



The Pipe Wrench

Sept 2008



Harnessing the Power of the Sun



These days you can't open a newspaper or turn on TV without seeing it. We are all trying to find cheaper more eco-friendly means to light, heat & cool our dwellings & businesses and to propel ourselves from point A to point B. From ancient Greek homes built to face the warm winter sun to advanced thin-film Photovoltaics, which generate electricity from the sun, humans have used the sun's rays to meet their energy needs. This makes sense given that the sun showers the earth every hour with enough energy to meet world demand for a year. And the best part: this energy is pollution-free, inexhaustible and accessible to many.

Photovoltaic vs. Thermal: What is the difference?

Solar PV (Photovoltaic) panels convert sunlight into electricity which is stored in batteries. Photovoltaic technology has come a long way since Bell Labs produced its first functional solar cell in 1953. But the basic theory is still the same...The sun's waves hit a photovoltaic cell and excites the electrons within layers of the cell. The excited electrons jump back and forth, creating electricity. This electricity is captured by wires running through PV cells and sends the electricity into your home. The electric current generated by PV cells is direct current (DC), or the type of current used in batteries.

Solar Thermal converts sunlight into heat, which is used to produce hot water. Given that the average household uses around 15KWh per day just to provide hot water, using Solar Thermal can greatly reduce total household energy usage. Have you even felt warm water trickle out of a garden hose that's been sitting in the sun? If so, then you've witnessed solar water heating in action. Now imagine that same water moving slowly through a system specifically designed to heat and store water-that is the essence of solar thermal water heating. People have for centuries used water heated by the sun and stored it for bathing, hand washing, cleaning clothes, heating homes and much more. The solar efficient techniques for capturing the sun's heat with modern plumbing systems will produce cost effective hot water and reduce the need for gas or electricity to heat water. There are a number of different solar thermal designs, but all are based on the same simple principle as the garden hose. Each has pros and cons, and each is suitable for a specific application.

In the near future Peterman Plumbing & Heating, Inc. will be your area Apricus Solar Hot Water dealer. Here is a list of web sites with more information on Solar Energy:

www.apricus.com ~~ www.solarusagenow.com ~~ www.energy.gov

The times they are a changing...

Due to rising costs and in the interest of cutting back on our paper usage to be “green” we are now collecting at the time of service for residential plumbing & heating/cooling service calls. With that being said we understand that plumbing & heating/cooling repairs are largely unplanned so if a major repair occurs we will discuss payment plans to fit your financial needs and based on your past history with us.



We have also had to add a \$3.00 fuel charge to each service call to offset the price of gas for our fleet of service vans. This challenging economy is making it more and more expensive to get a service vehicle to your home or business to make repairs and we are doing our best to give our customers the same quality service for a reasonable price.

~The Modern Toilet Seat~

One facet of plumbing fixtures that has gone through a metamorphosis of sorts the past few years is the toilet seat. A source of controversy in many homes, the considerate man makes sure he puts the seat in the down position when he is finished in the bathroom. Plumbing fixture manufacturers decided they needed to make this task easier hence they invented the “slow close seat”. Now you can simply use one finger to start the seat and the lid on a slow decent to the rim of the toilet. No more slamming, no more angry women. American Standard has a “rise & shine” toilet seat that easily pops off for cleaning then pops right back on. Have little children in the house? You need Kohler’s Transitions seat. It has 2 seats, one with a small hole so Junior doesn’t fall in and you don’t have the big clunky potty chair to deal with. Toilet seats are now ergonomically designed for your comfort, and yes, there was an engineer involved. Call us for details.

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