HOMEOWNER REPAIR GUIDE

TANKLESS WATER HEATERS

If you're seeking to reduce energy costs, a logical place to look is your water heater. Unfortunately, there's not much we can do with tank-type units; adding tank blankets and pipe insulation may help conserve heat, but doesn't seem to save much money. Despite newly-mandated efficiency requirements, operating costs for gas storage tank water heaters account for 20% or more of an average household's annual energy expenditures – and, of that cost, more than 60% is wasted.

A tank-type water heater maintains the water to the temperature you set, even when no hot water is being used. "Standby loss" (heat radiating from the walls of the tank and escaping out the flue pipe) adds to your water heating costs. Homeowners looking to reduce energy expenditures often consider installing a tankless water heater.

HOW TANKLESS HEATERS WORK

Common in Europe and around the world, tankless units heat water as it is used, or "on demand." When you open the spigot, a sensing device is activated, the heater fires up, and you get a constant supply of hot water for as long as you need it. When one person finishes a shower, there's no wait for more hot water before another person can take theirs.



Rinnai tankless water heater

CHOOSING A UNIT	
Whole-house	Depending on the amount of hot water required, you might choose one of the larger gas units, designed to supply all the hot water needs of a household, and have it installed centrally in the basement.
Point of use	Another alternative is to install small units at the point of use. For example, you can use a small electric unit as a "booster" for a far-off bathroom, dishwasher, or laundry. These units are usually installed underneath a sink or in a nearby closet.

THINGS TO CONSIDER

Despite their promise, tankless water heaters are not yet the perfect answer to a constant supply of hot water.

FLOW RATE

If you choose a centrally-located tankless heater, you'll have the best result if you look for one with the highest flow rate you can get. Also, you may need to modify your water-use behavior a bit. Regardless of manufacturers' claims, tankless units simply don't produce the same rate of water flow as do tank-type heaters. If you are showering with a 3-gallon-per-minute showerhead when a large water-using appliance cycles on, one or both may not get much hot water.

Homeowners also need to look carefully at what cost savings will actually be achieved by a tankless heater. The up-front cost of these units is still considerably more than conventional tank-type heaters, and expensive modifications to your electrical and/or gas lines may be required. Especially during colder weather, tankless units need to work harder to deliver hot water to more distant locations in the home, increasing operating costs. Given these considerations, homeowners should realize that they may not recoup their initial investment for quite some time. Nevertheless, more and more people are looking into tankless units – whether used as the sole source of heated water or to boost an existing tank-type unit – to help them reduce energy usage and adopt a more sustainable lifestyle.

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Home Repair Resource Center empowers homeowners to maintain their homes for sustainable and diverse communities.

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