

ELM Solar Collectors

Simply Wonderful...

Owning a swimming pool means poolside parties... early morning workouts... refreshing dips... family fun and romantic late night swims. Owning an ELM pool heater means more enjoyment more often. Join the hundreds of thousands of pool owners that have extended their swimming seasons with a solar pool heating system.



Built To Last...

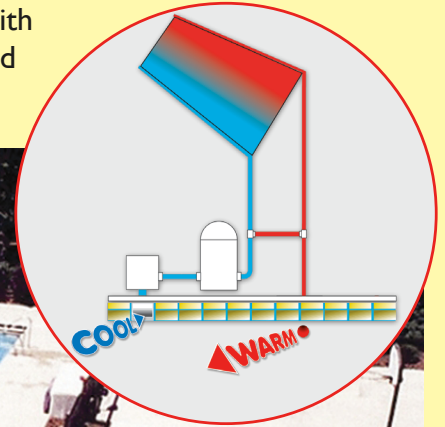
ELM solar collectors have been designed from thirty years of experience in manufacturing of solar heating equipment. They have undergone extensive testing resulting in performance certification by accredited independent laboratories and approval agencies. Performance rated at 1,000 BTU's per square foot by the Florida Solar Energy Center.

Ten Year Limited Warranty

ELM collectors lead the way in value backed by a Ten Year Limited Warranty with five full years of protection. You can relax with both ELM and ELM Plus knowing that you own the "Best Backed" system in the world.

Wonderfully Simple...

Using your existing pool pump, water is circulated through the many small passages of the solar collector, where it is warmed by the sun. This warm water then flows directly back to your pool through the regular pool plumbing. The ELM pool heater is designed to work with your existing pump and equipment.



ELM Quality and Reliability makes it the Pool Professional's Preferred Solar Pool Heating System.

ELM Plus

For added piece of mind, ELM Plus collectors carry a Full Ten Year Warranty.



CERTIFICATIONS, APPROVALS & TESTING

The ELM and ELM Plus solar pool heating systems meet or exceed the criteria for approvals from the following accredited independent laboratories and approval agencies:

- International Association of Plumbing and Mechanical Officials (IAPMO)
- Florida Solar Energy Center
- Dade County
- City of Los Angeles
- Solar Rating and Certification Corp. (SRCC)
- DSET Exposure Test, New River, Arizona

MATERIALS

Absorber Plate - Propylene copolymer with synergistic antioxidants and UV screen including carbon black.
 Mounting Brackets - Glass reinforced polypropylene.
 Holding-Down Straps - High tensile woven polyester.
 Connecting Hoses - Dual-Durometer EPDM.
 Clamps - Type 302/304 all stainless steel.
 (Optional all-stainless steel mounting hardware also available)

Available in 1 1/2" low profile design or 2" for larger commercial installations

DIMENSIONS

	1-1/2"			2"		
Nominal Size-fit	4 x 12	4 x 10	4 x 8	4 x 12	4 x 10	4 x 8
Overall Collector Length-in	144.0	120.0	96.0	144.0	120.0	96.0
Collector Width-in	47.0	47.0	47.0	47.0	47.0	47.0
Manifold Length-in	50.5	50.5	50.5	50.5	50.5	50.5
Manifold O.D.-in	1.9	1.9	1.9	2.4	2.4	2.4
Manifold I.D.-in	1.5	1.5	1.5	2.0	2.0	2.0
Gross Collector Area-ft ²	47.3	39.3	31.4	47.3	39.3	31.4
Net Collector Area-ft ²	47.3	39.3	31.4	47.3	39.3	31.4

WEIGHTS

Dry-lbs.	21.3	17.1	14.3	22.30	18.1	15.3
Wet-lbs.	48.0	41.6	35.1	54.00	47.6	41.1
Wet-lbs./ft ²	1.01	1.06	1.12	1.14	1.20	1.31
Fluid Capacity-gal	3.2	2.9	2.5	3.80	3.5	3.1

FLUID FLOW RATES

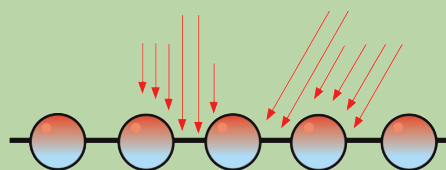
Maximum-GPM	10.0	10.0	10.0	10.0	10.0	10.0
Minimum-GPM	3.0	2.5	2.5	3.00	2.5	2.5
Recommended-GPM	5.0	4.0	3.3	5.00	4.0	3.3
Max. Collectors with Single Feed @ Recommended Flow Rate	10	12	12	12	14	14

PRESSURES

Pressure Drop - .30 ft. head (13PSI)
 pressure loss @ recommended flow rate.
 20 ft. head (.09PSI) pressure loss @ minimum flow rate.
 Max . Fluid Pressure - Greater than 85 PSI @ 80°F
 Recommended Max. Operating Pressure - 35 PSI @ 140°F

Specifications subject to change without notice.

PROVEN PERFORMANCE IN ALL CLIMATES



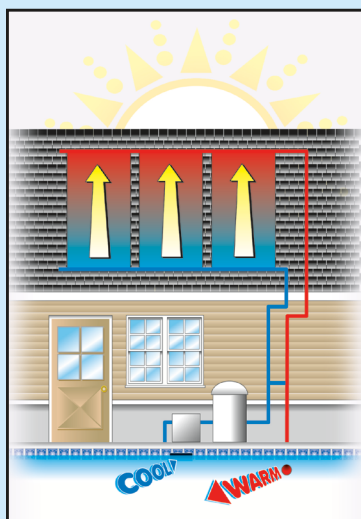
Cross section of a Sun-Swim Solar Collector, featuring "Sun Tracking" Design.

Engineered "tube and web" construction relieves the thermal stress of expansion and contraction assuring years of trouble free operation.

THERMAL PERFORMANCE RATINGS

Thermal Performance Equation - $n = 85.8 - 3.42$
 Incident Angle Modifier - $K_{qr} = 1.0 - 0.03$
 (Rated in accordance with ASHRAE standard 96-80)

Florida Solar Energy Center Certification
 (BTU's per standard day)
 4 x 12 - 47,200 / 4 x 10 - 39,300 / 4 x 8 - 31,500



www.elmdistribution.com
 1 (866) 765-2713

Available through: