



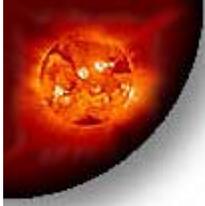
The Hottest Solar Pool Heating System on Earth!

REVOLUTION®... FAFCO's revolutionary technology thoroughly mixes the water through a subtle combination of angle, depth and frequency of "dimples" in a fully wetted surface. Pool water is directed into a revolving spiral flow, roto-washing the top and bottom surfaces of the panel, with all levels exposed to the sun's warmth. Water evenly and efficiently moves through the 2" header and the tubes, which are significantly more in number than competitors' panels. The result of this innovative engineering is the most effective solar pool heating system in the world - and a warmer, more comfortable pool temperature for you.



Notice the Patented Dimples

Reliability: FAFCO is the world's largest manufacturer of solar pool heating panels, with over 125,000 systems and 1,000,000 solar panels installed worldwide. That's nearly twice as many as our closest competitor. All FAFCO panels are made of durable, lightweight, ultraviolet-resistant, polyolefin material blended with proprietary additives at our plant under exacting, quality-control standards. The **Revolution®** Solar Panel is backed by FAFCO's 15-Year Worry-Free Warranty and the peace of mind that it's designed and built by the best in the business.



Technical Specifications

Product: Revolution® Solar Heat Exchanger

Description: The Revolution® Solar Collector is manufactured in Redwood City, California. The collector is a specially developed, highly stabilized polyolefin and is of a parallel, circular channel design. The collector channels are dimpled using a subtle combination of angle, depth, and frequency. This technology directs the water into a spiral, revolving flow exposing all the water molecules to the sun's warmth. It is unglazed, uninsulated, and designed for low temperature applications such as swimming pool heating/cooling, heat pumps, aquaculture, and hydroponics.

Dimensions: Header Length = 50.875in (1.29m)
Width (Panel Body) = 47.5in (1.21m)

| <i>Overall Dimensions</i> | <i>Effective Area</i> |
|----------------------------|---|
| 4ft x 8ft (1.22m x 2.44m) | 30.8ft ² (2.86m ²) |
| 4ft x 10ft (1.22m x 3.05m) | 38.8ft ² (3.60m ²) |
| 4ft x 12ft (1.22m x 3.66m) | 46.6ft ² (4.33m ²) |

Roof Mounting Space: Width = [Number Panels x 50.875in (129cm)] + 24in (61cm)
Length = Panel Length + 24in (61cm)

Rack Space: Width = [Number Panels x 50.875in (129cm)] + 2in (5cm)
Length = Panel Length + 6in (15cm)

| | | |
|--------------------------|----------------|--|
| Recommended Flow: | <i>Normal:</i> | 4 gpm per panel |
| | | 0.87 psi head loss (908 l/hr, 0.061 kg/cm ²) |
| | <i>Max:</i> | 8 gpm per panel |
| | | 3.47 psi head loss (1,817 l/hr, 0.244 kg/cm ²) |
| | <i>Min:</i> | 3 gpm per panel |
| | | 0.48 psi head loss (681 l/hr, 0.034 kg/cm ²) |

Panels Per Bank (max): 12 panels single end feed
17 panels diagonal feed

| | | | |
|------------------|-------------|---------------|-------------------------|
| Pressure: | <i>Temp</i> | <i>Normal</i> | <i>Max Intermittent</i> |
|------------------|-------------|---------------|-------------------------|

| <i>Temp.</i> | <i>Normal</i> | <i>Max. Intermittent</i> |
|---------------|---|-----------------------------------|
| 80°F (27°C) | 0 - 30 psi (0 - 2.2 kg/cm ²) | 45 psi (3.21 kg/cm ²) |
| 212°F (100°C) | 0 - 5 psi (0 - 0.35 kg/cm ²) | 5 psi (0.35 kg/cm ²) |
| 70°F (21°C) | Measured burst pressure of panel body = +300 psi (21.0 kg/cm ²) | |

Operating Temperature:

| | |
|---------------------------|--------------------------------|
| <i>Normal:</i> | 60°F - 90°F (16°C - 32°C) |
| <i>Max. Continuous:</i> | 212°F (100°C) |
| <i>Max. Intermittent:</i> | 250°F (121°C) w/norm. pressure |
| <i>Melt (failure):</i> | 338°F (170°C) |

Chemical Resistance: Compatible with common collector fluids.

Corrosion: Non-corrosive

Freezing: Panels should be drained before freezing conditions occur.

Weatherability: Weatherometer, accelerated outdoor exposure, and other extensive laboratory testing demonstrates long-term weatherability of Revolution™ collectors (see warranty). Additionally, FAFCO's experience of nearly 30 years and over 1,000,000 collectors installed confirms that the proprietary stabilization and high mechanical strength results in negligible warranty over the **FIFTEEN-YEAR** warranty period.

Weight Unfilled:

| <i>Panel Size</i> | <i>Gross Weight</i> | <i>Area Weight (Avg)</i> |
|-------------------|---------------------|--|
| 4ft x 8ft | 13.5lbs (5.04kg) | 0.42 lbs/ft ² (2.05 kg/m ²) |
| 4ft x 10ft | 15.9lbs (5.93kg) | 0.40 lbs/ft ² (1.95 kg/m ²) |
| 4ft x 12ft | 18.3lbs (6.83kg) | 0.38 lbs/ft ² (1.86 kg/m ²) |

Weight Filled:

(Fluid: water)

| <i>Panel Size</i> | <i>Gross Weight</i> | <i>Area Weight (Avg)</i> |
|-------------------|---------------------|--|
| 4ft x 8ft | 51.1lbs (19.1kg) | 1.60 lbs/ft ² (7.81 kg/m ²) |
| 4ft x 10ft | 59.8lbs (22.3kg) | 1.50 lbs/ft ² (7.32 kg/m ²) |
| 4ft x 12ft | 68.5lbs (25.6kg) | 1.43 lbs/ft ² (6.98 kg/m ²) |

Absorptivity: 0.96

Emissivity: 0.90

Time Constant: 64 seconds

Tested Output: 1,064 BTU/ft² (data from: Florida Solar Energy Center)

Performance Curves: *[pending]*
