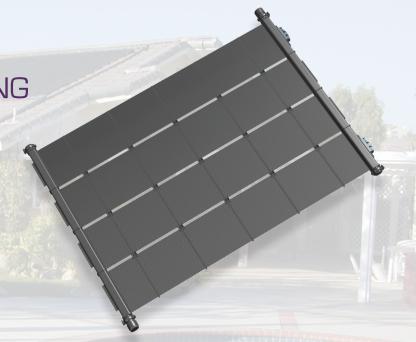


Technology of tomorrow available today. Innovative design, rugged construction and reliable operation make SunStar the perfect choice for your swimming pool heating needs.



ADVANCED DESIGN

"Individual tube design" allows wind load to be virtually eliminated, hence no straps across the collectors.

The individual tubes also prevents moisture from being trapped under the collector. Cracks and leaks due to thermal expansion and contraction are eliminated since each tube is able to expand and contract independently.

SINGLE PIECE CONSTRUCTION

Headers and risers are molded together forming one solid piece.

There are no seams or welds between the header and risers that can crack with age and stress.

SQUARE HEADER

The SunStar collector's unique square header creates added hydraulic turbulence.

This unique header shape maximizes flow characteristics and increases efficiency.

ONLY FOUR ROOF PENETRATIONS

Years of research and testing have led to an integrated panel mounting system that in most cases requires only four roof penetrations per collector.



Double Your Swim Season

MOUNTING

SunStar has eliminated the need for hoses and hose clamps.

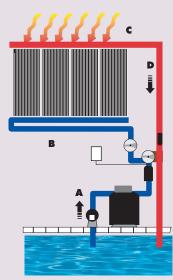
This makes a SunStar installation aesthetically pleasing, sleek and strong.

WARRANTY

Limited Lifetime warranty is non-prorated for the first twelve years and includes freeze protection. This warranty is simply the best in the industry. No other solar collector manufacturer offers this kind of protection and peace of mind.

Using the power of the sun to heat your pool

- **A.** Using your existing pool pump, pool water is directed through a series of valves to your solar collectors.
- **B.** Pool water enters the solar collectors at the bottom and rises to the top through the individual tubes of the collector. **C.** As the water rises through the collector it is heated by the sun's radiant energy **D.** The water is then returned to the pool to repeat the cycle until your pool has been warmed by the sun.



SPECIFICATIONS & TECHNICAL INFORMATION

UNIQUE TECHNICAL FEATURES:

- The individual tube design allows for expansion and contraction eliminating cracks and leaks.
- One piece 'overmolded' construction eliminates welds.
- No moisture build-up under collectors to cause roof deterioration.
- Integrally pigmented for efficiency and appearance.
- Design certified to withstand hurricane wind load, yet no need for straps across the collectors.
- Low collector head loss rate reduces pump requirements.

BTUs PER DAY

Certifying Organization	STR-40	STR-50	Performance Equations
Int'l Standard ORTECH Equivalent of 948 BTU/sq ft	38,550	46,150	.872 - 3.729 (Ti-TA) / I K _A X = 1.00041(S)
National Standard SRCC Equivalent of 948 BTU/sq ft	38.550	46,150	.87 - 3.735 (Ti-TA) / I K _A X = 1.000316(S)0104(S) ²
Florida Standard	956 BTU's/fi		.828 - 3.26 (Ti-TA) / I K _A X = 1.0011(S)

SUNSTAR STR-40

CERTIFICATION DATA

Collector Rating Number Thousands of BTU's per day per panel

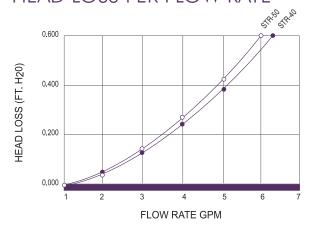
Category T(°F)		Solar Insolation			
		2,000 BTU/ft ²	1,500 BTU/ft²	1,000 BTU/ft²	
		A (-9)	82.16	64.96	47.83
	Water Temp.	B (+9)	53.37	36.62	19.94
	Minus Air	C (+36)	19.04	6.36	0
	Temp	D (+90)	0	0	0
		E (+144)	0	0	0

SUNSTAR STR-50

Collector Rating Number Thousands of BTU's per day per panel

Category T(°F)		Solar Insolation			
		2,000 BTU/ft ²	1,500 BTU/ft²	1,000 BTU/ft²	
		A (-9)	98.74	78.07	57.49
	Water Temp.	B (+9)	64.13	44.01	23.96
	Minus Air	C (+36)	22.91	7.64	0
	Temp	D (+90)	0	0	0
		E (+144)	0	0	0

HEAD LOSS PER FLOW RATE



COLLECTOR DATA

Collector Model	STR-40	STR-50
Size, Nominal	4' x 10.5'	4′ x 12.5′
Width	49"	49"
Length	127″	151.5"
Area (sq. ft)	40.7	48.7
Manifold Diameter	2"	2″
Weight (dry)	19 lbs	22 lbs
Volume Capacity	3.3 gal	3.7 gal
Working Pressure	90 psi	90 psi
Burst Pressure	270 psi	270 psi
Recommended Flow	4 gpm	5 gpm

