

BelRed Energy Solutions

TANKLESS WATER HEATER GUIDE



We've expanded our business to include plumbing service, plumbing installations, and an entire range of products!

Locally owned and operated for over 30 years, BelRed has been providing high-quality service to customers since 1986. What began as a small heating and air conditioning services business, has grown into one of the largest HVAC companies in western Washington. We credit our success to our decades of satisfied customers and HVAC products. Along with superior service, BelRed has always been at the forefront of HVAC offerings, and continues to offer new solutions to optimize comfort and efficiency. We've expanded our business to include service plumbing and plumbing installation, plus a whole range of products.

Whatever your plumbing needs, BelRed has a solution. Our expert plumbers are on hand to assist with maintenance, service, and repair, or install water heaters and other fixtures. Held to the same level of excellence that our heating and cooling systems are known for, our plumbing services and products can help prevent problems in the home before they occur. Our professional team will help find the option that's best for you so you get the ultimate savings, comfort and efficiency.



Why BelRed Energy Solutions?

From conventional tank heaters to new hybrid, heat pump and on-demand tankless models, we sell, install and service a wide variety of water heaters. We promise:

- Assured proper installation for reliability and performance
- Fast, expert repair of home water heaters of all types and brands
- Advice on selected the ideal water heater for your needs

Whether you need emergency or less urgent assistance with slow or clogged drains, leaks, drips, installations or other problems, our licensed plumbers provide:

- Prompt, courteous, knowledgeable service
- Guaranteed work
- Exceptional value

Why Tank?

- Less expensive technology
- No minimum flow requirement
- You are used to it.
- 100 year old technology
- Meets the new National Appliance Energy Conservation Act minimum efficiency standards.

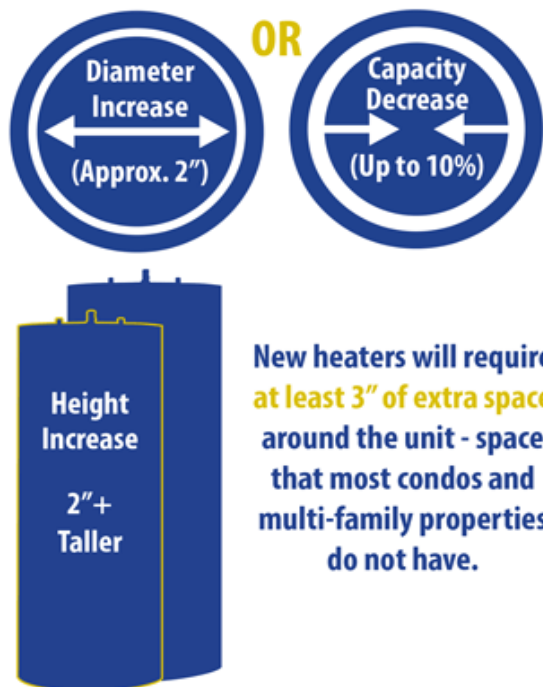


Why Not Tank?

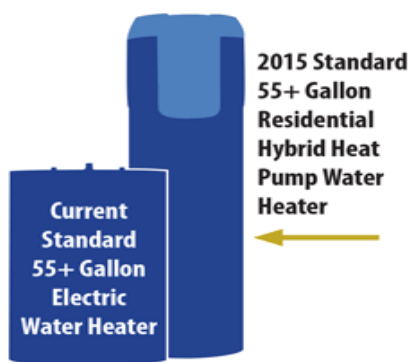
- Waste energy and money (Pay to reheat water when you are not using it. That's like going to the mall and keeping your car running while you are shopping!)
- Hot water limited by size of tank.
- You're paying your utilities provider 24 hours a day/ 7 days a week to heat water that you only use for typically an hour a day. Why pay 24/7 to keep 50 gallons of water at 110 degrees when you only use it for a few hours weekly?
- You can experience thousands of dollars of damage when the tank leaks (water damage is worse than fire damage; the average claim is \$4400 every time a water heater leaks)
Most people wait one day too long to replace their water heater!
- Rust and sediment fill tank replaces valuable space from water, less hot water; you pay to keep the tank hot.
- Pilot light-constant flame in your house.
- Not eco-friendly (50 to 65% efficient) landfills fill up with tanks.
- Eight to twelve year life span vs. 20 years for tankless. 50% or more longer lifespan.
- 100 year old technology (No real improvements in years)

What Do the New Rules Mean to You?

Changes for Tanks ≤ 55 Gallons



Changes for Tanks 55+ Gallons



“Based on the NAECA 2015 rules, all residential electric models over 55 gallons must be of the Hybrid Electric heat pump water heater type design.”
source: AO Smith

Water Heaters Under 55 Gallons

- The height of a new unit with the same gallon capacity as an existing unit may be two or more inches taller.
- The diameter of a new unit that has the same gallon capacity as an existing unit may be two or more inches wider.
- For units under 55 gallons, add a minimum of three or more inches when planning the space.

Water Heaters Over 55 Gallons

- Water heaters that are larger than 55 gallons will undergo the biggest changes. They may require more space or potentially switching models.
- All residential electric models over 55 gallons must be the Hybrid Electric heat pump water heater type design.
- All residential gas models over 55 gallons must be of the condensing water heater type design.

*The U.S. Department of Energy (DOE) regulates minimum energy efficiency requirements for water heaters. The new updates to the rules for increasing minimum energy efficiency standards was enacted in 2010 and went into effect on April 16, 2015.

What Goes Wrong With Tank-Type Water Heaters



Stage I: NEW

When a water heater is new, heat and pressure accelerate corrosion.

Stage II: Mid-Equipment Life

Sediment, rust and scale mix with water.

Half inch of sediment requires 70% more fuel to heater water.

Recover time longer with sediment build-up.

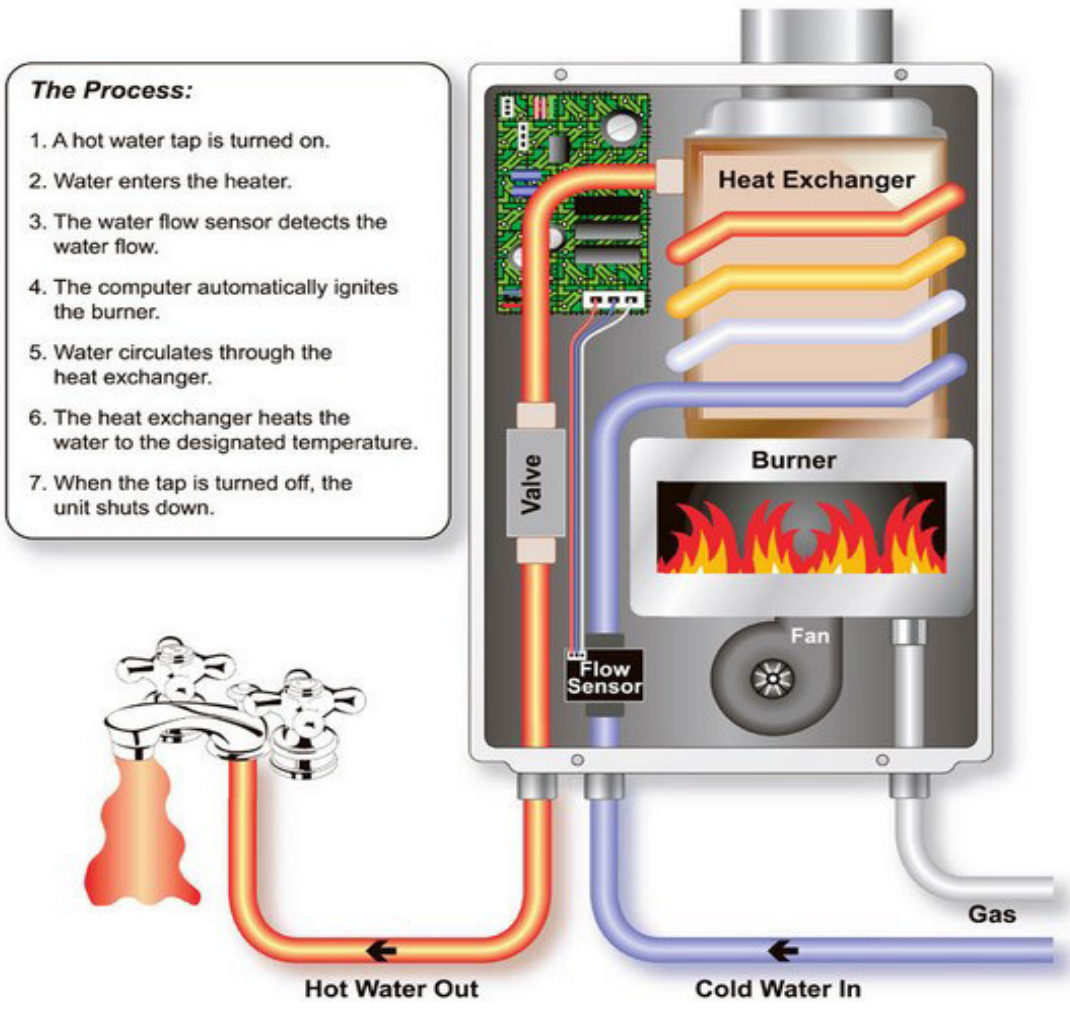
Stage 3: Failure Point

Pressure and corrosion cause leaking.

Life expectancy: 8 to 12 years.

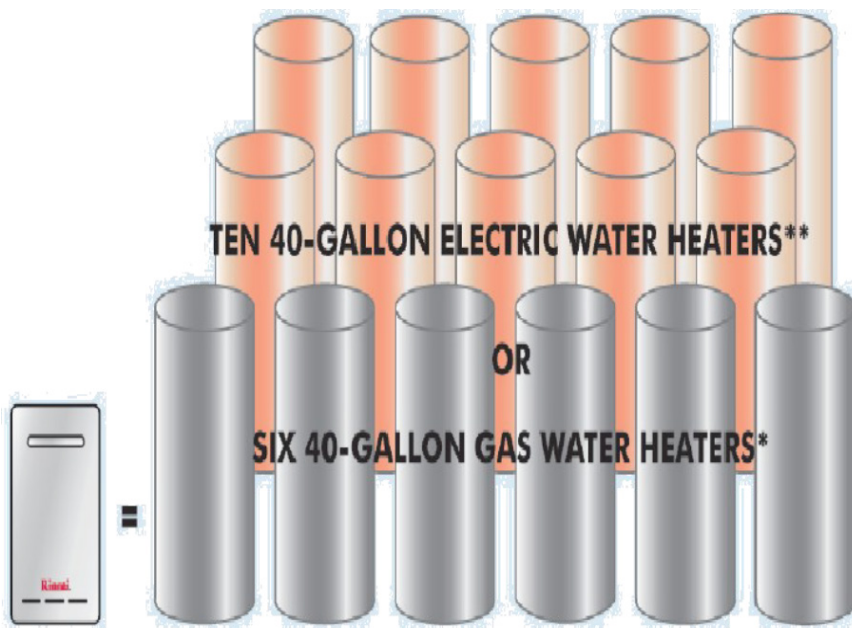
Average of \$4400 Worth of Damage

How Does a Tankless Water Heater Work?



How Much Will You Save?

Tank VS. Tankless Comparison



- One tankless delivers 240 gallons or more of hot water an hour ... every hour and consistent temperature!
- Based on 77 degree RISE continuous flow.
- Based on a 34,000 BTU input.
- Based on 4500 watt elements.



Sustainable and "GREEN"
Rinnai has earned ENERGY STAR approval by meeting the strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the Department of Energy, by using less energy and preventing greenhouse gas emissions.

How much square footage will you add to your house?

Three times smaller than your average water heater, it uses half the gas. It also provides the same amount of hot water per hour as six gas tank heaters or ten electric tank water heaters.

Pay only for the hot water used!

On average, a tankless water heater will last about **three** life spans of tank style water heaters. Everyone is different and these are averages, but would you like the peace of mind of never buying a water heater again? How about not dealing with the hassles of replacing the tank three times.

Tankless Water Heater Safety Benefits & Features



- **CAUTION**– Tank-style water heaters hold 50 gallons of hot pressurized water preparing to ruin someone’s day.
- **TANKLESS**- No tank and replaceable parts gives peace of mind.
- **TANKLESS**- No scalding precise temperature control.
- **NO PILOT LIGHT**– Burning gas constantly.



Tankless Water Heater Environmental Savings & Benefits



- With longer life span and 1/3 the size, less waste fills up our landfills.
- Over 35% drop in greenhouse gasses.
- 83 to 98% efficiency (versus 50% to 65% for traditional tank-style heaters)
- If everyone in the U.S. put in a high efficiency tankless water heater, it would be the same CO2 reduction as 6.7 million cars off the road.

**Tankless
water heater**



About the size of a suitcase, a tankless water heater mounts on your wall.

**Traditional
tank heater**



About the size of a small fridge, a filled tank heater must be located in a space that can support 400-600 pounds.

“It’s the technology on the inside that delivers the benefits on the outside.”

Why Tankless?

Proven Advanced Technology with over 50 years of continuing development

- 83 to 98% efficient
- 20 to 25 years (or longer) life span
- Eliminates energy and money waste
- No re-heating water over and over again
- Less space (wall hung or outdoors)
- Never run out of hot water
- No tank to burst or cause water damage
- No pilot light (safer, no burning gas 24 hours-a-day)
- Eco-friendly
- Longer life span, less landfill waste
- Tankless = three tank-style water heaters
- Parts are recyclable and replaceable.

*Recirculation Pump (Optional) Instant warm water.



Why NOT Tankless?

- Initial up front investment
- Specific options needed to have tankless work during power outages.

The Right Company for the Job Why Our Company is Right for You!

- We only use high quality materials for long-lasting service.
- Our employees are background checked. We will not send someone to your house that we wouldn't send to ours.
- Our thorough training allows us to offer you one price to complete your project with no surprises.
- Exact price before we start, includes parts, tax, labor permits and clean up.
- Family operated, locally independent and invested in your community.
- Our guarantees and business conduct are the best in the area.
- Manufacturers warranties are transferable.
- We have financing packages available within reach of nearly every budget.



KD NAVIEN®

The Leader in Condensing Tankless Technology

- Navien's units have built in controls for multi-unit system allowing easy setting.
- No extra control boards are required, reducing installation costs.
- Easy wiring between units and easy setting of the parent and child for multi-unit system.
- 16 units can be linked as one group and cascade as many groups as you need.
- Cascading allows for added redundancy insuring on-demand hot water in all situations.
- Small and compact wall-hung design allows multi-unit system even in a confined area.

Front Panel Command Center

- Self-diagnostics
- Displays temperature and water flow rate
- Displays status of cascade operation
- Convertible display from °F to °C
- User Friendly Interface
- Easy setup



Remote Control (Optional)

- Hot water temperature control
- Recirculation timer setting
- Function to set the number of initial activating water heaters for cascade system

Rinnai®

- Sleekest, most modern design in the industry
- 10-42% higher output for internal units
- Simpler, less expensive venting kits
- Better protection from condensate
- Improved durability for heat exchanger
- Longer residential warranty (12 years)



Reduced installed costs to all customers due to:

- Venting changes
- EZ connect
- Improved warranty (less potential future cost for repairs)



BOSCH

Invented for life

- Electronic ignition and patented burner design
- Exclusive safety and precision controls
- Built in freeze protection
- Direct vent, vertically or horizontally with PVC, CPVC or ABS-DWV
- Concentric and twin pipe venting options
- Can be used in solar thermal, recirculation, and space heating applications
- Built for durability and serviceability with 15-year warranty and 20+ year life expectancy

Up to:

- 98% thermal efficiency
- 225,000 BTU maximum output
- 12.1 gallons per minute capacity at 35F degree rise
- Minimum activation flow rate of 0.5 gallons per minute





Enjoy Endless Hot Water

Get Hot Water on Demand.

Lower Your Energy Bills.

Get a Tankless Water Heater from

BelRed Energy Solutions!

You'll LOVE it!