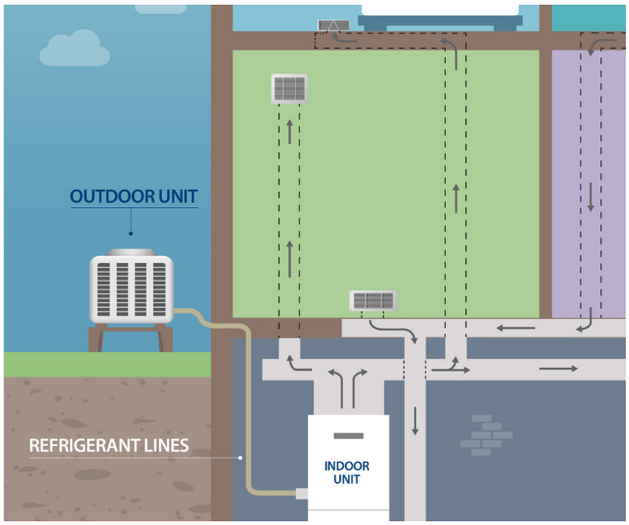
MI

HEAT PUMP COLLABORATIVE

How will the heat pump impact my home heating?

During the heating season, a heat pump extracts heat from the outside air and transfers it indoors to warm the home. It operates efficiently by moving existing heat rather than generating it, resulting in lower energy consumption compared to traditional heating systems. This leads to consistent, energy-efficient heating, reducing energy bills while maintaining indoor comfort, even in cooler weather. However, in extremely cold temperatures, the heat pump may become less efficient, sometimes requiring a supplementary heating source such as a fossil fuel furnace or electric heat kit.



How do I operate it?

Operating the thermostat on a heat pump is straightforward, but it's essential to use the right settings for optimal performance. Heat pumps work best when they maintain a steady temperature. Constantly adjusting the temperature can reduce efficiency. Instead, choose a comfortable temperature and let the system maintain it. Your heat pump thermostat will have a combination of modes that say "Heat," "Cool", "Aux" and/or "E/Emergency". The "Cool" setting will allow for the heat pump to operate as an air conditioner, cooling the space to the desired indoor temperature setpoint. Selecting "Heat" mode will utilize the heat pump in its heating mode, which will activate the outdoor unit just like it would in cooling mode but will utilize it for heating the space instead.

The modes "Aux" and "E/Emergency" will operate the secondary or back-up form of heat ONLY. This is for extremely cold conditions when the heat pump alone can't provide enough warmth. It activates a backup heating source, such as electric resistance heating or fossil fuel furnace. Only use this if needed, as it is less energy efficient. For hybrid systems, the thermostat will pair with a sensor for outdoor temperate sensor that will automatically switch from using the heat pump to the fossil fuel furnace, which could be programmed to 20-45° F. This is adjusted based upon the economic balance point which is determined by the HVAC contractor for when it is just as efficient to operate the furnace as it is to operate the heat pump.

Another mode on the thermostat is for the fan to be "On" or "Auto." The indoor blower will automatically engage when the thermostat calls for desired operation whether it be heating or cooling. Turning the Fan mode "On" will activate the fan to continuously recirculate air throughout the home, regardless of if the thermostat is calling for heating or cooling. The indoor portion of the equipment has a high-efficiency blower made standard by all manufacturers now, but keep in mind that the longer run times will result in higher utility usage. Therefore, it is recommended to keep the fan setting to "Auto" unless designated by the contractor for a specific reason.
Most thermostats have the ability of scheduling. It is not recommended to use the scheduling for large setbacks during times you are away from the home e.g. working 8 hour-a-day shifts. This could result in higher operational costs for the unit operation due to longer run times to overcome large setback temperatures and run times during peak demand times set forth by your utility company, usually inquiring about a larger expense on your utility bill. Depending on the setback temperature amount, the secondary form of heat could activate since the settings on most thermostats are set out of the box to operate backup heat after a 3°F differential. "Set it and forget it" is the optimal way of operating the system: setting the thermostat at a comfortable temperature and keeping it at that temperature all day.

What do I do if I have concerns?

One thing to note is a heat pump air delivery temperature may be lower than what you have experienced before with different systems. A heat pump can offer supply air delivery temperatures lower than your body temperature. **This does not mean the heat pump is not working.** This is expected operation, and you will find that you may not have to increase the setpoint on the thermostat in the winter higher than you do in the summer with the new system because it retains a proper amount of moisture in the air, leading to a less dry and negative indoor air quality environment.

New noises will be experienced with your heat pump. When the system goes into defrost mode, the outdoor unit will cease fan operation momentarily, and you may hear a "whooshing" sound. At the end of this cycle when the fan starts to operate again, you will notice what resembles steam coming out of the unit. This amount could be large or small, depending on the air temperature and humidity. **This is completely normal operation of the unit.** You should find no increase in your utility bill as well, and in some cases a decrease in your utility bill. If the system does not seem to be keeping up with a normal set temperature, your bills increase drastically, or there are strange noises coming from the unit that seem alarming, you should call your contractor or building maintenance to address these concerns.

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