SUNEARTH®

Solar Pool Heating System
Site Visit

Applications

Solar Pool Heating

Site Information:

Address:					
City:		**State:**		**Zip Code:**	
Wild Fire Zone:	**HIGH**◯ **MEDIUM**◯ **LOW**◯		**Annual Wind:**	**HIGH**◯ **MEDIUM**◯ **LOW**◯	

Pool Information:

Pool Size (WxL)		**Average Depth:**		**Pool Cover:**	
Pool Shading:	**NONE**◯ **PARTIAL**◯ **COMPLETE**◯		**Water Features:**		

Roof Information:

Available Roof Area:		**Roof Type:**		**Pool Orientation:**	
Roof Shading:		**Roof Pitch/Slope:**		**Distance from pool:**	

Notes:

SUNEARTH
8425 Almeria Avenue Fontana, CA 92335
(909) 434-3100, Fax (909) 434-3101
www.sunearthinc.com

Direct Heating System

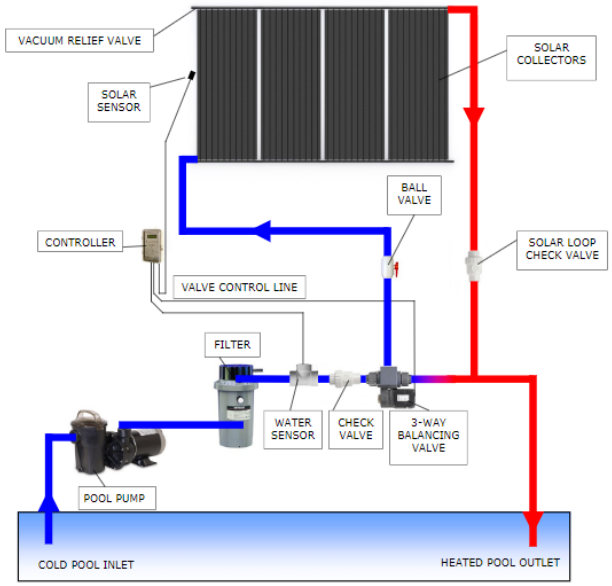

Figure 1: Direct System Schematic

This system is only recommended if pH and chlorine levels are closely monitored as discussed previously. This system is not intended for use with a salt water pool.

In this system, pool water is pumped from the bottom of a cold pool up through the roof mounted collectors where it absorbs heat from the sun. This heated water is then sent back to the pool. Because waters density changes with variations in temperature, the hotter water will tend towards the top of the pool while the cooler water will fall to the bottom. It follows that the cold water inlet should be placed near the bottom of the pool for optimal results.

Indirect, Drain-back Heating System

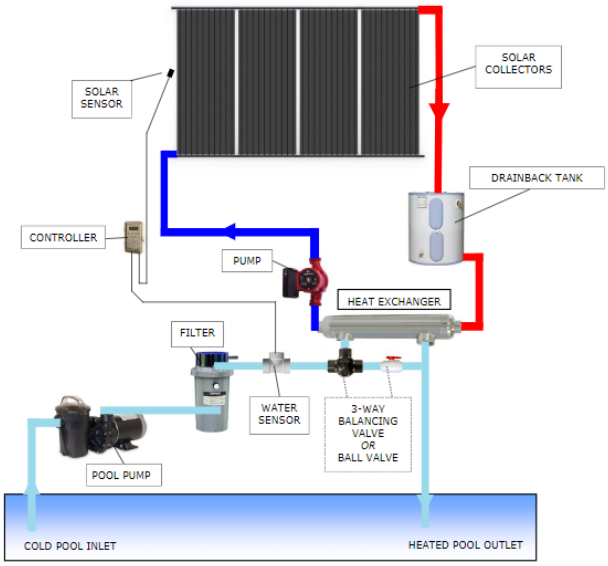

Figure 2: Indirect System Schematic

This system utilizes a heat exchanger and is recommended for salt water systems or systems with pH and chlorines levels that are not closely monitored.

In this system the pool water does not circulate in the collectors. A separate fluid, usually water or a mix of water and glycol, is in the collector loop. This fluid is heated by the sun in the collectors and brought back down into the heat exchanger to deliver the heat to the pool water indirectly. The pool water passes through the heat exchanger picking up heat through metal conduction.

This system also offers freeze protection via a drainback design.

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