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Extend Your Swim Season

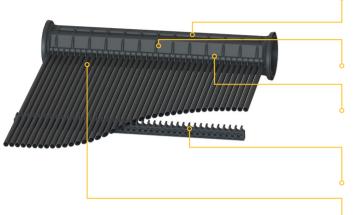






January 2017

SunUp Unique Features



Unique Hexagon shaped manifold for a flat aesthetic installation on a large range of roof types.

Reinforcement Ribs ensures the manifold header long life in varying pressures and temperatures.

One of a kind Over-Molding manufacturing method automatically injects the header directly over the panel tubes with no leaks.

Spacer Bars to prevent warping of the panel over time, as well as the abrasion of the riser tubes.

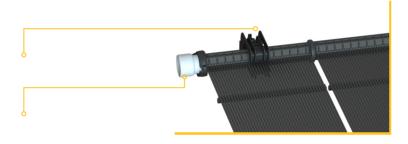
Individual Tube Design minimizes wind effects on the panel and creates extreme mechanical stability.

Modular Structure enables fast and firm connection between panels, creating any size absorption area over any type of roof imaginable.

Specially Formulated Polymer Material unique polymer formula stabilizes against sustained ultraviolet radiation, extreme weather and aging.

Alligator Clamp can be positioned anywhere on the panel header for direct drilling to various arrangements of roof truss structures.

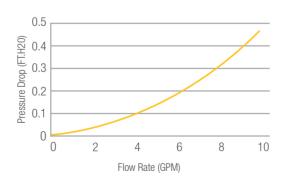
Parts & Fittings All-Polymer parts, creating simple connection between panels and standard plumbing pipes. * Optional fittings to flex hose with a 2" adaptor.



Dimensions & Design Parameters

Collectors Type	SU-48	SU-40	SU-32
Size	4' x 12'	4' x 10'	4' x 8'
Length	143.70"	119.69"	95.67"
Width	47.24"	47.24"	47.24"
Aperture Area (SF)	47.14 ft²	39.26 ft ²	31.38 ft ²
Manifold Diameter	2"	2"	2"
Weight "Dry"	16.53 lbs	13.67 lbs	11.20 lbs
Weight "Wet"	48.18 lbs	39.49 lbs	31.19 lbs
Volume Capacity	3.8 gal	3.1 gal	2.4 gal
Working Pressure	90 psi	90 psi	90 psi
Burst Pressure	180 psi	180 psi	180 psi
Typical flow 5-7 gpm	5-7 gpm	4-6 gpm	3-5 gpm

Head Loss Per Flow Rate



Chemical Resistance

The Polymer, polypropylene material is highly durable against: Corrosion, Lime scale, Chlorine, Bromine, Iodine, HCL, Salts and Sea water, and other swimming pool disinfectants.

Performance Rating & Daily Energy Output

Kilowatt-hours (thermal) Per m² Per Day		Thousands of Btu Per ft ² Per Day					
Climate	High Radiation (6.3 kWh/m².day)	Medium Radiation (4.7 kWh/m².day)	Climate	High Radiation (2000 Btu/ft².day)	Medium Radiation (1500 Btu/ft².day)		
Category (T _i -T _a)			Category (T _i -T _a)				
A (-5 °C)	6.5	5.1	A (-9 °F)	2.1	1.6		
B (5 °C)	3.3	2.0	B (9 °F)	1.0	0.6		
TECHNICAL INFORMATION		Tested in accordance with: ISO 9806:1994					
ISO Efficiency Equation [NOTE: Based on gross area and (P)=T,-T,]							

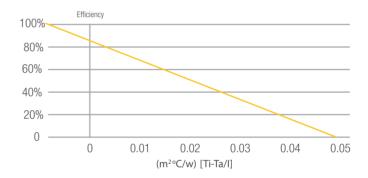
SI UNITS:	Wind speed (u) in m/s, Temperature (Ti-Ta) in °C, Radiation (G") in W/m ² =(0.909)(1-0.0460u)-(11.9716+14.2950u)(P/G")
IP UNITS:	Wind speed (u) in mph, Temperature (Ti-Ta) in °F, Radiation (G") in Btu/hr-ft ² =(0.909)(1-0.0206u)-(2.1084+1.1254u)(P/G")



Mechanical Stability

Maximum Recommended	bar	4
Operating Pressure	psi	60
Burst Pressure	bar	6
Duist Figssuig	psi	88

SunUp Efficiency Graph



How Does the Solar System Work

- **1.** The existing pool pump directs pool water via a controlled motorized valve to the solar collector.
- **2.** Pool water enters the solar collector at the bottom and rises to the top through the individual tubes of the collector.
- 3. Solar energy heats the water as it flows through the collector.
- 4. The Vaccum/air valve evacuation protects the system from freezing.
- **5.** The heated water then returns to the pool, and the cycle is repeated until the pool has been sufficiently warmed by the sun.
- **6.** The solar heating process is fully automatic, using temperature sensors and a differential controller.

