



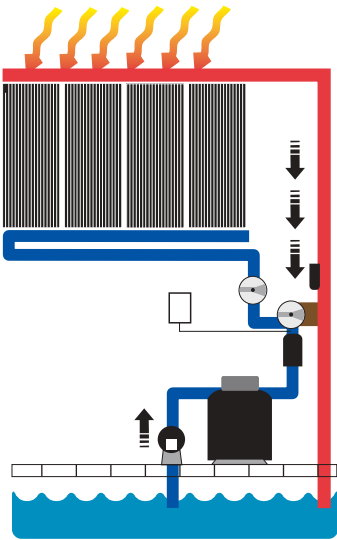
**SMART DESIGN** that stands the test of time. Heliocol solar pool heating systems are known for their design excellence with a proven track record for efficiency, reliability, and safety.



## THE FEATURES

## ADVANTAGES

Patented individual tube design	Allows expansion and contraction, eliminating cracks and leaks. Lets roof breathe, keeping it clean and dry.
Patented mounting hardware	Eliminates hoses, clamps and straps. No gaps between panels for smoother look; less than half the number of roof penetrations.
One-piece over molded construction	Eliminates welds and weld leaks.
Hurricane resistant	Can withstand hurricane-force winds; Heliocol panels are approved by most property and casualty insurance carriers.
Low collector-head loss	Reduces pump requirements.



### Using the power of the sun to heat your pool:

- A.** Using your existing pool pump, pool water is directed through a series of valves to your solar collectors.
- B.** Pool water enters the solar collectors at the bottom and rises to the top through the individual tubes of the collector.
- C.** As the water rises through the collector, it is heated by the sun's radiant energy
- D.** The water is then returned to the pool to repeat the cycle until your pool has been warmed by the sun.

## CERTIFICATION DATA

- ISO 9001:2008 and ISO 14001:2004
- Ortech International Laboratories
- Solar Rating & Certification Corporation (SRCC)
- Solar Energy Analysis Laboratory (SEAL)
- DSET Laboratories, Inc.
- HRS, Florida (Required for commercial use)
- Florida Solar Energy Center (FSEC)
- British National Water Council (for potability)
- German Federal Health Board
- NSF 50 for Recreational Water Facilities
- IAPMO #S-7379

## WHAT ISO CERTIFICATION MEANS TO YOU

Established in 1947, the International Organization for Standardization (ISO) is a worldwide federation of national standards bodies representing over 130 countries. ISO 9001-2008 Certification is a standard granted only to companies performing at the highest levels in their industries.

Heliocol is the first solar pool manufacturer in the world to achieve ISO 9001- 2008 Certification. This certification process took years of measuring Heliocol's customer service, low product failure rate, engineering and general business management.

# TECHNICAL INFORMATION AND SPECIFICATIONS

## HELIOCOL HC-50

Thousands of BTU's per day per panel

### SOLAR INSOLATION

Category T(°F)		2,000 BTU/ft <sup>2</sup>	1,500 BTU/ft <sup>2</sup>	1,000 BTU/ft <sup>2</sup>
Water temp. minus air temp.	A (-9)	101.28	77.17	57.88
	B (+9)	48.23	28.94	9.65
	C (+36)	4.82	0	0
	D (+90)	0	0	0

## HELIOCOL HC-38

Thousands of BTU's per day per panel

### SOLAR INSOLATION

Category T(°F)		2,000 BTU/ft <sup>2</sup>	1,500 BTU/ft <sup>2</sup>	1,000 BTU/ft <sup>2</sup>
Water temp. minus air temp.	A (-9)	77.03	58.69	44.02
	B (+9)	36.68	22.01	7.34
	C (+36)	3.67	0	0
	D (+90)	0	0	0

## HELIOCOL HC-40

Thousands of BTU's per day per panel

### SOLAR INSOLATION

Category T(°F)		2,000 BTU/ft <sup>2</sup>	1,500 BTU/ft <sup>2</sup>	1,000 BTU/ft <sup>2</sup>
Water temp. minus air temp.	A (-9)	85.43	65.09	48.82
	B (+9)	40.68	24.41	8.14
	C (+36)	4.07	0	0
	D (+90)	0	0	0

## HELIOCOL HC-30

Thousands of BTU's per day per panel

### SOLAR INSOLATION

Category T(°F)		2,000 BTU/ft <sup>2</sup>	1,500 BTU/ft <sup>2</sup>	1,000 BTU/ft <sup>2</sup>
Water temp. minus air temp.	A (-9)	61.22	46.64	34.98
	B (+9)	29.15	17.49	5.83
	C (+36)	2.92	0	0
	D (+90)	0	0	0

## KEY:

A - Pool Heating (Warm Climate)   B - Pool Heating (Cool Climate)   C - Water Heating (Warm Climate)  
D - Space & Water Heating

## CERTIFICATION DATA

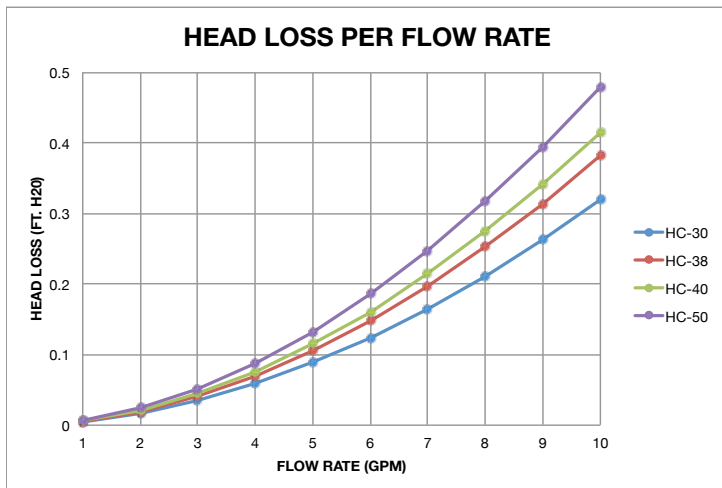
BTUs PER DAY

Certifying Organization	HC-50	HC-40	HC-38	HC-30	Performance Expectations
National Standard SRCC Equivalent of 1000 BTU/sq ft	48,230	40,680	36,680	29,150	$\eta = (0.909)(1 - 0.0206\omega) - (2.1084 + 1.1254\omega)(P/G^3)$
Florida Standard	956 BTU's/ft <sup>2</sup>				$0.828 - 3.26 (T_i - T_a) / K_f X = 1.00 - 0.11(S)$

## COLLECTOR DATA

Collector Model	HC-50	HC-40	HC-38	HC-30
Size, Nominal	4' x 12.5'	4' x 10.5'	4' x 9.5'	4' x 8'
Width	46.66"	46.56"	46.56"	46.56"
Length	151.44"	127.00"	114.84"	91.00"
Aperture Area (SF)	48.23	40.68	36.68	29.15
Manifold Diameter	2"	2"	2"	2"
Weight (dry)	22lbs	19lbs	18lbs	15lbs
Volume Capacity	3.7 gal	3.1 gal	2.8 gal	2.4 gal
Working Pressure	90 psi	90 psi	90 psi	90 psi
Burst Pressure	270 psi	270 psi	270 psi	270 psi
Typical Flow	5-7 gpm	4-6 gpm	3.8-5.5 gpm	3-4.4 gpm

## HEAD LOSS PER FLOW RATE



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