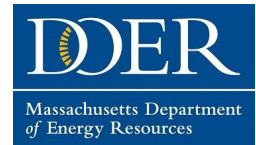
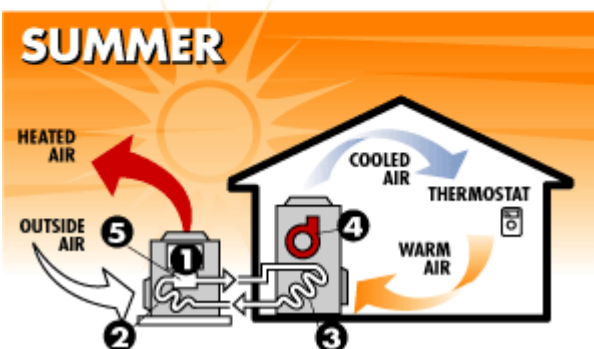
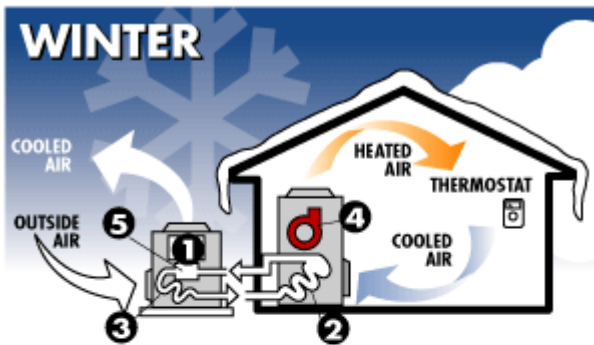


Save energy and money with a

Cold-Climate Air-Source Heat Pump Heating and Cooling System



Cold-Climate heat pump systems heat and cool your building at a fraction of the cost of oil or propane. Coupled with your existing oil or propane heating system, these hyper-efficient and quiet heat pumps work down to sub-zero temperatures to comfortably and efficiently heat your living and working spaces. During summer months, these units reverse and efficiently keep your building cool.



How do Air Source heat pumps work?
An air source heat pump uses the outside air to heat or cool a building. When used to heat a Building, this is achieved by transferring heat inside from the outside air. When used to cool a building, this is achieved by transferring heat from inside to the outside air. To achieve heat transfer in either direction, air source heat pumps use a system that includes a heat exchanger, a compressor and means to transfer heat from one area to the other, e.g., pipes filled with a refrigerant.
Air source heat pumps are driven by electricity, and systems exist that are powered by solar panels, making them both clean and energy efficient.

Ductless, Mini-Split Heat Pumps

Ductless, mini-split-system heat pumps (mini splits) make good retrofit add-ons to houses with "non-ducted" heating systems, such as hydronic (hot water heat), radiant panels, and space heaters (wood, kerosene, propane). They can also be a good choice for room additions where extending or installing distribution ductwork is not feasible, and very efficient new homes that require only a small space conditioning system. Be sure to choose an ENERGY STAR® compliant unit and hire an installer familiar with the product and its installation.

Like standard air-source heat pumps, mini splits have two main components — an outdoor compressor/condenser and an indoor air-handling unit. A conduit which houses the power cable, refrigerant tubing, suction tubing, and a condensate drain, links the outdoor and indoor units.

The **main advantages** of mini splits are their small size and flexibility for zoning or heating and cooling individual rooms



Operating Tips for Air-Source Heat Pumps:

PROPERLY SET THE SYSTEM

The auto mode may not provide the most efficient and comfortable operation. Set the indoor unit to HEAT mode during the cooler months and COOL mode during the warmer months. If you have multiple indoor units, set them all to operate in the same mode. For instance, if you are operating in HEAT mode during the cooler months, set all units to HEAT mode and conversely COOL mode in the warmer months.

USE THE "AUTO" FAN SPEED SETTING

As indoor and outdoor conditions change, your heat pump automatically uses the optimal fan speed. Achieve more electric energy savings by using the AUTO fan speed setting instead of other settings (typically quiet, low, medium, and high).

SET THE TEMPERATURE

Depending on the location of your indoor unit, you may need to set the temperature slightly higher or lower than the desired temperature in the room to meet your comfort needs. Think of the remote's temperature setting as a comfort setting rather than the exact temperature desired.

AVOID ADJUSTING THE TEMPERATURE SETTING

Cold-climate heat pump systems are designed to adjust to changing conditions automatically and efficiently. Once you find a comfortable temperature setting, avoid changing the setting or turning the unit off. Maximum efficiency is attained through a constant set point on the thermostat.