



CERTIFIED SOLAR COLLECTOR

SUPPLIER:
UMA Solar
 950 Sunshine Lane
 Altamonte Springs, FL 32714 USA
 www.umasolar.com
 In Accordance with:
SRCC Standard 100-2013-01

BRAND: Heliocol
 MODEL: HC
 COLLECTOR TYPE: Unglazed Flat Plate
 CERTIFICATION #: 10001884
 Original Certification: November 13, 2013
 Expiration Date: October 08, 2025

The solar collector listed below has been evaluated by the Solar Rating & Certification Corporation™ (SRCC™), an ANSI accredited and EPA recognized Certification Body, in accordance with SRCC OG-100, Operating Guidelines and Minimum Standards for Certifying Solar Collectors, and has been certified by the SRCC. This award of certification is subject to all terms and conditions of the Program Agreement and the documents incorporated therein by reference. This document must be reproduced in its entirety.

COLLECTOR THERMAL PERFORMANCE RATING (Collector Tested per ISO 9806)							
Kilowatt-hours (thermal) Per m ² Per Day				Thousands of Btu Per ft ² Per Day			
Climate ->	High Radiation (6.3 kWh/m ² .day)	Medium Radiation (4.7 kWh/m ² .day)	Low Radiation (3.1 kWh/m ² .day)	Climate ->	High Radiation (2000 Btu/ft ² .day)	Medium Radiation (1500 Btu/ft ² .day)	Low Radiation (1000 Btu/ft ² .day)
Category (Ti-Ta)				Category (Ti-Ta)			
A (-5 °C)	6.5	5.1	3.7	A (-9 °F)	2.1	1.6	1.2
B (5 °C)	3.3	2.0	0.8	B (9 °F)	1.0	0.6	0.2
C (20 °C)	0.2	0.0	0.0	C (36 °F)	0.1	0.0	0.0
D (50 °C)	0.0	0.0	0.0	D (90 °F)	0.0	0.0	0.0

A- Pool Heating (Warm Climate) **B-** Pool Heating (Cool Climate) **C-** Water Heating (Warm Climate)
D- Space & Water Heating (Cool Climate) **E-** Commercial Hot Water & Cooling

COLLECTOR SPECIFICATIONS					
Gross Area:	2.244 m ²	24.15 ft ²	Dry Weight:	5 kg	11 lb
Net Aperture Area:	2.244 m ²	24.15 ft ²	Fluid Capacity:	7.2 liter	1.9 gal
Absorber Area:	2.244 m ²	24.15 ft ²	Test Pressure:	1103 kPa	160 psi

TECHNICAL INFORMATION		Tested in accordance with: ISO 9806
ISO Efficiency Equation [NOTE: Based on gross area and (P)=Ti-Ta]		
SI UNITS:	Wind speed (u) in m/s, Temperature (Ti – Ta) in °C, Radiation (G") in W/m ² $\eta = (0.909)(1 - 0.0460u) - (11.9716 + 14.2950u)(P/G)$	
IP UNITS:	Wind speed (u) in mph, Temperature (Ti – Ta) in °F, Radiation (G") in Btu/hr-ft ² $\eta = (0.909)(1 - 0.0206u) - (2.1084 + 1.1254u)(P/G)$	

Incident Angle Modifier								Test Fluid:	Water
θ	10	20	30	40	50	60	70	Test Mass Flow Rate:	0.0987 kg/(s m ²) 72.78 lb/(hr ft ²)
K _{ra}	1.00	1.02	1.04	1.07	1.08	1.03	0.57	Impact Safety Rating: 0	

REMARKS:All sizes of this collector are certified.

Jen Higgins

Technical Director

