Structural Collapse Technician I
National Certification

Certification Preparation Guide

Referenced to:
NFPA 1006, Chapter 9, 2013 Edition
Referenced to:

NFPA 1006, Chapter 9, 2013 Edition

Federal Emergency Management Agency (FEMA)
National Urban Search and Rescue Response System
Structural Collapse Technician Training Student Manual, July 2012
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 (NBFSPQ - 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, 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 was specifically designed to help you prepare for the examination process ahead. This guide gives reading references for the written exam and the skills exam. By using this guide, you will be looking at the same pages the test writer was looking 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 in that state.

Certification Program Mission

This 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 service 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 on the basis of 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 specifically designed to help you prepare for the examination process ahead. This guide provides reading references for the written exam and the skills exam.

We have included information in this guide that will help you achieve the professional credential that is Fire Service National Certification. There are a few key 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 take you back 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 any of 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 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 in advance of 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 then notify the requestor of the proposed accommodations.

**What if I Fail the Exam?**

Failure of any required component (not submitting a currently valid certification or licensure KBEMS number, less than 70% on the written exam or less than 100% of the skills exam) constitutes a failed attempt.

- a. Candidates may re-test on any component of the exam (written, or skills exams) and resubmit current and valid KBEMS medical credentials.
- b. Candidates must register to take a retest at another test site. No walk-in testing is allowed. To register for a retest, call the Institute at (toll free) 866-804-8841.
- c. Candidates are allowed two attempts at any portion of the exam. If a candidate fails any portion of the exam twice, a new application and fee is required for an additional two testing attempts.
- d. Any portion of the exam process successfully completed will remain valid for one calendar year from the date of their first testing action.
- e. 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 process within the one year period will invalidate all previous testing.
Kansas Fire & Rescue Training Institute’s Certification Requirements for Structural Collapse Technician I

Kansas Board of Emergency Medical Services Certification

All candidates are required to have a current certification for Emergency Medical Responder, Emergency Medical Technician, Advanced Emergency Medical Technician, or Paramedic issued by the Kansas Board of Emergency Medical Services (KBEMS).

Certifications from other entities will be evaluated for reciprocity as per the KFRTI’s Reciprocity policy. Those candidates without such certification can complete written and skills testing for NFPA 1006, Chapter 5 (Introduction to Technical Rescue). Qualification in NFPA 1006, Chapter 5 will be issued only after proof of the required medical credentials is provided and verified. Once Qualification is issued, candidates may proceed on with testing in other NFPA 1006 disciplines and levels.

Prerequisites

All candidates are required to have successfully completed the written and skills testing for NFPA 1006, Chapter 5 (Introduction to Technical Rescue) prior to testing for NFPA 1006, Chapter 9.1 (Structural Collapse Technician – Level I) national certification. Certifications from other entities will be evaluated for reciprocity as per the KFRTI’s Reciprocity policy.

Structural Collapse Technician I - Certification Exam

Written Exam:

a. The Structural Collapse Technician I Written Exam includes 50 multiple choice and true/false questions.
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 allow “on-duty” personnel to receive alarms may be granted under special circumstances).
e. A 70% minimum score is required to pass the written exam.

Skills Exam:

a. The Skills Exam includes individual and team skills. Depending on the skill being tested, candidates may be tested individually, or as a member of a team.
b. Teams of 4 to 6 candidates are formed for the purpose of skills testing. Individual candidates may not pre-select crews or make up crews of their own choosing. Teams (for testing purposes) are appointed by the Exam Coordinator at the test site.
c. When testing a member of a team, evaluation includes both individual performance and performance as a member of the team.
d. Skills Exams typically include 3 to 4 stations. Each station may include multiple skills. All Structural Collapse Technician I Skills Exams will include no fewer than four (4) skills total.
e. Skills marked “Test Item Conducted by the Kansas Board of EMS” are waived with a current valid KBEMS licensure number.
f. 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 re-testing allowed.
# Structural Collapse Technician I - Written Exam

## Study/Preparation Information and Materials

**Structural Collapse Technician I Written Exam:** 50 multiple choice and true/false 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 allow “on-duty” personnel to receive alarms may be granted under special circumstances).

### Reading Reference/Text

The Structural Collapse Technician I written exam is referenced to two (2) documents. The first document is the supplemental guide produced by Federal Emergency Management Agency (FEMA).


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### Written Exam Study Pages

*Test questions are taken from these same pages*

<table>
<thead>
<tr>
<th>Section Subject &amp; NFPA 1006, Structural Collapse (Chapter 9) JPR Number</th>
<th>Reading/Study Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1 Level I – General Requirements</td>
<td></td>
</tr>
<tr>
<td>Direct a lowering operation in a high-angle environment.</td>
<td>(CMC) Pages: 44-68, 138-144, 146-152, 290-291, 362-380</td>
</tr>
<tr>
<td>Conduct a size-up of a light frame collapsed structure.</td>
<td>(FEMA): SM1b = 3-6, 8-15</td>
</tr>
<tr>
<td></td>
<td>SM1c = 1-6, 10-16, 32-37, 41-44, 48-52, 70-71, 85-95, 99-111</td>
</tr>
<tr>
<td></td>
<td>SM2b = 1-4</td>
</tr>
<tr>
<td></td>
<td>Appendix A = 6-15</td>
</tr>
</tbody>
</table>
### Written Exam Study Pages

*(Test questions are taken from these same pages)*

<table>
<thead>
<tr>
<th>Section Subject &amp; NFPA 1006, Structural Collapse (Chapter 9) JPR Number</th>
<th>Reading/Study Pages</th>
</tr>
</thead>
</table>
| **Develop a collapse rescue incident action plan.** 9.1.3 | (FEMA): SM1a = 1-4  
SM1b = 3-18  
SM1c = 17-21, 48-52, 85-94, 96-103, 105-115  
SM2b = 1-4 |
| **Implement a collapse rescue incident action plan.** 9.1.4 | (FEMA): SM1a = 1-4  
SM1b = 3-18  
SM1c = 1-6, 48-52, 85-95, 99-111  
SM1d = 2-7  
SM04 = 41-44 |
| **Search a light frame collapsed structure.** 9.1.5 | (FEMA): SM1b = 3-18  
SM1c = 1-6, 17-19, 48-52, 106-114, 116-117  
SM1d = 8-18  
SM2a = 22  
Appendix A = 6-10, 16-20 |
| **Stabilize a collapsed light frame structure as a member of a team.** 9.1.6 | (FEMA): SM1b = 3-8  
SM1c = 1-6, 10-21, 24-25, 48-52, 70-77, 84-86  
SM2a = 2-22, 38  
SM2b = 7-60 |
| **Implement collapse support operations at a rescue incident.** 9.1.7 | (FEMA): SM1b = 8-20  
SM1d = 3-7, 20-22 |
| **Release a victim from entrapment by components of a light frame collapsed structure.** 9.1.8 | (FEMA): SM1b = 2-18  
SM1c = 10-21, 24-25, 48-53, 60-65, 87-95  
SM1d = 8-18 |
| **Remove a victim from a light frame collapse incident.** 9.1.9 | (FEMA): SM1b = 8-20  
SM1c = 17-21, 24-25, 87-95 |
<table>
<thead>
<tr>
<th>Section Subject &amp;</th>
<th>Reading/Study Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFPA 1006, Structural Collapse (Chapter 9) JPR Number</td>
<td></td>
</tr>
</tbody>
</table>
| Lift a heavy load as a team member. 9.1.10 | (FEMA): SM1b = 8-17  
SM1c = 41-44  
SM2a = 3, 8-19  
SM04 = 3-22, 28-30, 38-44 |
| Move a heavy load as a team member. 9.1.11 | (FEMA): SM1b = 8-17  
SM2a = 3  
SM04 = 3-22, 33-40 |
| Breach light frame structural components. 9.1.12 | (FEMA): SM1c = 17-21, 24-25, 48-53  
SM2a = 3  
SM03 = 12-18 |
| Construct cribbing systems. 9.1.13 | (FEMA): SM2a = 18-19  
SM04 = 20-22 |
### Structural Collapse Technician I Skills Exam

**Study/Preparation Information and Materials**

<table>
<thead>
<tr>
<th><strong>Structural Collapse Technician I Skills Exam:</strong></th>
<th>The Skills Exam includes individual and team skills. Depending on the skill being tested, candidates may be tested individually, or as a member of a team. Teams of 4 to 6 candidates are formed for the purpose of skills testing. Individual candidates may not pre-select crews or make up crews of their own choosing. Teams (for testing purposes) are appointed by the Exam Coordinator at the test site. When testing a member of a team, evaluation includes both individual performance and performance as a member of the team. Skills Exams typically include 3 to 4 stations. Each station may include 1 to as many as 4 skills. All Structural Collapse Technician I Skills Exams will include no fewer than four (4) skills total.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time allowed to take exam:</strong></td>
<td>The overall exam is not timed; however, individual skills and/or stations may include a maximum/minimum time.</td>
</tr>
<tr>
<td><strong>Passing Score:</strong></td>
<td>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 allow “on-duty” personnel to receive alarms may be granted under special circumstances).</td>
</tr>
</tbody>
</table>

**Reading Reference/Text**

Structural Collapse Technician: Level I
Skill Evaluation Sheets

These Skills Evaluation Sheets are the exact grading sheets that evaluators use during the Skills Test. These sheets have been edited for the explicit use of grading skills 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 100% of the steps listed on these sheets be performed. You will not be evaluated on steps of the skills that are not listed on these evaluation sheets.
**Evaluator's Instructions to Candidates**

At this station, you will direct a team in the operation of a simple mechanical advantage system in a high-angle raising operation. You will analyze the system for efficiency, identify any safety concerns, and complete a system safety check, prior to loading the system. You must ensure that movement is controlled and the load can be held in place as needed.

The skill will end once the load has moved a minimum of 15 feet and at least one (1) system reset has been performed.

**Expected time to complete skill(s) is 30 minutes.**

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

**Evaluated Skill Items**

1. Direct personnel effectively.
2. Use of operational commands.
3. Analyze system efficiency.
4. Identify safety concerns.
5. Perform system safety check.

---

**Candidate's name:**

**Notes (Please include comments/explanation for failure):**

**Evaluator's Signature:**  
**Date:**

**Reference:** NFPA 1006, 2013 Edition, Chapter 6, Job Performance Requirement 6.1.1  
CMC Rescue, Rope Rescue Manual, Fifth Edition

**Evaluator Equipment Required:** Rescue personnel, rigged raising system, including a load and anchor, in a high-angle environment with a minimum haul distance of 15 feet.

**Candidate Equipment Required:** Helmet, gloves, boots
Rope Rescue Technician Level I: Direct the Operation of a Lowering System in a High-Angle Environment

CMC Rescue, Rope Rescue Manual, Fifth Edition

Evaluator Equipment Required: Established lowering system, anchor system, rescue personnel, a load to be moved, a low-angle environment with a minimum travel distance of 15 feet.

Candidate Equipment Required: Helmet, gloves, boots

Evaluator's Instructions to Candidates

At this station, you will direct a team in the operation of a lowering system in a high-angle environment. You will analyze the system for efficiency, identify any safety concerns, and complete a system safety check, prior to loading the system. You must ensure that movement is controlled and the load can be held in place as needed.

The skill will end once the load has moved a minimum of 15 feet.

Expected time to complete skill(s) is 30 minutes.

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

Evaluated Skill Items

1. Direct personnel effectively.
2. Use of operational commands.
3. Analyze system efficiency.
4. Identify safety concerns.
5. Perform system safety check.

1st Attempt 2nd Attempt
Pass Fail Pass Fail

Candidate's name: 

Notes (Please include comments/explanation for failure):

Evaluator's Signature: 

Station: Pass Fail

Date

Revised: Jan 2020
At this station you are required to conduct a size-up of a light-frame collapsed structure, given the following incident-specific scenario. You are to complete the Incident Briefing ICS Form 201, given the scenario information and what you observe at the collapse site.

"The ___ building has collapsed due to ... "

Expected time to complete skill(s) is 30 minutes.

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

Evaluator's Instructions to Candidates

FEMA, Structural Collapse Technician Course: Student Manual, Book 1, July 2012
FEMA, Structural Collapse Technician Course: Student Manual, Book 2, July 2012
FEMA, Structural Collapse Technician Course: Student Manual, Appendix, July 2012

Evaluator Equipment Required: Mock building collapse site, clipboard, Incident Briefing ICS Forms 201
Candidate Equipment Required: Helmet, gloves, boots

Evaluated Skill Items

For JPR 9.1.1:
1. Categorize light frame construction types.
2. Evaluate structural stability & hazards.
3. Implement resource and security protocols.

Candidate's name: ____________________________  Station: ________  Pass [ ] Fail [ ]

Notes (Please include comments/explanation for failure):

Evaluator's Signature: ________________________  Date: _____________

Revised: Jan 2020
Structural Collapse Technician Level I: Locate Victims

FEMA, Structural Collapse Technician Course: Student Manual, Book 1, July 2012
FEMA, Structural Collapse Technician Course: Student Manual, Book 2, July 2012
FEMA, Structural Collapse Technician Course: Student Manual, Appendix, July 2012

Evaluator Equipment Required: Scenario Packet, or Mock building collapse site and structural collapse tool kit.
Candidate Equipment Required: Helmet, gloves, boots

Evaluator's Instructions to Candidates
At this station you are required to determine potential victim locations, given the follow incident specific scenario.
"The ___ building has collapsed due to ... "

Expected time to complete skill(s) is 20 minutes.
To pass this station, you must successfully complete 100% of the steps.

Evaluated Skill Items

1. Use size-up information.
2. Use occupancy class information.
3. Use search devices.
4. Assess and categorize type of collapse.

Candidate's name: [INSERT]
Station: [INSERT]
Notes (Please include comments/explanation for failure):

Evaluator's Signature: [INSERT]
Date [INSERT]

Revised: Jan 2020
**Structural Collapse Technician Level I: Develop an Incident Action Plan**

**Reference:**
- NFPA 1006, 2013 Edition, Chapter 9, Job Performance Requirement 9.1.3
- FEMA, Structural Collapse Technician Course: Student Manual, Book 1, July 2012
- FEMA, Structural Collapse Technician Course: Student Manual, Book 2, July 2012
- FEMA, Structural Collapse Technician Course: Student Manual, Appendix, July 2012

**Evaluator Equipment Required:**
Mock building collapse site, clipboard, Incident Briefing ICS Form 201

**Candidate Equipment Required:**
Helmet, gloves, boots

---

**Evaluator's Instructions to Candidates**

At this station you are required to develop a collapse rescue Incident Action Plan (IAP), given the following incident-specific scenario. You are to complete the Incident Briefing ICS Form 201, given the scenario information and what you observe at the collapse site.

"The ___ building has collapsed due to ... "

**Expected time to complete skill(s) is 20 minutes.**

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

**Evaluated Skill Items**

<table>
<thead>
<tr>
<th></th>
<th>1st Attempt</th>
<th>2nd Attempt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Initial size-up information is used.</td>
<td>Pass</td>
<td>Fail</td>
</tr>
<tr>
<td>2. Incident Management System is incorporated.</td>
<td>Pass</td>
<td>Fail</td>
</tr>
<tr>
<td>3. Monitor changing conditions specific to the incident.</td>
<td>Pass</td>
<td>Fail</td>
</tr>
<tr>
<td>4. Identify potential specialized resources.</td>
<td>Pass</td>
<td>Fail</td>
</tr>
<tr>
<td>5. Determine construction and occupancy types.</td>
<td>Pass</td>
<td>Fail</td>
</tr>
<tr>
<td>6. Identify specific incident security requirements.</td>
<td>Pass</td>
<td>Fail</td>
</tr>
<tr>
<td>7. Create written documentation.</td>
<td>Pass</td>
<td>Fail</td>
</tr>
</tbody>
</table>

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**Candidate's name:**

**Notes (Please include comments/explanation for failure):**

**Evaluator's Signature:**

**Date**

Revised: Jan 2020
At this station you are required to implement a collapse rescue Incident Action Plan (IAP), given the IAP and the following incident-specific scenario.

"The ___ building has collapsed due to ... "

Expected time to complete skill(s) is 30 minutes.
To pass this station, you must successfully complete 100% of the steps.

<table>
<thead>
<tr>
<th>Evaluated Skill Items</th>
<th>1st Attempt</th>
<th>2nd Attempt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Implement components of an incident action plan.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Incident Management System is established &amp; implemented.</td>
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<td></td>
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<tr>
<td>3. Initiate hazard mitigation objectives.</td>
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<td></td>
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<tr>
<td>4. Specialized resources are requested.</td>
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<tr>
<td>5. Initiate rescue objectives.</td>
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<td></td>
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<tr>
<td>6. Perimeter security measures are established.</td>
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</tbody>
</table>

Candidate's name: [Name]
Station: [Station]
Pass [ ] Fail [ ]
Notes (Please include comments/explanation for failure):
Evaluator's Signature: [Signature]
Date: [Date]
Revised: Jan 2020
Structural Collapse Technician Level I: Search Light-Frame Collapse Structure

FEMA, Structural Collapse Technician Course: Student Manual, Book 1, July 2012
FEMA, Structural Collapse Technician Course: Student Manual, Book 2, July 2012
FEMA, Structural Collapse Technician Course: Student Manual, Appendix, July 2012

Evaluator Equipment Required: Mock building collapse site, structural collapse tool kit, an assignment, operational protocols, and size-up information.
Candidate Equipment Required: Helmet, gloves, boots

Evaluator’s Instructions to Candidates
At this station, operating as a member of a team, you are required to search a light-frame construction collapsed structure, given the Incident Action Plan and the following incident-specific scenario.

"The ___ building has collapsed due to . . . "

"Your specific assignment is . . . "

Expected time to complete skill(s) is 60 minutes.
To pass this station you must successfully complete 100% of the steps.

Evaluated Skill Items

<table>
<thead>
<tr>
<th>Evaluated Skill Items</th>
<th>1st Attempt Pass</th>
<th>1st Attempt Fail</th>
<th>2nd Attempt Pass</th>
<th>2nd Attempt Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ability to implement an Incident Management System.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. Apply search techniques.</td>
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<tr>
<td>3. Use marking systems.</td>
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<tr>
<td>4. Identify &amp; mitigate hazards.</td>
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<tr>
<td>5. Select &amp; use victim locating devices.</td>
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<td></td>
</tr>
</tbody>
</table>

Candidate's name: 
Station: Pass ☐ Fail ☐
Notes (Please include comments/explanation for failure):

Evaluator’s Signature: 
Date

Revised: Jan 2020
Structural Collapse Technician Level I: Stabilize Collapsed Light-Frame Structure

FEMA, Structural Collapse Technician Course: Student Manual, Book 1, July 2012
FEMA, Structural Collapse Technician Course: Student Manual, Book 2, July 2012
FEMA, Structural Collapse Technician Course: Student Manual, Appendix, July 2012

Evaluator Equipment Required: Mock building collapse site, structural collapse tool kit, an assignment, operational protocols, and size-up information.

Candidate Equipment Required: Helmet, gloves, boots

Evaluator's Instructions to Candidates
At this station, operating as a member of a team, you are required to stabilize a collapsed light-frame structure, given the Incident Action Plan and the following incident-specific scenario.

"The ___ building has collapsed due to . .."

"Your specific assignment is ..."

Expected time to complete skill(s) is 120 minutes.
To pass this station you must successfully complete 100% of the steps.

Evaluated Skill Items

1. Select & construct shoring systems.
2. Use personal protective equipment.
3. Perform structural load calculations.
4. Determine resource needs.
5. Select & operate basic & specialized tools & equipment.
6. Implement communications & safety protocols.
7. Mitigate specific hazards associated with shoring tasks.

Candidate's name: 
Station:  Pass [ ] Fail [ ]
Notes (Please include comments/explanation for failure): 

Evaluator's Signature: 
Date: 

Revised: Jan 2020
Evaluator's Instructions to Candidates

At this station, you are required to implement collapse support operations, given the Incident Action Plan and the following incident-specific scenario.

"The ___ building has collapsed due to ...

Expected time to complete skill(s) is 20 minutes.
To pass this station you must successfully complete 100% of the steps.

Evaluated Skill Items

1. Manage resources.
2. Set up lights.
3. Initiate environmental controls.
4. Set up rehab for rescures.

Candidate's name:

Station: Pass [ ] Fail [ ]

Notes (Please include comments/explanation for failure):

Evaluator's Signature: ____________________________ Date: ____________________________

Revised: Jan 2020
Structural Collapse Technician Level I: Release Victim from Entrapment

Reference: NFPA 1006, 2013 Edition, Chapter 9, Job Performance Requirement 9.1.8
FEMA, Structural Collapse Technician Course: Student Manual, Book 1, July 2012
FEMA, Structural Collapse Technician Course: Student Manual, Book 2, July 2012
FEMA, Structural Collapse Technician Course: Student Manual, Appendix, July 2012

Evaluator Equipment Required: Mock building collapse site, weather appropriate outerwear, additional protective gear as appropriate, structural collapse tool kit, specialized equipment necessary to complete the task, an assignment, operational protocols, and size-up information. Helmet, gloves, boots

Candidate Equipment Required:

Evaluator’s Instructions to Candidates
At this station, operating as a member of a team, you are required to release a victim from entrapment by components of a collapsed structure, given the Incident Action Plan and the following incident-specific scenario.

"The ___ building has collapsed due to ...

"Your specific assignment is ...

Expected time to complete skill(s) is 30 minutes.
To pass this station you must successfully complete 100% of the steps.

Evaluated Skill Items

1. Select, use, and care for PPE.  
2. Operate rescue tools and stabilization systems.  
3. Recognize crush syndrome indicators.  
4. Complete risk-benefit assessments for selected methods of rescue and time constraints. (EMR via KSBEMS)

Candidate’s name:

Notes (Please include comments/explanation for failure):

Evaluator’s Signature:  
Date: Revised: Jan 2020
**Structural Collapse Technician Level I: Remove Victim from Collapse**

**Reference:**
- NFPA 1006, 2013 Edition, Chapter 9, Job Performance Requirement 9.1.9
- FEMA, Structural Collapse Technician Course: Student Manual, Book 1, July 2012
- FEMA, Structural Collapse Technician Course: Student Manual, Book 2, July 2012
- FEMA, Structural Collapse Technician Course: Student Manual, Appendix, July 2012

**Evaluator Equipment Required:** Mock building collapse site, weather appropriate outerwear, additional protective gear as appropriate, disentangled victim, a basic first aid kit, victim packaging resources, an assignment, operational protocols, and size-up information.

**Candidate Equipment Required:** Helmet, gloves, boots

**Evaluator’s Instructions to Candidates**

At this station, operating as a member of a team, you are required to remove a victim from a collapse incident, given the Incident Action Plan and the following incident-specific scenario.

"The ___ building has collapsed due to ... "

"Your specific assignment is ... "

Expected time to complete skill(s) is 20 minutes.

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

<table>
<thead>
<tr>
<th>Evaluated Skill Items</th>
<th>1st Attempt</th>
<th>2nd Attempt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Select, use, and care for PPE.</td>
<td>Pass</td>
<td>Fail</td>
</tr>
<tr>
<td>2. Basic prehospital care of soft-tissue injuries.</td>
<td>(EMR via KSBEMS)</td>
<td></td>
</tr>
<tr>
<td>3. Fracture Stabilization.</td>
<td>(EMR via KSBEMS)</td>
<td></td>
</tr>
<tr>
<td>4. Airway Maintenance Techniques.</td>
<td>(EMR via KSBEMS)</td>
<td></td>
</tr>
<tr>
<td>5. Cardiopulmonary resuscitation.</td>
<td>(EMR via KSBEMS)</td>
<td></td>
</tr>
<tr>
<td>6. Selection and use of patient packaging equipment.</td>
<td>(EMR via KSBEMS)</td>
<td></td>
</tr>
</tbody>
</table>

**Candidate's name:**

Notes (Please include comments/explanation for failure):

**Evaluator’s Signature:**

Date

Revised: Jan 2020
Structural Collapse Technician Level I: Lift a Heavy Load

Reference:
- NFPA 1006, 2013 Edition, Chapter 9, Job Performance Requirement 9.1.10
- FEMA, Structural Collapse Technician Course: Student Manual, Book 1, July 2012
- FEMA, Structural Collapse Technician Course: Student Manual, Book 2, July 2012
- FEMA, Structural Collapse Technician Course: Student Manual, Appendix, July 2012

Evaluator Equipment Required: Mock building collapse site, weather appropriate outerwear, additional protective gear as appropriate, structural collapse tool kit, specialized equipment necessary to complete the task, engineering resources (if needed), a load to be lifted, an assignment, operational protocols, and size-up information.

Candidate Equipment Required: Helmet, gloves, boots

Evaluator's Instructions to Candidates

At this station, operating as a member of a team, you are required to lift a heavy load, given the Incident Action Plan and the following incident-specific scenario.

"The ___ building has collapsed due to ..."

"Your specific assignment is ..."

Expected time to complete skill(s) is 30 minutes.
To pass this station you must successfully complete 100% of the steps.

Evaluated Skill Items

1. Evaluate & estimate the weight of the load.
2. Operate lifting tools.
3. Apply levers.
4. Apply load stabilizing systems.

Candidate's name: __________________________
Notes (Please include comments/explanation for failure):

Evaluator's Signature: __________________________
Date: __________________________

1st Attempt
Pass [ ] Fail [ ]
2nd Attempt
Pass [ ] Fail [ ]

Station: Pass [ ] Fail [ ]

Revised: Jan 2020
# Structural Collapse Technician Level I: Move a Heavy Load

**Item 9-13**

| FEMA, Structural Collapse Technician Course: Student Manual, Book 1, July 2012  
| FEMA, Structural Collapse Technician Course: Student Manual, Book 2, July 2012  
| FEMA, Structural Collapse Technician Course: Student Manual, Appendix, July 2012 |

| Evaluator Equipment Required: | Mock building collapse site, weather appropriate outerwear, additional protective gear as appropriate, structural collapse tool kit, specialized equipment necessary to complete the task, engineering resources (if needed), a load to be lifted, an assignment, operational protocols, and size-up information. |

| Candidate Equipment Required: | Helmet, gloves, boots |

## Evaluator's Instructions to Candidates

At this station, operating as a member of a team, you are required to release a victim from entrapment by components of a collapsed structure, given the Incident Action Plan and the following incident-specific scenario.

"The ___ building has collapsed due to ... "

"Your specific assignment is ... "

Expected time to complete skill(s) is 30 minutes.

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

### Evaluated Skill Items

<table>
<thead>
<tr>
<th></th>
<th>1st Attempt Pass</th>
<th>Fail</th>
<th>2nd Attempt Pass</th>
<th>Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Evaluate &amp; estimate the weight of the load.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Operate lifting tools.</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>3. Construct &amp; use levers &amp; inclined planes.</td>
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<tr>
<td>4. Use rigging systems.</td>
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<tr>
<td>5. Stabilize the load.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Candidate's name:**

**Notes (Please include comments/explanation for failure):**

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**Evaluator's Signature:**

**Date:**

Revised: Jan 2020
Structural Collapse Technician Level I: Breach Light-Framed Structural Components

FEMA, Structural Collapse Technician Course: Student Manual, Book 1, July 2012
FEMA, Structural Collapse Technician Course: Student Manual, Book 2, July 2012
FEMA, Structural Collapse Technician Course: Student Manual, Appendix, July 2012

Evaluator Equipment Required: Mock building collapse site, weather appropriate outerwear, additional protective gear as appropriate, structural collapse tool kit, specialized equipment necessary to complete the task, engineering resources (if needed), an assignment, operational protocols, and size-up information.

Candidate Equipment Required: Helmet, gloves, boots

Evaluator's Instructions to Candidates

At this station, operating as a member of a team, you are required to breach structural components, given the Incident Action Plan and the following incident-specific scenario.

"The ___ building has collapsed due to ...

"Your specific assignment is ...

Expected time to complete skill(s) is 45 minutes.
To pass this station you must successfully complete 100% of the steps.

Evaluated Skill Items

1. Select & use breaching tools.
2. Implement breaching techniques based on building construction type.
3. Use personal protective equipment.
4. Apply stabilization where required.

Candidate's name:

Station: Pass [ ] Fail [ ]
Notes (Please include comments/explanation for failure):

Evaluator's Signature: ____________________________
Date: ____________________________

Revised: Jan 2020
**Structural Collapse Technician Level I: Construct Cribbing Systems**

FEMA, Structural Collapse Technician Course: Student Manual, Book 1, July 2012
FEMA, Structural Collapse Technician Course: Student Manual, Book 2, July 2012
FEMA, Structural Collapse Technician Course: Student Manual, Appendix, July 2012

**Evaluator Equipment Required:** Mock building collapse site, weather appropriate outerwear, additional protective gear as appropriate, structural collapse tool kit, various lengths of construction grade lumber, shims and wedges, specialized equipment necessary to complete the task, an assignment, operational protocols, and size-up information.

**Candidate Equipment Required:** Helmet, gloves, boots

**Evaluator's Instructions to Candidates**

At this station, operating as a member of a team, you are required to construct cribbing systems, given the Incident Action Plan and the following incident-specific scenario.

"The ___ building has collapsed due to ...
"Your specific assignment is ...

**Expected time to complete skill(s) is 45 minutes.**
To pass this station you must successfully complete 100% of the steps.

**Evaluated Skill Items**

<table>
<thead>
<tr>
<th></th>
<th>1st Attempt Pass</th>
<th>Fail</th>
<th>2nd Attempt Pass</th>
<th>Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Select &amp; construct cribbing systems.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Evaluate the structural integrity of the system.</td>
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<tr>
<td>3. Determine stability.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Calculate loads.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Candidate's name:**

**Notes (Please include comments/explanation for failure):**

**Evaluator's Signature:**

**Date**

Revised: Jan 2020