# Commercial Grade... Built to Last!



# NSF-50 Approved for Durability, Safety, and Toxicity

Ultra-Swim is available in standard 1-1/2" as well as 2" manifold designs to accomodate high-flow, high-efficiency pool filtration systems. The National Sanitation Foundation has listed Ultra-Swim as an approved product for use in recreational commercial aquatic equipment (NSF-50).

## DIMENSIONS

## 1-1/2" SERIES

# 2" SERIES <u>16050-12</u> .....<u>16050-10</u> ....<u>16050-08</u>

Model Number	. <u>16045-12</u> .	<u>16045-10</u>	<u>16045-08</u>
Nominal Size ft	4x12	4x10	4x8
Overall Collector Length-in	144.0 .		
Collector Width-in	47.0 .		
Manifold Length-in	50.5 .		50.5
Manifold O.Din	1.9 .		
Manifold I.Din	1.5 .	1.5	1.5
Gross Collector Area-ft2	47.3 .		
Net Collector Area-ft2	47.3 .		

# **WEIGHTS**

Dry-lbs	21.3		14.3
Wet-lbs			
Wet lbs-ft2	1.01	1.06	1.12
Fluid Capacity-gal	3.2		2.5

# **FLUID FLOW RATES**

Maximum-GPM	10.0	10.0	10.00
Minimum-GPM	3.0	2.5	2.5
Recommended-GPM	5.0		3.3
Max. Collector with Single			
Feed @ Recommended			
Flow Rate			12

# 

10.0	10.0	10.0
3.0		
5.0		3.3

## PRESSURES

Pressure Drop, PSI@GPM:1 1/2" -0.05@2.5 0.13@5.0 0.39@10.0 2" -0.05@2.5 0.20@5.0 0.60@10.0 Max. Fluid Pressure: Greater than 100 PSI @ 80°F Recommended Max. Operating Pressure: 50 PSI @ 140°F

# **CERTIFICATIONS & APPROVALS**

Ultra-Swim solar collectors have been designed from over thirty years of experience in manufacturing of solar heating equipment. They have undergone extensive testing resulting in performance certification and meet or exceed the criteria for approval from all nationally and locally accredited independent laboratories and recognized approval agencies. Ultra-Swim collectors are performance rated at 1,100 BTU's per square foot by the Florida Solar Energy Center.



IAPN R&7

(BTU's per standard day at 80°F air / 86°F inlet) Incident Angle Modifier-Kgr = 1.0 - 0.13 4x12 = 51,744 / 4x10 = 43,120 / 4x8 = 34,496 (Tested in accordance with ISO 9806)





Florida Solar Energy Center Certified Ratings Efficiency Equation n = 0.935 - 8.930(P/G) - 0.647(P<sup>2</sup>/G)

Available through:



www.ultraswimsolar.com





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# Enjoy your own solar heated pool!

# Simply Wonderful

Do you remember why you wanted a pool in the first place? Poolside parties, early morning workouts, family fun, romantic late-night swims... that's what it's all about!

Heating your pool with an Ultra-Swim Solar Pool Heater means more enjoyment, more often. Hundreds-of-thousands of pool owners have extended their swimming season with solar, and are now realizing the full potential of their pools.





"Since installing your system, we have thoroughly enjoyed the pool more and more. We've had numerous gatherings and get rave reviews. We love it!"

-Bryan D., Newport News, VA

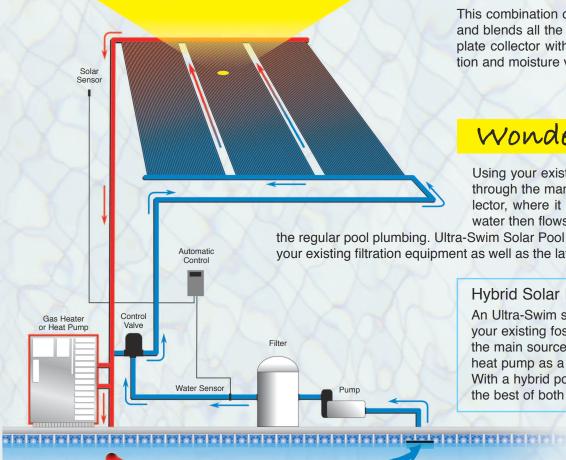
# U Solar Collectors

# Stress-Free

Ultra-Swim collectors carry the strongest warranty in the business because they are backed by Aquatherm Industries. Every warranty on every collector has been honored for more than thirty years. so your satisfaction and peace of mind are assured. You can relax with the knowledge that you own the "Best Backed" system available in the world.

Ultra-Swim Quality and Reliability makes it the Pool Professional's Preferred Solar Pool Heating System.

### Sunshine Lets You Save Natural Gas or Propane \$21,000 - \$28,000 Dollar for dollar, of all the options available to heat your pool, solar energy is the most cost-effective and environmentally **Operating Costs** friendly method available. In fact, solar pool heating is so effective that it's the largest use of solar thermal energy in the U.S.... accounting for over 75% of all solar thermal (heating) shipments! (Source Department of Energy Solar Collector Activity Report). Heat Pump \$12,000 - \$18,000 Installed Costs Solar-No Operating Costs 0 5 Years 10 Did you know... This bar graph is 15 Years based on a cumulative that over a fifteen year period, a fifteen year period that Years includes operating costs, heat pump produces **195,000 pounds of CO**<sub>2</sub> and as well as replacing a a natural gas heater produces 360,000 pounds of CO2. heat pump once and gas Solar produces zero harmful emissions to the environment. pool heater twice.



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Strategically placed slots in the webbing of Ultra-Swim Collectors prevent moisture buildup under the collector to preserve the life of the roof. These same slots allow pressure relief during high winds so you can expect your Ultra-Swim System to still be working long after the storm has passed.

This combination of features is unique to Ultra-Swim and blends all the strength and performance of a full plate collector with the benefits of wind load protection and moisture ventilation for your roof.

# 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. Ultra-Swim Solar Pool Heaters are designed to work with your existing filtration equipment as well as the latest in pool automation technology.

# Hybrid Solar Pool Heating

An Ultra-Swim system can also work alongside your existing fossil fuel heater. It uses solar as the main source of heat and a gas heater or heat pump as a backup heater. With a hybrid pool heating system, you'll have the best of both worlds.