



SUN EARTH

THE OASIS SERIES

SOLAR COLLECTOR SPECIFICATION SHEET

Applications



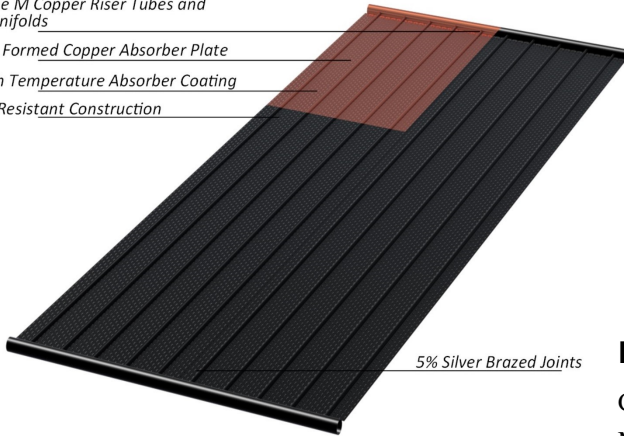
Solar Pool Heating

Type M Copper Riser Tubes and Manifolds

Roll Formed Copper Absorber Plate

High Temperature Absorber Coating

UV Resistant Construction

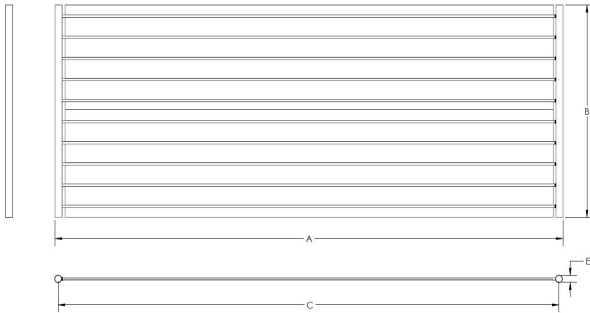


5% Silver Brazed Joints

Available Connections

- 1 1/2" Sweat (Standard)
- High Temperature Hose

Dimensions



F = Fluid Capacity (gal.)
G = Gross Area (ft²)

W = Dry Weight (lbs)
DFR = Design Flow Rate (GPM)

ΔP = Pressure Drop @ Design Flow Rate (psig)

Thermal Performance Ratings

Category (Ti-Ta) <small>Ti= inlet fluid temp Ta=ambient temp</small>	BTU/ft ² *Day		
	Clear (2000)	Mildly Cloudy (1500)	Cloudy (1000)
A(-9°F)	1500	1200	800
B(9°F)	900	600	300

A-Pool Heating (Warm Climate) B-Pool Heating. Thermal performance is obtained by multiplying the collector output for the appropriate application and insolation level by the total gross collector area. Derived from International Association of Plumbing and Mechanical Officials (IAPMO) S100.4 testing.

Materials

Collector Material: Roll formed Copper
 Max. Instantaneous Efficiency: 67%
 Header Size: 1 1/2" Nominal Copper (1.625" OD)
 Riser Size: 1/2" Nominal Copper
 Collector Coating: Flat Black Polyurethane

Design Limits

Internal Static Test Pressure: 160psig
 Max Flow Rate: 25gpm
 Max Wind/Snow: 60 psf
 Max Temperature: 100°F

MODEL	A(in)	B(in)	C(in)	E(in)	F	G	W	DFR	ΔP
OP-48	144.00	45.63	142.375	1.625	1.63	45.63	48.27	4.8	0.022
OP-40	120.00	45.63	118.375	1.625	1.47	38.02	40.22	4.0	0.020
OP-32	96.00	45.63	94.375	1.625	1.31	30.47	32.21	3.2	0.018

Due to SunEarth's policy of continuous product improvement, specifications are subject to change without notice.



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ENGINEERING SPECIFICATIONS

GENERAL:

The following shall be the specifications for the pool/spa heating collectors. Collectors shall be SunEarth Oasis Model _____, and shall be of the unglazed liquid flat plate type. Collectors shall be tested in conformance with ISO 9806:2013 and listed by the International Association of Plumbing and Mechanical Officials (IAPMO).

ABSORBER PLATE AND PIPING:

The absorber shall consist of a roll-formed copper plate of no less than .008 inch thickness. Risers shall be a minimum of 0.5 inch O.D. Type M Copper tubing on no more than 4.7" centers continuously soldered to the plate utilizing a non-corrosive solder paste with a melting point of 460°F. The risers shall be brazed to 1.625" O.D. Type M copper manifolds utilizing a copper phosphorous brazing allow with no less than 5% silver content, and conforming to the American Welding Society's BCuP-3 classification. The absorber plate shall be designed for 160 psig maximum operating pressure.

ABSORBER COATING AND PERFORMANCE CURVE:

The absorber coating shall be flat black paint. The instantaneous efficiency of the collector shall be a minimum Y-intercept of 0.68 and a slope of no less than $-19.29 \text{ BTU/ft}^2 \cdot \text{hr} \cdot ^\circ\text{F}$.

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