


<b>SOLAR COLLECTOR CERTIFICATION AND RATING</b>    <b>SRCC OG-100</b>	<b><u>CERTIFIED SOLAR COLLECTOR</u></b>  <b>SUPPLIER: Solar Skies Mfg, LLC</b> 800 Industrial Park, Hwy 28 West Starbuck, MN 56381 USA  <b>MODEL: Solar Skies SS-40</b> <b>COLLECTOR TYPE: Glazed Flat-Plate</b> <b>CERTIFICATION #: 100-2007-039F</b>
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<b>COLLECTOR THERMAL PERFORMANCE RATING</b>							
<b>Megajoules Per Panel Per Day</b>				<b>Thousands of Btu Per Panel Per Day</b>			
CATEGORY (Ti-Ta)	CLEAR DAY 23 MJ/m <sup>2</sup> ·d	MILDLY CLOUDY 17 MJ/m <sup>2</sup> ·d	CLOUDY DAY 11 MJ/m <sup>2</sup> ·d	CATEGORY (Ti-Ta)	CLEAR DAY 2000 Btu/ft <sup>2</sup> ·d	MILDLY CLOUDY 1500 Btu/ft <sup>2</sup> ·d	CLOUDY DAY 1000 Btu/ft <sup>2</sup> ·d
A (-5°C)	55	41	28	A (-9°F)	52	39	27
B (5°C)	50	36	23	B (9°F)	47	35	22
C (20°C)	42	29	16	C (36°F)	40	27	15
D (50°C)	25	13	3	D (90°F)	24	13	3
E (80°C)	10	1		E (144°F)	9	1	

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

Original Certification Date: October 4, 2007

### COLLECTOR SPECIFICATIONS

<b>Gross Area:</b>	3.696 m <sup>2</sup>	39.78 ft <sup>2</sup>	<b>Net Aperture Area:</b>	3.481 m <sup>2</sup>	37.47 ft <sup>2</sup>
<b>Dry Weight:</b>	69.4 kg	153 lb	<b>Fluid Capacity:</b>	6.1 l	1.6 gal
<b>Test Pressure:</b>	1103 kPa	160 psig			

### COLLECTOR MATERIALS

<b>Frame:</b>	Anodized Aluminum
<b>Cover (Outer):</b>	Low Iron Tempered Glass
<b>Cover (Inner):</b>	None
<b>Absorber Material:</b>	Tube - Copper / Plate - Copper Fin
<b>Absorber Coating:</b>	Selective Coating
<b>Insulation (Side):</b>	Polyisocyanurate
<b>Insulation (Back):</b>	Polyisocyanurate

### PRESSURE DROP

Flow		Δ P	
ml/s	gpm	Pa	in H <sub>2</sub> O

### TECHNICAL INFORMATION

<b>Efficiency Equation [NOTE: Based on gross area and (P) = Ti-Ta]</b>	<b>Y Intercept</b>	<b>Slope</b>	
<b>S I Units:</b> $\eta = 0.691 - 3.3960 (P)/I - 0.0197 (P)^2/I$	0.706	-4.9099	W/m <sup>2</sup> ·°C
<b>I P Units:</b> $\eta = 0.691 - 0.5985 (P)/I - 0.0019 (P)^2/I$	0.706	-0.865	Btu/hr·ft <sup>2</sup> ·°F

<b>Incident Angle Modifier [(S) = 1/cos θ - 1, 0° ≤ θ ≤ 60°]</b>	<b>Model Tested:</b>	100-2002-001A
<b>K<sub>arr</sub> = 1.0 - 0.1939 (S) - 0.0055 (S)<sup>2</sup></b>	<b>Test Fluid:</b>	Water
<b>K<sub>arr</sub> = 1.0 - 0.20 (S) (Linear Fit)</b>	<b>Test Flow Rate:</b>	39 ml/s      0.62 gpm

### REMARKS:

November, 2007

Certification must be renewed annually. For current status contact:

SOLAR RATING & CERTIFICATION CORPORATION

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