



## Heating/Air Conditioning Competency Profile

### BRAZING

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

### BASIC SHEET METAL

- Lay-out of sheet metal components
- Fabrication sheet metal components
- Install registers and boots

### BASIC REFRIGERATION

- 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 R22
- Residential A/C Units R410A
- Residential Heat pumps

Instructor \_\_\_\_\_

Date \_\_\_\_\_