



Performance Verification Packet

Reinforcement Iron and Rebar (REBAR39)

This performance verification is designed as one method to evaluate job skills and safe work habits of a participant. The performance of the participant must be evaluated by an NCCER certified evaluator, at an NCCER authorized assessment site and be approved by an NCCER accredited assessment center.

NCCER PERFORMANCE VERIFICATION CANDIDATE SUMMARY
REINFORCING IRON AND REBAR

Objective

The candidate will demonstrate proper layout of a rebar mat, with a 33%-snap tie pattern, as well as proper completion of four types of standard ties (snap, wrap-and-snap, saddle, and figure eight). The candidate will also perform proper set-up, use, and breakdown of oxyfuel cutting materials. Lastly, the candidate shall demonstrate safe lifting techniques for rebar.

Scope

This Performance Verification provides a means to observe and evaluate competencies in the following areas of rebar work:

- Layout
- Tying
- Cutting
- Lifting

Materials Required

- 22 pieces of #4 rebar (10 feet long)
- 1 piece of #6 rebar
- 1 piece of 20-foot rebar (any size)
- 18 pieces of 2 ¼ X6 bricks
- #16 gauge wire
- Wire reel
- Kleins®
- Kiel
- Measuring tape or rule
- Tool belt/side pouch
- Acetylene bottle
- Oxygen bottle
- Bottle cart, Oxygen and acetylene gauges, etc.
- Hose
- Flashback arresters
- Torch, striker
- Fire extinguisher
- PPE (including leather gloves, cutting goggles, tinted face shield)

NCCER PERFORMANCE VERIFICATION CANDIDATE SUMMARY
REINFORCING IRON AND REBAR

Time Required

One hour is the recommended time limit.

Tasks

- **Layout**

Lay out a 10 x 10-foot pattern (mat) of #4 rebar on 12-inch centers each way with 33% snap ties in pattern and 100% of ties in perimeter.

- a) Completed in 10-15 minutes
- b) All snap ties are tight (minimal bar movement when walking on mat)
- c) 33% pattern is correct
- d) Area is cleaned up (especially of wire pieces)

- **Tying**

On the leftover portion of the mat done previously, perform the following standard rebar ties (all should be tight, and all ties should be bent down properly):

- a) Snap
- b) Wrap and snap
- c) Saddle
- d) Figure eight

- **Cutting**

Set up the materials for cutting a piece of #6 rebar, and break it down and store it properly. The following should be verified:

- a) Proper set up
 - Check gauges for pressure
 - Check hoses and torch for leaks
 - Put on PPE (must have leather gloves, cutting goggles or tinted face shield) and check for fire extinguisher
- b) Lighting
 - Ensure proper/appropriate ignition source
 - Adjust torch properly
- c) Cutting #6 rebar
 - Preheat properly
 - Use proper torch speed
- d) Breakdown/storing
 - Roll up torch assembly
 - Reinstall bottle caps

NCCER PERFORMANCE VERIFICATION CANDIDATE SUMMARY
REINFORCING IRON AND REBAR

Tasks (cont'd)

- **Lifting**

With the evaluator or partner, lift a 20-foot piece of rebar using proper lifting techniques. If no second person is available, identify the positions on the rebar at which each person should lift it.

- a) Proper lifting posture demonstrated.
- b) Lifting points are $\frac{1}{4}$ the length, or five feet, from each end

- **Safety**

- a) Basic PPE (esp. safety glasses, rubber gloves, rubber boots, hard hat)
- b) General safe practices

NCCER PERFORMANCE EVALUATOR CHECKLIST
REINFORCING IRON AND REBAR

Date Completed Task To Perform

- __-__-__ 1. Layout
- Completed in 10-15 minutes
 - 33% snap-tie pattern completed correctly
 - All snap ties done tightly (with ends bent down and minimal movement of mat when walked upon)
 - Area is cleaned up of wire pieces and other materials
-

- __-__-__ 2. Tying
- **Snap** tie done properly, tightly, and bent down
 - **Wrap-and-snap** tie done properly, tightly, and bent down
 - **Saddle** tie done properly, tightly, and bent down
 - **Figure-eight** tie done properly, tightly, and bent down
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- __-__-__ 3. Cutting
- Proper setup (check gauges, hose, torch, put on PPE)
 - Lighting performed correctly
 - Proper cutting of the #6 rebar (esp. preheating and appropriate torch speed)
 - Correct breakdown and storage (roll up torch assembly and reinstall bottle caps)
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- __-__-__ 4. Lifting
- Proper lifting posture (lifting from the legs)
 - Correct lifting points (1/4 the length, or five feet, from each end)
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- __-__-__ 5. Safety
- Basic PPE
 - Inspection and cleaning of tools
 - General safe practices

Performance Verification Form

How to fill out and file your information

Participant

- 1) Print your last name, first name, and social security number.
- 2) Print your company name, current employer, and the state where your employer's main office is located.
- 3) In the space provided for "Participant Signature," sign your name and enter the date you signed the form.

Performance Evaluator

- 1) In the space provided for "Site Code," enter the postal zip code of the location where the performance verification is being conducted.
- 2) In the column provided for "Date," enter the date the participant completed each of the tasks. This date is important because there may be times a participant does not complete a performance verification in one day.
- 3) In the space provided for "Performance Evaluator," sign your name.
- 4) In the space provided for "Date," next to your signature, list the date the participant successfully completed all of the tasks.

Administrator

- 1) In the space provided for "Administrator," sign your name. Your signature indicates that the performance evaluator is certified to conduct this performance verification and that it was conducted within the guidelines of the NCCER.
- 2) In the space provided for "Date," next to your signature, list the date that this performance verification form is being sent to the NCCER for entry into the National Registry.
- 3) In the space provided for "Accredited Assessment Center," print the name of the accredited assessment center that is conducting this performance verification.



PERFORMANCE VERIFICATION FORM

REINFORCING IRON & REBAR REBAR39- CRAFT

Candidate information		
_____	_____	_____
Last Name	First Name	SSN or SGN
_____	_____	_____
Employer/Company Name	State	Code
Evaluator		
_____	_____	_____
Last Name	First Name	SSN or SGN

TASK #	SPECIFIC DUTIES/TASKS	DATE	START TIME	END TIME
01	Layout (Modules 39101-05 and 39102-05)			
02	Tying (Modules 39101-05 and 39102-05)			
03	Cutting (Modules 39101-05 and 39106-05)			
04	Lifting (Module 39102-05)			
05	Safety (Module 00104-04 and 39102-05)			

Consent/Release: I, the undersigned, do hereby authorize the National Center for Construction Education and Research (NCCER) to release the information and results attained through the administration of the National Craft Assessment and Certification Program (NCACP) to the organization referenced below, and acknowledge that the employer noted above is my present employer.

ACCREDITED ASSESSMENT CENTER: _____

PARTICIPANT: _____ SIGNATURE _____ DATE: _____

PERFORMANCE EVALUATOR: _____ SIGNATURE _____ DATE: _____

ADMINISTRATOR: _____ SIGNATURE _____ DATE: _____