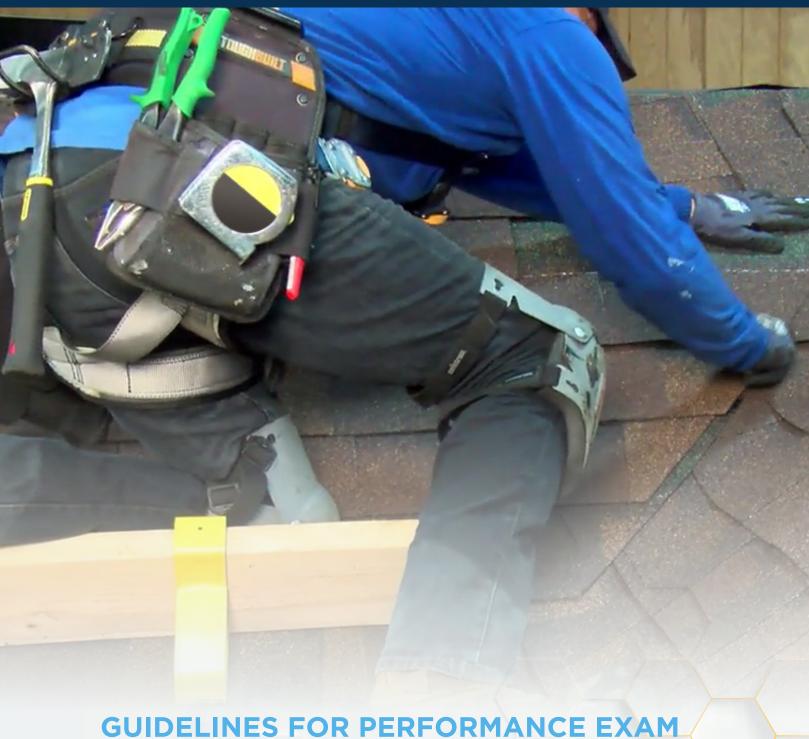
GUIDELINES



GUIDELINES FOR PERFORMANCE EXAM STANDARD TESTING CONDITIONS



NATIONAL ROOFING CONTRACTORS ASSOCIATION





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Introduction

NRCA ProCertification® provides an opportunity for experienced roofing workers to demonstrate their skills and knowledge to become NRCA ProCertified® installers in specific certification disciplines. A roof system installer certification is earned by passing a two-part exam.

Part One—Knowledge Exam. In an online exam, participants must answer questions correctly to establish their knowledge.

Part Two—Performance Exam. Participants are instructed to complete tasks to demonstrate their installations skills, including following safety requirements. A Qualified Assessor observes and scores the performance.

Performance exams are designed to measure minimum levels of accuracy and proficiency in performing several core tasks key to mastering a specific type of roof system application regardless of any specific manufacturer's details or specifications. The quantity and type of core tasks vary by certification.

Overview of Roles Involved in NRCA ProCertification Performance Exams

Authorized Testing Location—A performance exam testing location that has an agreement with NRCA to provide standard testing conditions for NRCA ProCertification performance exams. A list of ATLs is available by emailing certification@nrca.net.

Candidate—Pursues a NRCA ProCertified Roof System Installer certification by passing an online exam and a hands-on performance exam

Competent Safety Person – A person who can identify existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous or dangerous. He or she must be authorized to take prompt corrective action to eliminate hazards before and during a performance exam.

Performance Exam Point of Contact —A representative of a performance exam testing location who coordinates NRCA ProCertification activities for that location. The point of contact should be familiar with a specific location's business operations and the facility's resources. He or she must have authority to manage location assets and make decisions about scheduling performance exams.

Performance Exam Testing Location – A location that provides standard testing conditions for performance exams. Each testing location will be unique in what it can or cannot offer, which will determine the specific performance exams that can be conducted at a given location.

Qualified Assessor—A person who schedules, conducts and reports the results from performance exams

Responsibilities of Qualified Assessors and Testing Locations

All performance exams are scheduled by a Qualified Assessor. Performance exams may be conducted at any location that provides standard testing conditions. Standard testing conditions are described in the section titled Standard Testing Conditions Requirements. Qualified Assessors have full authority to determine whether standard testing conditions are present. They must cancel a scheduled performance exam if standard testing conditions cannot be achieved.

Confirming Safety

Safety is a high priority during all NRCA ProCertification activities. All ATLs must provide a clean, safe testing environment conforming with standard testing conditions as described in the requirements listed in this manual. Qualified Assessors must confirm with a competent safety person at a testing location that a safety check was done before each performance exam. The Performance Exam Safety Checklist is found in the appendix. It also is provided to the Qualified Assessor with every performance exam assignment.

Qualified Assessors should work with the appropriate individuals to rectify any safety or standard testing conditions problems. In a situation where a safety hazard cannot be corrected, the performance exam must be canceled.

Confirming Standard Testing Conditions

In addition to a safe testing environment, other standard testing conditions also must be in place for each performance exam. Standard testing conditions requirements include mockup details, roofing materials, and tools and equipment. These vary by roof system.

Standard testing conditions also include environmental conditions such as adequate light and the roof system manufacturer's recommended application temperature range.

A Qualified Assessor and an ATL's point of contact should collaborate in advance to determine responsibilities, such as:

- Who will provide mockups, tools, equipment and materials?
- Who will set up the testing area?
- Who will ensure tools and materials are returned to storage and verifying the testing area is returned to the proper condition after each performance exam is finished?

However, it is the Qualified Assessor's responsibility to ensure standard testing conditions exist before a certification candidate arrives for his or her performance exam appointment. Ensuring standard testing conditions exist includes confirming the mockup and all required materials, tools, equipment and personal protective equipment are in good working condition and readily available.

Standard Testing Conditions Requirements

General Requirements

All ATLs must provide the following space and conditions:

- At least one onsite performance exam point of contact for NRCA ProCertification activities
- Access to restroom facilities
- A clean, safe testing environment
- Restricted access by an ATL's employees/staff during testing activities
- Access to disposal for waste materials

Environmental Requirements

The following environmental conditions must be present during a performance exam:

- Daylight or equivalent indoor lighting
- A temperature range between 32 F and 90 F
- An average wind speed not to exceed 12 mph
- No precipitation

Mockup Requirements

General Mockup Characteristics

Mockups are an important element of standard testing conditions. All mockups must meet certain design characteristics that, when met, establish standard testing conditions. Each certification performance exam requires a unique mockup design to facilitate a candidate's performance of that certification's most critical tasks.

Before every performance exam, a Qualified Assessor should confirm minimum space requirements for mockups are met by the ATL. The physical space must be large enough to accommodate any mockup(s) and allow a Qualified Assessor to proctor hands-on performance exams safely and comfortably. When setting up mockups, a clear, unobstructed area must remain open at least 4 feet on each mockup side for the duration of all performance exams. This requirement applies to a single mockup or when multiple mockups are used simultaneously.

Performance exams are timed events. Candidates must complete an assignment within a specified time. Mockup characteristics such as physical size, slope and ease of access all can affect the time required to perform an assignment. For example, if one performance exam is given on a 4:12 mockup and another is given on a 12:12 mockup, the candidates' performances likely will not be completed in similar time. This is one reason it is so important mockups have the characteristics described in NRCA ProCertification mockup design documents.

The NRCA ProCertification program requires a specific mockup to be used during performance exams for each certification. NRCA provides concept designs for each certification's performance exam. Click on the link provided in Table 1 to access these mockup design requirements.

TABLE 1: NRCA ProCertification Performance Exam Mockup Designs				
Certification	URL			
Architectural Metal Flashings and Accessories	nrca.net/mockup-amfa			
Asphalt Shingle Systems	nrca.net/mockup-asphalt			
Clay and Concrete Tile Systems	nrca.net/mockup-cct			
EPDM Systems	nrca.net/mockup-epdm			
Thermoplastic Systems	nrca.net/mockup-tpo			

Tool, Equipment and Materials Requirements

Tools, equipment and materials are an important element of standard testing conditions. Similar to actual roofing projects, the tools, equipment and materials for each performance exam also are unique to the certification discipline in which a candidate is being tested.

As already mentioned, candidates must complete an assignment within a specified time. Although a variety of tools, especially power tools, may be used to install a roof system at actual job sites, tool and material types can affect the time required to perform an assignment. For example, if one low-slope system performance exam is given using a stand-up, self-feeding fastener installer and another is given using a handheld electric drill to install fasteners, the candidates' performances likely will not be completed in the same amount of time. Or if one steep-slope system performance exam is given using a pneumatic nail gun to install fasteners and another candidate is given hand nails, the candidate using a pneumatic nail gun will have an unfair advantage over the one given hand nails.

A detailed tools, equipment and materials list is provided to Qualified Assessors for each unique performance exam assignment. Click on the link provided in Table 2 to access the master list of tools, equipment and materials for each NRCA ProCertification performance exam.

TABLE 2: NRCA ProCertification Performance Exam Master Tools, Equipment and Materials Lists				
Certification	URL			
Architectural Metal Flashings and Accessories	nrca.net/tem-amfa			
Asphalt Shingle Systems	nrca.net/tem-asphalt			
Clay and Concrete Tile Systems	nrca.net/tem-cct			
EPDM Systems	nrca.net/tem-epdm			
Thermoplastic Systems	nrca.net/tem-tpo			

Authorized Testing Locations

ATLs have an agreement with NRCA to provide standard testing conditions for NRCA ProCertification performance exams. Each ATL will offer roof system-specific testing services unique to its location's available resources, capabilities and capacity. ATLs will offer standardized mockups, materials, tools and equipment for the certification(s) for which they provide testing at their locations. Please email certification@nrca.net with inquiries about becoming an ATL.

Authorized Testing Location Agreements and Fees

At their discretion, ATLs may opt to enter into written agreements with Qualified Assessors to document and memorialize the relationship, understanding and terms between the Qualified Assessor and the testing location.

Additionally, ATLs are permitted, at their discretion, to charge Qualified Assessors a reasonable,

appropriate fee for conducting performance exams at their facilities or locations. However, if an ATL chooses to charge such a fee, it must charge the same fee to all Qualified Assessors for whom the ATL provides the same facility use service.

An ATL may not vary charges or discriminate in the imposition of such a fee nor in the amount of such fee for any reason, including on the basis of race, color, ethnicity, religion, national origin, age, gender, sexual orientation, disability, marital status, or personal or business relationships

ATLs are free to negotiate any costs/fees with Qualified Assessors for providing facility services associated with NRCA ProCertification activities. It should be noted that fees an ATL can charge must be equitable, fair and consistent for all in its immediate market. NRCA does not reimburse ATLs for expenses related to providing these facility services. NRCA does not receive any fees that ATLs collect for providing standard testing conditions or site access.

Additional Policies

Following are key policies relating to all ATLs. Additional program policies can be found on NRCA's website at nrca.net/procertification/resource-center/policies-guidelines.

Audits by NRCA

NRCA reserves the right to conduct announced or unannounced audits of assessment activities and records to provide assurance Qualified Assessors are complying with all relevant agreements, procedures, policy directives and guidance pertaining to NRCA ProCertification activities.

An auditor may be an NRCA staff member, independent consultant, insurance representative or a designated agent NRCA authorized to conduct audits. In all cases, auditors are qualified by NRCA through training or experience. Auditors are not authorized to assess the accuracy of scoring being done by Qualified Assessors nor safety conditions of ATLs. NRCA will provide auditors with standard performance exam checklists to facilitate fair and accurate audits. Authorized Testing Locations agree to allow access by NRCA auditors to performance exam areas.

Confidentiality

An applicant's personal information and materials for any NRCA ProCertification credential will be kept confidential unless authorized by other NRCA policies or practices or otherwise directed in writing by the candidate. Only members of NRCA ProCertification committees, staff and designated individuals acting on behalf of NRCA's board of directors will have access to these documents. NRCA will take all reasonable precautions to ensure a candidate's personal information will not be released to third parties.

Permitted Use of NRCA Materials

Description of Services

"Services" means all the content of the NRCA ProCertification program, including all the educational content, information, resources, documents, handbooks, policies, materials, agreements and assessments.

Personal and Noncommercial Use Limitation

Unless otherwise specified, the Services are for personal and noncommercial use. Qualified Assessors may not disclose, modify, copy, distribute, transmit, display, perform, reproduce, publish, license, create derivative works from, transfer or sell any information, software, products or services obtained from the Services except as required and only to the extent necessary to fulfill the role of an NRCA ProCertification Qualified Assessor. By way of example, this includes but is not limited to copying, reproducing, duplicating, and/or disclosing of materials as needed to document and memorialize agreements with ATLs and NRCA ProCertified installer candidates to perform assessments of NRCA ProCertified installer candidates and to provide results of candidate assessments to NRCA.

Ownership of NRCA ProCertification Program Materials

NRCA owns and will continue to own in perpetuity all rights, copyrights, title and interest to the NRCA ProCertification courses, course materials, handbooks and assessment materials. These are protected by U.S. and international copyright laws. The NRCA ProCertification Qualified Assessor agrees not to use, copy, distribute, modify or make derivative works of any courses, course materials, educational content, information, resources, documents, materials, agreements and assessments except as required and only to the extent necessary to fulfill the role of an NRCA ProCertification Qualified Assessor. Doing so may result in severe civil and criminal penalties.

Warranty Disclaimer and Limitation of Liability

All NRCA ProCertification information, documents and materials are provided "as is," and NRCA makes no warranties, whether express, implied, statutory, or otherwise, including without limitation, warranties of merchantability or fitness for a particular purpose. In no event shall NRCA be liable for any direct, indirect, special, punitive or consequential damages of any kind or nature whatsoever, including without limitation, loss of profits or other economic loss caused by, resulting from, or otherwise arising from use of or reliance on any of the NRCA ProCertification program materials.

Appendix: Performance Exam Safety Checklist

This checklist cannot predict all possible hazard exposures and is only intended as a tool to assist Qualified Assessors and on-site competent safety persons with preparing for performance exams. Qualified Assessors are responsible for candidate's compliance with proper use of personal protective equipment during a performance exam. They are not responsible for safety conditions in other areas of a building.

<u>Item</u>	YES	NO	N/A
Ventilation system* is operating (where applicable)			
Emergency eye wash station** solution and first aid*** contents are unexpired and readily available			
The substrate (deck) has been inspected and confirmed to be firm and sound			
Drinking water supply is readily available			
The PFAS anchoring device that will be used for the performance exam demonstration is located			
Trip or fall hazards are identified and addressed (holes, obstacles, unnecessary tools or equipment)			
When applicable, other building occupants/tenants are given advance notice when performance exams are scheduled			
Testing area is cordoned off using caution tape, warning lines or other means necessary during performance exams to ensure restricted access and safe conditions are maintained when other work processes that could interfere with the testing process or expose the candidate to hazards are occurring			
Power supply is properly grounded			
GFCI device is in place (generator or building power) and tested for proper function			
Covers for power outlets, supply cabinets and connector boxes are in place and secure			
Power extension cords are without defects			
Power tools (hot-air welders, screw guns, etc.) are without defects and in safe operating condition			
Hand tools are without defects and in safe operating condition (no missing parts; cracks; dull blades)			
Air compressors, air hoses, couplings and fittings are without defects and in safe operating condition			
Pneumatic tools (such as nail guns) are without defects and in safe operating condition			
Required fire extinguishers are adequate size, current in inspection and readily available			
A person trained in first aid is onsite when an infirmary, clinic, hospital or physician is not reasonably accessible in terms of time or distance for the treatment of injured candidates			

Overhead hazards or unrelated materials are identified and, if present, are removed or secured, and proper head protection is available for use by everyone during the exam		
Combustible materials, if present, are more than 10 feet away and flammable liquids, if present, are more than 50 feet away from the testing area		
Chemical/solvents/adhesives are correctly labeled and stored a minimum of 50 feet from testing area until use		
Adequate lighting is present		
Exits or means of egress are clearly marked		
Safety Data Sheets for all materials on-site have been reviewed by the Qualified Assessor and are readily accessible		
Testing area is a minimum of 10 feet from unrelated operating power equipment		
*Requirements for ventilation are found in 29 CFR §1910.94, §1910.107, §1910.124(b)(4)(iii), §1920.6, ANSI Z-9.2 and Z-33.1. **Requirements for emergency eye wash are found in the most current ANSI Z358.1 standard ***Requirements for first aid supplies are found in 29 CFR §1926.50(d)(2)		