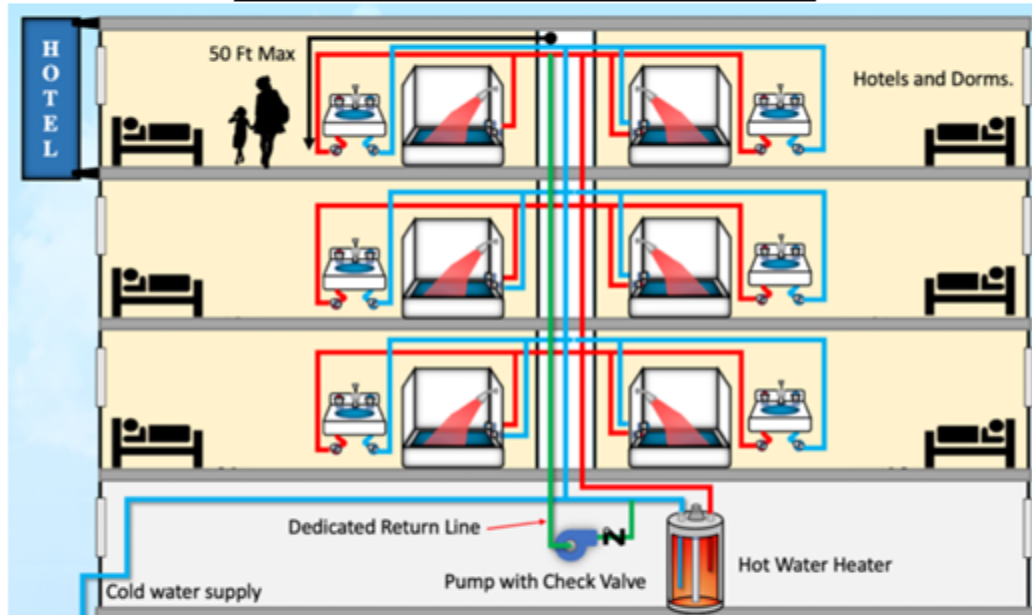


## HOT WATER RECIRCULATION SYSTEM



A domestic / commercial hot water recirculation pump works by continuously circulating hot water through a loop from the water heater to the farthest fixtures, like a shower or sink, and back again. This ensures hot water is immediately available at the tap, eliminating the wait for water to heat up and saving water and energy. The system can use either a dedicated return line or, in some cases, the existing cold water line as the return path and the pump is often controlled by a thermostat or timer.

### How it works?

- **Creating a loop:** The system connects to your water heater and creates a loop through your home's hot water pipes.
- **Continuous circulation:** The pump moves hot water from the heater through the pipes and any cooled water is returned to the heater to be reheated.
- **Immediate hot water:** When a faucet is opened, hot water is instantly available, rather than having to wait for the water in the pipes to heat up.
- **Water savings:** By not having to run the tap until the water is hot, the system prevents the waste of gallons of cold water.

### How to Install?

- **Dedicated return line:** This system is installed when a house is built and uses a separate return pipe to create a continuous loop from the farthest fixture back to the heater.

### Different types of controls and operations:

- **Thermostatic control:** The pump turns on and off based on the water temperature in the loop, ensuring it stays at the desired temperature.
- **Timer control:** For energy efficiency, the system can be set to run only during specific, predetermined times of the day.
- **On-demand control:** Some systems allow for a manual override, such as a button, to provide instant hot water when needed.