

## **:NoRTEC JOB SPECIFIC SKILLS COMPETENCY**

### **HEATING and AIR CONDITIONING MECHANIC HELPER**

**DOT: 637.664-010 / O'NET: 49-9098.00 SVP 6**

**Job Description:** Assists workers engaged in installing, repairing, and servicing industrial, commercial, and residential environmental-control systems. ***Physical Demands*** - Active w/heavy lifting, carrying, or moving (up to 100 lbs). ***General Educational Development***: R3 M2 L2; ***Aptitude*** - Average General Learning Ability, Numerical, Spatial, Form Perception, Finger Dexterity and Manual Dexterity.

#### **CORE SKILL COMPETENCIES/INDICATORS:**

1. Can demonstrate basic understanding of the theory and design of heating, ventilation, air-conditioning and refrigeration systems. (R, IN, S, T)
2. Can demonstrate familiarity with industry-specific tools and equipment, including basic and specialized hand tools (e.g. hammers, wrenches, metal snips), metalworking tools/equipment, cutting and bending tools/equipment, basic welding equipment, and threading equipment. (*Identify*). (R, T)
3. Can demonstrate familiarity with industry-specific testing devices (*Identify*). (R, T)
4. Can demonstrate ability to determine the kind of tools and equipment needed to do a specific job. (R, T)
5. Can demonstrate ability to read and interpret blueprints, design specifications, and manufacturer's instructions. (IN, S)
6. Can demonstrate proper techniques used to cut, punch, flange, shear, and solder sheet metal ducts and parts. (R, S, T)
7. Can demonstrate proper techniques used to cut, thread, and pack pipes. (R, S, T)
8. Can demonstrate proper technique used to wrap pipes in insulation and secure it in place with cement or wire bands. (R, S, T)
9. Can demonstrate proper technique used to pass electrical wire through conduits. (R, S, T)
10. Can demonstrate proper techniques used to splice electrical wire connections. (R, S, T)
11. Can demonstrate proper technique used to tape electrical wire. (R, S, T)
12. Can demonstrate proper technique used to assemble sheet metal components of prefabricated furnices. (R, S, T)
13. Can demonstrate ability to recognize and appropriately replace exhausted or defective containers of refrigerant. (R, S, T)
14. Can demonstrate proper techniques used to lubricate fans, motors and control units. (R, S, T)
15. Can demonstrate ability to install air and water filters in completed assemblies. (R, S, T)
16. Can demonstrate ability to assist workers in disassembling systems to repair or replace defective equipment, components, or wiring. (R, I, S, T)
17. Can demonstrate ability to assist workers in inspecting and testing systems to verify system compliance with plans and specifications and to detect malfunctions. (R, I, S, T)
18. Can demonstrate ability to assist workers in performing routine equipment maintenance. (R, I, S, T)
19. Can demonstrate ability to safely transfer equipment, tools, parts, and other objects, to and from workstations and other areas. (R, S, T)
20. Can quickly and accurately furnish workers with materials, tools and supplies as requested. (R, IN, I, S, T)
21. Can demonstrate ability to assist with general area maintenance. (R, I, S, T)

22. **Can demonstrate ability to perform arithmetic operations quickly and accurately. (IN, S)**
23. **Can demonstrate an understanding of occupational safety standards and procedures. (R, IN, S, T)**
24. **Can demonstrate ability to work patiently, systematically and thoroughly. (R, I)**