

# **Suntrek Industries**

## **High Performance Solar Collectors**

TO ENHANCE YOUR POOL OWNERSHIP EXPERIENCE





# Ultimate backyard enjoyment

Jump into your warm pool and hot spa at a moments notice.

A typical swim season without heating can last 2-3 months with less than desirable swimming temperatures. A Suntrek Solar Pool Heating System can triple your swim season; providing 80-86 degree temperatures in your pool and a 100 degree spa.

Those who have experienced the high cost of heating their pool with natural gas, propane or electricity know that an average monthly heating bill can exceed \$500 to \$1000 a month. With the cost being so high, the typical pool owner will only heat their pool on special occasions. The rest of the time, the pool temperatures are uncomfortable and the pool does not get used.

Community and backyard pools that rely on gas to maintain warm temperatures, typically will see 100% Return on Investment in less than 3 years when compared to the cost of a Suntrek solar pool heating system.

A thermostatically controlled Suntrek system will automatically heat your pool and spa to your desired temperature. Utilizing your pool filter pump to circulate water through the solar heating collectors, your Suntrek system has little to no operating cost.



## Comfort

The perfect swimming temperature and hot spa, will provide an oasis of relaxation.

## Exercise

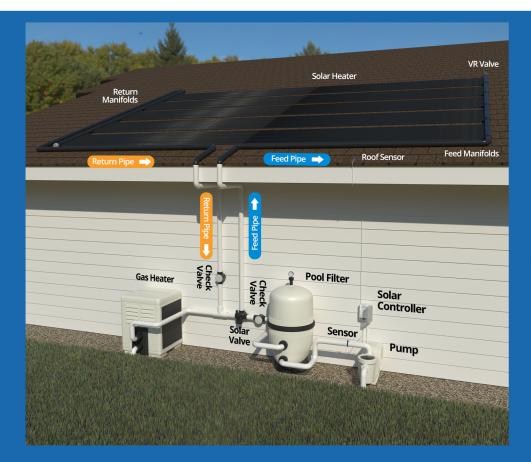
The ultimate workout that is easy on your joints. Improve your cardiovascular health without the aches and pains.

## Spontaneity

Warm swimming and spa temperatures will be ready and waiting for you 8 months of the year.

## Family Fun

Bring everyone together and create lifelong memories in your backyard.





While your pool filtration system is operating, a solar sensor on the roof will communicate to your control system when it is time to heat your pool or spa.

Your solar valve will open and divert the water to your Suntrek solar collectors. The sun's energy is absorbed and transferred to your pool or spa...FREE.

When the desired temperature is reached, your solar system will automatically know when to turn off so that your pool and spa will not overheat. Both your pool and spa will be heated and waiting for you.

## Versatile and Efficient

Since 1991, Suntrek has been on the forefront of the solar pool heating industry providing solutions for residential, commercial and government scale projects. With a unique tandem of product offerings in Suntrek Custom and Suntrek ST solar collectors, Suntrek provides the most versatile and suitable solution for any given application.

### **Modular Collector Design**

Panels can be built to any size and are assembled to fit any roof space. This system's modularity allows for the ultimate installation flexibility and serviceability in the future.

### **Ribbed Solar Tubing**

Engineered for Maximum Performance, Suntrek solar pool heaters are designed for increasing square footage of solar coverage. The 100% wetted surface area design and water channel engineering improves the transfer of solar energy into heat for your pool.

## **Suntrek Custom**

### **Patented Manifold Design** With unique, "continuous turbulent flow"

water channels which improves the transformation of solar energy into **EPDM Elastomer Water Channels** thermal energy for heating your pool

The most flexible and versatile solar tubing material which can contour to any roof obstacle (vents, skylights, hip, valleys, etc.).

## **Suntrek ST**



## O-Ring Connections & Mounting System between each panel,

allows system to be mounted closer together for more efficient and attractive installation.

### **Polypropylene Structure**

Rigid polypropylene collector material allows for a more uniform installation on inconsistent roofing materials and ground mounted systems.

### **Individual Water Channel Design**

Separated water channels allows for 360 degrees of solar radiation and limits wind lift.

### **Mounting Sled**

Sleds maintain alignment of individual riser tubes. Prevent abrasion to panel and roof when expanding and contracting.

# Specifications

## Suntrek Custom



Collector Model	Suntrek Custom		
Collector	EPDM Elastomer; 72 channels		
Width	24" wide		
Length	Custom Lengths		
Water Channel	ID = .190, OD = .333		
Manifolds	2" diameter, 28" long, 72 channels		
Weight	Approx. 1 lb. per sq. ft. ( 1.5 lbs. full)		
Max Operating Temp.	140°		
Max Operating Pressure	40 psi		
BTU Rating	1024 sq. ft. / day		
Suntrek Manifold Patent	DES.420,420		



Thousands of BTU Per ft² Per Day						
Climate Category (Ti - Ta)	High Radiation (2000 Btu/ft². day)	Medium Radiation (1500 Btu/ft². day)	Low Radiation (1000 Btu/ft². day)			
Pool Heating (warm climate) -9°F	1.7	1.3	0.9			
Pool Heating (cool climate) 9°F	1.0	0.7	0.3			
Water Heating (warm climate) 36°F	0.3	0.0	0.0			
Space & Water Heating - 90°F	0.0	0.0	0.0			

### **Suntrek ST**



Collector Model	ST-48	ST-40	ST-32
Size, Nominal	4' x 12'	4' x 10'	4' x 8'
Width	47.24	47.24	47.24
Length	143.70"	119.69"	95.67"
Aperture Area	47.14 sq. ft.	39.26 sq. ft.	31.38 sq. ft.
Manifold Diameter	2"	2"	2"
Dry Weight	16.53 lbs	13.67 lbs	11.02 lbs
Volume Capacity	3.8 gal	3.1 gal	2.4 gal
Working Pressure	90 psi	90 psi	90 psi
Burst Pressure	135 psi	135 psi	135 psi
Typical Flow	5 - 7 gpm	4 - 6 gpm	3 - 5 gpm



Thousands of BTU Per ft² Per Day						
Climate Category (Ti - Ta)	High Radiation (2000 Btu/ft². day)	Medium Radiation (1500 Btu/ft². day)	Low Radiation (1000 Btu/ft². day)			
Pool Heating (warm climate) -9°F	2.0	1.6	1.2			
Pool Heating (cool climate) 9°F	1.0	0.6	0.2			
Water Heating (warm climate) 36°F	0.1	0.0	0.0			
Space & Water Heating - 90°F	0.0	0.0	0.0			





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