# Heating/Air Conditioning Competency Profile



#### **BRAZING**

- OXY-ACT silver brazing
- Turbo-torch silver brazing
- Low temperature soldering
- VULKAN Lokring

#### **BASIC SHEET METAL**

- Lay-out of sheet metal components
- Fabrication sheet metal components
- Installation of sheet metal components

#### **BASIC REFRIGERATION**

- Recovery, pressure test and evacuation
- Charging a system by Super-heat
- Charging a system by Sub-cooling
- Installing a TXV

#### INDUSTRY CERTIFICATIONS

- 10-hour OSHA Certification
- No EPA 608 Certification
- EPA 608 Certification Type 1
- EPA 608 Certification Type 2
- EPA 608 Certification Type 3
- EPA 608 Universal Certification
- Elevating Work Platform Type 3 Group A Scissor Lifts Certification
- Elevating Work Platform Type 3 Group B Boom Lifts Certification
- Telehandler Safety Course Class 7 Industrial Forklift Certification

#### PIPE FITTING

- Furnace installation requirements
- Thread pipe with power unit
- · Pipe threading by hand
- Gas-Tite certification

## DOMESTIC FURNACE/AC INSTALLATION

- Setup / install a residential gas furnace
- Setup and install a residential condenser unit
- Low/high voltage installation
- Flue pipe installation

#### **ELECTRICAL**

- Basic Residential wiring
- Conduit bending
- Schematic reading
- Electrical troubleshooting using a schematic
- Lock-out Tag-out
- Single Phase Electrical
- Three Phase Electrical

#### LIGHT COMMERCIAL

- Working with different refrigerants
- TXV
- Hot-gas Bypass
- EPR & CPR valves
- Defrost cycles
- Pump down cycles
- Semi- Hermetic Compressors
- Hi/Low pressure controls

### **TROUBLE SHOOTING**

- Residential Gas Furnace
- Residential Electric Furnace
- Residential A/C Units
- Residential Heat pumps