

Ask Jon Eakes

Getting hot water to a remote sink -- fast

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Here is one that I answered one year , and found a better answer a year later.

GETTING THE HEATER CLOSER TO THE FAUCET

In 2003 a viewer asked me about how to get hot water to that back bedroom because they have to run the water for two or three minutes before the hot water arrives from the basement tank, not to mention the wasted water. At that time my only advice was to install a smaller water tank right near that bathroom, either electric or a high efficiency gas one that would not require a full chimney system. Another possibility would be to install an instant hot water system in that part of the house. All those solutions would work, but would take space and considerable cost. After it went to air, a viewer from Vancouver sent me information on the Metlund Hot Water M'Dand Systems.

A DEMAND PUMP

This is a really nifty gadget. As you can see in the photo, it is not very large, in fact it is installed under the sink. In essence it is simply a water pump. You have a direct wired button and/or a remote button that will turn it on. It has a temperature sensor that will turn it off when the water pipe under the sink is full of hot water -- a feature that has won it some energy conservation awards. So what does it do? It pumps water rapidly in a closed loop drawing water from the hot water line and sending it back towards the hot water tank rather than down the drain. In seconds the hot water reaches the back end of the house! And then it simply shuts off. So when you want hot water, first you push the button. You will hear the quiet spinning of the pump and when it stops, you turn on the hot water tap -- the water will be hot.

As you can see in the diagrams , there are two ways to put this system into the plumbing. The easiest is simply to pump from the hot water line side of the sink into the cold water line side of the sink. With the faucet closed, the water spins in a loop drawing hot water from the hot output end of the tank and feeding cold water back into the cold input end of the tank by way of the cold water line. This works and is the easiest and least expensive to install, in fact you can do it yourself in an hour.

The drawback to this type of a loop is that you will be putting water from the hot water tank into the cold water line and some people do not want to drink water that has been sitting in the hot water tank or hot water lines. The ideal installation requires a dedicated return pipe that goes from under the sink back to the hot water tank. Now once water enters the hot water tank, it stays in the hot side of the plumbing. This of course is more practical to do during construction or major renovations.

I installed one in 2003 and it is still running (2022) with daily use.

Either way, with the press of a button, the room temperature water that is standing in the hot water lines can be replaced in seconds with freshly hot water from the tank. "www.GotHotWater.com"

CONTINUOUS CIRCULATION

Serious water conservation laws in some jurisdictions, like California, require implementing some technique that will not waste water down the drain every time you want hot water. The most common technique is a continuous pump that keeps hot water circulation through the hot water pipes and back to the tank all the time. That wastes a lot of electricity and heat loss through the pipes. The Metlund pump is equally water efficient and far more energy efficient.

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