

API Sol-R-Flow™ Water Heater System



Why Sol-R-Flow™

Sol-R-Flow™ water heaters are constructed with high density polyethylene plastic tubing. National sanitation approved for potable water use, Sol-R-Tuff™ tubing was put through a 16 year independent test under an acrylic glazing and subject to a constant 105 psi of pressure. Sol-R-Tuff™ tubing withstood freezing, sunlight degradation, and corrosion. Unheard of with conventional solar collectors sold today. Collector can be laid flat with no connection to the roof – the weight holds them down; be put on sloped surfaces with just one mounting connection. The built in framework lifts the collector of the mounting surface so the surface can breathe, preventing dry rot. Can be transported to roof via one person and requires no roof load structural.

The construction of Sol-R-Flow™ doesn't allow for over-heating or freezing, eliminating mechanical devices such as pressure relief valves, tempering valves, freeze valves, freeze protect recirculation devices or freeze resistant fluids.

Think of solar as a supplement to your existing system – as long as a contribution is made based on current usage that's all that is required. Systems sold with heat exchangers, storage tanks, closed loop are generally an over-kill and produce more hot water than the average family will use. They are mechanical nightmares. The salesman will tell you it will turn the meter backwards but in reality it will turn your pockets inside-out. Only buy what's required. SOL-R-FLOW is one third the cost of conventional systems. Sol-R-Flow™ water heating will deliver plenty of hot water with the least mechanical failures due to their simplicity – keep it simple and reliable.



Passive Solar Water Heater

The SOL-R-FLOW™ water heating collector with a capacity of 9 gallons operates with no pumps or controls. When hot water is used, pre-heated water is drawn into the conventional water heater reducing or eliminating the use of gas or electricity. Where hot water consumption is used in the day time (households, laundromats, hotels, radiant floor heating, heat pump assist remote showers, etc.) the greatest degree of return on your investment can be realized.

Heating can be accomplished with one SOL-R-FLOW™ water heater or a multiple number of SOL-R-FLOW™ water heaters to accommodate the rate of usage.

Active Solar Water Heater

SOL-R-FLOW™ water heaters can be coupled with motorized valves, pumps, controls, and storage tanks to maximize efficiency and enhance usage. Solar energy collected in the day and stored for use when most needed. can have advantages for several applications.

Example: Households where night time and morning hot water use is required, radiant floor heating, heat pump assist, spa heating, greenhouses, etc. Applications can be combined to include heating a pool in the summer and a home in the winter.

Pre-heat Solar Water Heating Systems

Manual System Kit

Description: When hot water is pulled – cold water circulates through sun coil displacing hot water for use.

Kit includes: 1 glazed suncoil, 1 pre-plumbed 3-way valve operating module, 50' of feed and return tubing, all connecting fittings, and hardware to complete the install.

Auto System Kit

Description: When hot water is pulled – cold water circulates through sun coil displacing hot water for use. When temperature at sun coil drops below the cold water supply temperature, the water flow is automatically diverted to optimize operational efficiency.

Kit includes: Same as manual system except for the addition of a 3-way motorized valve, set point controller, temperature sensor with plumbing assembly, and 24 volt plug in transformer to complete the install.

Recirculation Single Tank Solar Water Heating System

Description: Storage of solar heated water by your existing tank type heater is accomplished by using a timer to interrupt the use of electric or gas when solar is most productive and use of hot water is not. The operation is completed with a low cost plug in D.C. circulation pump and temperature differential controller to optimize operational efficiency.

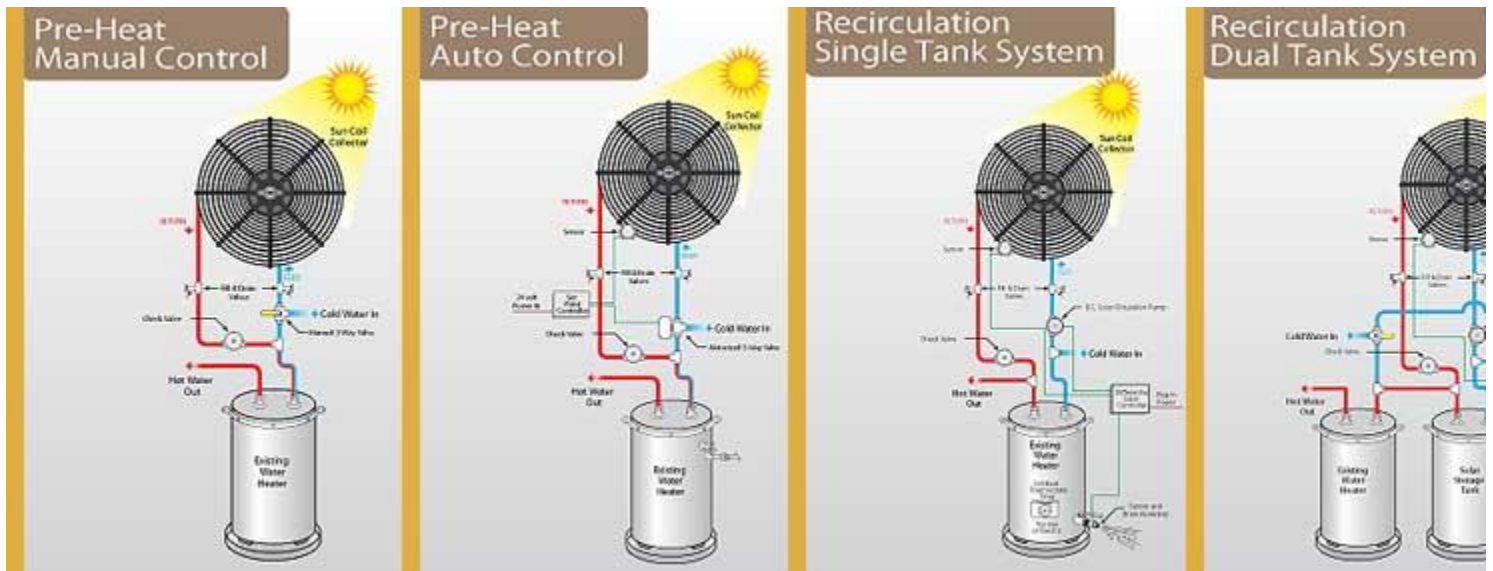
Kit includes: 1 glazed sun coil, 1 pre-plumbed and wired appliance kit, tank and collector sensor assembly kit, timer (specify gas or electric), 50' of feed and return tubing, all connecting fittings, and mounting hardware to complete the install.

Recirculation Dual Tank Solar Water Heating System

Description: Where a greater capacity of solar heated water is required. A separate storage tank is installed. The storage tank can be a store-bought electric model in 40, 60, and 80 gallon and simply modified to accept the solar and existing back-up plumbing mechanics. Or your existing water heater can be converted to a solar storage tank and replaced with an updated higher efficiency model.

Kit includes: Same as a single tank solar system except for the addition of solar storage tank back up plumbing assembly.

Optional Equipment: Tank saver and insulating kit for conversion of your existing gas heater to solar storage tank.



TO SEE DIAGRAMS ENLARGED, [CLICK HERE TO DOWNLOAD A FULL COLOR BROCHURE AS A PDF.](#)

Solar Coil Collector Construction & Specifications

Tubing: 3/4 SDR 9 High Density Polyethylene tubing, NSR approved for potable water

Hub, Spokes and End Caps: High impact ABS

Glazing: Acrylic 1/16 thick with ultraviolet inhibitors

Mounting: Internal aluminum bracket supplied

Weight Dry: 45 lbs • **Weight Wet:** 133 lbs

Net Absorption Area: 26 sq ft • **Gross Absorption Area:** 37 sq ft

Warranty: Limited 20 Year

