


<b>SOLAR COLLECTOR CERTIFICATION AND RATING</b>    <b>SRCC OG-100</b>	<b>CERTIFIED SOLAR COLLECTOR</b>  <b>SUPPLIER:</b> <b>Solar Skies Mfg, LLC</b> 106 Donovan Drive Alexandria, MN 56308 USA  <b>MODEL:</b> NSC-28  <b>COLLECTOR TYPE:</b> North Star Glazed Flat-Plate <b>CERTIFICATION#:</b> 2007040D
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### COLLECTOR THERMAL PERFORMANCE RATING

Megajoules Per Panel Per Day				Thousands of BTU Per Panel Per Day			
CATEGORY (Ti-Ta)	CLEAR DAY	MILDLY CLOUDY	CLOUDY DAY	CATEGORY (Ti-Ta)	CLEAR DAY	MILDLY CLOUDY	CLOUDY DAY
A (-5 °C)	39.5	29.8	20.2	A (-9 °F)	37.4	28.3	19.2
B (5 °C)	35.9	26.2	16.6	B (9 °F)	34.0	24.9	15.8
C (20 °C)	30.1	20.6	11.2	C (36 °F)	28.5	19.5	10.6
D (50 °C)	18.1	9.6	2.1	D (90 °F)	17.1	9.1	2.0
E (80 °C)	7.0	1.0	0.0	E (144 °F)	6.6	1.0	0.0

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: 04-OCT-07

### COLLECTOR SPECIFICATIONS

<b>Gross Area:</b>	2.663 m <sup>2</sup>	28.67 ft <sup>2</sup>	<b>Net Aperature Area:</b> 2.40 m <sup>2</sup> 25.87 ft <sup>2</sup>
<b>Dry Weight:</b>	54.4 kg	120. lb	<b>Fluid Capacity:</b> 4.5 liter 1.2 gal
<b>Test Pressure:</b>	1103. KPa	160. psg	

### COLLECTOR MATERIALS

<b>Frame:</b>	Anodized Aluminum
<b>Cover (Outer):</b>	Low Iron Tempered Glass
<b>Cover (Inner):</b>	None

### Pressure Drop

Flow		ΔP	
m/s	gpm	Pa	in H <sub>2</sub> O

<b>Absorber Material:</b>	Tube - Copper / Plate - Copper Fin	<b>Insulation Side:</b>	Polyisocyanurate
<b>Absorber Coating:</b>	Selective Coating	<b>Insulation Back:</b>	Polyisocyanurate

### TECHNICAL INFORMATION

Efficiency Equation [NOTE: Based on gross area and (P)=Ti-Taj]				<b>Y INTERCEPT</b>	<b>SLOPE</b>
<b>S I UNITS:</b>	$\eta = 0.691$	$-3.39600 (P)/I$	$-0.01968 (P)^2/I$	<b>0.706</b>	<b>-4.910 W/m<sup>2</sup>.°C</b>
<b>I P UNITS:</b>	$\eta = 0.691$	$-0.59821 (P)/I$	$-0.00193 (P)^2/I$	<b>0.706</b>	<b>-0.865 Btu/hr.ft<sup>2</sup>.°F</b>
<b>Incident Angle Modifier [(S)=1/cosθ - 1, 0°&lt;θ&lt;=60°]</b>			<b>Model Tested:</b>	100-2002-001A	
<b>Kα = 1</b>	-0.194 (S)	-0.006 (S) <sup>2</sup>	<b>Test Fluid:</b>	Water	
<b>Kα = 1</b>	-0.20 (S)	Linear Fit	<b>Test Flow Rate:</b>	14.6 ml/s.m <sup>2</sup> 0.0215 gpm/ft <sup>2</sup>	

REMARKS:

September, 2010  
Certification must be renewed annually, For current status contact:  
SOLAR RATING & CERTIFICATION CORPORATION  
c/o FSEC ♦ 1679 Clearlake Road ♦ Cocoa, FL 32922 ♦ (321) 638-1537 ♦ Fax (321) 638-1010

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