

RUUD HYBRID WATER HEATERS

Super efficient! HP-SERIES



2.0 *energy factor*

FAST *recovery*

EASY *installation*

40 & 50 *gallon capacities*

ECO *friendly*



Rely on Ruud



The Ruud Hybrid Water Heater Solution

Superb engineering, coupled with decades of water heating expertise, have produced an integrated heat pump water heater that has over TWICE the efficiency of standard electric water heaters. Its narrow 21" diameter fits through access doors, unlike some hybrid products. It has the same connections as a standard electric water heater, making installation fast and easy. The user-friendly LED control panel is protected behind a small door conveniently located at eye level. This touch pad allows homeowners to select the water temperature range as well as choose the efficiency setting based on hot water demand.

Ruud HVAC product lines have successfully utilized heat pump technology for over 30 years. By taking our field proven technology and combining it with our industry leading tank design, we have developed an integrated heat pump water heater that meets or exceeds industry standards for efficiency and performance.

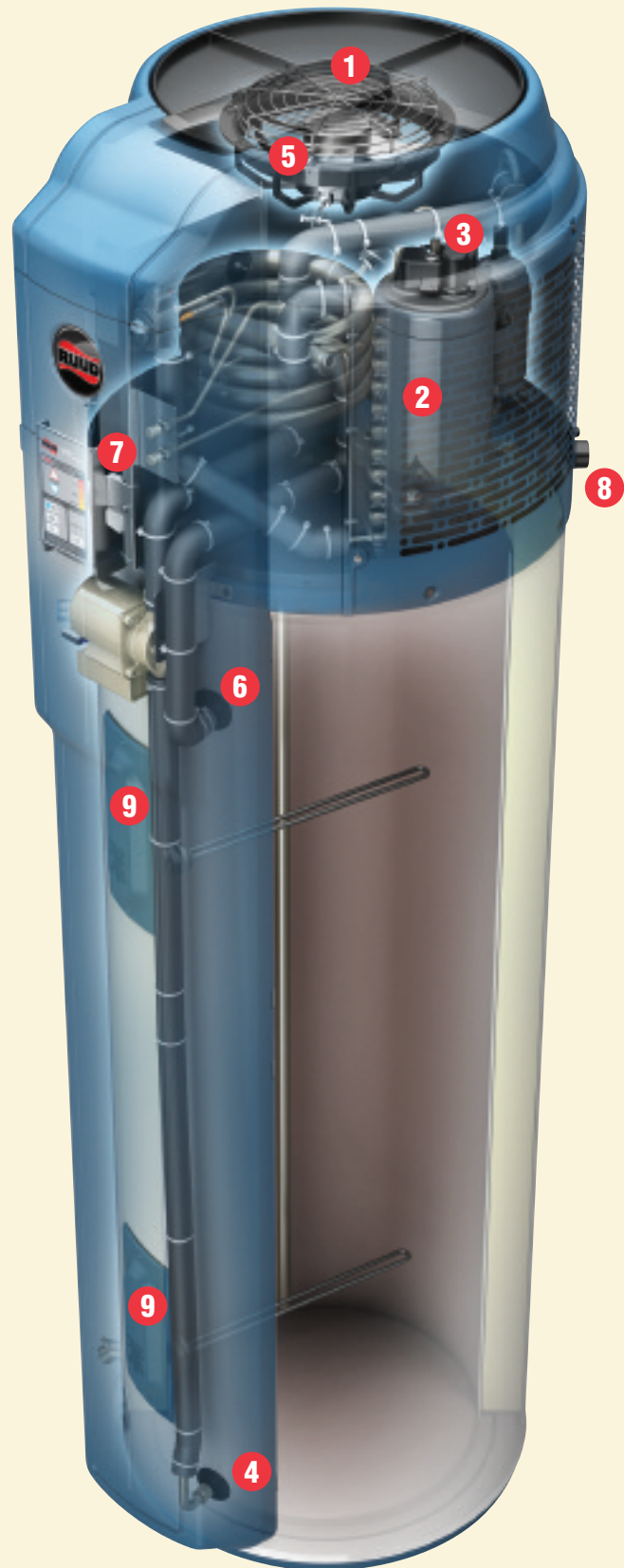
The Ruud HP-Series provides best-in-class hot water delivery. In the Energy Saver mode it provides the same first hour hot water delivery as a standard electric model. In the High demand mode it exceeds the first hour delivery of a standard 65 gallon electric model.

Exceptional energy efficiency, performance, reliability, and easy installation make the Ruud HP-Series one of the best water heating solutions on the market today.

How the Ruud Heat Pump Water Heater Works

In "Energy Saver" mode, this water heater's high efficiency heat pump operates automatically for hot water storage in this sequence:

- 1 A fan pulls air through the top air filter.
- 2 Heat in the air is absorbed by eco-friendly refrigerant inside the evaporator coil and cool (dehumidified) air is exhausted.
- 3 Refrigerant is pumped through a compressor, which increases the temperature.
- 4 Simultaneously the cooler water from the bottom of the tank is pumped to the top of the appliance, where it circulates through a patented condenser coil.
- 5 Hot refrigerant transfers its heat to the water inside the condenser coil.
- 6 Heated water is returned back to the top of the tank.
- 7 All functions are controlled simultaneously by an advanced circuit board located behind the user touch pad.
 - In "High demand" mode, the heat pump can run in tandem with an electric element during periods of high demand.
 - In "Electric Heat Only" mode, the heat pump is disabled and the appliance operates like a standard electric water heater with two elements.
- 8 Condensate drain connection.
- 9 Backup electric heating elements.



Our Most Advanced, Energy-Efficient Electric Water Heater

Ruud air-source heat pump water heaters work much like a refrigerator in reverse. The heat pump extracts the heat from warm air, intensifies the heat with a compressor, delivers the heat to the water, and exhausts the cooler air. Because it uses the warm ambient air temperature to do most of the work, it is a very efficient way to heat water.

2.0 Energy Factor Over TWICE the efficiency of standard electric water heaters

- Uses heat pump technology for superb energy-efficiency
- Easy-to-use LED touch pad controls the water temperature range, 3 energy efficiency settings, and overall operation
- Ideal choice for new homes and for electric water heater replacements in attics, basements, and garages



Choose the Right Efficiency Setting

Based on climate, demand, and installation site

ENERGY SAVER

The most energy efficient setting is Energy Saver mode, it works by extracting warmth from the surrounding air, concentrating the heat, and delivering it to the water. This mode provides an industry leading 2.0 energy factor (EF) and a first hour delivery comparable to a standard 50 gallon electric model.

HIGH DEMAND

When hot water demands are high, use the High Demand setting. In this mode both the heat pump and electric element will operate as needed. The High Demand mode will provide a remarkable 1.5 EF and a first hour delivery in excess of a standard 65 gallon electric model.

ELECTRIC HEAT ONLY

A temporary Electric Heat Only setting is available to ensure hot water availability without operating the heat pump. The water heater will revert back to Energy Saver operation after two weeks, if not reset by the user.



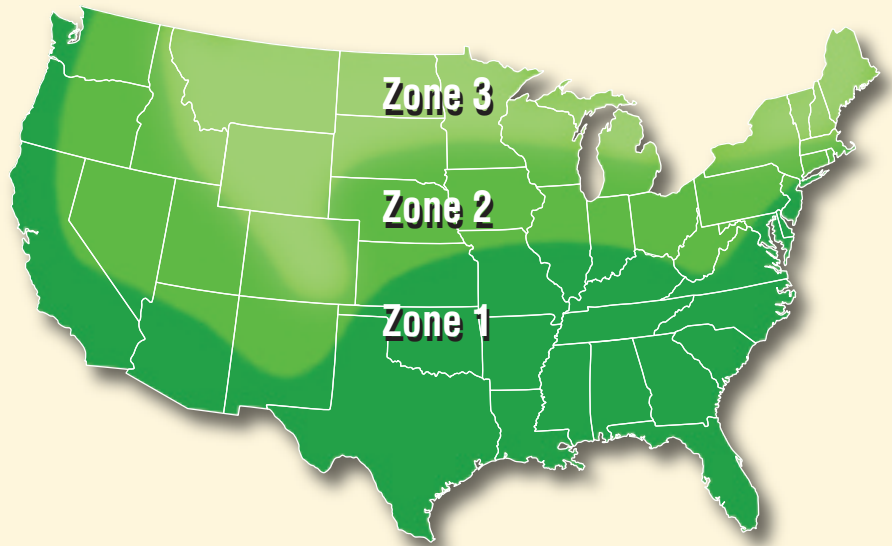
Select the Right Installation Site

For best heat pump operation, the temperature in the location where the water heater is to be installed should average 40 degrees or above. Choose a warm installation site like an attic, garage or basement. Because a heat pump tends to cool the area where it is located, any type of air-source heat pump will work more efficiently in a warm location. The heat pump will need 1,000 cubic feet of air space around it (approx. 10x10x10 ft. room).



Energy Efficiency Zones

The map below indicates, on the average, the most favorable locations for heat pump water heaters. Annual weather patterns and other factors will determine your overall energy efficiency.



Zone 1: Heat pump will be used most of the year (90-100%)

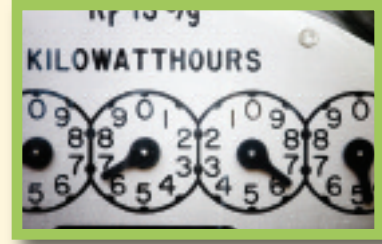
Zone 2: Combination heat pump (60%) and electric heating elements (40%)

Zone 3: Combination heat pump (50%) and electric heating elements (50%)

Heat pump water heaters can be effectively used in all areas of the U.S. The highest efficiencies will be achieved when installed in locations where the unconditioned air temperature is between 40°F – 120°F. Attics, basements, and garages typically provide optimal performance.

Electric Utilities *benefits!*

The new fully integrated hybrid heat pump water heater is ENERGY STAR® rated. Its high energy factor and best-in-class hot water delivery reduces the load on electric utilities while providing its customers with plenty of hot water. With additional utility incentives and federal tax credits, it is an affordable investment for the homeowner with a payback of less than three years.



Homeowners *benefits!*



The Ruud hybrid water heater has over TWICE the efficiency of standard electric water heaters. If your annual energy cost for hot water is \$520, you can save as much as \$286 per year. The user-friendly touch pad allows homeowners to select the water temperature range and choose the highest efficiency setting for their hot water demand. The Ruud hybrid water heater is ENERGY STAR® rated. State and local incentives/rebates may be available.

Contractors *benefits!*

The Ruud hybrid water heater was designed for easy installation. It installs much like a standard electric water heater, with the same familiar connections. Its narrow 21" diameter helps the contractor place the unit in the right area for highest energy efficiency. It can conveniently be ordered from your local Ruud wholesaler.



Builders *benefits!*



Builders are always looking for products that will set their homes apart from the competition. The Ruud heat pump water heater offers best-in-class hot water delivery and will reduce the homeowner's overall cost of ownership. The hybrid water heater's distinctive look and its energy efficiency will attract the interest of today's savvy consumers.

See Use & Care Manual for important installation details, LED touchpad control, and general maintenance requirements.

How you heat water is impacting your budget and the environment. Your water heater is the second largest user of energy in your home. On the average you are spending approximately \$500 to heat water annually.



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Specifications

DESCRIPTION				DIMENSIONS (SHOWN IN INCHES)				ENERGY INFORMATION		
GAL. CAP.	MODEL NUMBER	FIRST HOUR RATING GPH	RECOVERY IN GPH @ 90°F RISE	HEIGHT A	DIAMETER B	UNIT WEIGHT (LBS)	APPROX. SHIP WT. (LBS)	ENERGY SAVER	AVG. ANN. OPER. COST	
40	HP40RU	56	21	65-1/2	21	190	246	2.0 EF	\$234	
50	HP50RU	67	21	75-1/2	21	197	267	2.0 EF	\$234	

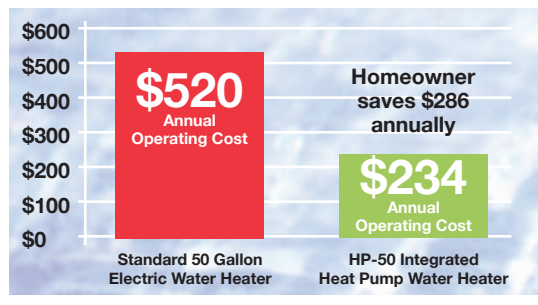
Energy Factor and Average Annual Operating Costs based on 2007 D.O.E. (Department of Energy) test procedures. D.O.E. national average fuel rate electricity.

Features and Benefits

- 10-Year limited tank and parts warranty*
- Energy efficient: 2.0 EF
- 3 Operation modes
 - Energy Saver (heat pump)
 - High Demand (heat pump with element backup)
 - Electric Heat Only (temporary)
- 2-1/2" Non-CFC foam insulation
- Premium restored anode rod protection, extends tank life
- Exclusive Ruudglas® tank lining
- Factory installed T&P valve
- Brass drain valve
- Easy access side connections
- 3/4" NPT water inlet, outlet, and condensate drain connections
- 21" diameter, fits through access doors
- Easily replaces a standard electric water heater
- Stainless steel resistor elements
- Heat pump operating range 40° F to 120° F
- Built in freeze/overheat protection
- Easy access, top mounted washable air filter

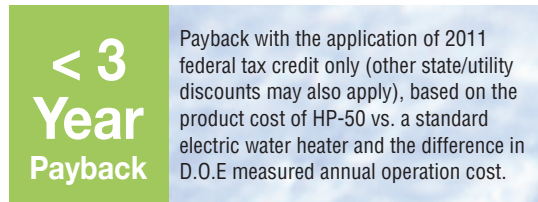
*See Residential Warranty Certificate for complete information.

Annual Operating Cost Comparison Standard 50 Gallon Electric vs. Hybrid 50 Gallon Electric

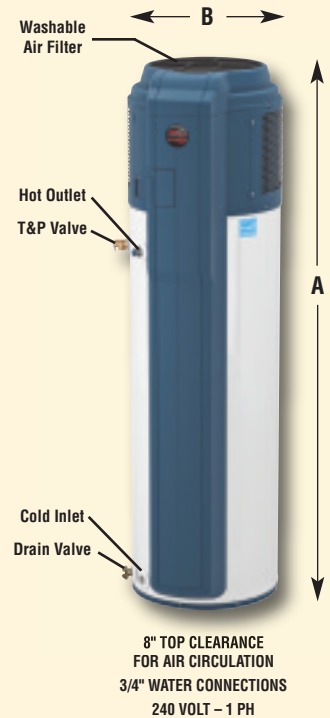


Operating costs based on 2007 US Department of Energy annual operating cost calculations and average consumer, national energy costs.

Estimated Homeowner Payback HP-50 Heat Pump Water Heater



Operating costs based on 2007 US Department of Energy annual operating cost calculations and average consumer, national energy costs. Please consult with your tax advisor for eligibility requirements and amount of tax credit.



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Stimulus approved seal
provided by Hanley Wood

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In keeping with its policy of continuous progress and product improvement, Ruud reserves the right to make changes without notice.

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Ruud manufactures residential and commercial heating & cooling and water heating products.

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