

Understanding Your Electric Water Heater

One of the appliances that uses the most electricity in a typical month is an electric water heater. Costs to operate your electric water heater can account for as much as 25 percent of your energy use.

Many people mistakenly think if they use hot water right before On-Peak starts at 6 a.m., they'll be using

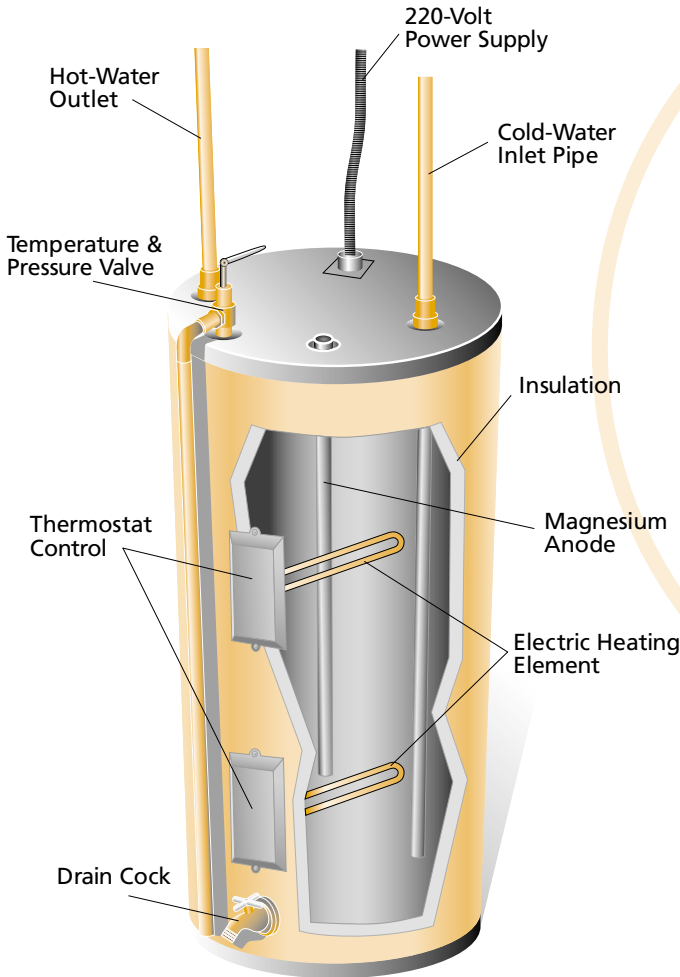
Here's how your water heater works: Basically an electric water heater is an insulated tank filled with water. Electrical elements controlled by thermostats heat the water and keep it hot. As hot water is drawn from the water heater (mainly for showers, laundry, and dish washing) it is refilled with cold water. The bottom thermostat senses a temperature change and directs power (electricity consumption) to the lower thermostat and lower element to warm the water. When the temperature of the tank reaches the temperature indicated on the thermostat, the power is turned off. The water heater then doesn't use any electricity until more hot water is drawn off or considerable time has lapsed and the water temperature has dropped.

So even if you use hot water near the end of the Off-Peak periods, the heating of the water may occur during the more expensive On-Peak periods.

Installing a water heater timer on your water heater (and programmable thermostats on your heating and cooling systems) can help control when you use this energy and therefore reduce the cost of running these appliances.

If you have a timer installed on the water heater, set it during winter peak hours to turn off at 6 a.m. and on again at 10 a.m.

You will still have plenty of hot water for your shower, it just won't reheat until 10 a.m. Another quick tip: take more showers than baths. Baths use the most hot water in an average household. You use 15 to 25 gallons of hot water for a bath and less than 10 gallons for a five-minute shower.



energy during the Off-Peak period. However, your shower will use the hot water already stored in the tank, and it won't likely be until after your shower, during the start of On-Peak hours, that your water heater will start refilling and reheating the tank, using electricity to do so.