

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: **100-2009044A**

Certification Date: 05-JAN-10	Type: Glazed Flat-Plate	Expiration Date: 06-JUN-20
Test Laboratory: Bodycote	Report Number: 07-08-9196A RV1 07-08-9174	Report Date: 06-JUN-08
Brand: Micro-Flo	Certified Model: S32A	Model Tested: 2009007A
Supplier: Sunward LLC 75 Meigs Road Vergennes, VT 05491 USA (802) 877-1200		

Description: Aluminum frame. Tempered Glass cover. Copper absorber with Moderately Selective Black Paint. Fiberglass side insulation and Fiberglass back insulation. Water was the fluid for performance tests. Gross Area: 2.976 m² (32 ft²). Aperture Area: 2.783 m² (30 ft²).

GLAZED COLLECTOR THERMAL PERFORMANCE RATING

Megajoules Per Panel Per Day				Thousands of BTU Per Panel Per Day			
CATEGORY	CLEAR DAY	MILDLY CLOUDY	CLOUDY DAY	CATEGORY	CLEAR DAY	MILDLY CLOUDY	CLOUDY DAY
A (-5 °C)	42.7	32.3	22.0	A (-9 °F)	40.5	30.6	20.8
B (5 °C)	38.3	27.9	17.5	B (9 °F)	36.3	26.4	16.6
C (20 °C)	31.6	21.4	11.2	C (36 °F)	29.9	20.2	10.6
D (50 °C)	18.5	9.3	1.6	D (90 °F)	17.5	8.8	1.5
E (80 °C)	7.1	0.8	0.0	E (144 °F)	6.7	0.8	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

Efficiency Equation [NOTE: Based on gross area and (P)-Ti-Ta]	Y INTERCEPT	SLOPE
S I UNITS: $\eta = 0.685 - 3.75590 (P)/I - 0.01512 (P)^2/I$	0.694	-4.81 W/m ² .°C
I P UNITS: $\eta = 0.685 - 0.66160 (P)/I - 0.00150 (P)^2/I$	0.694	-0.80 Btu/hr.ft ² .°F

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

Kα = 1	-0.34 (S)	0.082 (S) ²	Kα = 1	-0.25 (S)	Linear Fit (S) ²
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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.

[Signature]
Technical Director

January 05, 2010

