#### 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 One: 03101-13 has no Performance Profile Sheet; performance testing is not required for this module.

Module Two: 03102-13 has no Performance Profile Sheet; performance testing is not required for this module.

Craft: HVAC Level One

Module Three: 03106-13

**Module Title: Basic Electricity** 



TRAINEE NAME:	
TRAINING PROGRAM SPONSOR:	
INSTRUCTOR:	

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task

Be sure to list the date the testing for each task was completed.

Recognition: When testing for the NCCER Training Program, record performance testing results on

Training Report Form 200, and submit the results to your 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 for eligibility

requirements, or contact NCCER for more information.

OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
3	Use the proper instrument to measure voltage in an energized circuit.				
3	Use the proper instrument to measure current in an energized circuit.				
3	Use the proper instrument to measure resistance.				
3	Use a multimeter to check circuit continuity.				
2, 4	5. Assemble and test series and parallel circuits using a transformer or battery, wires, and selected load devices.				

Craft: HVAC Level One Module Four: 03108-13





TRAINEE NAME:
TRAINING PROGRAM SPONSOR:
NSTRUCTOR:

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task

Be sure to list the date the testing for each task was completed.

**Recognition:** When testing for the NCCER Training Program, record performance testing results on Training Report Form 200, and submit the results to your 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 for eligibility

requirements, or contact NCCER for more information.

OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
1	Identify the components of induced- draft and condensing furnaces and describe their functions.				
2	Perform common maintenance tasks on a gas furnace including air filter replacement and temperature measurements.				

Craft: HVAC Level One Module Five: 03107-13





TRAINEE NAME:
TRAINING PROGRAM SPONSOR:
INSTRUCTOR:

**Rating Levels:** (1) Passed: performed task (2) Failed: did not perform task Be sure to list the date the testing for each task was completed.

Recognition: When testing for the NCCER Training Program, record performance testing results on

Training Report Form 200, and submit the results to your 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 for eligibility

requirements, or contact NCCER for more information.

OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
1	Measure temperatures in an operating cooling system.				
1	Calibrate a set of refrigerant gauges and thermometers.				
1	Connect a refrigerant gauge manifold and properly calculate subcooling and superheat on an operating system using a temperature probe.				
2	Identify refrigerants using cylinder color codes.				
3, 4	5. Identify compressors, condensers, evaporators, metering devices, controls, and accessories.				

Craft: HVAC Level One Module Six: 03109-13





TRAINEE NAME:
TRAINING PROGRAM SPONSOR:
INSTRUCTOR:

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task

Be sure to list the date the testing for each task was completed.

**Recognition:** When testing for the NCCER Training Program, record performance testing results on

Training Report Form 200, and submit the results to your Training Program Sponsor.

Certified Plus Credential: Trainees who successfully complete these performance tasks may be eligible for

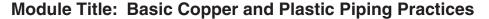
a Certified Plus Credential. Refer to the Note on Performance Testing for eligibility

requirements, or contact NCCER for more information.

OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
1	Use a tachometer to measure blower motor rpm.				
1,2	Read and interpret equivalent length charts and required air volume/duct size charts.				
1	Use a manometer to measure static pressure in a duct system.				
2	Use a velometer to measure the velocity of airflow at the output of air system supply diffusers and registers.				
1	Use a velometer to calculate system cfm.				

**Craft: HVAC Level One** 

Module Seven: 03103-13





TRAINEE NAME:
TRAINING PROGRAM SPONSOR:
INSTRUCTOR:

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task

Be sure to list the date the testing for each task was completed.

Recognition: When testing for the NCCER Training Program, record performance testing results on

Training Report Form 200, and submit the results to your 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 for eligibility

requirements, or contact NCCER for more information.

OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
2	Cut and bend copper tubing.				
2	Safely join copper tubing using mechanical fittings.				
	Flare tubing and complete a flared connection				
	Use a compression fitting and ferrule to make a connection				
	Use a swaging tool to swage a piece of tubing				
3	3. Cut and join lengths of plastic pipe.				

Craft: HVAC Level One Module Eight: 03104-13





TRAINEE NAME:
TRAINING PROGRAM SPONSOR:
INSTRUCTOR:

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task

Be sure to list the date the testing for each task was completed.

Recognition: When testing for the NCCER Training Program, record performance testing results on

Training Report Form 200, and submit the results to your 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 for eligibility

requirements, or contact NCCER for more information.

OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
2	Properly set up and shut down oxyacetylene equipment.				
1	Properly set up and shut down an acetylene single tank.				
1	Properly prep and safely solder copper tubing in various planes, using various fittings.				
2	Properly prep and safely braze copper tubing using various fittings.				

Craft: HVAC Level One Module Nine: 03105-13



Module Title: Basic Carbon Steel Piping Practices

TRAINEE NAME:
TRAINING PROGRAM SPONSOR:
NSTRUCTOR:

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task

Be sure to list the date the testing for each task was completed.

**Recognition:** When testing for the NCCER Training Program, record performance testing results on

Training Report Form 200, and submit the results to your 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 for eligibility

requirements, or contact NCCER for more information.

OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
1	1. Cut, ream, and thread steel pipe.				
1, 2	Join lengths of threaded pipe using selected fittings.				