



SOLAR RATING & CERTIFICATION CORPORATION

AWARD OF COLLECTOR CERTIFICATION

The solar collector listed below has been evaluated by the Solar Rating and Certification Corporation (SRCC) in accordance with SRCC Document OG-100, *Operating Guidelines and Minimum Standards for Certifying Solar Collectors*, and has been certified by the SRCC as specified in SRCC Standard 100-94, *Test Methods and Minimum Standards for Certifying Solar Collectors*. Certification and thermal performance ratings are based on the successful durability and performance testing of a sample unit where said tests have been conducted by an independent laboratory accredited by the SRCC.

Collector Certification Number: **100-2005014A**

Date Certified: **September 14, 2006**

Expiration Date: **July 5, 2018**

Test Laboratory: **Bodycote**

Report Number: **06-08-9133-1**

Report Date: **July 5, 2006**

Product: **Glazed Flat-Plate** Certified Model: **COL-4x8-TL-SG1-SD10US** Model Tested: **COL-4x8-TL-SG1-SD10US**

Supplier: **Enerworks, Inc.**  
**PO Box 9, 252 Hamilton Crescent**  
**Dorchester, ON NOL 1G0 Canada**  
**(519) 268-6500**

Description: **Galvanized Steel frame. Low Iron Tempered Glass glazing. Aluminum absorber with Vapor Deposition Selective Coating coating. Isocyanurate side insulation and Mineral Wool back insulation. Prolylene Glycol & Water was the fluid for performance tests. Gross Area: 2.87 m<sup>2</sup> ( 30.94 ft<sup>2</sup>). Aperture Area: 2.69 m<sup>2</sup> ( 28.96 ft<sup>2</sup>)**

**GLAZED COLLECTOR THERMAL PERFORMANCE RATING**

Megajoules Per Panel Per Day				Thousands of Btu Per Panel Per Day			
Category (Ti-Ta)	CLEAR	MILDLY CLOUDY	CLOUDY	Category (Ti-Ta)	CLEAR	MILDLY CLOUDY2	CLOUDY
	23 MJ/m <sup>2</sup> -d	17 MJ/m <sup>2</sup> -d	11 MJ/m <sup>2</sup> -d		2 kBtu/ft <sup>2</sup> -d	1.5 kBtu/ft <sup>2</sup> -d	1 kBtu/ft <sup>2</sup> -d
A (-5 °C)	45	34	23	A (-9 °F)	43	32	22
B (5 °C)	41	30	19	B (9 °F)	39	28	18
C (20 °C)	33	23	12	C (36 °F)	32	22	11
D (50 °C)	19	10	2	D (90 °F)	18	9	1
E (80 °C)	7			E (144 °F)	6		

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

**Efficiency Equation [NOTE: (P) = Ti-Ta]**

SI Units:  $\eta = 0.717 - 4.0141 (P)/I - 0.0187 (P)^2/I$  **Y Intercept** 0.726 **Slope** -5.11 W/m<sup>2</sup>·°C  
 IP Units:  $\eta = 0.7166 - 0.7074 (P)/I - 0.0018 (P)^2/I$  0.726 -0.901 Btu/hr·ft<sup>2</sup>·°F

**Incident Angle Modifier [NOTE: (S) = 1/cos θ - 1]**

$K_{\alpha} = 1.0 - 0.1100 (S) - 0.0506 (S)^2$   $K_{\alpha} = 1.0 - 0.16 (S)$  (Linear Fit)

This award of certification is subject to all terms and conditions of the Program Agreement and the documents incorporated therein by reference. It must be renewed annually. Any change in collector design, materials, specifications, parts, or construction must be reported to SRCC for evaluation of continued certification.

  
 Technical Director

September 15, 2006

