufire-firefighter-certification#study_guides

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Dear Certification Candidate,

Welcome to the National Firefighter Certification Program!

The Kansas Fire & Rescue Training Institute is accredited by the International Fire Service Accreditation Congress (IFSAC) and by the National Board on Fire Service Professional Qualifications (NBFPSPQ - also known as "Pro Board"). These accreditation agencies establish rules and standards to follow in the administration, recordkeeping, and providing of National Certification for the fire service. Through this accreditation, the Kansas Fire & Rescue Training Institute is authorized to issue accredited National Certifications to individuals meeting the requirements of selected national standards.

Kansas Fire & Rescue Training Institute's role in the process is to maintain testing materials and a fair system of administering certification exams.

This National Certification Preparation Guide is designed to help you prepare for the examination process. This guide gives reading references for the written exam and the skills exam. By using this guide, you will look at the same pages the test writer looked at when they wrote the test questions and developed the skills evaluation sheets.

Our Coordinators and Evaluators are here to observe your skills and knowledge – they will not help you pass the test.

Our staff and evaluators will treat you with respect and professionalism. Our goal is that you complete the testing process with satisfactory performance and earn your National Certification.

Good luck,

KFRTI Staff

National Certification

National Certification is a professional credential that verifies your proficiency in the level to which you were/are certified. Kansas certifications do not expire. If you are moving to another state, you should contact the certification entity in that state to find out if your National Certification from Kansas is recognized.

Certification Program Mission

The mission of the National Certification Program is to maintain an accredited system for Kansas Fire Service members to earn National Fire Service Certification professional credentials.

Certification Program Values and Principles

In the conduct of this program, the Kansas Fire & Rescue Training Institute uses the values listed below to guide our professional conduct; they form the foundations and parameters of this program.

- ✘ We hold in high regard honesty and integrity in ourselves and those we serve.
- ✘ Kindness and professionalism guide our instructors and our evaluators.
- ✘ We respect the fire and emergency services and those who serve in it.
- ✘ Transparency of our system, processes, and policies is paramount.
- ✘ The certification standards drive fair evaluation and testing.
- ✘ We value our role as the provider and protector of the national certification program's credibility.

Academic Integrity

We hold staff (including part-time) and certification candidates to identical ethical standards. We expect professional behavior at all times. Any incident of academic misconduct by a candidate will invalidate their test results, forfeit their certification fee, and may subject them to suspension from the certification process for one year.

Academic misconduct includes cheating, plagiarism, falsification of records, unauthorized possession of examinations, intimidation, and/or other actions that may improperly affect the evaluation of a candidate or assisting others in any such act.

Our policy on academic misconduct is that of "zero tolerance."

The University of Kansas prohibits discrimination. Specifically, the University of Kansas prohibits discrimination based on race, color, ethnicity, religion, sex, national origin, age, ancestry, disability, status as a veteran, sexual orientation, marital status, parental status, gender identity, gender expression, and genetic information in the University's programs and activities. Retaliation is also prohibited by University policy.

How to Use the Certification Preparation Guide

This National Certification Preparation Guide is designed to help you prepare for the examination process. This guide provides reading references for the written exam and the skills exam.

We have included information in this guide to help you achieve the professional Fire Service National Certification credential. There are a few critical elements in preparing for the National Certification Exam. They are: 1) Take some time between the end of your course and the certification exam to focus on studying for the exam. 2) Use this Preparation Guide to help focus on the requirements of the National Standard and your study time.

STEP 1: Review the Administrative information in front of this Preparation Guide.

- ✘ We have included some important information about the program and the steps of certification. Please take a few minutes and review these pages.

STEP 2: Review the Reading Reference Pages

The Reading Reference pages are arranged by Job Performance Requirements (JPRs), which are determined by the correlating NFPA standard.

- ✘ Read and study the pages listed in the written exam reading pages.
- ✘ By reading these pages, you are reading the same pages the test developer was when they were writing test questions.

STEP 3: Review the Skill Evaluation Sheets in this Certification Guide.

- ✘ Take note of the Instructions to the candidate (grey boxes) on each Skill Sheet. These are the instructions that the evaluator will give to you in each station before you test.
- ✘ Skills sheet references refer you to the reference manual to explain the skill. You will be graded only on those items listed on the skill evaluation sheets. Use these in your practice and exam preparations.

STEP 4: Read & Review, Read & Review, Read & Review, and Practice, Practice, Practice!

- ✘ Don't practice until you do it right; practice until you can't do it wrong!

STEP 5: Get a good night's rest before the exam.

- ✘ You can be tired in three ways: Mentally, Physically, and Emotionally. If you are tired in any of these ways, it will make you tired in ALL of them.
- ✘ Save the party for after the exam... get a good night's rest... eat a good breakfast (if you test in the morning)... easy on the sugar and caffeine... and relax!

GOOD LUCK!

Note:

If you are exploring National Certification and haven't taken a course specifically for the level of certification you are seeking, we STRONGLY suggest that you start the process by taking a course. Under certain circumstances, you may challenge some certification exams. Persons who take a course first do much better on the exam. Contact the Kansas Fire & Rescue Training Institute for more information.

National Certification Application & Processes

- Application:** Applications are required before testing. Visit the KFRTI web page (<https://kupce.ku.edu/kufire-firefighter-certification>) to download the application.
- Registration for Exams:** Pre-registration is required. Go to the KFRTI online registration point to register and pay the certification fee. (<https://www.enrole.com/kupce/jsp/index.jsp?categoryId=10019>)
- Certification Fees:** Certification fees must be paid before the exam date. Individuals are required to pay fees online when registering for an exam. An organization may request to be billed; this billing process requires a Purchase Order from that organization stating each candidate's name. To arrange billing, call the KFRTI at 1-866-804-8841. Billing cannot be processed online.
- Number of Attempts:** Candidates are allowed two attempts per test per application, and all testing must be completed within one year of the first testing activity. Additional testing requires a new application and fee.
- Picture I.D. Required:** A government-issued photo I.D. is required at the test site.
- Accommodations:** The Kansas Fire and Rescue Training Institute, as part of the University of Kansas, adheres to the requirements of the Americans with Disabilities Act. Certification candidates requesting accommodations must submit the request in writing two (2) weeks before testing. The request must include a copy of the diagnosis by a qualified professional. Upon receipt of an accommodations request, the Kansas Fire and Rescue Training Institute will review the request and notify the requestor of the proposed accommodations.

What if I Fail the Exam?

Failure of any required component (less than 70% on the written exam, or less than 100% on the skills exam) constitutes a failed attempt.

- a. Candidates may retest on any component of the exam (written or skills exams).
- b. Candidates must register to take a retest at another test site. No walk-in testing is allowed. Call the Institute at (toll-free) 866-804-8841 to register for a retest.
- c. Candidates are allowed two (2) attempts at any portion of the exam. A new application and fee is required if a candidate fails any portion of the exam twice. The new application starts the certification process over, and all portions of testing will have to be retested.
- d. The Institute strongly recommends that candidates study or seek additional training before attempting the exam for a third attempt.

Time to Complete Certification

Candidates have one year from the date of their first testing action to complete their certification. Retaking the written test, retesting skills, submitting verification forms, and all other requirements must be completed within that year. Failure to complete the certification within that year will invalidate all previous testing. The candidate must submit a new application, repay the testing fee, and resubmit all verification forms to retest for the written and skills tests before certification.

Kansas Fire & Rescue Training Institute's Certification Requirements for Trench Rescue Technician

Prerequisites

All candidates are required to have successfully completed the written and skills testing for NFPA 1006, Chapter 12.2 (Trench Rescue Operations) before testing for NFPA 1006, Chapter 12.3 (Trench Rescue Technician) national certification. Certifications from other entities will be evaluated for reciprocity as per the KFRTI's Reciprocity policy.

Trench Rescue Technician - Certification Exam

Written Exam:

- a. The Trench Rescue Technician Written Exam includes 50 multiple-choice questions. The written test covers Trench Rescue Technician.
- b. Candidates are allowed one (1) hour to complete the exam.
- c. Answer sheets and pencils are provided. "Bubble Sheet" answer sheets that candidates fill in small circles to indicate answer (a, b, c, d) as the correct answer are used.
- d. No cell phones, radios, or other electronic devices are allowed in the room while an exam is being administered (an exception for radios that would enable "on-duty" personnel to receive alarms may be granted under special circumstances).
- e. A 70% minimum score is required to pass the written exam in each discipline.

Skills Exam:

- a. The Skills Exam includes individual and team-based skills in a scenario setting. Depending on the skill being tested, candidates may be tested individually or as a member of a team.
 - b. Teams of candidates are formed for the purpose of skills testing. Individual candidates may not pre-select or make up crews of their own choosing. The Exam Coordinator appoints teams (for testing purposes) at the test site.
 - c. When testing as a team member, evaluation will include both individual performance and performance as a member of the team.
 - d. Each Skills Exam will include 1 to 3 stations. Each station may consist of multiple skills. All skill exam scenarios will include no less than four (4) or five (5) skills in total.
 - e. You will be given up to two attempts at each station. The two attempts per station make up your first overall attempt at the skills exam.
- a. Skills exams require 100% to pass in all stations.
 - b. No same-day skills retesting is allowed.

**Trench Rescue Technician s - Written Exam
Study/Preparation Information and Materials**

Written Exam: 50 multiple-choice and true/false questions.

- **Trench Rescue Technician** 50 questions

Time allowed to take exam: One (1) hour.

Passing Score: 70% (or higher)

Answer sheets and pencils are provided. "Bubble Sheet" answer sheets that candidates fill in small circles to indicate answer (a, b, c, d) as the correct answer are used.

No cell phones, radios, or other electronic devices are allowed in the room while an exam is being administered (an exception for radios that would enable "on-duty" personnel to receive alarms may be granted under special circumstances).

Reading Reference/Text

The Trench Rescue Technician written exam is referenced to one (1) document.

(JBL) - Ron "Z" Zawlocki and Craig Dashner, Trench Rescue: Principals and Practices to NFPA 1006 and 1670, 4th edition, 2023

The National Standard test is based on

NFPA 1006 Standard for Technical Rescuer Professional Qualifications, 2021 Edition.

**Written Exam Study Pages
(Test questions are taken from these exact pages.)**

Section Subject	Reading/Study Pages
NFPA 1006, JPR Number	

12.3 Trench Rescue Technician – General Requirements

Develop a shoring plan for an intersecting trench.

12.3.1 (JBL) Pages: 236-246, 250-252, 270-273

Implement a shoring plan for an intersecting trench.

12.3.2 (JBL) Pages: 238-242, 250-252, 270-273

Develop a shoring plan for a trench more than 8 ft. deep.

12.3.3 (JBL) Pages: 236-239, 260-262, 270-273

Implement a shoring plan for a trench more than 8 ft. deep.

12.3.4 (JBL) Pages: 236-239, 260-262, 270-273

Written Exam Study Pages
(Test questions are taken from these exact pages.)

Section Subject NFPA 1006, JPR Number	Reading/Study Pages
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Support an intersecting trench as a member of a team.

12.3.5 (JBL) Pages: 236-246, 270-273

Install supplemental sheeting and shoring.

12.3.6 (JBL) Pages: 236-239, 270-273

Utilize spot shoring techniques to support soil without incorporating uprights or panels.

12.3.7 (JBL) Pages: 260-273

Construct load stabilization systems.

12.3.8 (JBL) Pages: 213-216

Lift as load.

12.3.9 (JBL) Pages: 207-217, 220-233

Coordinate the use of heavy equipment.

12.3.10 (JBL) Pages: 220-233

Release a victim from entrapment by components of a collapsed trench.

12.2.11 (JBL) Pages: 236-246, 250-252, 270-273

***Trench Rescue Technician Skills Exam
Study/Preparation Information and Materials***

Trench Rescue Technician Skills Exam:

The Skills Exam includes individual and team-based skills in a scenario setting. Depending on the skill being tested, candidates may be tested individually or as a member of a team.

Teams of candidates are formed for the purpose of skills testing. Individual candidates may not pre-select or make up crews of their own choosing. The Exam Coordinator appoints teams (for testing purposes) at the test site.

When testing a team member, evaluation includes both individual performance and performance as a member of the team.

Skills Exams typically include 1 to 3 stations. All Trench skill exam scenarios will include no less than four (4) or five (5) skills in total

Time allowed to take exam:

The overall skill exam is not timed; however, individual skills and/or stations may include a maximum/minimum time.

Passing Score:

Skills exams require 100% on all stations and skills. Up to two attempts will be given for each skill and/or station being tested. These two attempts make up your first attempt at the skills exam.

No cell phones, radios, or other electronic devices are allowed in the room while an exam is being administered (an exception for radios that would enable "on-duty" personnel to receive alarms may be granted under special circumstances).

Reading Reference/Text

The Trench Rescue Operation skills exam is referenced to:

(JBL) - Ron "Z" Zawlocki and Craig Dashner, Trench Rescue: Principals and Practices to NFPA 1006 and 1670, 4th edition, 2023

The National Standard test is based on:

NFPA 1006 Standard for Technical Rescuer Professional Qualifications, 2021 Edition.

Trench Rescue Operations Skill Evaluation Sheets

These Skills Evaluation Sheets are the exact grading sheets that evaluators use during the Skills Test. These sheets have been edited to use grading skills explicitly and should not be used to learn the skills.

These Skill Evaluation Sheets have been included in this Preparation Guide for the purpose of guiding you as final preparations are made (and practice performed) for the Certification Exam.

Grading for the Skills Evaluation requires performing 100% of the steps listed on these sheets. You will not be evaluated on steps of the skills that are not listed on these evaluation sheets.



Trench Rescue Technician: Develop a shoring plan for an intersecting trench

Item TT1

Reference: NFPA 1006, 2021 Edition, Chapter 12, Job Performance Requirement 12.3.1.

Evaluator Equipment Required: Trench Scenario, Multi-gas monitor, Trench tactical worksheet and checklist

Candidate Equipment Required: Personal Protective Equipment (Helmet and Gloves), Pen or Pencil

Evaluator's Instructions to Candidates

At this station, you will develop a shoring plan for an intersecting trench that identifies and prepares to mitigate potential collapse and entrapment hazards. You will provide a pre-briefing to the rescue team that will identify and establish safe zones both inside and outside of the trench, a strut preparation staging area, shoring strategies, and the victim release and removal plan.

This process will end once you indicate you are finished or the maximum 10-minute time limit expires.
To pass this station, you must successfully complete 100% of the steps.

Evaluated Skill Items

	1st Attempt		2nd Attempt	
	Pass	Fail	Pass	Fail
1. Determine shoring strategies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Designate cut station location and material and equipment needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Establish safe zones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Pre-brief team on shoring strategies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Victim release	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Projected path for removal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Met allowed time (10-minutes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date: _____

Station: Pass Fail

Candidate name: _____

Candidate Signature: _____

Evaluator Name: _____

Evaluator Signature: _____

Notes (Please include comments/explanation for failure):



Trench Rescue Technician: Implement a shoring plan for an intersecting trench

Item TT2

Reference: NFPA 1006, 2021 Edition, Chapter 12, Job Performance Requirement 12.3.2.

Evaluator Equipment Required: Trench Scenario, KFRTI trench rescue cache, Trench tactical worksheet and checklist

Candidate Equipment Required: Personal Protective Equipment (Helmet, Gloves, Safety Boots, safety glasses, and hearing protection)

Evaluator's Instructions to Candidates

At this station, as a member of a team, you will implement a trench shoring plan for an intersecting trench based on the incident pre-briefing and protocols, so that the victim is protected from additional collapse, the trench walls are supported, prior areas of collapse are addressed, shoring team members work from protected areas, and shoring systems are installed so they perform their intended function.

This process will end once you indicate you are finished, or the maximum 60-minute time limit expires.

To pass this station you must successfully complete all 100% of the steps.

Evaluated Skill Items

	1st Attempt		2nd Attempt	
	Pass	Fail	Pass	Fail
1. Demonstrates the ability to place shoring and shielding systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Use Protocols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Choose methods to stabilize	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Establish a strut preparations staging location (cut-station)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Use personal protective equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Anticipate extrication logistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Install supplemental shoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Create shoring systems in an intersecting trench. (primary, secondary, complete)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Met allowed time (60-minutes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date: _____

Station: Pass Fail

Candidate name: _____

Candidate Signature: _____

Evaluator Name: _____

Evaluator Signature: _____

Notes (Please include comments/explanation for failure):



Trench Rescue Technician: Develop a shoring plan for a trench more than 8 ft. deep

Item TT3

Reference: NFPA 1006, 2021 Edition, Chapter 12, Job Performance Requirement 12.3.3.

Evaluator Equipment Required: Trench Scenario, KFRTI trench rescue cache, Trench tactical worksheet and checklist

Candidate Equipment Required: Personal Protective Equipment (Helmet and Gloves), Pen or Pencil

Evaluator's Instructions to Candidates

At this station, you will develop a shoring plan for a trench more than 8 ft deep that identifies and prepares to mitigate potential collapse and entrapment hazards. You will provide a pre-briefing to the rescue team that will identify and establish safe zones both inside and outside of the trench, a strut preparation staging area, shoring strategies, and the victim release and removal plan.

This process will end once you indicate you are finished or the maximum 10-minute time limit expires.

To pass this station, you must successfully complete 100% of the steps.

Evaluated Skill Items

	1st Attempt		2nd Attempt	
	Pass	Fail	Pass	Fail
1. Determine shoring strategy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Designate strut preparations staging location (cut-station)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Determine material and equipment needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Establish safe zones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Team Prebriefing				
a. shoring strategies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. victim release plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. projected path for removal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Meets allowed time (10-minutes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date: _____

Station: Pass Fail

Candidate name: _____

Candidate Signature: _____

Evaluator Name: _____

Evaluator Signature: _____

Notes (Please include comments/explanation for failure):



Trench Rescue Technician: Implement a shoring plan for a trench more than 8 ft. deep

Item TT4

Reference: NFPA 1006, 2021 Edition, Chapter 12, Job Performance Requirement 12.3.4.

Evaluator Equipment Required: Trench Scenario, KFRTI trench rescue cache, Trench tactical worksheet and checklist

Candidate Equipment Required: Personal Protective Equipment (Helmet, Gloves, Safety Boots, safety glasses, and hearing protection)

Evaluator's Instructions to Candidates

At this station, as a member of a team, you will implement a trench shoring plan for a trench more than 8 ft deep, based on the incident pre-briefing and protocols, so that the victim is protected from additional collapse, the trench walls are supported, prior areas of collapse are addressed, shoring team members work from protected areas, and shoring systems are installed so they perform their intended function.

This process will end once you indicate you are finished, or the maximum 60-minute time limit expires.

To pass this station you must successfully complete all 100% of the steps.

Evaluated Skill Items

	1st Attempt		2nd Attempt	
	Pass	Fail	Pass	Fail
1. Demonstrates the ability to place shoring and shielding systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Use Protocols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Choose methods to stabilize	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Establish a strut preparations staging location (cut-station)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Use personal protective equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Anticipate extrication logistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Install supplemental shoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Create shoring systems in a trench more than 8 ft deep (primary, secondary, complete)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Met allowed time (60-minutes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date: _____

Station: Pass Fail

Candidate name: _____

Candidate Signature: _____

Evaluator Name: _____

Evaluator Signature: _____

Notes (Please include comments/explanation for failure):



Trench Rescue Technician: Support an intersecting trench as a member of a team

Item TT5

Reference: NFPA 1006, 2021 Edition, Chapter 12, Job Performance Requirement 12.3.5.

Evaluator Equipment Required: Trench Scenario, KFRTI trench rescue cache, Trench tactical worksheet and checklist

Candidate Equipment Required: Personal Protective Equipment (Helmet, Gloves, Safety Boots, safety glasses, and hearing protection)

Evaluator's Instructions to Candidates

At this station, as a member of a team, you will provide support for an intersecting trench based on the incident pre-briefing and protocols so that hazards are identified and managed, further soil movement is continuously monitored and minimized, and the victim is protected from further collapse and extrication is considered. Rescuers must demonstrate the ability to follow trench protocols while utilizing personal protective equipment, always remain in "safe zones," and understand emergency procedures.

This process will end once you indicate you are finished, or the maximum 60-minute time limit expires.

To pass this station you must successfully complete all 100% of the steps.

Evaluated Skill Items

	1st Attempt		2nd Attempt	
	Pass	Fail	Pass	Fail
1. Demonstrate the ability to interpret tabulated data information and tables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Identify the following:				
a. Type of intersecting trench	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Hazards in the trench	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Types of collapse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Methods to stabilize	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Use trench rescue protocols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Use personal protective equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Anticipate extrication logistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Place shoring and shielding systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Met allowed time (60-minutes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date: _____

Station: Pass Fail

Candidate name: _____

Candidate Signature: _____

Evaluator Name: _____

Evaluator Signature: _____

Notes (Please include comments/explanation for failure):



Trench Rescue Technician: Install supplemental sheeting and shoring

Item TT6

Reference: NFPA 1006, 2021 Edition, Chapter 12, Job Performance Requirement 12.3.6.

Evaluator Equipment Required: Trench Scenario, KFRTI trench rescue cache, Trench tactical worksheet and checklist

Candidate Equipment Required: Personal Protective Equipment (Helmet, Gloves, Safety Boots, safety glasses, and hearing protection)

Evaluator's Instructions to Candidates

At this station, as a member of a team, install supplemental sheeting and shoring for each 2 ft of depth dug below an existing approved shoring system so that hazards are identified and managed, further soil movement is continuously monitored and minimized, initial shoring strategies are continued, and the victim is protected from further collapse while excavation of entrapping soil is continued, and extrication is considered. Rescuers must demonstrate the ability to follow trench protocols while utilizing personal protective equipment, always remain in "safe zones," and understand emergency procedures.

This process will end once you indicate you are finished, or the maximum 60-minute time limit expires.

To pass this station you must successfully complete all 100% of the steps.

Evaluated Skill Items

	1st Attempt		2nd Attempt	
	Pass	Fail	Pass	Fail
1. Demonstrate the ability to interpret tabulated data information and tables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Identify supplemental sheeting and shoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Identify types of collapse and methods to stabilize	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Identify exposure to hazards within the trench relative to existing safe zones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Use trench rescue protocols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Select and use personal protective equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Anticipate extrication logistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Place shoring and shielding systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Met allowed time (60-minutes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date: _____

Station: Pass Fail

Candidate name: _____

Candidate Signature: _____

Evaluator Name: _____

Evaluator Signature: _____

Notes (Please include comments/explanation for failure):



Trench Rescue Technician: Utilize spot shoring techniques to support soil without incorporating uprights or panels

Item TT7

Reference: NFPA 1006, 2021 Edition, Chapter 12, Job Performance Requirement 12.3.7.

Evaluator Equipment Required: Trench Scenario, KFRTI trench rescue cache, Trench tactical worksheet and checklist

Candidate Equipment Required: Personal Protective Equipment (Helmet, Gloves, Safety Boots, safety glasses, and hearing protection)

Evaluator's Instructions to Candidates

At this station, as a member of a team, utilize spot shoring techniques to support soil without incorporating uprights or panels as part of the shoring plan to prevent further collapse. so that hazards are identified and managed, further soil movement is continuously monitored and minimized, initial shoring strategies are continued, and the victim is protected from further collapse and extrication is considered. Rescuers must demonstrate the ability to follow trench protocols while utilizing personal protective equipment, always remain in "safe zones," and understand emergency procedures.

This process will end once you indicate you are finished, or the maximum 60-minute time limit expires.

To pass this station you must successfully complete all 100% of the steps.

Evaluated Skill Items

	1st Attempt		2nd Attempt	
	Pass	Fail	Pass	Fail
1. Demonstrate the ability to interpret tabulated data information and tables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Identify types of collapse and methods to stabilize	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Identify exposure to hazards within the trench relative to existing safe zones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Use trench rescue protocols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Select and use personal protective equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Anticipate extrication logistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Utilize spot shoring techniques	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Place shoring and shielding systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Met allowed time (60-minutes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date: _____

Station: Pass Fail

Candidate name: _____

Candidate Signature: _____

Evaluator Name: _____

Evaluator Signature: _____

Notes (Please include comments/explanation for failure):



Trench Rescue Technician: Construct load stabilization systems

Item TT8

Reference: NFPA 1006, 2021 Edition, Chapter 12, Job Performance Requirement 12.3.8.

Evaluator Equipment Required: Trench Scenario, KFRTI trench rescue cache, Cribbing and High pressure airbags, Trench tactical worksheet and checklist

Candidate Equipment Required: Personal Protective Equipment (Helmet, Gloves, Safety Boots, safety glasses, and hearing protection)

Evaluator's Instructions to Candidates

At this station, as a member of a team, you will calculate the weight of the load and then construct a load stabilization system (cribbing system), so that the stabilization system will support the load safely, the system is stable, and the assignment is completed.

This process will end once you indicate you are finished, or the maximum 20-minute time limit expires.

To pass this station you must successfully complete all 100% of the steps.

Evaluated Skill Items

	1st Attempt		2nd Attempt	
	Pass	Fail	Pass	Fail
1. Demonstrate the ability to select and construct a stabilization system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Evaluate structural integrity of the system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Determine stability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Calculate loads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Met allowed time (20-minutes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date: _____

Station: Pass Fail

Candidate name: _____

Candidate Signature: _____

Evaluator Name: _____

Evaluator Signature: _____

Notes (Please include comments/explanation for failure):



Reference: NFPA 1006, 2021 Edition, Chapter 12, Job Performance Requirement 12.3.9.

Evaluator Equipment Required: Trench Scenario, KFRTI trench rescue cache, Cribbing and High pressure airbags, Trench tactical worksheet and checklist

Candidate Equipment Required: Personal Protective Equipment (Helmet, Gloves, Safety Boots, safety glasses, and hearing protection)

Evaluator's Instructions to Candidates

At this station, as a member of a team, you will calculate the weight of the load and then select a load lifting system, so that load movement is controlled and stabilized lifted throughout the lifting process, to allow access to the victim.

This process will end once you indicate you are finished, or the maximum 20-minute time limit expires.

To pass this station you must successfully complete all 100% of the steps.

Evaluated Skill Items

	1st Attempt		2nd Attempt	
	Pass	Fail	Pass	Fail
1. Ability to evaluate and estimate the weight of the load	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Operate the tools correctly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Operate a lever	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Apply load stabilization systems (Evaluation Sheet TT8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Met allowed time (20-minutes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date: _____

Station: Pass Fail

Candidate name: _____

Candidate Signature: _____

Evaluator Name: _____

Evaluator Signature: _____

Notes (Please include comments/explanation for failure):



Trench Rescue Technician: Coordinate the use of heavy equipment

Item TT10

Reference: NFPA 1006, 2021 Edition, Chapter 12, Job Performance Requirement 12.3.10.

Evaluator Equipment Required: Trench Scenario, KFRTI trench rescue cache, Radio, Heavy Equipment (excavator backhoe, vac truck, etc.) with Operator, Trench tactical worksheet and checklist

Candidate Equipment Required: Personal Protective Equipment (Helmet, Gloves, Safety Boots, safety glasses, and hearing protection)

Evaluator's Instructions to Candidates

At this station, you will coordinate the use of heavy equipment while identifying hazards and continuously monitoring the scene for rescuer and victim safety. You will assess the operator for skill and calm demeanor and the heavy equipment for precision of movement and maintenance issues. Communication with the operators will be by radio and hand signals. Appropriate PPE will be used.

This process will end once you indicate you are finished, or the maximum 30-minute time limit expires.

To pass this station you must successfully complete all 100% of the steps.

Evaluated Skill Items

	1st Attempt		2nd Attempt	
	Pass	Fail	Pass	Fail
1. Identifies hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Continuously monitor the scene for rescuer and victim safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Assesses operator for skill and calm demeanor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Assesses heavy equipment for precision of movement and maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Communicates using hand signals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Communicates using radio equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Use personal protective equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Met allowed time (30-minutes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date: _____

Station: Pass Fail

Candidate name: _____

Candidate Signature: _____

Evaluator Name: _____

Evaluator Signature: _____

Notes (Please include comments/explanation for failure):



Trench Rescue Technician: Release a victim from entrapment by components of a collapsed trench

Item TT11

Reference: NFPA 1006, 2021 Edition, Chapter 12, Job Performance Requirement 12.3.11.

Evaluator Equipment Required: Trench Scenario, KFRTI trench rescue cache, Cribbing and High pressure airbags, Trench tactical worksheet and checklist

Candidate Equipment Required: Personal Protective Equipment (Helmet, Gloves, Safety Boots, safety glasses, and hearing protection)

Evaluator's Instructions to Candidates

At this station, you will release a victim from entrapment by components of a collapsed trench. Hazards to rescue personnel and victims shall be minimized. The techniques used should take the victim's injuries into consideration, identify potential crush injuries, compartment syndrome, and enhance survivability. All techniques and actions must not compromise the integrity of the existing trench shoring system.

This process will end once you indicate you are finished or the maximum 30-minute time limit expires.

To pass this station, you must successfully complete 100% of the steps.

Evaluated Skill Items

	1st Attempt		2nd Attempt	
	Pass	Fail	Pass	Fail
1. Select, use, and care for PPE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Operate rescue tools and stabilization systems;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Identify crush injuries related to compartment syndrome;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. and complete risk/benefit assessments for selected methods of rescue and time constraints.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Met allowed time (30-minutes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date: _____

Station: Pass Fail

Candidate name: _____

Candidate Signature: _____

Evaluator Name: _____

Evaluator Signature: _____

Notes (Please include comments/explanation for failure):