

# Heat Pump Sizing, Selection, and Design Training

## Required Topics

These are the topics that must be included in the Heat Pump Sizing, Selection, and Design Training course:

1. Heat Pump Cold Weather Performance (capacity and efficiency)
2. Heat Pump Sizing - Heat load calculation (any tool/method)
3. Product Selection
  - a. indoor units,
  - b. outdoor units (multi-zone vs single zone),
  - c. thermostats,
  - d. rain caps,
  - e. base pan heaters
4. System Design/Layout/Siting
  - a. indoor units,
  - b. outdoor units (including types of mounts),
  - c. line sets (including branch boxes),
  - d. condensate lines,
  - e. ductwork (optional)
    - i. layout
    - ii. sizing
    - iii. calculating static pressure
  - f. Thermostats (including integrating with other heating systems)
5. Building construction considerations (optional)
  - a. Things to avoid
    - i. Load bearing wall beams
    - ii. Flashing
    - iii. Shutters
    - iv. Snow drift/build-up locations
      1. Inside corners
      2. Roof valleys
  - b. Things to look for
    - i. Closets
    - ii. Garages
    - iii. Attics
    - iv. Basements
    - v. Basement/attic stairways

## Heat Pump Sizing, Selection, and Design Training

6. Efficiency Maine Required Topics (Efficiency Maine presenters available)
  - a. [User Tips](#)
  - b. [Code of Conduct](#)
  - c. [Heat Pump Installation Requirements Checklist](#)
7. Efficiency Maine Optional Topics (Efficiency Maine presenters available)
  - a. [Heat Pump Myths and Facts](#)
  - b. [Available Rebates](#)
  - c. [Residential Rebate Claim Form](#)
  - d. [Financing](#)
  - e. Brochures (download or order free copies from 866-376-2463)
    - i. [Heat Pump User Tips](#) brochure
    - ii. [Heat Pump Residential Rebate brochure](#)
    - iii. [Introduction to Heat Pumps](#) brochure
    - iv. [Quick Guide to Home Heating](#) brochure
  - f. Quality Assurance Inspections
  - g. Becoming an Efficiency Maine Residential Registered Vendor or Commercial Qualified Partner
    - i. [RRV Locator Tool](#)
    - ii. [Agreement form](#)
    - iii. [Code of Conduct](#)

### Optional Resources:

1. Efficiency Maine [website](#)
2. [Efficiency Maine Annual Heat Pump Basics Certificate](#) on-line video
3. NEEP's Guide To Sizing & Selecting Air-Source Heat Pumps in Cold Climates click [here](#).
4. NEEA's Cold Climate DHP Specification and Recommendations click [here](#)
5. Simple sizing tools
  - a. [www.Loadcalc.net](http://www.Loadcalc.net)
  - b. [EComfort.com](http://EComfort.com)