



Water Heating

Save money by reducing Standby Losses

Standby losses are one of several factors affecting total water heating energy consumption. Standby heat loss occurs when heat from inside the water heater tank travels (by conduction) to the outside of the tank. Once outside the tank, the heat essentially has been wasted.

Reducing standby losses will lower the overall water heating costs. Two ways to effectively reduce standby heat losses in water heater tanks are:

1. Install an insulating wrap or “water heater blanket” around the tank.

Fiberglass is the most commonly used material for water heater blankets. Most hardware or building supply stores carry insulation kits, which contain the insulation material and straps or tape to attach the blanket to the tank. If your tanks insulation value is R16 or more you should not wrap it, as it is already efficiently insulated.

These blankets are most effective at reducing energy consumption when the difference between the ambient air temperature outside the tank is much colder than the hot water supply temperature. Wrapping the first 6 feet of both hot and cold water pipes with a heavy foam insulation will also save energy.

2. Lower the hot water temperature setting.

Most water heater tanks have thermostats that regulate the temperature of the domestic hot water. Possible settings may range from 110°F to about 180°F. Other tanks have dials that specify “warm” or “hot”. In this case the hot water temperature must be measured with a thermometer at the sink.

Most ordinary hot water applications like hand washing only require 120° F water. Dishwashers may require 180° F water, possibly less, if the washer is equipped with a booster heater.

Check the thermostat setting and make sure that it is appropriate for the end-uses in your facility. If not, the thermostat can be adjusted by removing the cover plate (usually near the bottom of the tank), and twisting the dial.