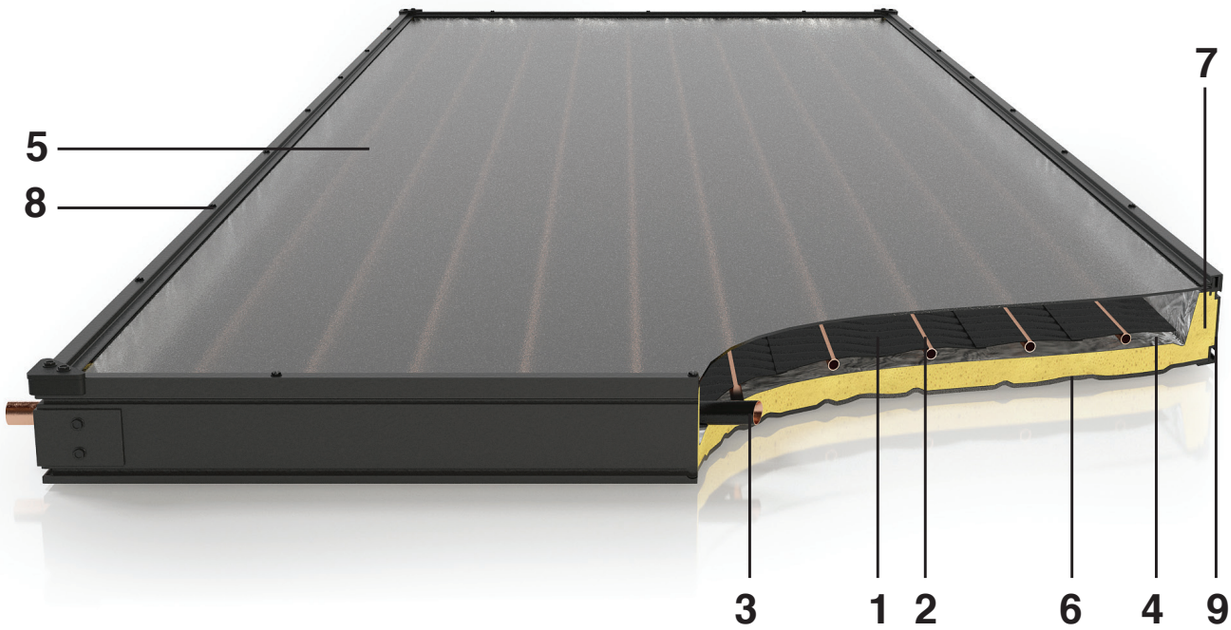
AURORA Solar Collector by Solene™
Specification Sheet

AURORA
SOLAR COLLECTORS BY SOLENE™

Advanced Engineering, Maximum Performance

AURORA Solar Collectors are the most technologically advanced collectors on the market today. AURORA features the highest quality materials & state-of-the-art engineering to provide maximum efficiency & durability you can depend on for years to come. AURORA collectors are environmentally friendly, non-polluting and reliable in any environment. AURORA panels are the most important component of any solar water heating system, producing dependable results under any weather conditions.



Solene
SOLAR HOT WATER SYSTEMS

1. Absorber Plate
Utilizing a state-of- the-art ultrasonic weld, copper fins and risers provide superior thermal connectivity between the fins and risers. Revolutionary coating is black chrome on nickel, producing a premium selective surface with maximum efficiency for solar energy use.
Absorptivity = 0.95
Emissivity = 0.12

2. Tubing Grid
1/2" copper risers are brazed to 1" copper mainfolds for optimal flow distribution.

3. Piping Connection
Two 1" Type M copper tubes.

4. Aluminum Foil
Attached to the insulation, acts as a barrier against out-gasing.

5. Solar Glass Glazing
A single pane of 1/8" thick solar glass is patterned to reduce reflection and tempered to maximize strength and durability.
*Iron oxide content:
0.03%
*Solar transmittance: 91%

6. Back Plate
High-Density Polyethylene Backing: Reduces torque in the frame, is lightweight and eliminates the possibility of any electrolysis issues for maximum benefit.

7. Insulation
1-3/16" polyisocyanurate foam cast under and around the side of the absorber plate, retains the heat of the water in the collector. CFC-free rigid urethane meets U.S. and European standards.

8. Casing
All aluminum extrusion casings create a sleek framewall. Unique extruded profile allows easy anchoring to the roof (shingle, tile, tar) or collector stands.

9. Gaskets
All-around TPE (thermoplastic elastometer) gasket. Highly resistant to temperature differences and UV radiation. Absorbs the differential expansion of frame and glazing.

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General Specifications

	SLAR-30	SLAR-32	SLAR-40
Gross Area (sq. ft.)	24	32	40
Net Aperture Area (sq. ft.)	22.5	30.15	37.84
Ratio Net/Gross Area	0.9375	0.94	0.95
Length (in.)	72”	96”	120”
Width (in.)	48”	48”	48”
Thickness (in.)	4”	4”	4”
Header - End-to-End	52”	52”	52”
Weight (lbs.)	84	105.8	132.2
Fluid Capacity (gal.)	.86	1.02	1.18
Recommended Flow Rate	0.6	0.8	1.0
Test Pressure (psi)	300	300	300
Operating Pressure (psi)	145	145	145

Efficiency Ratings

	SLAR-30			SLAR-32			SLAR-40		
	Clear Day	Mildly Cloudy	Cloudy Day	Clear Day	Mildly Cloudy	Cloudy Day	Clear Day	Mildly Cloudy	Cloudy Day
A (-9° F)	35.4	26.8	18.2	46.1	34.8	23.7	56.5	42.7	29.0
B (9° F)	31.7	23.1	14.5	41.3	30.1	18.9	50.7	36.9	23.2
C (36° F)	26.5	18.0	9.6	34.5	23.5	12.6	42.4	28.8	15.4
D (90° F)	17.2	9.5	2.5	22.4	12.4	3.3	27.6	15.3	4.1
E (144° F)	9.2	2.9	0.0	12.0	4.1	0.0	14.9	5.1	0.0

Efficiency Equation [NOTE: Based on gross area and (P)=Ti-Taj]
S I UNITS: η=0.7820 -4.28290 (P)/I -0.00484 $(P)^2/I$
I P UNITS: η=0.7820 -0.7544 (P)/I -0.0005 $(P)^2/I$

Y INTERCEPT	SLOPE
0.8	-4.6 W/m².°C
0.8	-0.8 Btu/hr.ft².°F

Efficiency Equation [NOTE: Based on gross area and (P)=Ti-Taj]
S I UNITS: η=0.7840 -4.28050 (P)/I -0.00484 $(P)^2/I$
I P UNITS: η=0.7840 -0.7540 (P)/I -0.0005 $(P)^2/I$

Y INTERCEPT	SLOPE
0.8	-4.6 W/m².°C
0.8	-0.8 Btu/hr.ft².°F

Ti = Water temperature (T out - T in)/2 F
Ta = Ambient temperature F
I= Solar radiation Btu/hr/ft2

Solene SOLAR HOT WATER SYSTEMS

FSEC® SRCC SOLAR CERTIFICATION

OG-100 Collector Approved
OG-300 System Qualified

Made in the U.S.A. from domestic and foreign materials.