


<p>SOLAR COLLECTOR CERTIFICATION AND RATING</p>  <p>SRCC OG-100</p>	<p>CERTIFIED SOLAR COLLECTOR</p> <p>SUPPLIER: Apricus Inc. 6 Sycamore Way, Unit #2 Branford, CT 06405 USA</p> <p>MODEL: Apricus AP-30C</p> <p>COLLECTOR TYPE: Tubular</p> <p>CERTIFICATION#: 2007033D</p> <p>Original Certification Date: 22-SEP-10</p>
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COLLECTOR THERMAL PERFORMANCE RATING

Kilowatt-hours Per Panel Per Day				Thousands of BTU Per Panel Per Day			
CATEGORY (Ti-Ta)	CLEAR DAY (6.3 kWh / m ² .day)	MILDLY CLOUDY (4.7 kWh / m ² .day)	CLOUDY DAY (3.1 kWh / m ² .day)	CATEGORY (Ti-Ta)	CLEAR DAY (2000 Btu / ft ² .day)	MILDLY CLOUDY (1500 Btu / ft ² .day)	CLOUDY DAY (1000 Btu / ft ² .day)
A (-5 °C)	13.5	10.2	6.9	A (-9 °F)	46.1	34.8	23.5
B (5 °C)	12.9	9.6	6.3	B (9 °F)	44.0	32.7	21.4
C (20 °C)	11.9	8.6	5.3	C (36 °F)	40.6	29.3	18.0
D (50 °C)	10.0	6.7	3.5	D (90 °F)	34.2	23.0	11.8
E (80 °C)	7.9	4.7	1.7	E (144 °F)	27.1	15.9	5.9

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

COLLECTOR SPECIFICATIONS

Gross Area:	4.158 m ²	44.76 ft ²	Net Aperture Area:	2.99 m ²	32.21 ft ²
Dry Weight:	96.6 kg	213. lb	Fluid Capacity:	1.0 liter	0.3 gal
Test Pressure:	1103. KPa	160. psig			

COLLECTOR MATERIALS

Frame: Stainless Steel
Cover (Outer): Glass Vacuum Tube
Cover (Inner): None

Pressure Drop

Flow		ΔP	
ml/s	gpm	Pa	in H ₂ O
20.00	0.32	105.00	0.42
50.00	0.79	524.0	2.1
80.00	1.27	1257.00	5.05

Absorber Material: Tube - Copper / Plate - Aluminum
Absorber Coating: Aluminum Nitride

Insulation Side: Vacuum
Insulation Back: Vacuum

TECHNICAL INFORMATION

Efficiency Equation [NOTE: Based on gross area and (P)=Ti-Ta]	Y INTERCEPT	SLOPE
SI Units: η = 0.456 - 1.35090 (P)/I - 0.00381 (P) ² /I	0.458	-1.579 W/m ² .°C
IP Units: η = 0.456 - 0.23796 (P)/I - 0.00037 (P) ² /I	0.458	-0.278 Btu/hr.ft ² .°F

Incident Angle Modifier [(S)=1/cosθ - 1, 0°<θ<=60°]

Kτα = 1 1.306 (S) - 1.034 (S)²
Kτα = 1 0.23 (S) Linear Fit

Test Fluid: Water
Test Flow Rate: 20.0 ml/s.m² 0.0294 gpm/ft²

REMARKS:

Tested with long axis of tubes oriented north-south. IAM perpendicular to the tubes is listed above. IAM parallel to the tubes = 1.0 - 0.09(S)

January, 2012
 Certification must be renewed annually, For current status contact:
 SOLAR RATING & CERTIFICATION CORPORATION
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