

What's the difference between a heat pump and an air conditioner?

As we mentioned above, air conditioners only cool your home, but a heat pump can **both heat and cool your home**.

So a heat pump can serve as both your air conditioner in the summer as well as your heater in the winter.

How? Heat pumps work by moving heat from one place to another. In the summer, they move heat from your home to the outdoors (just like any other air conditioner), and in the winter they move heat into your home from outdoors.

Your system will absorb the heat from your home's air and carry that heat outside via refrigerant lines. At your outdoor unit, your AC will then release that heat into the air outside your home.

A heat pump can then heat your home using the same method. A heat pump will simply reverse the flow of refrigerant, absorbing heat from the air outside and carrying that heat into your home to heat your home's air.

Why install a heat pump?

Heat pumps **provide benefits** like:

- **Works just like an air conditioner in the summer**
- **2 systems (heating and cooling) in one**
- **More energy efficient than any other form of electric heat in the winter (Since heat pumps move heat rather than creating heat, they are very energy efficient in the winter.)**

However, heat pumps do have a few drawbacks, including:

- **Price** — Heat pumps are slightly more expensive than a comparable air conditioner. However, if you consider the fact that you're getting a heating system in addition to an AC system, a heat pump is far less expensive than installing a central AC AND a furnace or additional heater. You can learn more about the cost to install a heat pump on our blog,
- **They don't work in very cold climates** — There must be heat for a heat pump to 'move' into your home during the winter, so they aren't great when temperatures get below about 30° F. Luckily, that's usually not an issue for Phoenix residents, which is why a heat pump is a great option for most homeowners that live here.

Why install an AC system?

Even with all the benefits of a heat pump system, there are a few reasons you might consider an air conditioner over a heat pump:

- **If you have a new heating system**— If you have another type of heater (like a furnace) that's in good shape or you just replaced your heater, you can save some money by purchasing an air conditioner rather than a heat pump.

- **If you have a gas heating system**— Heat pumps are electric systems, which means they can't run on gas. So, if your home's heating system runs on gas heat, an AC system and the heating option you currently have is a better option for you than replacing both with a heat pump. Why? Well, natural gas is a cheaper form of fuel than electricity is, so a gas furnace will probably be less expensive than an electric one. If you have a gas heating system currently, our suggestion would be to purchase an AC, not a heat pump.
If you have a new heating system or your HVAC systems run on gas, instead of buying a heat pump you could spend the additional money on a higher-efficiency AC.

Other factors to consider when choosing a cooling system

Whether you've decided on a heat pump or a central AC system, there are two other factors you'll need to consider that will impact the cost of your installation and monthly bills:

- **SEER rating**— The SEER Rating (Seasonal Energy Efficiency Ratio) of an AC or heat pump measures how efficient that system is. The higher the SEER rating, the more expensive the AC or heat pump will be upfront, but the less you'll pay for monthly energy bills. To determine which SEER rating is best for you, you'll want to discuss your cooling needs and budget with a professional. SEER ratings range from 14-24+, but we usually suggest a SEER rating of 15–18 for Phoenix homeowners.
- **Size**— The larger the AC or heat pump, the more expensive it will be. However, the size of AC or heat pump you need for your home will depend on many factors that will need to be assessed by a professional during a Manual J. Load Calculation. Even though this may seem like an extra step, installing the wrong size AC or heat pump could result in many, expensive issues, so it's important to take the time to do this before installing a new AC or heat pump.