



PILOT ASSESSMENT BLUEPRINT
HVAC – Heating, Ventilation, and
Air Conditioning (1251)
Skill-Based (Performance)

Job Description	<p>Brazing with Nitrogen</p> <p>Participant will shape and cut a section of copper tubing with two bends, reconnect the pieces, flare and attach one end, sweep with nitrogen, braze the joints, and verify all connections before cleanup and evaluator notification.</p>
Administration Time	30 minutes
Equipment, Supplies, and Materials Required	<ul style="list-style-type: none">• 24" section of 3/4" copper tubing• 3/8" flare nut• 3/8" MFL x 1/4" MFL adaptor• 8 inches of 3/8" soft copper pipe• 3/4" to 3/8" reducer• 15% silver alloy brazing rods• Oxy/acetylene or air/acetylene torch only• Pipe cutter• Tape measure• Swaging and flaring kit• Sand cloth• Nitrogen tank with nitrogen regulator and flow meter used for low pressure purge or sweep• 1/4" hose for purging or nitrogen sweep• Wet rag for cleaning prior to inspecting• Pipe bender• Vise or clamp if needed• Scribing tool or marking tool• Deburring or reaming tool• Small bucket• PPE:<ul style="list-style-type: none">○ Gloves○ Safety glasses