



# The Basics

## Energy Efficient Heating + Cooling

Heat pump systems function as both heating and cooling for your home. They use the refrigeration cycle just like a highly-efficient refrigerator, except **they exhaust the cold and keep the heat when heating**. When cooling, they work the same by using the cool air and exhausting the hot air. Highly efficient, these systems maintain a comfortable temperature in the home regardless of outside temperature.



### Why should I choose a Heat Pump System

- **It heats and cools.** Heat pump systems not only keep your home cool when its hot outside, they heat your home when its colder, resulting in ideal temperatures year-round.
- **Cost-Saving.** Switching from gas to a two-stage or variable heat pump system increases air conditioning energy efficiency, which results in lower energy costs.
- **Safe.** Heat pump systems remove possible carbon monoxide hazards in the air, creating a safer and cleaner home.
- **More comfort.** Not only do heat pump systems keep your home at the ideal temperature, they dehumidify the air in your home better than standard air conditioners.



### When is the best time to install?

- **Before extreme hot or cold seasons.** Be prepared! Replace your air conditioning and/or space heating units during more moderate seasons so that you can be comfortable during extreme heat/cold weather.
- **During a remodel or new construction.** There are numerous types of heat pump systems which require different installation needs, make sure to plan accordingly.
- **Replacing an existing system.** Work with an experienced contractor to select and properly install the best system for your situation. Based on your energy load, the new system could save hundreds each year.



### What should I do next?

- **Review the Energy Guide label.** Every heat pump system has two ratings; the heating season performance factor (HSPF), and the seasonal energy efficiency ratio (SEER), which measure total space heating required and heat removal required each year, respectively.
- **Match your climate with your system.** In warmer climates, the SEER is more important than the HSPF. In colder climates, focus on getting the highest HSPF feasible.