Portland General Electric

Tankless Water Heaters

Tankless water heaters, also known as on-demand or instant water heaters, heat the water as it passes through the heater, based upon the demand for hot water.

Advantages of tankless water heaters

- Provides hot water quickly
- Takes up less space than traditional tank
- No wasted energy in the form of "standby" heat loss



Disadvantages

With electric tankless water heaters, there are possible "hidden" costs for electrical service and distribution system upgrades. You may need to hire an electrician to upgrade your electrical panel to handle increased load; electric tankless water heaters require more energy to operate. Conventional water heaters typically require 4.5 kilowatts, while electric tankless models require 18 to 28 kilowatts (natural gas tankless models are also available). In addition, PGE may need to

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upgrade distribution system equipment serving the home. Otherwise, lights may flicker and electrical devices could be damaged. Those costs would be billed to the customer.

Tankless water heaters have a limited water flow rate. Generally, the largest tankless heaters can provide enough hot water to supply one shower or bath at a time and two sinks. Most likely, you wouldn't be able to run dishwashers or clothes washers at the same time as a shower. A family of four might not have enough hot water to meet their needs.

Some homes may require more than one tankless water heater, depending on the house design. For example, if a large house has multiple bathrooms on opposite ends of the house, one tankless heater would not be adequate.

Compare efficiency, savings against costs

Energy savings from an electric tankless water heater may be small in comparison with the added costs:

- Conventional water heaters: up to 95+ percent efficiency ratings
- Tankless water heaters: 95 percent+ efficiency ratings
- Estimated average savings with tankless: \$15 per year

Alternatives

- Install a standard tank closer to where you need the water
- Small under-sink tank to save space
- Small "point-of-use" tankless heater if you just have a sink that needs hot water