

## STRUCTURAL COLLAPSE - RESCUE TECHNICIAN

<b>RESOURCE CATEGORY</b>	Search and Rescue
<b>RESOURCE KIND</b>	Personnel
<b>OVERALL FUNCTION</b>	The Structural Collapse Rescue Technician rescues people in a structural collapse incident
<b>COMPOSITION AND ORDERING SPECIFICATIONS</b>	<ol style="list-style-type: none"><li>1. This position can be ordered as a single resource or in conjunction with a NIMS typed team (Structural Collapse Rescue Team).</li><li>2. Logistics for deploying this position (e.g., security, lodging, transportation, meals) must be discussed prior to deployment of this resource.</li><li>3. Operations in search and rescue environments might be immediately dangerous to life and health (IDLH), per ASTM F2890 Standard Guide for Hazard Awareness for Search and Rescue Personnel. The requesting authority must consider the need for additional recognized capability or endorsements.</li><li>4. Discuss logistics for deploying this position, such as security, lodging, transportation, and meals, prior to deployment</li><li>5. This position typically works 12 hours per shift, is self-sustainable for 72 hours, and is deployable for up to 14 days</li></ol>

Each type of resource builds on the qualifications of the type below it. For example, Type 1 qualifications include the qualifications in Type 2, plus an increase in capability. Type 1 is the highest qualification level.

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Position Qualification for Mass Search and Rescue Operations  
Search and Rescue

COMPONENT	TYPE 1	TYPE 2	NOTES
<b>DESCRIPTION</b>	<p>Same as Type 2 PLUS</p> <ol style="list-style-type: none"> <li>1. Performs rescue in structural collapse incidents, including identifying hazards in a collapsed structure defined as Heavy and/or Medium construction, consistently with the UN INSARAG Guideline and Methodology for US&amp;R categories for structures</li> <li>2. Capable of performing rescue involving lifting, moving, breaching &amp; breaking, and shoring of light, medium, and heavy frame construction debris</li> </ol>	<p>The Structural Collapse Rescue Technician is responsible for the following:</p> <ol style="list-style-type: none"> <li>1. Performs rescue in structural collapse incidents, including identifying hazards in a collapsed structure defined as Light construction, consistently with the United Nations (UN) International Search and Rescue Advisory Group's (INSARAG) Guideline and Methodology for Urban Search &amp; Rescue (US&amp;R) categories for structures</li> <li>2. Capable of performing rescue involving lifting, moving, and shoring of light frame construction debris</li> <li>3. Requests rescue, evacuation and recovery resources as needed</li> <li>4. Performs medical care to include Basic Life Support (BLS)</li> <li>5. Reports to a Structural Collapse Rescue Team Leader, if applicable</li> <li>6. Operates within the Incident Command System (ICS), a specialized position within Structural Collapse Rescue Team</li> </ol> <p>General Functions:</p> <ol style="list-style-type: none"> <li>1. Deploys for up to 14 days, ready to deploy for an incident within 24 hours of notification, self-sustaining for 72 hours upon arrival, and works up to 12 hours per shift</li> <li>2. Provides: <ol style="list-style-type: none"> <li>a. Safety of self and team members and operations</li> <li>b. Medical care of self and team members and subjects</li> <li>c. Simple decontamination of self and team members</li> <li>d. Basic ground support capability for helicopter operations</li> </ol> </li> <li>3. Use of ground vehicles, water vehicles, and aircraft for operations and support.</li> <li>4. Operates in environments with and without infrastructure including those affected by disasters and terrorism; with compromised access to roadways, utilities, transportation, and limited availability of shelter, food, and water</li> </ol>	Not Specified
<b>EDUCATION</b>	Not Specified	Not Specified	Not Specified

Superseded

Position Qualification for Mass Search and Rescue Operations  
Search and Rescue

COMPONENT	TYPE 1	TYPE 2	NOTES
<b>TRAINING</b>	<p>Same as Type 2 PLUS:</p> <ol style="list-style-type: none"> <li>1. IS-809: Emergency Support Function (ESF) #9 - Search and Rescue</li> <li>2. National US&amp;R Response System Orientation course or equivalent</li> <li>3. National US&amp;R Response System Structural Collapse Technician Training or equivalent</li> <li>4. FEMA/Department of Justice (DOJ) Emergency Response to Terrorism: Basic Concepts training or equivalent</li> </ol> <p>Completion of the following awareness-level training:</p> <ol style="list-style-type: none"> <li>1. Critical Incident Stress Management Training</li> <li>2. Weapons of Mass Destruction (WMD) Awareness Training (AWR160) or equivalent (to be refreshed every 5 years)</li> <li>3. Annual Hazardous Materials First Responder (Awareness), per OSHA 29 CFR 1910.120 (Q)(6)(i) or equivalent</li> <li>4. Awareness training consistent with operations level National Fire Protection Association (NFPA) 1670: Standard on Operations and Training for Technical Search and Rescue Incidents in the following areas: <ol style="list-style-type: none"> <li>a. Confined space rescue operations</li> <li>b. Water rescue operations</li> <li>c. Structural collapse operations</li> </ol> </li> </ol> <p>Completion of a NFPA, ASTM or equivalent Structural Collapse SAR training program as validated by the AHJ that meets the experience specific to a Structural Collapse Rescue Technician and that includes but is not limited to training consistent with Technician level NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents and that includes highline rope rescue.</p>	<p>Completion of the following courses:</p> <ol style="list-style-type: none"> <li>1. IS-100: Introduction to Incident Command System, ICS-100</li> <li>2. IS-200: ICS for Single Resources and Initial Action Incidents</li> <li>3. IS-700: National Incident Management System (NIMS) An Introduction</li> <li>4. IS-800: National Response Framework, An Introduction</li> </ol> <p>Completion of the following capability-based training:</p> <ol style="list-style-type: none"> <li>1. Annual Bloodborne Pathogens per Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1030 (Code of Federal Regulations) or equivalent, and Airborne Pathogens Training</li> <li>2. OSHA 29 CFR 1910.120 and/or 1910.134(f) Respiratory Protection including the successful completion of a quantitative respiratory protection fit test and the associated currency requirements, as applicable</li> <li>3. Use, care, inspection and maintenance of all related personal protective equipment (PPE), tools, devices and equipment specific to this position and sub-specialties</li> <li>4. Current certification in basic first aid for first responders or equivalent to include cardiopulmonary resuscitation (CPR) and automated external defibrillator (AED)</li> <li>5. Completion of a National Fire Protection Association (NFPA), ASTM International (ASTM) or equivalent Structural Collapse Search and Rescue (SAR) training program or as verified by the Agency Having Jurisdiction (AHJ) meeting the following position-specific key skills and aptitudes: <ol style="list-style-type: none"> <li>a. SAR Hazard Awareness, Navigation and Survival training or equivalent</li> <li>b. OSHA Duties of the Entrant per 29 CFR 1910.146 training or equivalent</li> </ol> </li> <li>6. Department of Homeland Security (DHS)/Federal Emergency Management Agency (Continued)</li> </ol>	Not Specified

Superseded

Position Qualification for Mass Search and Rescue Operations  
Search and Rescue

COMPONENT	TYPE 1	TYPE 2	NOTES
TRAINING		(Continued) (FEMA) Structural Collapse Technician Course or equivalent 7. Training consistent with operations level NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents in the following areas: a. General Requirements b. Rope rescue low angle c. Structural Collapse Search and Rescue (permit-required, non-mine, non-cave) 8. Training consistent with Level II of NFPA 1006: Standard for Technical Rescuer Level 1 & 2 Professional Qualifications (Excluding Chapter 1 Administration: Section 1.3.3) 9. FEMA Global Positioning System (GPS) awareness course or equivalent	

Superseded

Position Qualification for Mass Search and Rescue Operations  
Search and Rescue

COMPONENT	TYPE 1	TYPE 2	NOTES
<b>EXPERIENCE</b>	Same as Type 2	<p>Knowledge, Skills and Abilities (KSAs):</p> <ol style="list-style-type: none"> <li>1. Ability to function at the Technician level</li> <li>2. Ability to identify and apply the role of the Structural Collapse Rescue Technician within the incident management structure</li> <li>3. Knowledge of structural collapse rescue and associated hazards, including recognition of the various types of building/structural collapses and their impact</li> <li>4. Understanding of rescue procedures in the building/structural collapse environment during day and night operations</li> <li>5. Ability to identify and use appropriate Personal Protective Equipment (PPE)</li> <li>6. Ability to carry out the following: <ol style="list-style-type: none"> <li>a. Technical rescue operations</li> <li>b. General standards of technical rescue</li> <li>c. Rope rescue</li> <li>d. Structural collapse search and rescue</li> <li>e. Confined space search and rescue</li> <li>f. Machinery rescue</li> <li>g. Trench and excavation search and rescue</li> </ol> </li> <li>7. Knowledge of the capabilities of canine search</li> </ol> <p>Experience:</p> <ol style="list-style-type: none"> <li>1. Experience that demonstrates scene management and dynamic assessment of risk</li> <li>2. Experience with relevant building/structural collapses, confined space and rope rescue techniques</li> <li>3. Experience with identifying hazards, including potential operating environments</li> <li>4. Experience as a NIMS Type 4 Fire Officer</li> <li>5. Completion of a Structural Collapse Rescue Technician Position Task Book (PTB) or equivalent documentation that validates and verifies (by AHJ) the successful completion of all skills, and demonstrated ability to perform skills in exercises and/or actual incident operations</li> </ol>	<p>KSAs are addressed in NFPA 1006: Standard for Technical Rescuer Professional Qualifications and NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents.</p>

Superseded

Position Qualification for Mass Search and Rescue Operations  
Search and Rescue

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<b>PHYSICAL/MEDICAL FITNESS</b>	Same as Type 2	<ol style="list-style-type: none"> <li>1. Ability to perform duties under arduous circumstances, characterized by working consecutive 12-14 hour days under physical and emotional stress for sustained periods of time</li> <li>2. Minimum physical fitness and swimming standards, Job Related Physical Ability Test (JRPAT) set by AHJ</li> <li>3. NFPA 1582 Standard on Comprehensive Occupational Medical Program for Fire Departments, or equivalent minimum medical fitness standards determined by the AHJ</li> <li>4. Maintain immunizations as outlined by the U.S. Department of Health and Human Services Centers for Disease Control's most current recommended adult immunization schedule for the United States of America</li> </ol>	Arduous fitness or work capacity criteria should be consistent with the physical fitness levels defined in the NWCG Wildland Fire Qualification Systems Guide, NFPA 1582: Standard on Comprehensive Occupational Medical Programs for Fire Departments, or equivalent physical and medical fitness criteria determined by the AHJ.
<b>CURRENCY</b>	Same as Type 2	<ol style="list-style-type: none"> <li>1. Annual refresher of related rescue skills and abilities in structural collapse environments</li> <li>2. Operational incident experience and/or participation in exercises, drills, or simulations within three years from the time approved by the AHJ to serve as a Structural Collapse Rescue Technician</li> <li>3. Background checks as permitted and/or required by applicable law</li> <li>4. Completion of a quantitative respiratory protection fit test required per 29 CFR 1910.134</li> </ol>	The providing entity must carry out and use any background checks as specified by applicable law. This may or may not include the following: background check currency within twelve months; sex offender registry check; and a local, state and national based criminal history.
<b>PROFESSIONAL AND TECHNICAL LICENSES AND CERTIFICATIONS</b>	Same as Type 2	<ol style="list-style-type: none"> <li>1. Certification and/or recertification as required by the AHJ in order to perform medical care including Basic Life Support (BLS)</li> <li>2. Certification or documentation indicating completion of training outlined above (Structural Collapse Rescue Technician)</li> <li>3. Certification or completion of structural collapse, confined space, and high and low angle training that relates to the job standards</li> </ol>	The AHJ determines the types of emergency medical certifications needed to meet the minimum criteria, including: first aid, CPR, and Basic Life Support (BLS) or Advanced Life Support (ALS). The AHJ determines any other additional certifications requirements in accordance with NFPA and ASTM search and rescue standards, or equivalent.

Superseded



## Position Qualification for Mass Search and Rescue Operations Search and Rescue

### NOTES

Nationally typed resources represent the minimum criteria for the associated category. The Agency Having Jurisdiction (AHJ) may require additional training, capabilities and endorsements.

### REFERENCES

1. FEMA, NIMS 509-4: Fire Officer
2. FEMA, NIMS 508-8: Structural Collapse Rescue Team
3. FEMA, NIMS 508-8: Structural Collapse Search Team
4. FEMA, NIMS 509-8: Structural Collapse Rescue Team Leader
5. FEMA, NIMS 509-8: Structural Collapse Search Team Leader
6. FEMA, NIMS 509-8: Structural Collapse Search Technician
7. United Nations (UN) International Search and Rescue Advisory Group (INSARAG), Guidelines and Methodology, April 2012
8. American Society for Testing and Materials International (ASTM) F-2890: Standard Guide for Hazard Awareness for Search and Rescue Personnel, latest edition adopted
9. National Fire Protection Association (NFPA) 1006: Standard for Technical Rescuer Professional Qualifications, latest edition adopted
10. NFPA 1582: Standard on Comprehensive Occupational Medical Program for Fire Departments, latest edition adopted
11. NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents, latest edition adopted
12. National Wildfire Coordinating Group (NWCG) Publication, PMS 304-2 Fitness and Work Capacity, latest edition adopted
13. Occupational Safety and Health Administration (OSHA), 29 CFR 1910.120 (Code of Federal Regulations), Hazardous Waste Operations and Emergency Response
14. OSHA, 29 CFR 1910.134, Respiratory Protection
15. OSHA, 29 CFR 1910.146, Permit-Required Confined Spaces
16. OSHA, 29 CFR 1910.1030, Annual Bloodborne Pathogens

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