

HEAT PUMPS

Choices

Information to help you achieve the highest degree of indoor comfort for your home.



Goodman[®]
Air Conditioning & Heating

Thank goodness for Goodman.[®]



Air Conditioning & Heating

Indoor comfort all year long

Energy-Efficiency Ratings

For indoor comfort, millions and millions of homeowners rely on the Goodman® brand every day.

To many homeowners, the term 'heat pump' is a bit confusing.

Another way to define a heat pump is to think of it as a central air conditioning unit that can heat your home, too.

Here is a simplified explanation of how a heat pump operates. When the outdoor temperature soars, a heat pump functions just like a central air conditioner. It pumps low pressure refrigerant to an evaporator coil. Humid warm air passes over this coil typically sent from an air handler or gas furnace (depending on your home's type of heating and cooling system). As the warm, humid air passes over the cold evaporator coil, humidity is removed and the air is chilled prior to the air being sent to the return air registers.

As outdoor temperatures fall and you want heating comfort for your home, the heat pump automatically reverses the refrigerant cycle. So instead of warm air passing over the cold evaporator coil, in the heating cycle, cold air passes over a warm evaporator and is heated before it is sent to your home's air registers.

Compared to a central air conditioner that gets to take a 'vacation' during the heating season, a heat pump works to deliver indoor comfort all year. And since it works nearly every day of the year, when homeowners choose a new heat pump, many look for features that offer enhanced performance and long-term reliability.

How much energy (electricity) is used to provide cooling and heating operation by heat pumps is measured two ways.

Two basic ratings are provided to help you determine the energy efficiency of a heat pump:

SEER

Seasonal Energy Efficiency Rating is the term used to identify the air-cooling efficiency rating of a heat pump. The higher the rating number the more efficient it is designed to operate.

HSPF

Heating Season Performance Factor identifies the air-heating efficiency of a heat pump. The higher the rating number the more energy efficient the heat pump is designed to operate.

Performance Features

If the heat pump system in your home is the primary source for heating and cooling your home, you may want to choose one that offers performance and reliability features. Several important factors include:

- 1 High-efficiency two-speed scroll compressor** provides up to 18 SEER cooling and up to 9.5 HSPF heating performance for lower energy bills compared to lower rated SEER units (SEER and HSPF ratings vary by model)
- 2 Refrigeration-grade premium copper tubing and aluminum fin condenser coil** configuration delivers outstanding heat transfer properties with R-410A refrigerant
- 3 Specialized time delay defrost technology** allows smooth transition when units enter defrost mode
- 4 Heavy-gauge galvanized steel enclosure with sound-control top** – baked enamel finish protects your system from outdoor elements
- 5 Factory-installed inline filter drier** protects the refrigerant system from dirt and moisture for longer service life compared to units without filter driers
- 6 Factory-installed heater band and accumulator** ensures refrigerant is ready even in extreme external temperatures
- 7 High-density compressor sound control blanket** – acoustically engineered sound isolation helps reduce noise levels (compared to units without sound control blankets) for years of quiet comfort
- 8 Quiet ECM condenser fan** – high-efficiency motor with special three-blade fan design moves air quickly and quietly
- 9 ComfortNet™ compatible** – improve your home comfort convenience with more control options and communicating thermostats with touchscreen interface



After you have reviewed the information contained in this publication, you should be more informed about the features and benefits that heat pumps can deliver for your home's indoor comfort.

Before purchasing this appliance, read important information about its estimated annual energy consumption, yearly operating cost, or energy efficiency rating that is available from your retailer.

Goodman®
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Why are homeowners talking about Goodman®?

The reviews are in! ★★★★★

Each day more and more homeowners say, "Thank goodness for Goodman®". Find out why by visiting www.goodmanmfg.com/reviews.

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The company provides innovative, premium quality indoor climate management solutions to meet the changing needs of residential, commercial and industrial customers.



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