

To Have a Hot Shower ...

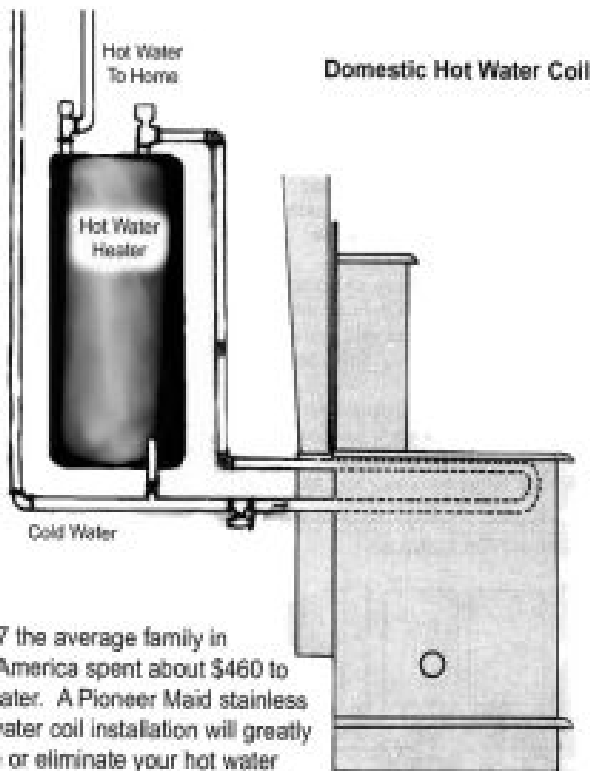
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We started our homesteading project back in June 2015 ... and finally, nearly 4 years later, we have hot running water in the cabin, and can take a hot shower!

What a luxury when you've been out working all day in the mud, and come back in filthy!! This project has taken us a couple years to complete, partly because, in light of all the other things that have needed doing, it was a relatively low priority. It's also a complex system that has taken some designing, and a whole lot of parts (which equates to many trips to town). The great thing about it is that it uses no electricity and no propane. Heating is provided by the wood stove, which has a coil installed in it for this purpose. The water tank is heated by convection, in a process often referred to as thermosiphon, and had to be mounted at an elevation above the coil in the stove (so it sits on the counter in a corner in the bathroom). This also helps to heat the bathroom up. The whole water system is gravity fed. Turn on a tap, and there's hot water! But simple it is not!



In 1987 the average family in North America spent about \$460 to heat water. A Pioneer Maid stainless steel water coil installation will greatly reduce or eliminate your hot water utility bill.

Image: An example of a thermosiphon hot water system for a wood cook stove similar to ours.

There are various safety release systems (both for steam and water) involved, lots of copper piping, and fancy dielectric unions to prevent electrolysis and corrosion (as the tank is galvanized steel and the pipes for the hot water are copper).

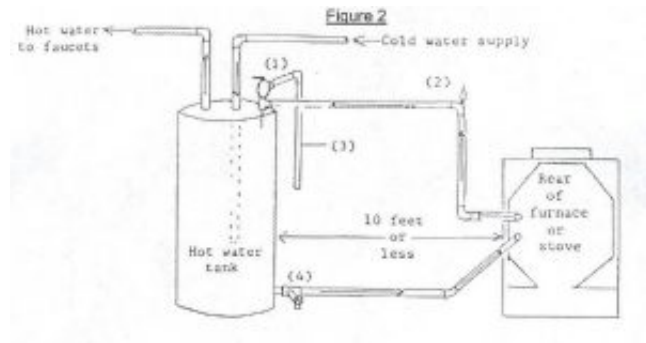


Image: A diagram from an older document showing the thermosiphon set-up. Note that the water tank must be located no further than 10 feet from the stove. Luckily for us, our cabin is small, and the bathroom counter, where the hot water tank is mounted, is less than 10 feet from the stove.

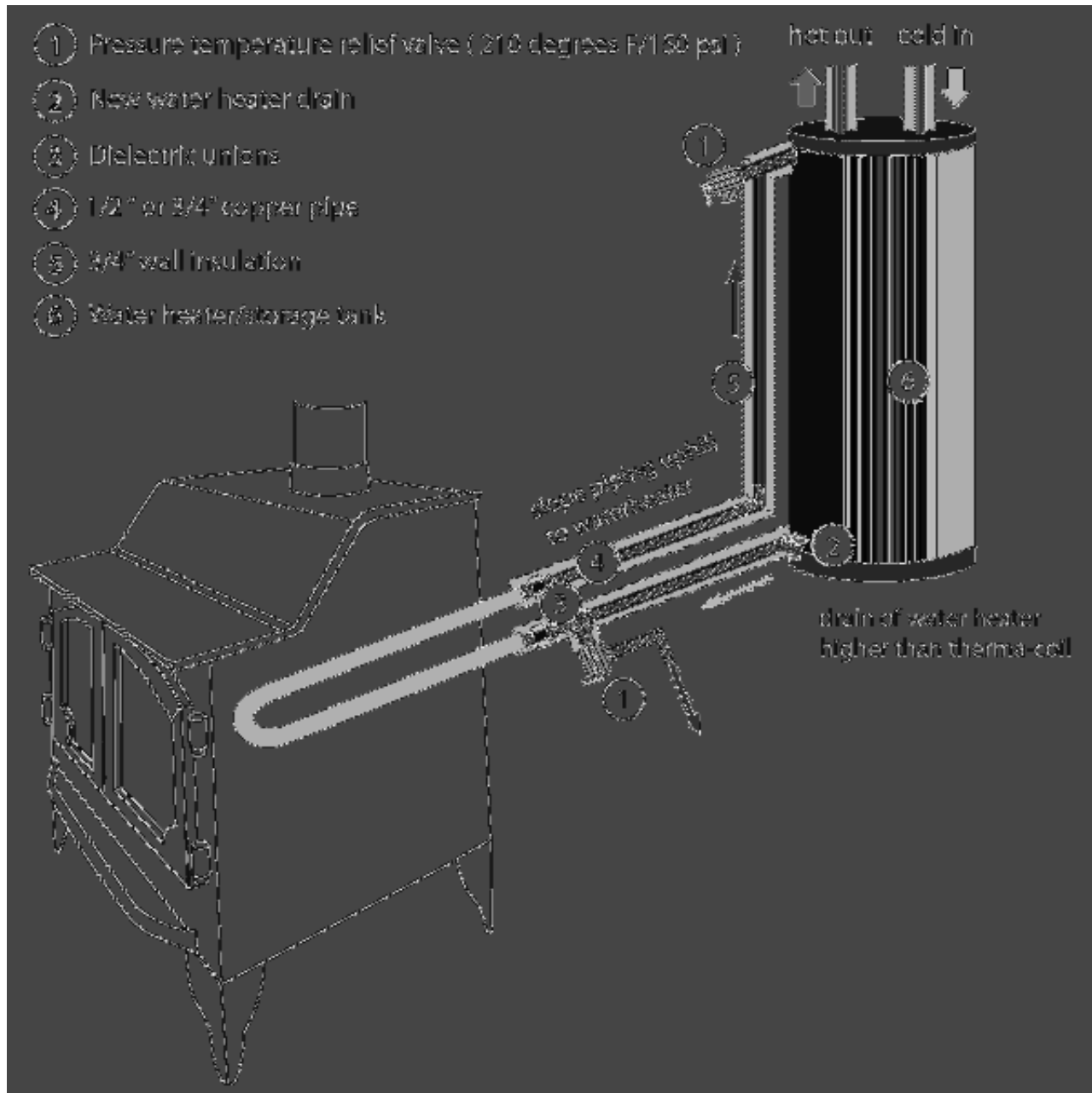


Image: Another, more modern, example of a thermosiphon installation. This one notes the need for dielectric unions. Originally, the old hot water tanks were made of copper – beautiful things that are now antiques and collector’s items. Even our tank, composed of galvanized steel, is an old find. Most people today use salvaged electrical or gas hot water tanks.

And, of course, the hot water had to be plumbed into two sinks and the shower. None of our plumbing is hidden inside the walls (due to the unique wall structure of the cabin), and everything had to be neatly run along the floor or behind the counters ... so lots of little bends and a few minor hidden octopuses. But the delight of a hot water shower ...

Journal

Our Adventures

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