

This document is meant to be a **CONDENSED SUMMARY** of module assessments and performance testing required for a student to achieve the **NCCER Sheet Metal Level I Certification**. The actual NCCER Performance Profile packet should be studied, referenced, and used for instructor planning and execution of Level I certification for students. NCCER Performance Profiles Links:

[Core Curriculum](#)

[Sheet Metal Level I](#)

In order for students to receive the NCCER Level 1 credential, the following criteria must be met

1. Facility must be an NCCER Accredited Training & Education Facility (ATEF)
2. Instructors must have a current NCCER Craft Instructor Certification in the applicable trade area
3. NCCER Registration and Release Form must be on file for each student receiving credential
4. All Core and Level I written/electronic assessments and Performance Profile assessments must be passed and NCCER testing procedures followed.

NCCER Core Curriculum: Module and Performance Profile Summary (5th Edition)

Module	Performance Profile
Basic Safety (00101-15)	<ol style="list-style-type: none"> 1. Extension ladder 2. PPE inspection 3. PPE fitting/removal 4. Power cord/GFCI inspection
Construction Math (00102-15)	No Performance Testing Required for this Module
Introduction to Hand Tools (00103-15)	<ol style="list-style-type: none"> 1. Visual inspection of 5 hand tools 2. Safe and proper use of 3 hand tools 3. Make a straight, square cut in lumber
Introduction to Power Tools (00104-15)	<ol style="list-style-type: none"> 1. Demonstrate the safe use of 3 power tools
Introduction to Construction Drawings (00105-15)	Using floor plan supplied with module: <ol style="list-style-type: none"> 1. Locate walls 2. Identify width 3. Determine distances between walls 4. Determine elevation of slab
Introduction to Basic Rigging (00106-15) <i>*Optional for Level I Certification</i>	<ol style="list-style-type: none"> 1. Demonstrate ASME Emergency Stop hand signal
Basic Communication Skills (00107-15)	<ol style="list-style-type: none"> 1. Perform a task after oral instructions 2. Work related form 3. Read and interpret instructions for donning PPE, oral instruction
Basic Employability Skills (00108-15)	No Performance Testing Required for this Module
Introduction to Materials Handling (00109-15)	<ol style="list-style-type: none"> 1. Demonstrate safe manual lifting 2. Demonstrate how to tie 2 common knots

NCCER Sheet Metal I Curriculum: Module and Performance Profile Summary (3rd Edition)

Module	Performance Profile
Introduction to the Sheet Metal Trade (04101-08)	<ol style="list-style-type: none"> 1. Identify types of metal 2. Identify common sheet metal fittings 3. Use a standard sheet metal gauge to measure various thicknesses
Tools of the Trade (04102-08)	<ol style="list-style-type: none"> 1. Hand tool application and maintenance 2. Hand tool use 3. Power tool application, use, and maintenance 4. Power tool demonstration 5. Shop machine application, use and maintenance 6. Shop machine demonstration 7. Selecting tools and machines for given application 8. Selected tool demonstration
Introduction to Sheet Metal Layout and Processes (04103-08)	<ol style="list-style-type: none"> 1. Transferring a sheet metal pattern 2. Using hand snips for straight, outside curved, and internal cuts 3. Perform a double cut on light pipe 4. Use shears to square light gauge sheet metal 5. Use stakes to form a cone 6. Use stakes to form a 90-degree bend 7. Use a slip-roll forming machine for round pipe with grooved seams 8. Use a box and pan brake for right angle bends 9. Use a bar folder to make a hem bend 10. Use a hand brake to make a Pittsburgh seam 11. Make a crimped edge on round pipe 12. Join round pipe by crimping and beading
Trade Math One (04104-08)	<ol style="list-style-type: none"> 1. Use the OWL Method to calculate offset
Fabrication One – Parallel Line Development (04105-08)	<ol style="list-style-type: none"> 1. Layout and fabricate 7 fittings (using grooved lock seam, flexible connection, Pittsburgh seam, and mitered fitting) 2. See Performance Profile packet for multiple fittings
Installation of Ductwork (04106-08)	<ol style="list-style-type: none"> 1. Fastener identification and application 2. Fastener specifications 3. Hanger types and applications 4. Installing duct hangers, supports, and reinforcements 5. Connecting and sealing rectangular and round duct
Installation of Air Distribution Accessories (04107-08)	<ol style="list-style-type: none"> 1. Explain the purpose of accessories 2. Simulate/demonstrate installation of accessories 3. Install an opposed blade balancing damper 4. Install a takeoff
Insulation (04108-08) <i>*Elective</i>	<ol style="list-style-type: none"> 1. Measure and cut fibrous duct wrap including one facing tab 2. Install insulation around pipe 3. Install a vapor barrier around pipe 4. Sealing seams, joints, of facing tabs with tape or adhesive

	5. Install metal nosing
Architectural Sheet Metal (04109-08) <i>*Elective</i>	<ol style="list-style-type: none">1. Layout and develop a pattern for 60-degree two-piece conductor elbow2. Fabricate the fitting listed above3. Form and solder a lap seam and a butt seam4. Layout and fabricate: rectangular outlet tube, rectangular gutter (two styles)5. Fabricate flashing for a shingle roof6. Lay out and fabricate the following: chimney flashing, typical metal coping profile