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.
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- Provide adequate supervision to prevent injuries.
- Take immediate and effective action to remedy any emergency.

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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 26101-14 has no Performance Profile Sheet; no performance testing is required for this module.
**Objective**  |  **TASK** |  **RATING**  
---|---|---
1 | 1. Perform a visual inspection on various types of ladders. |  
1 | 2. Set up a ladder properly to perform a task. |  
1 | 3. Properly don a harness. |  

---

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<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>3, 4, 5</td>
<td>4. Perform a hazard assessment of a job such as replacing the lights in your classroom.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Discuss the work to be performed and the hazards involved.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Locate the closest phone to the work site and ensure that the local emergency telephone numbers are either posted at the phone or known by you and your partner(s).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Plan an escape route from the location in the event of an accident.</td>
<td></td>
</tr>
</tbody>
</table>
Module 26103-14 has no Performance Profile Sheet; no performance testing is required for this module.
Module 26104-14 has no Performance Profile Sheet; no performance testing is required for this module.
1. Use *NEC Article 90* to determine the scope of the *NEC*. State what is covered by the *NEC* and what is not.

2. Find the definition of the term *feeder* in the *NEC*.

3. Look up the *NEC* specifications that you would need to follow if you were installing an outlet near a swimming pool.

4. Find the minimum wire bending space required for two No. 1/0 AWG conductors installed in a junction box or cabinet and entering opposite the terminal.
Objective | TASK | RATING
--- | --- | ---
3 | 1. Identify the appropriate box type and size for a given application. | 
4 | 2. Select the minimum size pull or junction box for the following applications: | 
| • Conduit entering and exiting for a straight pull | 
| • Conduit entering and exiting at an angle |
### Objective 3
1. Make 90° bends, back-to-back bends, offsets, kicks, and saddle bends using a hand bender.

### Objective 4
2. Cut, ream, and thread conduit.

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 and select various types and sizes of raceways, fittings, and fasteners for a given application. | 
4 | 2. Demonstrate how to install a flexible raceway system. | 
5 | 3. Terminate a selected raceway system. | 
6 | 4. Identify the appropriate conduit body for a given application. | 

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Craft: Electrical
Module Number: 26109-14
Module Title: Conductors and Cables

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
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<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1. Install conductors in a raceway system.</td>
<td></td>
</tr>
</tbody>
</table>
### Objective 4

1. Using an architect’s scale, state the actual dimensions of a given drawing component.

### Objective 5, 6

2. Make a materials takeoff of the lighting fixtures specified in Performance Profile Sheet 2 using the drawing provided on Performance Profile Sheet 3. The takeoff requires that all lighting fixtures be counted, and where applicable, the total number of lamps for each fixture type must be calculated.
<table>
<thead>
<tr>
<th>Lighting Fixture Type</th>
<th>Manufacturer and Catalog Number</th>
<th>Number and Type of Lamps</th>
<th>Total Number of Fixtures</th>
<th>Total Number of Lamps for Fixture Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA</td>
<td>Lithonia LB 440</td>
<td>4-F40CS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FB</td>
<td>Lithonia LB 240</td>
<td>2-F20U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FC</td>
<td>Lithonia LP/RFB-3</td>
<td>INCL.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Hitek TWP 150</td>
<td>1-450HPS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EX</td>
<td>Lithonia XSIG-EL</td>
<td>INCL.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EM</td>
<td>Lithonia ELU-2</td>
<td>INCL.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Craft: Electrical
Module Number: 26110-14
Module Title: Basic Electrical Construction Drawings

For Performance Task Two, please refer to the 11” × 17” Drawing included with this Exam
Objective | TASK | RATING
---|---|---
3, 4, 6, 7, 8 | 1. For a residential dwelling of a given size, and equipped with a given list of major appliances, demonstrate or explain how to: | 
| | • Compute lighting, small appliance, and laundry loads. | 
| | • Compute the loads for large appliances. | 
| | • Determine the number of branch circuits required. | 
| | • Size and select the service-entrance equipment (conductors, panelboard, and protective devices). | 

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<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2</td>
<td>2. Using an unlabeled diagram of a panelboard (Performance Profile Sheet 3), label the lettered components.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>3. Select the proper type and size outlet box needed for a given set of wiring conditions.</td>
<td></td>
</tr>
</tbody>
</table>
Identify the Components:

(A) ________________________
(B) ________________________
(C) ________________________
(D) ________________________
(E) ________________________
(F) ________________________
(G) ________________________
(H) ________________________
(I) ________________________

Copyright © 2014 NCCER. Permission is granted to reproduce this page provided that copies are for local use only and that each copy contains this notice.
Objective
1. Under instructor supervision, measure the voltage in your classroom from line to neutral and neutral to ground.

2. Under instructor supervision, use an ohmmeter to measure the value of various resistors.

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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
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<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1. Collect data from a motor nameplate.</td>
<td></td>
</tr>
<tr>
<td>6, 7, 8</td>
<td>2. Identify various types of motors and their application(s).</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>3. Connect the terminals for a dual-voltage motor.</td>
<td></td>
</tr>
</tbody>
</table>
Craft: Electrical

Module Number: 26203-14

Module Title: Electric Lighting

TRAINER NAME: _____________________________________________________________

TRAINER 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.

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<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1. Read and interpret information given in lamp manufacturers’ catalogs for one or more selected lamps.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2. Properly select and install lamps into lighting fixtures.</td>
<td></td>
</tr>
</tbody>
</table>

continued
### Objective 3, 4

<table>
<thead>
<tr>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Install one or more of the following lighting fixtures and their associated lamps:</td>
<td></td>
</tr>
<tr>
<td>• Surface-mounted</td>
<td></td>
</tr>
<tr>
<td>• Recessed</td>
<td></td>
</tr>
<tr>
<td>• Suspended</td>
<td></td>
</tr>
<tr>
<td>• Track-mounted</td>
<td></td>
</tr>
</tbody>
</table>
Craft: Electrical

Module Number: 26204-14

Module Title: Conduit Bending

<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>3, 5</td>
<td>1. Use an electric or hydraulic bender to bend a 1&quot; conduit stub-up</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to an exact distance of 15(\frac{1}{4})&quot; above the deck.</td>
<td></td>
</tr>
<tr>
<td>3, 5</td>
<td>2. Make an offset in a length of conduit to miss a 10&quot; high obstruc-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>tion with a clearance between the obstruction and the conduit of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>not less than 1&quot; nor more than 1(\frac{1}{2})&quot;.</td>
<td></td>
</tr>
<tr>
<td>3, 5</td>
<td>3. Make a saddle in a length of conduit to cross an 8&quot; pipe with 1&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>clearance between the pipe and the conduit.</td>
<td></td>
</tr>
</tbody>
</table>

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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.

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<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1. Identify various NEMA boxes.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2. Properly select, install, and support pull and junction boxes over 100 cubic inches in size.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>3. Identify various conduit bodies and fittings.</td>
<td></td>
</tr>
</tbody>
</table>

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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
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<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>2, 5</td>
<td>1. Prepare multiple conductors for pulling in a raceway system.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2. Prepare multiple conductors for pulling using a wire-pulling basket.</td>
<td></td>
</tr>
</tbody>
</table>

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each copy contains this notice.
Craft: Electrical

Module Number: 26207-14

Module Title: Cable Tray

<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 6</td>
<td>1. Generate a list of materials for a cable tray layout. List all the components required, including the fasteners required to complete the system.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>2. Join two straight, ladder-type cable tray sections together.</td>
<td></td>
</tr>
</tbody>
</table>
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
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<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>2, 3, 5</td>
<td>1. Terminate conductors using selected crimp-type and mechanical-type terminals and connectors.</td>
<td></td>
</tr>
<tr>
<td>2, 3, 5</td>
<td>2. Terminate conductors on a terminal strip.</td>
<td></td>
</tr>
<tr>
<td>2, 3, 5</td>
<td>3. Insulate selected types of wire splices and/or install a motor connection kit.</td>
<td></td>
</tr>
</tbody>
</table>
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 $\frac{3}{4}$" galvanized water pipe and the other end to the correct terminal in a main panelboard. | continued
<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>3, 6</td>
<td>2. Install two lengths of Type NM cable in a switch box using Type NM cable clamps:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Strip the ends of the cable to conform with <em>National Electrical Code</em>® requirements.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Secure the cable in the switch box and tighten the cable clamps.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Connect and secure the equipment grounding conductors according to <em>NEC</em>® requirements, and secure to the switch box with either a ground clip or a grounding screw.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>3. Size the minimum required grounding electrode conductor for a 200A service fed by 3/0 copper.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>4. Size the minimum required equipment grounding conductor in each conduit for a 400A feeder gap using two parallel runs of 3/0 copper.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
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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<table>
<thead>
<tr>
<th>Objective</th>
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<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Voltage rating</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Amperage interrupting rating</td>
<td></td>
</tr>
</tbody>
</table>

Craft: Electrical

Module Number: 26210-14

Module Title: Circuit Breakers and Fuses
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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<tr>
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<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>5, 9</td>
<td>1. Mount and connect a 120V lighting contactor with a three-wire pushbutton control.</td>
<td></td>
</tr>
</tbody>
</table>
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- Safety precautions
- Procedures for each task to be tested

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- Provide adequate supervision to prevent injuries.
- Take immediate and effective action to remedy any emergency.

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2. The training must be delivered through an Accredited Training Sponsor recognized by NCCER.
3. For every module, the specific performance testing must be completed to the satisfaction of the instructor.
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 the NCCER National Registry.

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-Acccredited Assessment Administrator must sign off on the Performance Verification before it is submitted to NCCER.
Module 26301-14 has no Performance Profile Sheet; no performance testing is required for this module.
Module 26302-14 has no Performance Profile Sheet; no performance testing is required for this module.
Craft: Electrical

Module Number: 26303-14

Module Title: Practical Applications of Lighting

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 Credential:
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.

<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1. Using manufacturers’ catalogs, select the appropriate lighting fixtures for specific lighting situations.</td>
<td></td>
</tr>
</tbody>
</table>

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Craft: Electrical  
Module Number: 26303-14  
Module Title: Practical Applications of Lighting

<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-5</td>
<td>2. While touring selected structures to observe their lighting systems:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Identify the various types of lighting fixtures used.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Explain the specific purpose(s) served by the different fixtures.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Identify the lighting system class of service.</td>
<td></td>
</tr>
</tbody>
</table>
Craft: Electrical
Module Number: 26304-14
Module Title: Hazardous Locations

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 Credential: 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.

<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-5</td>
<td>1. Using two rigid metal conduit nipples, a sealing fitting, three pieces of No. 12 THHN conductors, and a packing fiber/sealing kit, perform the following operations:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Secure one conduit nipple in each end of the seal.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Make sure the required amount of threads are engaged.</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Pull the three THHN conductors through the nipples and seal so that about 6&quot; is protruding from each nipple.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Pack the fiber as per the instructions furnished with the sealing kit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Mix the sealing compound.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Position the unit in the required location and pour in the sealing compound.</td>
<td></td>
</tr>
</tbody>
</table>
Module 26305-14 has no Performance Profile Sheet; no performance testing is required for this module.
Module 26306-14 has no Performance Profile Sheet; no performance testing is required for this module.
Module 26307-14 has no Performance Profile Sheet; no performance testing is required for this module.
Module 26308-14 has no Performance Profile Sheet; no performance testing is required for this module.
Module 26309-14 has no Performance Profile Sheet; no performance testing is required for this module.
Module 26310-14 has no Performance Profile Sheet; no performance testing is required for this module.
Craft: Electrical

Module Number: 26311-14

Module Title: Motor Controls

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 Credential: Trainees who successfully complete these performance tasks may be
eligible for a Certified Plus Credential. Refer to the Note on Performance
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<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1. Make all connections for a magnetic motor controller, controlled by two pushbutton stations, including the connections for holding the circuit interlock.</td>
<td></td>
</tr>
</tbody>
</table>

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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 for each task in the rating box.
• 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 the NCCER Standardized Craft 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. For every module, the specific performance testing must be completed to the satisfaction of the instructor.
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 the NCCER National Registry.

Certified Plus Credential

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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 26401-14 has no Performance Profile Sheet; no performance testing is required for this module.
Module 26402-14 has no Performance Profile Sheet; no performance testing is required for this module.
Module 26403-14 has no Performance Profile Sheet; no performance testing is required for this module.
Craft: Electrical

Module Number: 26404-14

Module Title: Basic Electronic Theory

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 Credential: 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.

<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1. Test a transistor to determine whether it is an NPN or PNP.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>2. Identify the cathode on three different styles of SCRs, using the shape or markings for identification.</td>
<td></td>
</tr>
</tbody>
</table>

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Craft: Electrical
Module Number: 26405-14
Module Title: Fire Alarm Systems

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 Credential: 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.

<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1. Connect selected fire alarm system(s).</td>
<td></td>
</tr>
</tbody>
</table>
Craft: Electrical
Module Number: 26406-14
Module Title: Specialty Transformers

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 Credential:
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.

<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1. Identify various specialty transformers.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2. Using a clamp-on ammeter, demonstrate the principles of a current transformer. Identify the primary winding, then calculate and measure the effects of increasing the number of turns (loops) in the primary winding.</td>
<td></td>
</tr>
<tr>
<td>Objective</td>
<td>TASK</td>
<td>RATING</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>3</td>
<td>3. Connect a buck-and-boost transformer to a single-phase circuit so that it will first be in the boost mode, and then in the buck mode. Record the voltage increase and decrease for each configuration.</td>
<td></td>
</tr>
</tbody>
</table>
Craft: Electrical
Module Number: 26407-14
Module Title: Advanced Controls

<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2, 3</td>
<td>1. Identify and connect various control devices.</td>
<td></td>
</tr>
</tbody>
</table>

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 Credential:
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.
### Performance Profile Sheet

**Craft:** Electrical  
**Module Number:** 26408-14  
**Module Title:** HVAC Controls

<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1. Identify various types of thermostats and explain their operation and uses.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2. Install a conventional 24V bimetal thermostat and hook it up using the standard coding system for thermostat wiring.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3. Check and adjust a thermostat, including the heat anticipator setting and indicator adjustment.</td>
<td></td>
</tr>
</tbody>
</table>

**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 Credential:**  
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.
Craft: Electrical
Module Number: 26409-14
Module Title: Heat Tracing and Freeze Protection

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 Credential: 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.

<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1. Prepare and connect heat tracing cable in a power connection box or splice box.</td>
<td></td>
</tr>
</tbody>
</table>
Module 26410-14 has no Performance Profile Sheet; no performance testing is required for this module.
Craft: Electrical  
Module Number: 26411-14  
Module Title: Medium-Voltage Terminations/Splices

<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>2, 3</td>
<td>1. Prepare a cable and complete a splice or stress cone.</td>
<td></td>
</tr>
</tbody>
</table>
Module 26412-14 has no Performance Profile Sheet; no performance testing is required for this module.
Craft: Electrical
Module Number: 46101-11
Module Title: Fundamentals of Crew Leadership

<table>
<thead>
<tr>
<th>Objective</th>
<th>TASK</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>1. Develop and present a look-ahead schedule.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>2. Develop an estimate for a given work activity.</td>
<td></td>
</tr>
</tbody>
</table>