

#### **Event Horizon Solar & Wind LLC**

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#### IS SOLAR THERMAL RIGHT FOR ME

	Est cost in thsnds	Payback		Difficulty of installation
Thermal	\$2.5-\$5.0	4-6	20-30 yrs	Project Level moderate

#### What Will I Need?

- south facing roof top or
- unobstructed southern view
- plumbing, electrical, carpentry possible
- room for a solar storage tank

#### Why Solar Thermal

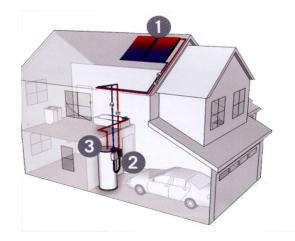
- Often overlooked, solar thermal has the lowest cost/fastest payback of all renewable systems.
- Solar water heating is a great place to start converting to free-fuel systems.
- Hot water use is about 30% of total heating costs
- Hot water use is consistent throughout the year. This means you can exploit the very long days in summer.
- Water makes an excellent heat storage material, so even if the sun only makes an appearance every few days, your system will stay warm.
- Tanks can charge with just a few hours of sun.
- Solar collectors are designed for roof or ground mounting. A good southern facing roof space is a great money saving asset.
- Solar water heat can be used with base board and radiant floor heating for space heat.
- Air heating systems are also available for direct space heat.

**How Big Are the Collectors?** Available in 4x6 4x8 or 4x10 ft.

**How Many Collectors Do I Need?** Rule of Thumb, 40 sq ft of collector (appx 1 4x10) per person in the household.

# What are the Components of a Solar Water Heating System? Collectors, Heat Exchanger, Supplemental Water Storage Tank, Circulating Pumps, Sensor, Expansion Tank and Misc. monitoring and safety equipment.

**Solar Thermal In Winter?** These systems work with radiant, not conduction heat. It does not have to be warm outside to heat water. Cold clear days in deep winter work well for charging your system.

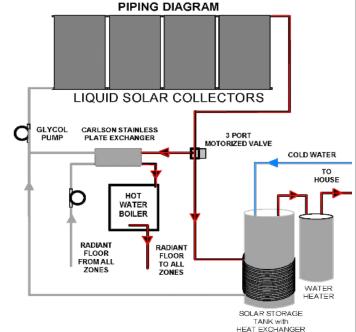


### **WORKS IN ANY HOME**

When solar fluid in the collector (1) is heated by the sun, it is pumped through the Helio-Pak (2), which then heats the water in your storage tank (3). The solar fluid then circulates back up to the collector, where it gets reheated by the sun. The whole process automatically continues as long as the sun heats the collector. When there is little or no sun, a backup heating element self-activates to provide ample hot water for your home

Can Solar Be Used for Space Heating? Solar water heating systems can support baseboard, radiant floor and radiator heat. Fairly large collector arrays are required for these applications.

## SIMPLE RADIANT FLOOR GLYCOL SYSTEM USES FLOOR MASS HEAT STORAGE



Systems may be installed by the owner with assistance from Event Horizon Solar and a professional plumber, or we can arrange the full installation.