

# Heat Pump Installer Training

## Required Topics

These are the topics that must be included in the Heat Pump Installer Training course (Installer #1.b. above). The training must include both classroom instruction and hands-on exercises that address the following:

1. Installation
  - a. Efficiency Maine [Heat Pump Installation Checklist](#)
  - b. Indoor units
  - c. Outdoor units
    - i. Mountings (brackets and stands)
  - d. Line sets
    - i. Flaring
    - ii. Mechanical connections (like ZoomLock)
    - iii. Refrigerant handling safety
    - iv. Vacuum testing
    - v. Purging with nitrogen
    - vi. Pressure testing
    - vii. Leak detection with soap bubbles and electronic testers
    - viii. Calculating refrigerant requirements
    - ix. Charging refrigerant
    - x. Adding additional refrigerant
    - xi. Branch boxes
  - e. Condensate lines / condensate pumps
  - f. Ductwork (optional)
    - i. Sealing
    - ii. Insulating
  - g. Thermostats/controls
2. Commissioning
  - a. All modes
  - b. Condensate flow with fan running (testing for dips that create blockages)
3. [Heat Pump User Tips](#) brochure
4. Service
  - a. Troubleshooting
  - b. Manufacturer resources
  - c. Pumping down refrigerant into outdoor unit
  - d. Refrigerant recovery



## Heat Pump Installer Training

5. Efficiency Maine Topics (Efficiency Maine presenters available)
  - a. Quality Assurance Inspections
  - b. Efficiency Maine [Code of Conduct](#)
  - c. Efficiency Maine [Heat Pump Installation Checklist](#)

### Optional Resources:

1. Efficiency Maine [website](#)
2. [Efficiency Maine Annual Heat Pump Basics Certificate](#) on-line video
3. NEEP's Guide To Installing Air-Source Heat Pumps in Cold Climates by NEEP click [here](#)