

POST-DISASTER COMPLEX ARCHITECTURAL SYSTEM CONDITION EVALUATOR

RESOURCE CATEGORY	Emergency Management
RESOURCE KIND	Personnel
OVERALL FUNCTION	The Post-Disaster Complex Architectural Systems Condition Evaluator (Complex Architectural Systems Condition Evaluator) conducts Detailed Evaluations of architecturally complex buildings and architectural systems—such as fire safety systems, environmental systems, building envelope systems, communication systems, accessibility and building transportation systems, and others—in incident areas, to assess incident impacts on habitability and occupancy, in accordance with Applied Technology Council (ATC) ATC-20-1, ATC-45, and FEMA P-2055 guidance
COMPOSITION AND ORDERING SPECIFICATIONS	<ol style="list-style-type: none"> 1. This position can be ordered as a single resource or in conjunction with a NIMS typed team (Post-Disaster Building Safety Evaluation Team). 2. This position can be teamed with a National Incident Management System (NIMS) Post-Disaster Complex Structural Condition Evaluator 3. Discuss logistics for deploying this position, such as working conditions, length of deployment, security, lodging, transportation, and meals, prior to deployment 4. Requestor orders this position to supplement a Post-Disaster Building Safety Evaluation Team when assessing complex structures with building systems whose function is critical to reoccupancy in incident areas 5. Requestor identifies the structure type—such as International Code Council (ICC) Use Group—or the building name to clarify the Authority Having Jurisdiction's (AHJ) needs, if possible 6. This position does not escort residents or provide cost estimates, advice on repairs/rebuilding, or design services

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.

COMPONENT	SINGLE TYPE	NOTES
DESCRIPTION	<p>The Complex Architectural Systems Condition Evaluator conducts post-disaster Detailed Evaluations of the condition of critical building systems in architecturally complex structures, including:</p> <ol style="list-style-type: none"> 1. High-rise buildings 2. Mixed-use facilities 3. Hospitals 4. Schools 5. Shopping malls 6. Hotels and convention centers 7. Historic structures 8. Large business complexes 	<p>The condition and performance of building systems affect occupancy and habitability. Building systems include:</p> <ol style="list-style-type: none"> 1. Fire protection—active (suppression) and passive (fire-rated assembly elements) 2. Exiting and egress 3. Accessibility 4. Building envelope (cladding and roofing) 5. Environmental systems 6. Building transportation systems, including elevators 7. On-site energy generation (solar) 8. Communication/alarm systems 9. Nonstructural architectural elements
EDUCATION	Not Specified	Not Specified

COMPONENT	SINGLE TYPE	NOTES
TRAINING	<p>Completion of the following:</p> <ol style="list-style-type: none"> 1. IS-100: Introduction to the Incident Command System, ICS-100 2. IS-200: Basic Incident Command System for Initial Response, ICS-200 3. IS-700: National Incident Management System, An Introduction 4. IS-800: National Response Framework, An Introduction 5. One of the following: <ol style="list-style-type: none"> a. ICC When Disaster Strikes Institute b. California Office of Emergency Services (Cal OES) Safety Assessment Program (SAP) c. ATC-20 and ATC-45 programs with additional concepts of operations training 	Not Specified
EXPERIENCE	<p>Knowledge, Skills, and Abilities:</p> <ol style="list-style-type: none"> 1. Familiarity with the International Building Code (IBC) or National Fire Protection Association (NFPA) Life Safety Code requirements for egress and rated assemblies 2. Familiarity with local, state, tribal, territorial, and Federal accessibility guidelines 3. Ability to understand the interrelated nature of structural, nonstructural, and building systems, such as: <ol style="list-style-type: none"> a. Fire protection—active (suppression) and passive (fire-rated assembly elements) b. Exiting and egress c. Accessibility d. Building envelope (cladding and roofing) e. Environmental systems f. Building transportation systems, including elevators g. On-site energy generation (solar) h. Communication/alarm systems i. Nonstructural architectural elements <p>Experience: Ten years of experience in the architectural design of complex building types, field investigation, and construction observation OR 10 years of experience as an ICC Commercial Plans Examiner with commercial construction field inspection experience for a major metropolitan jurisdiction (population greater than 100,000)</p>	The ability to understand the interrelated nature of structural, nonstructural, and building systems is critical in evaluating the post-disaster residual performance level of a system. A clear understanding of these issues allows the evaluator to assess the inherent risk to occupancy posed by a facility's reduced functionality and to judge whether the risk of reoccupancy (to inhabitants) outweighs the benefit (to the community).
PHYSICAL/MEDICAL FITNESS	Moderate	The NIMS Guideline for the National Qualification System (NQS) defines Physical/Medical Fitness levels for NIMS positions.
CURRENCY	Completes all necessary refresher trainings or exams for training courses listed above; completes all necessary recertifications	Not Specified
PROFESSIONAL AND TECHNICAL LICENSES AND CERTIFICATIONS	<p>Currently licensed as one or more of the following:</p> <ol style="list-style-type: none"> 1. Registered Architect 2. ICC Commercial Building Inspector, Plans Examiner, or Certified Building Official with a bachelor's degree in construction, fire protection management, engineering, or architecture 3. AHJ-approved equivalent of one of the above certifications 	Not Specified

NOTES

1. Nationally typed resources represent the minimum criteria for the associated component.
2. This document contains links or references to non-Federal resources and materials. Such non-Federal references are for informational purposes only and do not constitute an endorsement by the Federal Emergency Management Agency, the U.S. Department of Homeland Security, or any of its employees.

REFERENCES

1. FEMA, NIMS 508: Post-Disaster Building Safety Evaluation Team
2. FEMA, NIMS 509: Post-Disaster Complex Structural Condition Evaluator
3. FEMA, National Incident Management System (NIMS), October 2017
4. FEMA, NIMS Guideline for the NQS, November 2017
5. FEMA, National Response Framework, June 2016
6. FEMA, P-2055: Post-disaster Building Safety Evaluation Guidance, latest edition adopted
7. Disaster Recovery Reform Act of 2018, Pub. L. 115-254, Division D, § 1241(b)
8. Applied Technology Council (ATC), ATC-20-1: Field Manual: Postearthquake Safety Evaluation of Buildings, latest edition adopted
9. ATC, ATC-45: Field Manual: Safety Evaluation of Buildings after Windstorms and Floods, latest edition adopted
10. California Office of Emergency Services (Cal OES) Safety Assessment Program (SAP)
11. International Code Council, International Building Code, latest edition adopted
12. National Fire Protection Association 101: Life Safety Code, latest edition adopted
13. International Code Council (ICC), When Disaster Strikes Institute