

Understanding the factors that determine how much a heat pump system costs to install can help you more effectively evaluate the heating and cooling option for your home.

If you're like most homeowners, you're always looking for new ways to cut your utility costs so that you can spend your money on more important things.

One strategy to accomplish this is to install a heat pump to replace both your home's heating *and* cooling systems.

Heat pumps have grown in popularity in recent years, yet many homeowners still aren't aware of the benefits of the option, most notably:

1. They're able to reduce or eliminate your dependence on fuels like gas and oil by utilizing **electric heating**.
2. They're able to **both heat and cool your home** thanks to clever technology designed to make homes more energy efficient.

If you're curious about the technology behind heat pumps, there's lots of information to explore to help you fully understand how they work.

The HVAC professionals here at Mattioni have helped countless homeowners understand heat pumps and evaluate if this type of systems is a good fit for them.

In this article, however, we're going to focus on **all the factors that determine how much a heat pump costs to install**.

We're going to provide as much pricing transparency and clarity as possible because we believe that **understanding what goes into installation pricing can help you make the best decision for you and your home**.

That's why we cracked open our price book and identified the following specific factors as the most influential in determining the price of installing a heat pump:

1. System Type & Equipment Matching
2. Heating & Cooling Capacity Needs
3. Energy Efficiency of the System
4. The Complexity of Installation and Ductwork Modifications Needed
5. Accessories & Additional Systems
6. Geography
7. Quality of the Installation Company

Lining up these pricing factors with your heating and cooling priorities allows you to narrow down your search to a handful of heat pumps that meet your goals and fit your budget. Let's start by exploring the first and broadest categories of heat pumps: the type of system.

1. SYSTEM TYPE & EQUIPMENT MATCHING

Heat pumps, like furnaces and air conditioners, have **different capabilities to throttle their temperature output**.

The first step in calculating your heat pump cost is deciding between a single-stage, two-stage, and variable-speed system.

- **Single-stage heat pump units** operate at either 100% capacity or not at all.
- **Two-stage heat pump units** have an added stage at roughly 65% capacity.
- **Variable-speed heat pump units** operate at virtually any capacity, as they continually adjust their compressor's speed to run at an

energy-conserving level.

Performance and energy efficiency typically increase as you go from single-stage to two-stage to variable-speed, so **this is a decision that'll impact your comfort and monthly utility costs.**

While most traditional air conditioners in the Greater Philadelphia Region are installed on top of a furnace to utilize its blower motor, **since heat pumps both heat and cool your home, they're usually not installed alongside a furnace.**

This means that **a standard heat pump installation requires an air handler installation** as well, in lieu of connecting to a furnace's blower motor. In these cases, the air handler constitutes between \$5,000 and \$8,000 of the total cost of the installation.

To enhance their comfort and reliability, heat pumps also require one of the following backup heat sources:

- **Heat Kits provide additional electric heating** to support the heat pump and add up to, and sometimes over, \$1,000 to the total installation price.
- **Dual Fuel/Hybrid Systems** are installed alongside a furnace, which **provides oil or gas backup heating.** This heating arrangement doesn't require an air handler.

Your decisions about whether to opt for a Dual Fuel System or a backup heat kit will dictate what equipment is required, or not required, to properly install your heat pump

Also, whether or not you already have the equipment needed will impact your heat pump cost.

If this all seems confusing or overwhelming, don't worry. **Our HVAC professionals are here to answer all of your questions about heat pump system equipment.**

Here's a birds-eye view of all the possible price ranges, including an air handler, for each different type of system:

- Single-stage heat pump units typically range between **\$12,000 and \$20,000**
- Two-stage heat pump units typically range between **\$14,000 and \$24,000**
- Variable-speed heat pump units typically range between **\$15,000 and \$25,000**

Where your total installation cost falls within these price ranges will be determined by our other six variables, mainly by the next two: the heating and cooling capacity and energy efficiency of the system.

2. HEATING AND COOLING CAPACITY NEEDS

Heating and cooling capacities (measured in BTUs and tonnage respectively) refer to the amount of heat that a heating system can produce or that a cooling system can remove from a home.

We sometimes call the heating and cooling capacity the "size" of the system.

Matching your home with an appropriately sized heat pump system will help with your home's comfort and reduce energy costs, while also promoting the health and longevity of your system.

In general, **the greater the capacity needed, the higher the cost of the system.**

Every home has unique heating and cooling capacity needs based also on the following variables:

- The square footage and insulation rating of your home
- The total number and efficiency of your windows and doors
- The number of people living in your home
- The direction that your home is facing
- The appliances in your home
- The color of your roof and exterior
- The interior layout of your home

The size of your existing ductwork also plays a very important role in determining the appropriate heat pump sizing for your home.

Ductwork that's too narrow will not be able to facilitate the airflow of a heat pump system that might otherwise fit your home.

If your ductwork is too wide it'll need an oversized heat pump system that'll hinder efficiency and the comfortability of your home.

Don't hesitate to talk with your HVAC professional about your existing ductwork and how it impacts your new system options.

Modifications to your ductwork are sometimes the best bet for solving this.

3. ENERGY EFFICIENCY OF THE SYSTEM (SEER2 AND HSPF2 RATINGS)

If you want to maximize your savings on monthly electrical bills, then you'll probably want to explore some of the more efficient heat pumps.

Your guides with this are the **SEER2 and HSPF2 rating scales**.

- The Seasonal Energy Efficiency Ratio, or SEER2, rating is from 13 to 26 which measures a heat pump's efficiency when it's in cooling mode.
- The Heating Seasonal Performance Factor, or HSPF2, rating is an uncapped scale with a minimum of 7.5 and indicates a heat pump's efficiency when in heating mode. HSPF2 is calculated by measuring how many BTUs of heat are delivered per kilowatt hour.

While the differences between single-stage, two-stage, and variable-speed systems indicate how efficient a system is, the SEER2 and HSPF2 rating systems test the equipment under specific conditions to provide a precise efficiency analysis.

In most cases, **the higher the efficiency scores, the higher the cost of the equipment**.

- A low-efficiency heat pump system scores between a **13-14 SEER2 rating**.
- An average-efficiency heat pump system scores between a **14.1-17 SEER2 rating**.
- A high-efficiency heat pump system scores between a **17.1-26 SEER2 rating**.

4. THE COMPLEXITY OF INSTALLATION AND DUCTWORK MODIFICATIONS NEEDED

While most installations are straightforward, there's the potential for additional costs tied to the increased complexity of installing your new heat pump.

Things like additional crew members, materials, modifications, accessibility, and added time are all factors that can increase the price of installation.

Also, **If you're replacing an air conditioner with a heat pump, there's a lot of new utility infrastructure that needs to be set up.**

This means that additional materials (and additional time) are frequently needed. **If you're replacing an old heat pump with a new one, this doesn't apply quite as much.**

Accessibility of the Installation, Modifications & Additional Materials Needed

Heat pump installations can require additional or unusual work such as:

- **Hanging the outdoor unit** on the side of the house if there is no space for it on the ground.
- **Cutting holes** through drywall or the exterior of your home to run lines or wiring.
- **Making additional modifications** to create access to span the distance needed for lines or wiring.
- **Major duct modifications** to physically fit the system or to handle the proper amount of airflow needed.
- **Crawl space installations** require installers to work while laying down.

Your new heat pump system may require a new **refrigerant line, wiring, or ductwork** to be installed properly.

The three factors impacting just how much additional materials will raise the total installation cost are the **type of material, the distance that needs to be spanned, and the difficulty of accessing that distance.**

- **Refrigerant line:** The lines connecting your indoor air handler and outdoor heat pump unit could span 75 feet or more.
- **Wiring:** Wiring may also need to span up to 75 feet or more.
- **Ductwork:** Modifications to the ductwork closest to your furnace may be needed, and some Dual Systems may need a plenum or return drop to be added for the system to be installed properly.

Making the necessary considerations to provide a quality installation can increase the price, however doing so will make sure that your system is set up for success and longevity, which will save you on repair costs.

Attic Installations

If your heat pump system will be housed in your attic, some potential factors could impact the logistics of the job:

- **Ease of access:** Lifting the system up a ladder and fitting it through a narrow opening.
- **Workability:** Walking on joists if there is no flooring can add to the complexity of the job.
- **Temperature:** Summer attic installations sometimes require additional manpower to allow the installers to rotate working as temperatures in the attic are usually over 125°F and can reach up to 160°F.

5. ACCESSORIES

HVAC accessories like [indoor air quality products](#) and smart thermostats can enhance your home's comfort and the accessibility of your heating and cooling systems. These additional investments add to the total cost of your HVAC installation.

Whole-House Dehumidifiers cost between \$2,500 and \$4,500 to install, depending on the size of your home, the amount of humidity that needs to be removed, and if the system will be ducted in, if it's stand-alone or zoned for both.

Whole-House Humidifiers cost between \$900 and \$3,500 to install, depending on the size of your home.

Whole-House Air Scrubbers cost around \$1,600 to install. If your home is large enough to call for two AC systems, we recommend getting two air scrubbers.

Whole-House Air Purifiers cost between \$600 and \$3,000 to install, depending on the type of air purifier and size of the system.

Energy Recovery Ventilation Systems (ERVs), also known as air intake systems, cost between \$3,000 and \$6,000 to install.

Smart Thermostats are sometimes required for variable-speed heat pumps. If you don't have one already that is compatible with your system, they cost between \$700 and \$1,200 to install.

6. GEOGRAPHY

Like many other goods and services, your geographic location will also influence the price of installing a new heat pump system.

For instance, a heat pump installation in a large city like New York will be more expensive than in a small town. The socio-economic status of where you live plays a part in this as well, however these price differences aren't easily measured.

Although this factor is out of our control, staying aware of it will give you a better idea of how much your installation should cost, and if you're getting a good quote or not.

7. QUALITY OF THE INSTALLATION COMPANY

Not all HVAC installation companies are created equal. The quality of the company providing your installation services, and how they train their installers, is going to affect the total cost of installing your new heat pump system.

It's not uncommon for a less professional company that overlooks the details of a quality installation to offer lower prices. If you get an appealing quote from a service provider who lacks testimonials or pictures of previous work, it might be a red flag that you're talking to a corner-cutter installer.

Poor installations often follow cheap prices, which has several negative consequences on your new system's performance, efficiency, and longevity.

Conversely, an HVAC installation company that provides **trained, licensed, and experienced installers** will deliver a quality installation. It may come at a higher price, but a quality HVAC installation will set your new system up for optimal performance, efficiency, and longevity.

Considering how future repair costs and efficiency levels impact the long-term costs tied to your heat pump system helps to put the quality of installation into context.

Making Your Heat Pump Installation Decision

As you can see, there are a lot of variables in play that influence the bottom line heat pump cost, and some of these factors are outside of your control entirely. Suffice it to say, no two installations are identical.

If you haven't already, here is a sound approach to your heat pump installation search.

1. Rank your home heating and cooling priorities.
2. Compare your priorities to the information covered in this article.
3. Speak with an HVAC professional to narrow down your search to a few options.

Following these steps will help you start to sift through all the heat pump options available and narrow down your search to a small list of options suited for your home.

When it comes time to talk with an HVAC professional, be sure to ask all of your questions as understanding your options is the best way to make a sound decision for the future of your home.

Our HVAC professionals are ready to guide you through this important process. To speak with the Mattioni team about heat pump pricing, call us at **484-617-3619** or [schedule an appointment online today](#).

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