


<b>SOLAR COLLECTOR CERTIFICATION AND RATING</b>    <b>SRCC OG-100</b>	<b>CERTIFIED SOLAR COLLECTOR</b>  <b>SUPPLIER:</b> Dawn Solar Systems, Inc. 183 Route 125, Unit A-7 Brentwood, NH 03833 USA  <b>MODEL:</b> 3004L  <b>COLLECTOR TYPE:</b> Unglazed Flat-Plate  <b>CERTIFICATION#:</b> 2004009A
--	---

ALL SIZES OF THIS COLLECTOR MODEL ARE CERTIFIED

<b>COLLECTOR THERMAL PERFORMANCE RATING</b>							
Megajoules Per Square Meter Per Day				Thousands of BTU Per Square Foot Per Day			
CATEGORY	CLEAR DAY	MILDLY CLOUDY	CLOUDY DAY	CATEGORY	CLEAR DAY	MILDLY CLOUDY	CLOUDY DAY
A (-5 °C)	2.4	1.9	1.3	A (-9 °F)	0.2	0.2	0.1
B (5 °C)	1.7	1.2	0.6	B (9 °F)	0.1	0.1	0.1
C (20 °C)	0.3	0.0	0.0	C (36 °F)	0.0	0.0	0.0
D (50 °C)	0.0	0.0	0.0	D (90 °F)	0.0	0.0	0
E (80 °C)	0.0	0.0	0.0	E (144 °F)	0.0	0.0	0.0

Original Certification Date: 10-JUN-05

**COLLECTOR SPECIFICATIONS**

<b>Gross Area:</b>	9.302 m <sup>2</sup>	100.12 ft <sup>2</sup>	<b>Net Aperature Area:</b> 9.30 m <sup>2</sup> 100.12 ft <sup>2</sup>
<b>Dry Weight:</b>	0.0 kg	0. lb	<b>Fluid Capacity:</b> 8.2 liter 2.2 gal
<b>Test Pressure:</b>	1104. KPa	160. psg	

**COLLECTOR MATERIALS**

<b>Frame:</b>	Galvanized Steel
<b>Cover (Outer):</b>	None
<b>Cover (Inner):</b>	

**Pressure Drop**

Flow		ΔP	
ml/s	gpm	PA	in H <sub>2</sub> O
20.00	0.32	2523.30	10.14
50.00	0.79	14934.3	60.0
80.00	1.27	27363.30	109.97

<b>Absorber Material:</b>	Tube - PEX / Plate - Steel
<b>Absorber Coating:</b>	Dark Green Fluorocarbon

<b>Insulation Side:</b>	Plywood
<b>Insulation Back:</b>	Plywood

**TECHNICAL INFORMATION**

<b>Efficiency Equation [NOTE: Based on gross area and (P)=Ti-Taj]</b>				<b>Y INTERCEPT</b>	<b>SLOPE</b>
<b>S I UNITS:</b>	$\eta = 0.125$	$-1.86700 (P)/I$	$-0.08056 (P)^2/I$	<b>0.126</b>	$-3.67 \text{ W/m}^2 \cdot ^\circ\text{C}$
<b>I P UNITS:</b>	$\eta = 0.125$	$-0.32887 (P)/I$	$-0.00788 (P)^2/I$	<b>0.126</b>	$-0.60 \text{ Btu/hr.ft}^2 \cdot ^\circ\text{F}$
<b>Incident Angle Modifier [(S)=1/cosθ - 1, 0°&lt;θ&lt;=60°]</b>				<b>Model Tested:</b>	3004L
<b>Kα = 1</b>	-0.212 (S)	0.118 (S) <sup>2</sup>		<b>Test Fluid:</b>	Water
<b>Kα = 1</b>	-0.09 (S)	Linear Fit		<b>Test Flow Rate:</b>	31.5 ml/s 0.50 gpm

**REMARKS:** This collector is integrated into the roof. The ratings listed above are based on the gross area of the tested collector. Collector weight was not measured.

December, 2009

Certification must be renewed annually. For current status contact:

SOLAR RATING &amp; CERTIFICATION CORPORATION

c/o FSEC ♦ 1679 Clearlake Road ♦ Cocoa, FL 32922 ♦ (321) 638-1537 ♦ Fax (321) 638-1010

[Return to Search](#)