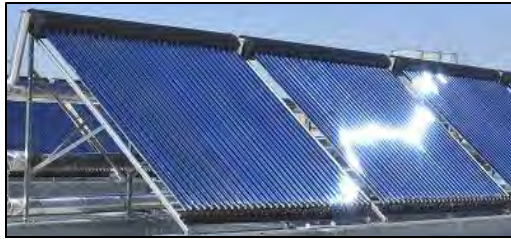


# SPP-30A

## Evacuated Tube Collector



- Buy American Compliant*
- SRCC Certified:  
OG-100 & OG-300*
- High-Performance,  
High Efficiency*
- Top Quality Materials &  
Construction*

The SPP-30A is a high performance, high-efficiency evacuated tube collector.

These collectors are used to produce domestic hot water, in space heating systems, and to power absorption chillers for solar air conditioning systems.

Buy American Compliant, and SRCC certified, these collectors are perfect for residential, commercial, and industrial applications alike.



- Buy American Compliant:** The SPP-30A complies with the Buy American Act (BAA) and American Recovery & Reinvestment Act (ARRA), which is a requirement on many commercial and government projects
- SRCC Certified:** Collector is OG-100 and OG-300 certified, allowing the SPP-30A to qualify for Federal, State, and local incentives, such as rebates and tax credits
- Anodized Manifold / Header:** Header construction made from aluminum, with an anodized coating for long lasting durability in all weather and environmental conditions
- Stainless Steel Frame:** Frame made from stainless steel material, with 24" centers for easier mounting and installation
- Borosilicate Glass Tubes:** Glass tubes made from high quality borosilicate glass, which is resistant to thermal shock, stress, and rated for 1" hail impact
- Extra Tubes:** Each SPP-30A collector comes with 2 extra spare tubes in case of tube damage during installation
- High performance:** High heat performance in all weather conditions makes the SPP-30A perfect for hot water, space heating, and air conditioning in all climates

# SPP-30A Specifications

Collector Data	
Number of Tubes	30
Dimensions	96" x 79"
Absorber Area	44.75 ft <sup>2</sup>
Fluid Capacity	0.4gl
Dry Weight	190lbs
Warranty	10 Years

Casing and Frame Specifications	
Header Casing Material	Anodized Aluminum
Frame Material	Stainless Steel
Manifold Insulation Material	Rock Wool
Manifold Insulation Thickness	2.36"
Internal Manifold Piping Material	1 ¼" Copper – Schedule M
Sealing Material	Silicone
Installation Angle Range	15° - 90°

Evacuated Tube / Heat Pipe Specifications	
Tube Length	70.8"
Emissivity Coefficient	8%
Tube Absorber Coating	Copper, Stainless Steel, Aluminum
Absorptive Coefficient	92%
Glass Material	Borosilicate Glass
Outer Glass Tube Diameter	2.28"
Inner Glass Tube Diameter	1.85"
Vacuum	5 x 10 <sup>-2</sup> PA
Stagnation Temperature	482°F
Heat Pipe Material	Copper
Hail Resistance	~1" Diameter

Manifold / Operation Specifications	
Recommended Manifold Fluid Content	Water or Water/Glycol
Wind Load Rating	120 mph
Maximum Operating Pressure	169 psi
Recommended Flow Rate	0.8 ~ 1.2 gpm



## SRCC Certification Data: Collector Thermal Performance Rating

BTU per Panel Per Day			
Category (Ti-Ta)	Clear Day 2000 Btu/ft <sup>2</sup> /day	Mildly Cloudy 1500 Btu/ft <sup>2</sup> /day	Cloudy Day 1000 Btu/ft <sup>2</sup> /day
A (-9F)	47,000	36,000	24,000
B (9F)	46,000	34,000	22,000
C (36F)	43,000	31,000	19,000
D (90F)	36,000	25,000	13,000
E (144F)	29,000	18,000	7,000

(Ti) – Temperature Inlet: Refers to temperature of fluid entering manifold.  
 (Ta) – Temperature Ambient: Refers to the ambient temperature, or the outside air temperature.  
 (Ti-Ta) – Refers to the inlet fluid temperature subtracted from the outside ambient temperature. For example, if the temperature entering the manifold is 100F, and the outside air temperature is 80F, the Ti-Ta would be 20F.

- (A) – Pool Heating (Warm Climate)
- (B) – Pool Heating (Cool Climate)
- (C) – Water Heating (Warm Climate)
- (D) – Water Heating (Cool Climate)
- (E) – Air Conditioning