

## **Installation Tier Program**

### **Entry Level**

#### **Daily**

- Load truck
- walkthrough with journeyman/homeowner
- unload truck
- prep work area
  - drop cloths
  - tools
  - parts
- record m/n & s/n
- clean up trash throughout day
- organize throughout day
- take all necessary pictures
- Show initiative and good work ethic

#### **Training**

- Skill Mill Entry Level Module

#### **Skills/Abilities**

- Proficient with company dispatch program
- Knowledge and understanding of HVAC system components
- Knowledge and understanding of industry tools and parts
- Ability to install refrigerant line sets and condensate lines in crawlspaces and attics with supervision
- Ability to set and level outdoor unit mounting pad with supervision
- Ability to drill holes through concrete foundations and building components with supervision

**"Proficient"** implies a thorough competence derived from training and practice and having great knowledge and experience in a trade or profession.

## **Tier 1**

### **Daily**

- Load truck
- walkthrough with journeyman/homeowner
- unload truck
- prep work area
  - drop cloths
  - tools
  - parts
- record m/n & s/n
- clean up trash throughout day
- organize throughout day
- take all necessary pictures
- Show initiative and good work ethic
- Keep truck stocked

### **Certifications/Training**

- Skill Mill Tier 1 Module
- CSST (Gastite mfg. best practice installation)
- EPA Certification (Proper refrigerant handling)
- LP Fitter License

### **Skills/Abilities**

- Demonstrate ability of refrigerant pipe brazing with supervision
- Demonstrate proficient knowledge of mechanical code for condensate piping, refrigeration piping, gas piping & duct system component installation.
- Demonstrate proficient knowledge of manufacturer installation requirements for condensate piping, refrigeration piping, gas piping and duct system component installation.
- Demonstrate the ability to install basic duct system components with supervision
- Demonstrate the ability to install gas piping with supervision
- Demonstrate a basic understanding of control wiring with supervision
- Demonstrate the ability to properly set AC or Heat pump outdoor unit with supervision

**"Proficient"** implies a thorough competence derived from training and practice and having great knowledge and experience in a trade or profession

## Tier 2

### Daily

- Load truck
- walkthrough with journeyman/homeowner
- unload truck
- prep work area
  - drop cloths
  - tools
  - parts
- record m/n & s/n
- clean up trash throughout day
- organize throughout day
- take all necessary pictures
- Show initiative and good work ethic
- Keep truck stocked

### Certifications/Training

- Skill Mill Tier 2 Module
- Mitsubishi M series and P series installation and troubleshooting Training (M & P Training)
- HVAC Institute Classes Completed
  - Understanding HP/AC Service & Install
  - Understanding Gas Furnace
  - Understanding Electrical Circuits
- Basic HVAC Gas furnace mechanical codes
- Basic HVAC Air Conditioner/ Heat Pump codes
- Basic HVAC manufacturer application guide
- Basic Refrigeration Theory

### Skills/Abilities

- Knowledge and understanding of single and two stage furnace, AC and Heat Pump system sequence of installation
- Demonstrate ability to set and connect AC and Heat Pump outdoor unit without supervision
- Demonstrate ability to install supply and return duct system components without supervision
- Demonstrate ability to install gas pipe systems and components without supervision
- Demonstrate proper use of refrigerant gauge manifold set
- Demonstrate proper use of refrigerant reclaim machine
- Demonstrate proper use and care of refrigerant vacuum pump

**"Proficient"** implies a thorough competence derived from training and practice and having great knowledge and experience in a trade or profession.

## Tier 3

### Daily

- Load truck
- walkthrough with journeyman/homeowner
- unload truck
- prep work area
  - drop cloths
  - tools
  - parts
- record m/n & s/n
- clean up trash throughout day
- organize throughout day
- take all necessary pictures
- Show initiative and good work ethic
- Keep truck stocked

### Certifications/Training

- Skill Mill Tier 3 Module
- Basic HVAC duct system diagnostics
- Basic Sheetmetal
- Refrigeration Charging and Start Up Procedures
- Gas furnace installation and application

### Skills/Abilities

- Knowledge and understanding of Gas Furnace, AC and Heat Pump system sequence of operation
- Demonstrate proficiency to set and connect AC and Heat Pump outdoor unit (Labor Budget)
- Demonstrate proficiency to install supply and return duct system components (Labor Budget)
- Demonstrate proficiency to install gas pipe systems and components (Labor Budget)
- Demonstrate proficiency for proper use of refrigerant gauge manifold set
- Demonstrate proficiency proper use of refrigerant reclaim machine
- Demonstrate proficiency proper use and care of refrigerant vacuum pump
- Demonstrate ability to layout and fabricate basic Sheetmetal fitting
- Demonstrate ability to install HVAC system controls with supervision
- Demonstrate ability to install gas furnace/air handler with supervision
- Demonstrate the ability to set/connect and install gas furnace flue components with supervision
- Demonstrate the ability to set and connect ductless heat pump indoor module with supervision
- Demonstrate the ability to cut in following components with supervision
  - Bath Vent
  - Range Vent
  - PVC Vent
  - Roof Terminations
  - Sidewall Terminations

**"Proficient"** implies a thorough competence derived from training and practice and having great knowledge and experience in a trade or profession.

## Tier 4

### Daily

- Review job packet
- Inspect equipment and supplies preload, pull additional material as needed
- Direct/supervise apprentice load truck
- Pre-Install walkthrough with homeowner
- Direct/supervise apprentice for work area prep
  - drop cloths
  - tools
  - parts
- Direct/supervise apprentice for work/project tasks
- Perform manufacturer's start up procedure
- organize throughout day
- Ensure apprentice has taken all necessary pictures
- Inspect/Direct and manage truck stock

### Certifications/Training

- Skill Mill Tier 4 Module
- Mitsubishi M series and P series installation and troubleshooting Training (M & P Training)
- Duct Design
- HVAC Institute Classes for Reinforcement:
  - Understanding HP/AC Service & Install
  - Understanding Gas Furnace
  - Understanding Electrical Circuits

### Skills/Abilities

- Knowledge and understanding of building plans
- Knowledge and understanding of electrical diagrams
- Knowledge and understanding of system component diagrams
- Knowledge and understanding of refrigeration troubleshooting
- Knowledge and understanding of electrical troubleshooting
- Knowledge and understanding of air flow diagnostics
- Knowledge and understanding of Ductless VRF system sequence of installation and operation
- Demonstrate proficiency for installation of Ductless VRF systems
- Demonstrate proficiency to install HVAC system controls (Zoning controls included)
- Demonstrate proficiency to install gas furnace/air handler, AC and Heat Pump systems
- Demonstrate proficiency to set/connect and install gas furnace flue components
- Demonstrate proficiency to install all duct system and venting components

**"Proficient"** implies a thorough competence derived from training and practice and having great knowledge and experience in a trade or profession.

## Journeyman

### Daily

- Review job packet
- Inspect equipment and supplies preload, pull additional material as needed
- Direct/supervise apprentice load truck
- Pre-Install walkthrough with homeowner
- Direct/supervise apprentice for work area prep
  - drop cloths
  - tools
  - parts
- Direct/supervise apprentice for work/project tasks
- Perform manufacturer's start up procedure
- organize throughout day
- Ensure apprentice has taken all necessary pictures
- Inspect/Direct and manage truck stock

### Certification/Training

- Oregon BCD LEB Limited Energy License
- Manufacturer continuing education

### Skills/Abilities

- Demonstrate the ability to complete complex jobs/projects without supervision
- Demonstrate the ability to effectively communicate with homeowners
- Demonstrate proficiency with duct system layout, installation, and sizing
- Demonstrate proficiency with layout and fabrication of all system Sheetmetal transition fittings
- Demonstrate proficiency with duct system diagnostics
- Demonstrate proficiency with HVAC system refrigeration and electrical diagnostics
- Demonstrate proficiency in project supervision
- Demonstrate proficiency with mechanical and energy code
- Demonstrate ability to train apprentice

**"Proficient"** implies a thorough competence derived from training and practice, and having great knowledge and experience in a trade or profession.