

NOTE ON PERFORMANCE TESTING

Performance Profile Sheet(s) are included in a format that can be easily photocopied for each trainee. This examination is designed to measure competency in the tasks taught in each module.

Please note the number of tasks to be tested while teaching each module. Each trainee should be tested on all the tasks listed on the Performance Profile Sheet(s). Before performance testing, the instructor should brief the trainees on:

- Test objectives and criteria
- Safety precautions
- Procedures for each task to be tested

The instructor administering the performance testing should also do the following:

- Ensure that all of the needed equipment is available and operating properly.
- Set up the testing stations.
- Organize and administer the test in a way that allows for optimal performance.
- Complete the Performance Profile Sheet(s) for each trainee by assigning a pass/fail score for each listed task. Also, include the testing date, and start and end times for each task in the rating boxes.
- Monitor adherence to all safety regulations and precautions.
- Provide adequate supervision to prevent injuries.
- Take immediate and effective action to remedy any emergency.

Performance Testing

If Performance Testing is done as part of NCCER's Training Program, the following conditions must be met:

1. The Craft Instructor must hold valid NCCER instructor certification.
2. The training must be delivered through an Accredited Training Sponsor recognized by NCCER.
3. The specific performance testing must be completed successfully.
4. The results of the testing must be recorded on Training Report Form 200. This form must be provided to the local Accredited Training Sponsor to be forwarded to NCCER's Registry Department.

Certified Plus Credential

Provided the sponsor is working through an NCCER-Accredited Assessment Center, candidates who successfully pass performance testing may be eligible for a Certified Plus Credential. A number of NCCER's Performance Profiles cross over to NCCER's Assessment Performance Verifications and may be completed simultaneously. Go to www.nccer.org and select the Assessments tab to locate the Performance Verifications associated with this craft.

Note that two other important conditions are required for the Certified Plus Credential:

1. Candidates must first pass the associated written assessment.
2. An NCCER-Accredited Assessment Administrator must sign off on the Performance Verification before it is submitted to NCCER.

**Module 26201-14 has no Performance Profile Sheet;
no performance testing is required for this module.**

Craft: Electrical

Module Number: 26202-14

Module Title: Motors: Theory and Application



TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor

Certified Plus Credentials: Trainees who successfully complete these performance tasks may be eligible for a Certified Plus Credential. Refer to the Note on Performance Testing of this Performance Profile for eligibility requirements, or contact NCCER for more information.

Objective	TASK	RATING
1	1. Collect data from a motor nameplate.	
6, 7, 8	2. Identify various types of motors and their application(s).	
9	3. Connect the terminals for a dual-voltage motor.	

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Craft: Electrical

Module Number: 26203-14

Module Title: Electric Lighting



TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor

Certified Plus Credentials: Trainees who successfully complete these performance tasks may be eligible for a Certified Plus Credential. Refer to the Note on Performance Testing of this Performance Profile for eligibility requirements, or contact NCCER for more information.

Objective	TASK	RATING
2	1. Read and interpret information given in lamp manufacturers' catalogs for one or more selected lamps.	
3	2. Properly select and install lamps into lighting fixtures.	

continued

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Craft: Electrical

Module Number: 26203-14

Module Title: Electric Lighting



Objective	TASK	RATING
3, 4	3. Install one or more of the following lighting fixtures and their associated lamps:	
	<ul style="list-style-type: none"> • Surface-mounted 	
	<ul style="list-style-type: none"> • Recessed 	
	<ul style="list-style-type: none"> • Suspended 	
	<ul style="list-style-type: none"> • Track-mounted 	

Craft: Electrical

Module Number: 26204-14

Module Title: Conduit Bending



TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor

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Objective	TASK	RATING
3, 5	1. Use an electric or hydraulic bender to bend a 1" conduit stub-up to an exact distance of 15¼" above the deck.	
3, 5	2. Make an offset in a length of conduit to miss a 10" high obstruction with a clearance between the obstruction and the conduit of not less than 1" nor more than 1½".	
3, 5	3. Make a saddle in a length of conduit to cross an 8" pipe with 1" clearance between the pipe and the conduit.	

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Craft: Electrical

Module Number: 26205-14

Module Title: Pull and Junction Boxes



TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor

Certified Plus Credentials: Trainees who successfully complete these performance tasks may be eligible for a Certified Plus Credential. Refer to the Note on Performance Testing of this Performance Profile for eligibility requirements, or contact NCCER for more information.

Objective	TASK	RATING
1	1. Identify various NEMA boxes.	
2	2. Properly select, install, and support pull and junction boxes over 100 cubic inches in size.	
5	3. Identify various conduit bodies and fittings.	

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Craft: Electrical

Module Number: 26206-14

Module Title: Conductor Installations



TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor

Certified Plus Credentials: Trainees who successfully complete these performance tasks may be eligible for a Certified Plus Credential. Refer to the Note on Performance Testing of this Performance Profile for eligibility requirements, or contact NCCER for more information.

Objective	TASK	RATING
2, 5	1. Prepare multiple conductors for pulling in a raceway system.	
2	2. Prepare multiple conductors for pulling using a wire-pulling basket.	

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Craft: Electrical

Module Number: 26207-14

Module Title: Cable Tray



TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor

Certified Plus Credentials: Trainees who successfully complete these performance tasks may be eligible for a Certified Plus Credential. Refer to the Note on Performance Testing of this Performance Profile for eligibility requirements, or contact NCCER for more information.

Objective	TASK	RATING
1, 6	1. Generate a list of materials for a cable tray layout. List all the components required, including the fasteners required to complete the system.	
6	2. Join two straight, ladder-type cable tray sections together.	

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Craft: Electrical

Module Number: 26208-14

Module Title: Conductor Terminations and Splices



TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor

Certified Plus Credentials: Trainees who successfully complete these performance tasks may be eligible for a Certified Plus Credential. Refer to the Note on Performance Testing of this Performance Profile for eligibility requirements, or contact NCCER for more information.

Objective	TASK	RATING
2, 3, 5	1. Terminate conductors using selected crimp-type and mechanical-type terminals and connectors.	
2, 3, 5	2. Terminate conductors on a terminal strip.	
2, 3, 5	3. Insulate selected types of wire splices and/or install a motor connection kit.	

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Craft: Electrical

Module Number: 26209-14

Module Title: Grounding and Bonding



TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor

Certified Plus Credentials: Trainees who successfully complete these performance tasks may be eligible for a Certified Plus Credential. Refer to the Note on Performance Testing of this Performance Profile for eligibility requirements, or contact NCCER for more information.

Objective	TASK	RATING
3, 6	1. Using the proper fittings, connect one end of a No. 4 AWG bare copper grounding wire to a length of 3/4" galvanized water pipe and the other end to the correct terminal in a main panelboard.	

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Craft: Electrical

Module Number: 26209-14

Module Title: Grounding and Bonding



Objective	TASK	RATING
3, 6	2. Install two lengths of Type NM cable in a switch box using Type NM cable clamps:	
	<ul style="list-style-type: none"> Strip the ends of the cable to conform with <i>National Electrical Code</i>® requirements. 	
	<ul style="list-style-type: none"> Secure the cable in the switch box and tighten the cable clamps. 	
	<ul style="list-style-type: none"> Connect and secure the equipment grounding conductors according to <i>NEC</i>® requirements, and secure to the switch box with either a ground clip or a grounding screw. 	
5	3. Size the minimum required grounding electrode conductor for a 200A service fed by 3/0 copper.	
8	4. Size the minimum required equipment grounding conductor in each conduit for a 400A feeder tap using two parallel runs of 3/0 copper.	
9	5. Size the minimum required bonding jumper for a copper water pipe near a separately derived system (transformer) where the secondary conductors are 500 kcmil copper.	

Craft: Electrical

Module Number: 26210-14

Module Title: Circuit Breakers and Fuses



TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor

Certified Plus Credentials: Trainees who successfully complete these performance tasks may be eligible for a Certified Plus Credential. Refer to the Note on Performance Testing of this Performance Profile for eligibility requirements, or contact NCCER for more information.

Objective	TASK	RATING
2	1. Identify the following on one or more circuit breaker(s) and fuse(s):	
	• Number of poles	
	• Load rating	

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Craft: Electrical

Module Number: 26210-14

Module Title: Circuit Breakers and Fuses



Objective	TASK	RATING
	<ul style="list-style-type: none">• Voltage rating	
	<ul style="list-style-type: none">• Amperage interrupting rating	

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Craft: Electrical

Module Number: 26211-14

Module Title: Control Systems and Fundamental Concepts



TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
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Objective	TASK	RATING
5, 9	1. Mount and connect a 120V lighting contactor with a three-wire pushbutton control.	

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