

# Electric Water Heaters



## FOUR SYSTEM TYPES TO MEET YOUR NEEDS

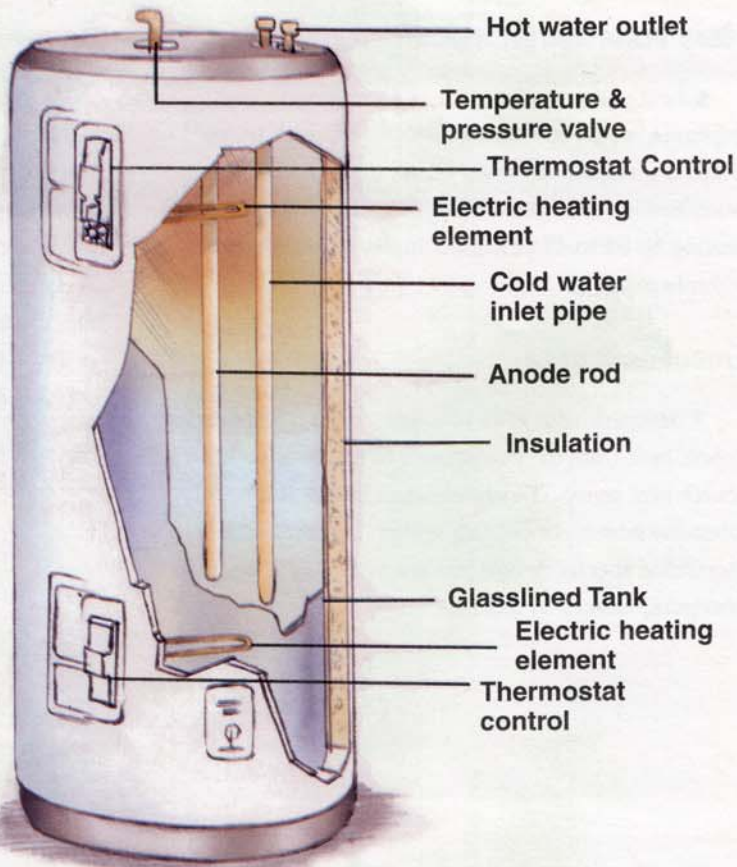
The water heater is the second largest user of energy in most homes in Nebraska. Only the heating and cooling system equipment use more. Unlike heating and cooling equipment which are seasonal, the water heater works year round.

### GET TO KNOW AN ELECTRIC WATER HEATER

Basically an electric water heater is an insulated tank filled with water. Electrical elements controlled by thermostats heat the water and keep it hot. Most electric water heaters have two 4500 watt elements; one is located near the top of the tank and the other near the bottom. Each element is controlled by a separate thermostat but the two thermostats are interlocked; when one is off, the other is on. The top element heats water in the top one-fourth of the tank. When the water in the top of the tank reaches the correct temperature, the top element shuts off and the lower element comes on to heat the remaining water. This contributes to quicker recovery in high use situations. Since the elements are immersed in water, the heat goes directly into the water. This makes electric water heaters the most efficient water heating appliance available.

### WHAT SIZE DO YOU NEED?

Residential electric water heaters range in size from 6 to 120 gallon capacity. Consider your family's present and future hot water needs and choose a unit large enough to meet those needs. A 52-gallon electric water heater should supply the needs of the average family.



### FLEXIBILITY

Electric water heaters are more flexible than other water heating appliances. They require no minimum clearance so can be placed anywhere including under a remote sink or in a closet. They require no fuel line or exhaust flue and there is no pilot light to worry about.

Operating cost of electric water heaters are competitive with other types of water heaters.

# NEW TECHNOLOGIES IN WATER HEATING

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## HEAT PUMP WATER HEATER

A heat pump water heater is a small dedicated appliance which transfers heat from room air to the water in a residential water heater tank. A heat pump water heater will reduce energy requirements for water heating by 35 to 45 percent compared to resistance water heating.

## DESUPERHEATER

A desuperheater is an efficient means of recovering excess heat from the compressor of an air or water source heat pump. Desuperheaters heat water only when the heating or cooling system is operating. They require no special design and are available as part of a heat pump unit or as retrofits.

## INTEGRATED SYSTEMS

If you're replacing your present heating system or building a new home, ask us about integrated systems. Recently water heating has become available with the new "triple function" heat pump system. This system provides space heating, air conditioning and domestic water heating in a single high efficiency unit. Although there is limited availability, the advantage of this system is that it can produce hot water independent of the comfort system.

