



**DEPARTMENT OF FINANCIAL SERVICES**

Division of State Fire Marshal  
Bureau of Fire Standards & Training

**STRUCTURAL COLLAPSE RESCUE TECHNICIAN TASK BOOK**

Please type or print legibly.

NAME: LAST		FIRST	MI	DATE OF BIRTH
HOME ADDRESS		CITY	STATE	ZIP CODE
EMAIL ADDRESS		PHONE NUMBER	FCDICE STUDENT ID NUMBER	
DATE TASK BOOK INITIATED		DATE TASK BOOK COMPLETED		

**ATTEST:** The information contained in this document is true and correct to the best of my knowledge. I understand that falsification of this document is subject to penalty and is cause to deny or revoke this certification.

*Signature of Applicant*

*Date*

*Signature of Fire Chief, Agency Head or Designee*

*Printed Name of Fire Chief, Agency Head or Designee*

*Date*

**PURPOSE OF THIS TASK BOOK:** This task book is an evaluative tool designed to document that a candidate has demonstrated certain requisite skills required to meet a specific NFPA 1670 job performance requirement. Selected skill objectives in this task book are a supplement to the student learning outcomes and objectives met by successfully completing the Structural Collapse Rescue Technician program curriculum.

**EXPECTATION OF CANDIDATE:** The Structural Collapse Rescue Technician candidate is solely responsible for the maintenance, completion, and submission of this task book.

**EXPECTATIONS OF EVALUATOR:** The evaluator is a direct supervisor, training officer or person designated by Fire Chief or Agency Head who is responsible for overseeing the performance or activity of the candidate. The evaluator documents first hand observation of the requisite skills of candidate, and attests by signature when task(s) has been demonstrated. Evaluators must sign and enter their Student ID numbers on this form.

**STRUCTURAL COLLAPSE RESCUE TECHNICIAN**

<i>General Reference to NFPA 1670 Standard</i>	<i>Evaluator Signature (Print &amp; Sign Name)</i>	<i>Student ID Number</i>	<i>Date</i>
Coordinate the use of heavy equipment at a structural collapse incident			
Conduct search operations intended to locate victims trapped inside and beneath collapsed debris			
Stabilize a collapsed heavy construction type structure as a member of a team			
Breach heavy structural components			
Cut through structural steel			
Identify the 13 types of collapse patterns and potential victim locations			
Develop a structural collapse rescue incident			

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action plan for both light frame and heavy construction type structures			
Access victims trapped inside and beneath collapsed debris			
Perform extrication operations involving packaging, treating, and removing victims trapped within and beneath collapsed debris			
Stabilize a structure and perform rescue shoring operations in order to stabilize the structure in all types of construction			
Release a victim from entrapment by components of both light frame and heavy construction type collapsed structures			
Remove a victim from both light frame and heavy construction type collapse incidents			
Lift and move a heavy load as a member of a team			
<b>STRUCTURAL COLLAPSE RESCUE TECHNICIAN BREACHING AND BREAKING</b>			
<i>General Reference to NFPA 1670 Standard</i>	<i>Evaluator Signature (Print &amp; Sign Name)</i>	<i>Student ID Number</i>	<i>Date</i>
Describe the technique for cutting post-tensioned cables			
Demonstrate proper set up of an exothermic torch			
Demonstrate proper use of an exothermic torch			
Demonstrate a piercing cut with an exothermic torch			
Demonstrate a line cut with an exothermic torch			
Trouble shoot an exothermic torch			
Demonstrate the set up of an oxy/acetylene/MAPP torch			
Demonstrate a piercing cut with an oxy/acetylene/MAPP torch			
Demonstrate a line cut with an oxy/acetylene/MAPP torch			
Trouble shoot an oxy/acetylene/MAPP torch			
Demonstrate cutting tensioned cable or wire rope			
Demonstrate the proper set up of a gasoline/oxygen torch			
Demonstrate proper light up of a gasoline/oxygen torch			
Demonstrate a plunge cut with a gasoline/oxygen torch			
Demonstrate a line cut with a gasoline/oxygen torch			
Trouble shoot a gasoline/oxygen torch			
Breach heavy structural components			
Cut through structural steel			
Identify pre-stressed concrete			
Identify post-stressed concrete			
Differentiate between tension, shear and compression			

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Correctly calculate the weight of a concrete slab			
Demonstrate proper application of wetting diamond blades			
Identify the difference between wet and dry cut diamond blades			
Demonstrate relief cuts			
Demonstrate a bevel cut for a lift out			
Demonstrate a step cut			
Demonstrate a stitch cut breach			
Demonstrate a dirty breach			
Demonstrate a bolting for a lift out			
Demonstrate proper use of a rotary saw			
Demonstrate proper use of a rotary hammer			
Demonstrate proper use of breakers			
Demonstrate the set up of the Stanley Hydraulic System			
Trouble shoot the Stanley Hydraulic System			
Demonstrate the proper technique for a plunge cut			
Trouble shoot a rail saw (Stanley)			
Trouble shoot breakers (Stanley)			
Demonstrate proper use of bolt cutters			
Demonstrate proper use of whizzer saw			
Demonstrate proper use of rebar cutter			
Demonstrate proper use of the DS-11 diamond chain saw			
Trouble shoot DS-11 chainsaw, replace and tighten chain			
Demonstrate the proper use of a reciprocating saw			
Demonstrate proper use of a core drill			
Trouble shoot a core drill			

### STRUCTURAL COLLAPSE RESCUE TECHNICIAN LIFTING AND MOVING

<i>General Reference to NFPA 1670 Standard</i>	<i>Evaluator Signature (Print &amp; Sign Name)</i>	<i>Student ID Number</i>	<i>Date</i>
Demonstrate crane hand signals			
Demonstrate the use of an inclined plane (wedge and ramp)			
Demonstrate the proper use of wedges			
Demonstrate the proper use of box cribbing			
Demonstrate the use of a come-along			
Demonstrate the proper use of pipes as rollers			
Assemble a high pressure airbag system			

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Demonstrate the ability to accurately calculate load weights			
Lift a heavy load as part of a team			
Move a heavy load as part of a team			
<b>STRUCTURAL COLLAPSE RESCUE TECHNICIAN SHORING</b>			
<i>General Reference to NFPA 1670 Standard</i>	<i>Evaluator Signature (Print &amp; Sign Name)</i>	<i>Student ID Number</i>	<i>Date</i>
Construct a cutting table and wedge jig			
Determine raker shore angle & length (45 degree)			
Demonstrate cutting field wedges			
Demonstrate cutting gusset plates Demonstrate proper nail patterns			
Construct a solid sole raker shore			
Construct a split sole raker shore			
Construct a raker shore with plywood backing			
Construct anchor systems			
Construct diagonal bracing			
Construct a flying raker shore			
Construct a flying shore			
Construct a double raker shore			
Construct a laced post shore			
Construct a sloped floor shore on a hard surface			
Construct a sloped floor shore on an earth surface			
Demonstrate the proper use of pneumatic shores			
Demonstrate the proper use of box cribbing on a sloped floor			