

Technical Information

Solar Collector Specifications-	Part Number	HT-408	HT-410	HT-412
Nominal Size (feet)		4 x 8	4 x 10	4 x 12
Width (header length in inches)		47.8	47.8	47.8
Width Installed (includes space between headers in array)		48	48	48
Space between absorbers when installed (inches)		2.9	2.9	2.9
Length (inches)		95.5	119.5	143.5
Header Inside Diameter (inches)		2	2	2
Net Collector Area (square feet)		30.25	37.85	45.45
Net Weight Empty (pounds)		15.30	18.61	21.10
Water Capacity (gallons)		2.72	3.14	3.68
Recommended Water Flow Rate (gallons per minute)		3.2	4.0	4.8
Pressure Loss @ Recommended Flow Rate (psi)		0.05	0.09	0.14
Maximum Operating Pressure (psi)		27	27	27
Absorptivity		0.97	0.97	0.97
Emissivity		0.90	0.90	0.90
Heating Capacity, Certified by FSEC (B tu/sq.foot/day)		1000	1000	1000
Heating Capacity, Certified by FSEC (B tu/collector/day)		30,400	38,000	45,600

Hi-Tec Materials

Hi-Tec Collector

Propylene copolymer with synergistic antioxidants and UV screen including carbon black

Strap Brackets

Universal Strap Anchor (USA)

Universal Mounting Bracket

Glass-Filled Polypropylene with UV stabilizer

Flexible Couplings

Ethylene-propylene-diene-terpolymer (EPDM) rubber

# of Collectors	Width of Array
5	20'
6	24'
7	28'
8	32'
9	36'
10	40'
11	44'
12	48'

* Allow appropriate, additional space for piping at ends and for roof obstructions.



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Features & Technical Information

Features

Captures the Most Solar Energy

Hi-Tec pool collectors have been tested by two different independent laboratories (The Florida Energy Center and Ortec Laboratories). In each case, Hi-Tec received one the highest test scores for heat collection ever achieved for polypropylene solar pool collectors.

Most Durable Construction

Our headers are molded directly to the extruded absorber surface, forming a permanent, leak-free bond. Hi-Tec's tube-on-fin absorber expands and contracts with temperature changes, relieving the stresses that cause other solar collectors to deteriorate with age.

Proven Materials

Hi-Tec is made from a special formulation of polypropylene that has demonstrated high reliability in solar pool heating applications for over twenty years, in all climates. Our proprietary formulation attracts the sun's energy but resists its damaging effects.

Better Flow

Generous, 2" (inside diameter) headers and straight-through water flow in the absorber reduce pressure losses, improving water flow. Better flow raises collector performance and assures maximum pool filtration.

Better Appearance

Our injection molding process smoothly joins the header and absorber, assuring consistently superior workmanship. Installed collectors are close-coupled, minimizing the space between absorbers. The narrower gap improves the appearance of the array and fits more solar into less roof area.

USA Mounting System

We designed our USA Mounts to be strong, protect each anchor point from the elements and to increase the overall wind load strength of the Hi-Tec installation. Further, our USA Mounts are comprised of 3 parts, thus making them virtually weatherproof.



Universal Mount

Our exclusive Universal Mount system makes Hi-Tec's installation fast, safe, and durable. Built-in sealing pockets assure sealed anchor points. Flexible couplings, and our specially designed, interlocking semi-dovetails allow the collector array to move horizontally with temperature changes, preventing buckling and relieving stresses on anchor points. Hi-Tec's Universal Mount design spaces the headers away from the roof, and this protective design feature, combined with the tube-on-fin contour, prevents moisture build-up without requiring additional, costly substrate.



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