

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

REFRIGERANT RECOVERY

- No EPA Certification
- EPA Certification 1
- EPA Certification 2
- EPA Certification 3
- EPA Universal Certification

OSHA

- 10-hour 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