Mult-Zone Heat Pump for a Townhome

Heat pumps use electricity to provide clean, efficient heating and cooling.

- **Proven technology** heats and cools homes year-round across New York State
- **One system** provides comfort in both summer and winter
- **Healthy and safe** with no fuels, carbon monoxide, or window air conditioners
- **Affordable** with rebates, financing options, and low operating costs
- **Clean and green** with reduced greenhouse gas emissions
- **Versatile** solution for new or existing homes

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**Ducts** distribute warm or cool air to rooms. Existing ducts can often be modified and reused. Ducts work best in insulated spaces. Ask your installer to pay special attention to insulation and duct sealing.

**Insulation and air sealing** are often important first steps. This saves money, improves comfort, and makes heat pumps more effective.

**Window and door** upgrades can improve comfort and efficiency.

**Air handlers** distribute warm or cool air through ducts.

**Thermostats** Some thermostats can operate both heat pumps and other heating systems.

**Ductless heads** distribute heated or cooled air into a space. They operate very quietly.

**Outdoor units** operate very quietly. They must be above snow, away from other obstructions, and shielded from excessive water or ice. **Multi-zone** means multiple air handlers, ductless heads, or a combination connected to a single outdoor unit.

**Refrigerant lines** are small, insulated tubing that connect each air handler and/or ductless head to the outdoor unit. Coordinate placement and color with your installer.
Multi-Zone Air Source Heat Pumps

Features

• Save space outdoors with multiple indoor units connected to one outdoor unit
• Control temperature in different areas of the home
• Options for both ducted and ductless heating and cooling
• Quiet and efficient operation
• Eliminate window air conditioners

Types of Indoor Units

Multi-zone heat pumps allow you to “mix and match” ducted air handlers and ductless “heads.” Each should be sized to meet specific heating and cooling needs of the space it serves. Your installer can suggest the best options based on those needs, configuration of the home, and location of ducts (if present). Options include:

- High-wall ductless heads are among the most common and versatile.
- Low-wall ductless heads may be installed where radiators once were. Do not block them with furniture.
- Ducted air handlers come in a wide range of configurations. Some serve a single room; others can serve most of a home.

Each indoor unit can have its own thermostat, but all indoor units connect to a single outdoor unit.

Ask Your Installer

• What size units do I need? Ask for room-by-room heating and cooling calculations.
• Can heat pumps sufficiently heat my home or is an additional system needed?
• What is the best location for each indoor unit? Can we avoid heads directly above where people sit or sleep?
• What are my options for locating the outdoor unit(s)?
• How long will installation take? Where and when will you need access?
• How do I operate my system for optimal comfort and efficiency?
• What maintenance is required? How often should I clean or change air filters? Is annual service needed?
• What is the expected lifespan and warranty?

Cost Considerations

Installation Cost

• Check with NYSERDA, your electric company, and installer for incentives and financing options as larger incentives may be available for eligible customers
• Each zone adds cost, so use fewer zones when practical
• Cost varies with region, heat pump size, manufacturer, installation complexity, and installer experience

Operating Cost

• Your overall heating costs will likely decrease if switching from oil, propane, or electric baseboard
• If you previously heated with fuel, don’t be surprised to see electric bills rise; however, oil, or propane bills will drop or disappear
• Efficient homes (windows, doors, insulation, air sealing) have much lower operating costs

This document is part of NYSERDA’s Heat Pump Planner.

Learn more at: nyserda.ny.gov/HeatPumpPlanner