

CHOOSE AN **ENERGY STAR®** HEAT PUMP WATER HEATER



What is a heat pump or "hybrid" water heater and how does it work?

A heat pump water heater works like a refrigerator in reverse. It uses reliable technology to capture heat from the surrounding air and transfers it to the tank to make hot water.

An ENERGY STAR certified heat pump water heater uses 70% less electricity to make the same hot water as a standard electric model.

Heat pump water heaters come in different shapes and styles. Some models are called "hybrid" water heaters because they can switch modes to operate like a standard electric model when needed—like a hybrid car switching modes for a quick boost of power. This flexibility allows hybrid water heaters to balance efficiency and performance.

Other models, typically called split systems, have a small unit mounted outside the house which is linked to a hot water tank inside the house. These models use a heat pump to efficiently produce hot water. Split systems typically do not include an electric resistance heating element.

Benefits

Super Energy Efficient: Heat pump water heaters make the same amount of hot water using 70% less electricity. Uses 1/3 the electricity and at 1/3 the cost than conventional electric water heaters.

Health and Safety: Heat pump water heaters are safe and reliable. They are also easy to install because they do not require extra venting to remove exhaust gases.

Reliability: Heat pumps have been around for decades and are a proven, reliable technology. ENERGY STAR[®] certified electric water heaters come with a minimum 6-year manufacturer warranty.

Eco Friendly: Heat pump water heaters require less energy to make the same hot water, which conserves resources and reduces greenhouse gas emissions.

More Connected, More Flexible: Many heat pump water heaters include some form of connectivity which means more user control and flexibility. This can include the ability to set your water heater to vacation mode to save energy, to track and monitor energy usage, and to participate in energy saving incentive programs, where available.

Smart Investment: Heat pump water heaters typically cost more upfront, but quickly pay for themselves with energy savings, rebates, and tax incentives.

Uses 70% less energy and saves \$315 per year.



Source: ENERGY STAR V4.0 Data Package Table 6. Based on 50 Gallon

Rebates and Tax Credits

The premium cost of a heat pump water heater can be offset with rebates available from local utilities plus a \$300 federal tax credit.

Rebates: Find rebates and special offers for ENERGY STAR certified electric water heaters near you: <u>Special Deals Finder</u>.

\$300 Tax Credit: Homeowners can receive a \$300 federal tax credit for purchasing an electric heat pump water heater. Must be an existing home & your principal residence. New construction and rentals do not apply. More information on how to apply: Federal Tax Credits for Consumer Energy Efficiency | ENERGY STAR

State and local tax incentives may exist in your region. Check eligibility details before making your purchase.

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Join the millions making a difference at energystar.gov.





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What's different?

Size: Heat pump water heaters are generally a bit larger than conventional water heaters. Be sure there is enough space to fit your new highperformance water heater. If space is limited, consider an ENERGY STAR certified split system.

Dehumidification: In the same way a kitchen refrigerator generates a small amount of heat, a heat pump water heater creates a small amount of cool, dry air. This makes them ideal for clammy basements and stuffy garages. Although not required, the cool air can be ducted directly outside or to adjacent rooms for even greater comfort.

Sound: A low soft humming sound is normal for a heat pump water heater—similar to a new dishwasher or refrigerator.

Picking the Right Size

Your new ENERGY STAR certified electric water heater should be properly sized to your home and the number of occupants, just like your existing one. If your family needs have increased, you might consider a larger tank. You can find the size of your water heater listed in gallons on its nameplate or on the yellow Energy Guide sticker.

Installation

Electrical: The most common type of heat pump water heater requires a dedicated 240 Volt outlet—perfect for homes with an existing electric water heater. Electric panel upgrades may be needed if replacing a gas water heater or if a 240V outlet is not available. To make the conversion of a gas water heater to an electric heat pump easier, next generation heat pump models are being developed. These models will utilize existing 120V outlets, helping to avoid costly electrical panel upgrades.

Condensate Drain: Heat pump water heaters produce pure, clean, non-corrosive condensate water which can be directed to an existing drain or condensate pump.



Room Temperature: Heat pump water heaters perform best in spaces that remain between 40°–90°F (4.4°–32.2°C). Many models can operate outside this range for short periods of time, but ideally the tank should be placed somewhere that remains above freezing.

Clearance Space: Access to air allows heat pump water heaters to operate at peak performance. Most models need about 750 to 1000 cubic feet of air, which is about the size of a 10 ft x 10 ft room. If your water heater is tucked away in a tight closet, a simple louvered door or jumper duct will do the trick. Always follow manufacturer's specifications.

Easy Maintenance

Heat pump water heaters are high performance – not high maintenance. Like any water heater, a visual inspection should be done periodically to make sure everything is in working order. Tips to maintain a long life are annual flushing and checking the anode rod—no different than a standard electric tank. Most manufacturers have a filter alarm to indicate when the filter should be cleaned. Consult the product manufacturer owner's manual for specific maintenance requirements and recommendations.

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