

# SUNTREK ST™

## Enjoy your pool even more by heating with a SUNTREK ST Solar Pool Heating System!

Solar is the most efficient way to heat your pool by using free energy from the sun. Allowing you to take advantage of your investment beyond the summer months.

Suntrek ST was designed with your roof in mind. No straps are needed, requiring less roof penetrations. Our panels are slim, light weight and available in 3 standard sizes —making installation a breeze.

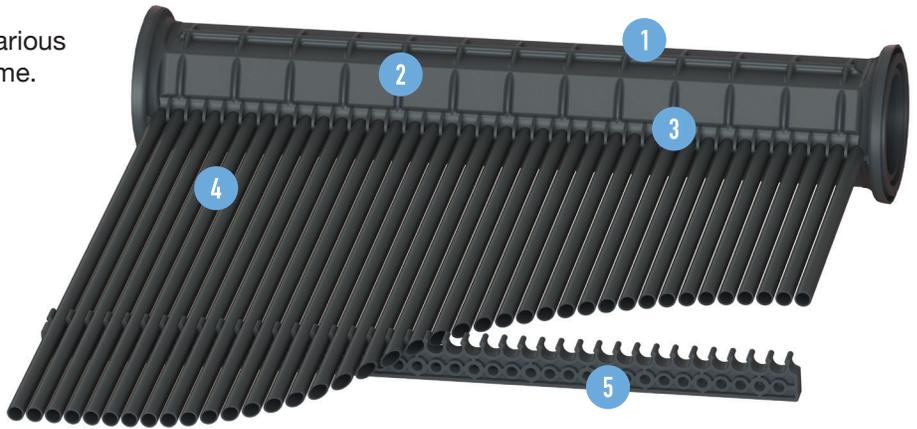
### HOW IT WORKS

Using your existing pool pump, pool water is directed through a series of valves to your solar panels. The water enters the panels at the bottom and rises to the top through the individual tubes. As the water rises through the panel, it is heated by the sun's radiant energy. The water is returned to the pool to repeat the cycle until your pool has been warmed to your desired temperature.



### DESIGN FEATURES

- 1. Unique Hexagon-Shaped Manifold**  
A flat aesthetic installation on a large range of roof types.
- 2. Reinforced Ribs**  
Ensures the manifold header withstands various pressure and temperature changes over time.
- 3. Over-Molding Manufacturing Method**  
Eliminate leaks from welding by fusing the header directly over the panel tubes.
- 4. Individual Tube Design**  
Minimize wind effects on the panel and allow for rapid moisture release.
- 5. Spacer Bars**  
Prevents the panel from warping over time and abrasion to the riser tubes.



### OTHER FEATURES

- **The Modular Structure** enables fast and firm connection between panels, creating any size absorption area over any type of roof imaginable.
- **Specially Formulated Polymer Material** stabilizes against sustained ultraviolet radiation, extreme weather and aging.
- **Alligator Clamps** can be positioned anywhere on the panel header and allows for direct drilling to various designs of roof truss structures.
- **All-Polymer Parts and Fittings** create simple connections between panels and standard plumbing pipes. (optional fittings to flex hose with a 2" adaptor)

## Collector Data

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

## Certification Data

Certifying Organization	National Standard SRCC
ST-48	47,135
ST-40	39,551
ST-32	28,279
Performance Expectations	$\eta = (0.909)(1 - 0.026u) - (2.1084 + 1.1254u)(P/G)$



## ST-48

### Solar Insolation

Category T(°F)	2,000 BTU/ft <sup>2</sup>	1,500 BTU/ft <sup>2</sup>	1,000 BTU/ft <sup>2</sup>	
Water Temp. Minus Air Temp.	A (-9)	94.28	75.42	56.57
	B (+9)	47.14	28.28	9.43
	C (+36)	4.71	0	0
	D (+90)	0	0	0

Thousands of BTU's per day per panel

## ST-40

### Solar Insolation

Category T(°F)	2,000 BTU/ft <sup>2</sup>	1,500 BTU/ft <sup>2</sup>	1,000 BTU/ft <sup>2</sup>	
Water Temp. Minus Air Temp.	A (-9)	78.32	62.82	47.11
	B (+9)	39.26	23.56	7.85
	C (+36)	3.93	0	0
	D (+90)	0	0	0

Thousands of BTU's per day per panel

## ST-32

### Solar Insolation

Category T(°F)	2,000 BTU/ft <sup>2</sup>	1,500 BTU/ft <sup>2</sup>	1,000 BTU/ft <sup>2</sup>	
Water Temp. Minus Air Temp.	A (-9)	62.76	50.21	37.66
	B (+9)	31.38	18.83	6.28
	C (+36)	3.14	0	0
	D (+90)	0	0	0

Thousands of BTU's per day per panel

## KEY

A - Pool Heating (Warm Climate)    B - Pool Heating (Cool Climate)  
 C - Water Heating (Warm Climate)    D - Space & Water Heating

