



# BENTON RURAL ELECTRIC ASSOCIATION

402 7TH Street • P.O. BOX 1150 • PROSSER, WASHINGTON 99350 • 509/786-2913 • Fax: 509/786-0291

A Touchstone Energy® Cooperative 

Dear Member,

Here are is what you need to know about Benton REA's heat pump water heater (HPWH) rebate program.

- You must be a Benton REA member to receive a rebate
- These tanks are a little larger than standard tanks
- Some refer to this technology as “hybrid water heaters”
- Heat pump water heaters should work great in some applications and are just the wrong technology for others – I can help you determine if this is the right technology for you
- HPWHs need to be installed by a “trained installer”. This could be a contractor, you or your uncle Charlie. Attached is a list of trained installation professionals. Self-installation training for AO Smith, Kenmore, State and American equipment can be found here:
  - [university.hotwater.com/residential/heat-pump/](http://university.hotwater.com/residential/heat-pump/)
  - [www.hotwater.com/service/heat-pump-certification/](http://www.hotwater.com/service/heat-pump-certification/)
- Your favorite hardware store may employ installers but they are not the only installers available – you may wish to contact others for installation prices
- You and the installer need to complete the form included with this letter and submit it with a copy of the invoice to myself at Benton REA.

## Understanding Tiers

- “Tier 1” generally refers to HPWHs that expel exhaust air to the space where they are located; it was the first evolution of this technology and I doubt if they are even available for purchase anymore. When properly installed, Benton REA offers a \$300 rebate for Tier 1 HPWHs.
- “Tier 2” products (when located inside the home) may be installed so as to have their exhaust air ducted to the exterior of the home. When properly installed, Benton REA offers a \$500 rebate for Tier 2 HPWHs.
- “Tier 3” is very similar to Tier 2 but it comes from the factory with default energy saving settings selected on the control panel. When properly installed, Benton REA offers a \$500 rebate for Tier 3 HPWHs.

This incentive is now also available for installations in manufactured homes!

Included with this letter is a qualified products list for Tier 2 and Tier 3 products. If the unit you are looking at is not on the list, it may be Tier 1 –check with me before purchasing!

## Hot Water Solutions

Visit [HotWaterSolutionsnw.org/](http://HotWaterSolutionsnw.org/) to learn more about HPWHs. Specifically, this portion of the website may be very helpful, [hotwatersolutionsnw.org/what-is-a-heat-pump-water-heater/is-it-right-for-you](http://hotwatersolutionsnw.org/what-is-a-heat-pump-water-heater/is-it-right-for-you).

That web site identifies particular brands and models that are eligible for the previously mentioned rebates and may identify locations where buy-downs are occurring.

We'll probably want to swing by and take a picture of your new unit for our records.

In years past, a \$300 federal tax credit on this equipment has been available – you should check to see if that still applies; so do your homework on that. This is relatively new technology and we are trying to do a good job of informing you on this potential purchase. I would encourage you to call us so we can make sure that you get off on the right foot. This has the potential for very significant energy savings in your home and we want to make your experience with it as positive as possible.

Sincerely,

Eric Miller  
Energy Services - Benton REA  
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(509)786-2913, (509)949-6007  
[emiller@bentonrea.org](mailto:emiller@bentonrea.org)

# Heat Pump Water Heater Form

All sections must be filled out by the installer at the time of installation. A copy of this completed form, the purchase receipt or invoice, and the manufacturer's Installation Checklist must be promptly submitted to the homeowner's utility in accordance with utility policy. Last updated: 2012-09-18.

## Household information

Program Use Only Project ID: \_\_\_\_\_

Customer Name	Installation Address	City	State	Zip
Phone (with area code)	Mailing Address	City	State	Zip
Email	Year Built: _____ Heated Area (sq ft) _____			
Heating system:	<input type="checkbox"/> Electric Furnace <input type="checkbox"/> Zonal Electric Resistance <input type="checkbox"/> Ductless Heat Pump <input type="checkbox"/> Ducted Heat Pump <input type="checkbox"/> Fireplace/Woodstove/Pellet stove <input type="checkbox"/> Gas Furnace <input type="checkbox"/> Other (specify): _____			
Air Conditioning:	<input type="checkbox"/> None <input type="checkbox"/> Central <input type="checkbox"/> Zonal (window and/or wall units) <input type="checkbox"/> Evaporative cooler			
Number of occupants:	Number of water heaters: _____			
Information about the water heater being replaced (this row only)	Fuel <input type="checkbox"/> Electric <input type="checkbox"/> Gas	Age (years): _____	Size (gallons): _____	Functional? <input type="checkbox"/> yes <input type="checkbox"/> no

## Installation Information

Brand Installed	Model	Size (gallons): _____	Date of installation: _____
Other Appliances in installation room: <input type="checkbox"/> Clothes dryer <input type="checkbox"/> Fridge <input type="checkbox"/> Freezer <input type="checkbox"/> Furnace <input type="checkbox"/> Other (specify): _____			
Where was this water heater purchased? <input type="checkbox"/> Installer <input type="checkbox"/> Retailer <input type="checkbox"/> Online <input type="checkbox"/> Other (specify): _____			
Total installed cost (before rebates): \$ _____ Break down cost into the categories below: Equipment: \$ _____ Labor: \$ _____ Electrical: \$ _____ Other: \$ _____ Specify: _____			
Installation location: <input type="checkbox"/> Conditioned space <input type="checkbox"/> Unconditioned space Specify: <input type="checkbox"/> Garage <input type="checkbox"/> Basement <input type="checkbox"/> Closet <input type="checkbox"/> Utility room <input type="checkbox"/> Laundry room <input type="checkbox"/> Other: _____			
Installation room size (feet): (length _____) x (width _____) x (height _____) = _____ cu.ft.			
Installation clearances: air inlet side (ft) _____ air outlet side (ft) _____ back (in) _____ front (ft) _____ top (in) _____			
Information about ducted Installations	CO Monitor Location: _____	Ducted out of conditioned space? <input type="checkbox"/> yes <input type="checkbox"/> no	Length of intake duct (ft): _____ Length of exhaust duct (ft): _____

A select group of homeowners installing ducted heat pump water heaters will be contacted to participate in a study to measure energy and water use. To opt out of this study group, please check here.

## Installation Checklist

(complete in addition to the manufacturer's checklist)

Follow the manufacturer's installation instructions exactly. Failure to do so will result in disqualification from the program, may void the manufacturer's warranty, and may result in lower than expected energy savings.

- |  |   |
|--|---|
| <input type="checkbox"/> There is adequate clearance to remove the air filter              | <input type="checkbox"/> Temperature and Pressure relief valve is properly installed and not plugged              |
| <input type="checkbox"/> Earthquake strapping is installed                                 | <input type="checkbox"/> Homeowner is aware of cooling effect and noise levels to expect in the installation area |
| <input type="checkbox"/> Installation complies with code                                   | <input type="checkbox"/> Homeowner understands maintenance requirements   |
| <input type="checkbox"/> Condensate line drains at a slope to a drain or exterior location | <input type="checkbox"/> Homeowner understands the safety instructions  |

**Required Customer and Technician Signatures** Both signatures are required. If installed by the homeowner, the homeowner must also sign the installer section.

<p>By signing below, the homeowner certifies that they understand and agree that they may be contacted for the purpose of scheduling an on-site installation quality assurance visit by a representative of the Heat Pump Water Heater (HPWH) program. This form must be signed by the person whose name appears on the electric utility account. ENERGY INFORMATION RELEASE: The undersigned utility customer requests and authorizes the specified utility to release billing and usage information for the account listed below to the HPWH program. With this authorization, the HPWH program can request billing information for up to two years pre-installation and two years post-installation. The utility customer also hereby releases the utility company from any and all liability arising from or connected with providing this information.</p>	
<p><input type="checkbox"/> A copy of the purchase receipt or installer's invoice is included with this application.</p> <p><input type="checkbox"/> A completed copy of the manufacturer's Installation Checklist is included with this application.</p>	
Electric Utility:	Account #:
Account holder name:	
Account holder signature:	Date:
<p>By signing below, installer certifies that this form and any accompanying documentation are complete and accurate; that all measures associated with this project were completed as of the signature date below; that all equipment was installed according to the manufacturer's specifications and any additional specifications required by Bonneville Power Administration; and that unit is functional and operational prior to submission of this rebate form.</p>	
Manufacturer Training Location:	Date of Training:
Installer name:	<input type="checkbox"/> Contractor <input type="checkbox"/> Non-contractor or Homeowner
Installer signature:	Date:

PRIVACY ACT STATEMENT Basic authority for collecting this information is authorized by 16 U.S.C. §§ 832 et. seq., and 838 et. seq., pursuant to Bonneville Power Administration's Conservation Program system of records established in 46 FR 31700. This information is primarily intended to further, but is incidental to the performance of, BPA's overall Energy Efficiency Program, the objective of which is to acquire energy resources through energy efficiency, to determine what cost-effective conservation and direct application renewable resources measures should be installed or adopted under different circumstances, and to provide incentives for the installation of such measures. Other routine issues of this information include: aggregation into a public database on energy efficiency; furnished to authorized personnel for installation/repair of equipment; aggregated into a database for program publicity; and in some instances information regarding buildings will be made available to subsequent purchasers of the buildings. Your disclosure of the requested information is voluntary; however failure to provide requested information means that it will not be possible for you to participate in this BPA Energy Efficiency program.

Please return this form to:

Company Name	Office/Location Address	City	ST	ZIP	MainPhone	Contact #1
A & N Heating and Cooling	205 E Curtiss	Walla Walla	WA	99362	(509) 520-0432	Mark A. Brown
Apollo Heating and Air	1119 W. Columbia Dr.	Kennewick	WA	99336	(509) 987-1500	Jason Lynch
Burkes Plumbing	1551 Nagler Rd	Selah	WA	98942	(509) 697-6574	Kenneth Burke
Campbell & Co.	2828 W Irving St	Pasco	WA	99301	(509) 948-4244	Clint Young
Doc Water Heater	3000 Fire Mountain Road	West Richland	WA	99353	(509) 628-9621	Gary Lincoln
Olmstead Electric	POB 1721	Walla Walla	WA	99362	(509) 529-7799	Chuck Olmstead
Roto-Rooter Plumbing & Drain	801 S Clodfelter Rd	Kennewick	WA	99336	(509) 440-5825	Curtis Johnson
Sun River Electric	9312 W 10th	Kennewick	WA	99326	(509) 727-7701	Sean Walton
Total Energy Management, Inc.	1975 Butler Loop	Richland	WA	99354	(509) 946-4500	George Grimes
Total Quality Air LLC	1916 N 18th Drive	Pasco	WA	99301	(509) 205-1592	Carlos Garcia
Tritan Plumbing	5306 S. Cascade Pl.	Kennewick	WA	99337	(509) 438-2214	Tom Stride
Waterways Inc	2118 SE 12th Ave # 101	Battle Ground	WA	98604	(360) 687-1304	Anders Sundqvist
Miller & Team	POB 1701	Zillah	WA	98953	(509)829-0747	Chris Miller
Ray's Plumbing	200 Abbess Lane	Yakima	WA	98908	(509)966+2860	Ray
Pioneer Plumbing	716 W 22nd Ave	Kennewick	WA	99337	(509)396-7944	Mike or Sara

# DO-IT-YOURSELF INSTALLATION TIPS for

## Heat Pump Water Heaters

### ■ ■ Before you begin...

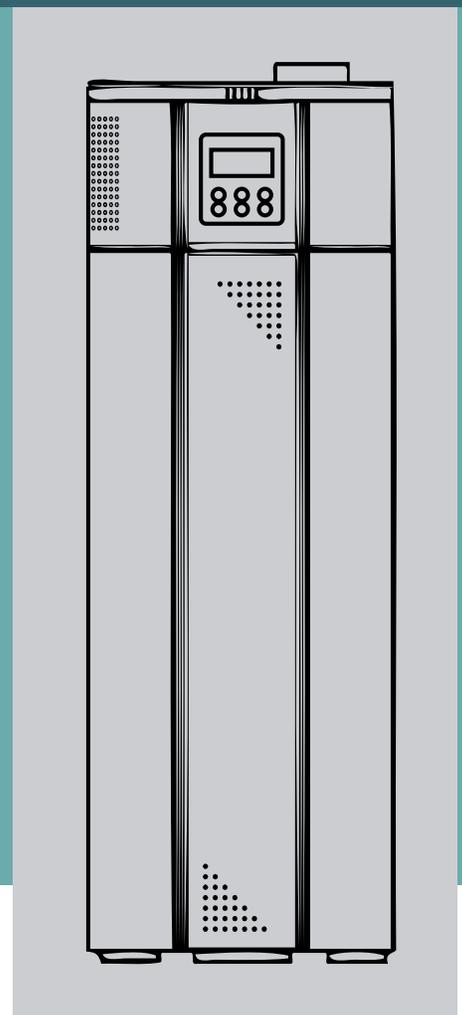
Familiarize yourself with all elements of installing an electric water heater. This sheet provides you with tips specific to the additional steps required to install a heat pump water heater; it is not an installation guide. It does not serve as a replacement for manufacturer instructions.

#### DO YOUR HOMEWORK

- Review manufacturer's installation instructions and any supplementary resources, such as videos, that may be available.
- If you do not feel comfortable installing a standard electric water heater, do not attempt to install a heat pump water heater.
- Verify that your installation will be in compliance with all code and permitting requirements.
  - Oregon: [cbs.state.or.us/bcd](https://cbs.state.or.us/bcd)
  - Idaho: [dbs.idaho.gov](https://dbs.idaho.gov)
  - Washington: <https://fortress.wa.gov/ga/apps/sbcc> or [lni.wa.gov](https://lni.wa.gov)
  - Montana: [bsd.dli.mt.gov/bc/bs\\_index.asp](https://bsd.dli.mt.gov/bc/bs_index.asp)
- Ensure that your installation meets utility rebate and/or tax credit requirements. Visit [SmartWaterHeat.org/Rebates](https://SmartWaterHeat.org/Rebates) for more information.

### Parts to have ready

- Electrical tape
  - Wire nuts
  - Teflon thread tape
  - Water supply pipes
    - Push-fit connectors do not require soldering; verify local code compliance
  - Pipe connector for temperature/pressure relief valve pipe
  - PVC pipe and accessories for condensate lines
    - PVC connectors – threaded for condensate outlet connection (both 45° and 90° elbows)
    - Pipe hangers
    - PVC glue
  - Pipe insulation
  - Earthquake straps
  - Wood or other spacing blocks
  - Shims
- Optional:**
- Condensate pump
    - Clear vinyl tubing, sized for condensate pump and sufficient length to reach drain
    - Tubing hangers
  - Drain pan to sit beneath unit
    - New unit may have a larger circumference than existing tank
  - Thermal expansion tank if required by local code



### Tools to have ready

- Pipe cutter or hacksaw
- Measuring tape
- Gloves
- Plumber's wrench
- Screwdrivers
- Drill
- Level
- Ladder
- Electrical current tester or voltmeter
- Socket wrench
- Garden hose



### 1. REMOVE EXISTING UNIT

- Turn off power to the existing unit at the breaker box and disconnect electrical connections.
- Turn off water to the existing unit and disconnect water connections, leaving some pipe for new connections.  
*Note: Use a hacksaw or pipe cutter for this step.*
- Remove existing unit.



### 2. POSITION NEW HEAT PUMP WATER HEATER

- Place drain pan in desired installation location, ensuring proper space between unit and wall.
  - Unless ducted, most units require at least 1,000 cubic feet of air-flow around them to draw air from. This is the equivalent of a 10'x12'x8' space.
  - Installation in an outdoor or unprotected area is not recommended.
  - Position the unit so the air filter, cover and front panels can be easily accessed for inspection and servicing.
- Place the new unit inside the drain pan.  
*Note: Heat pump water heaters are much heavier than standard electric units, and are very top heavy. Use care when moving.*
- Attach earthquake straps that comply with manufacturer's clearance requirements and local code. If necessary, attach blocks to studs using appropriate anchors and maintain proper spacing from wall when straps are tightened.



### 3. INSTALL FILTER

- Ensure installation location allows access to air filter, which must be cleaned regularly. See the manufacturer's manual for cleaning schedule.
- Some filters lift up, while other filters are accessed on the side of the unit.



### 4. LEVEL UNIT

- Ensure the unit is level, using shims if necessary.
- Like a refrigerator, leveling ensures the unit operates properly.
- Some local codes require the unit to sit on a stand, check with your city for requirements.



### 5. CONNECT PIPES

- Connect water pipes in accordance with manufacturer's instructions.  
*Note: Flexible pipe connections may be allowed and require no soldering, clamps, unions or glue.*
- Use teflon tape on all threaded connections.
- Install temperature/pressure relief valve (TPV) per installation instructions and local codes.



### 6. INSULATE HOT WATER SUPPLY

- Insulate hot water supply with flexible insulation to help maximize energy savings.



### 7. INSTALL ELECTRICAL CONNECTIONS

- Install electrical connections in accordance with manufacturer installation instructions.  
*Note: Verify proper voltage with electrical current tester or voltmeter.*



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## 8. ADDRESS CONDENSATE MANAGEMENT

- Identify condensate drain port(s) and choose the most appropriate drainage method for your installation.
- Attach PVC pipe to drain port and route in a downward slope to either a floor or sink drain.

*Note: If there is not a drain nearby, a condensate pump is required (see below).*

- If drainage pipe is directed outside, ensure pipe will not freeze.

### Condensate Pump Installation Tips

- Install condensate pump per manufacturer instructions.
- Most condensate pumps can be attached to a wall hanger and plugged into a standard 115W outlet.
- Ensure tubing is connected securely to pump output and drains to a suitable termination point.
- Tubing may need to be routed up and over surrounding rooms.
- To help pull tubing through insulation and/or areas with limited access, attach a long PVC pipe to tube and gently pull tube through.
- Tubing and pipe hangers can be installed on condensate lines to prevent slippage and achieve a cleaner look.



## 9. FILL TANK

- Double-check connections to ensure there are no leaks.
- Turn on a hot water faucet in the house to allow air to escape the new tank as it is filled.
- Turn on cold water supply to the unit.
- When the hot water faucet in the house has a steady stream, the tank is full.



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## 10. START YOUR HEAT PUMP WATER HEATER

- The heat pump water heater is ready to turn on. Turn on the power to the unit at the breaker.
- Verify the condensation pump is working properly by filling it slowly with water until the pump engages.
- Refer to manufacturer's operation manual and Smart Water Heat's Homeowner Quick Reference Guide for maintenance and operation guidelines.

*Disclaimer: This document provides general tips for a quality installation of a heat pump water heater; it is not an installation guide. For complete information regarding installation requirements, features, benefits, operation and maintenance, review the manufacturer's installation manual for the installed product. Images of specific manufacturer product lines are not placed as endorsements nor does this guide guarantee their quality.*

*Smart Water Heat is an initiative of the Northwest Energy Efficiency Alliance, an alliance of Northwest utilities and energy efficiency partners.*