

HOT WATER CIRCULATION PUMPS

It seems like it takes forever. You turn on the hot water in your kitchen or bathroom and start waiting... Eventually, the water warms up, and you are able to complete the task you started "forever" ago.

There MUST be something that will reduce the time you must wait for hot water to travel from your water heater to the point of use. You might be in luck!



PROBLEM ONE:

Waiting and waiting for hot water

PROBLEM ONE SOLUTION:

Install a hot water circulation pump. The pump will continuously pump hot water to all points of use, so it can be instantly enjoyed.

PROBLEM TWO:

Problem One is solved, but now there is a new problem – increased water heater operation, but why?

1. The pump draws hot water from your water heater and circulates it throughout your house.
2. As the water circulates through the plumbing of the house, it cools.
3. If no hot water is consumed, it all returns back to the water heater. Since it is cooler than when it left the water heater, it must be reheated.
4. The water heater thermostat(s) realize the water is cooler and engages the element(s) until the water is heated to the set temperature on the thermostat.
5. This happens over and over, 24 hours a day, 7 days a week. The result is usually a much higher electric bill.

HOW MUCH MORE ELECTRICITY WILL A WATER HEATER USE, WHEN A CIRCULATION PUMP IS INSTALLED?

It depends on several factors:

- How far must be the hot water travel before it makes it back to the water heater to be reheated? *A bigger house typically means more distance to travel.*
- What is the temperature of the water? *The greater the temperature difference in the hot water and the ambient air surrounding your plumbing, the faster the heat will leave the water.*
- Is your hot water plumbing insulated? *Doing this will help reduce heat loss as the water travels.*

EXAMPLE: 9 hours per day X 30 days X 4.5kW = 1,215 kWh of additional usage*

*Based on estimated 9 hours per day additional water heater operation

PROBLEM TWO SOLUTION:

- Purchase a timer for your standard circulation pump. Only operate the pump during periods of high use, typically in the morning and evening.
- Purchase a circulation pump that detects when hot water is demanded and only operates until hot water has arrived at the point of use.
- Purchase a circulation pump that is activated by a hardwired button or a remote control.
- If you have an existing standard circulation pump, plug it into a remote-control outlet. Use the remote to activate the pump from the point of use, when hot water is needed.

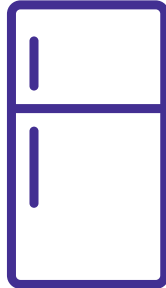


HOME ENERGY-SAVING TIPS

Here are simple things to do when trying to reduce energy use inside an outside your home. Find more energy-savings tips at carrollecc.com/energy-saving-tips.

REFRIGERATOR

Don't keep your refrigerator too cold. Recommended temperatures are 35°- 38°. Make sure your refrigerator door seals are airtight.



COOLING

You might experience energy savings by utilizing a programmable thermostat. The Cooperative generally advocates setting your thermostat to a comfortable setting and avoid adjusting it.



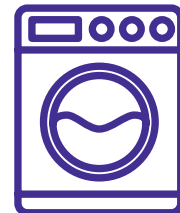
COOKING

Use smaller appliances, like microwaves or toaster ovens, which use less electricity than stovetops or ovens.



LAUNDRY

Wash with cold water, switching from warm water to cold water can cut one load's energy use by more than half.



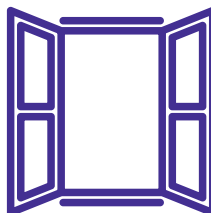
COMPUTERS

Use the sleep setting when the computer is idle and turn off the computer at night.



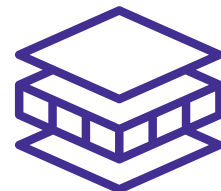
WINDOWS

Choose window treatments that allow you to use natural light while reducing heat loss and gain.



INSULATION

Fills gaps in your home's insulation. Seal any air leaks throughout your home.



my co-op