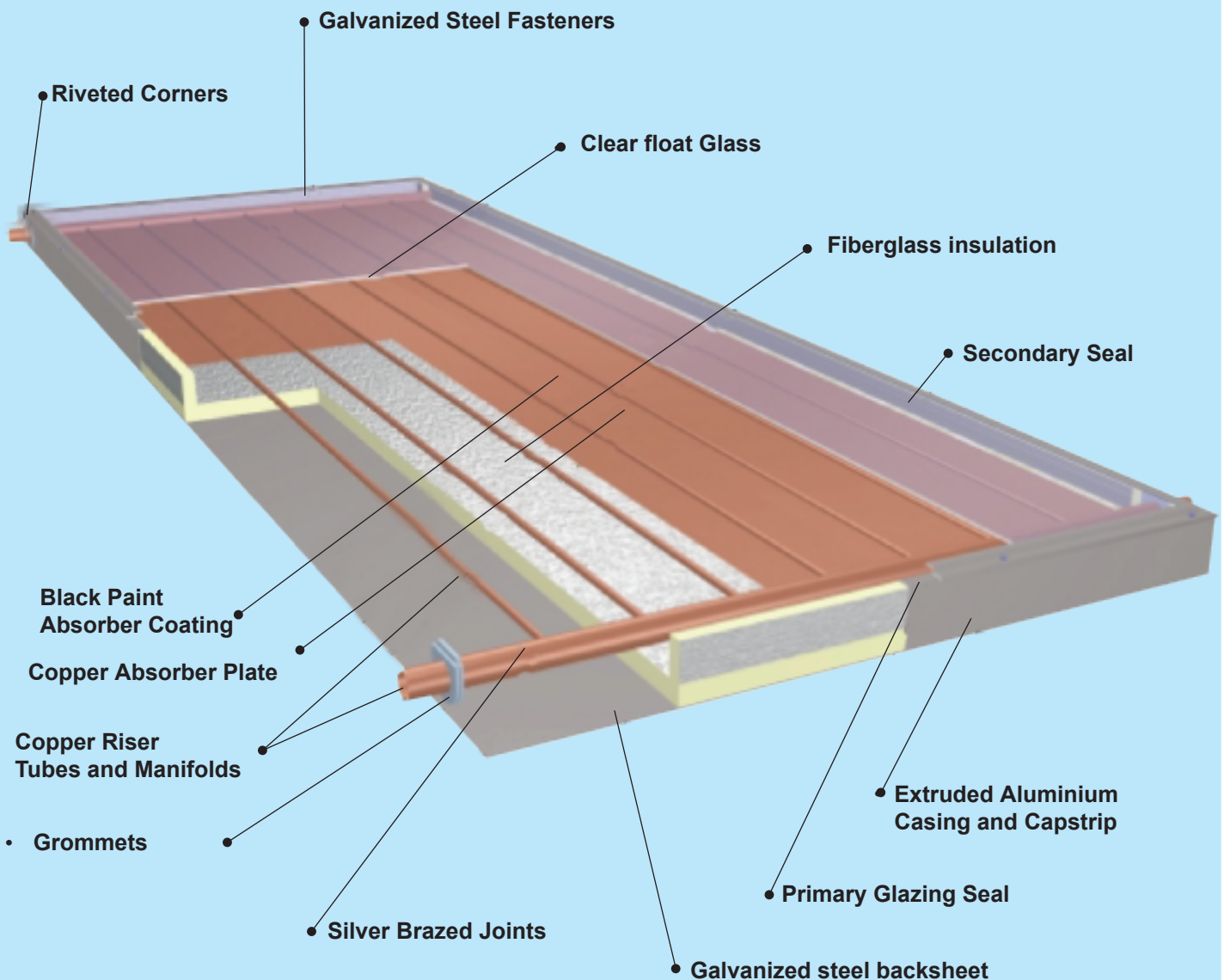


# THE LOW COST PANEL FOR SOLAR WATER HEATING TECHNOLOGY



Solarnet Model No.	Width mm	Length mm	Depth mm	Gross Area m <sup>2</sup>	Net Aperture m <sup>2</sup>	Dry Weight, kg	Fluid Capacity litres	Design Flow Rate l/h	Pressure Drop at Design Flow Rate mmHg	Max. Flow Rate l/h	Maximum Operating Press bar	Std. Header Width, mm	Std. Header Diameter, mm Nominal	Header, Center to Center, mm
LC1	910	2010	88.5	1.83	1.65	28	3	140	40	3000	10	970	28	1890

## THERMAL PERFORMANCE RATINGS

### MODEL HE

ISO			
wh/m <sup>2</sup> /Day			
Category (T <sub>m</sub> -T <sub>a</sub> )	CLEAR DAY	MILDLY CLOUDY	CLOUDY DAY
<small>T<sub>m</sub> = average fluid temp T<sub>a</sub> = ambient air temp</small>	6300 wh/m <sup>2</sup> /Day	4700 wh/m <sup>2</sup> /Day	3200 wh/m <sup>2</sup> /Day
A(5°C)	4196	3075	2033
B(10°C)	4002	2875	1835
C(20°C)	3614	2473	1441
D(50°C)	2448	1269	257
E(80°C)	1283	66	-

A-Pool Heating(Warm Climate) B-Pool Heating C-Water Heating (Warm Climate) D-Water Heating (Cool Climate) E-Air Conditioning/Industrial Process Heat. Thermal performance is obtained by multiplying the collector output for the appropriate application and isolation level by the total gross collector area.

(Performance specifications subject to testing error of +/- 3%)

## ENGINEERING SPECIFICATIONS

The following shall be the specifications for the solar collectors. Collectors shall be Solarnet LC model \_\_\_\_\_, and shall be of the glazed liquid flat plate type. Collectors shall be tested in conformance with ASHRAE 93-1986, and NF P50-501

### GENERAL

The dimensions of the collector shall be \_\_\_\_\_cm in length, \_\_\_\_\_ cm in width and 8.85cm in depth. The collector casing shall be an aluminum extrusion, minimum thickness 1.5mm. The casing shall have notched framewalls for ease of plate removal and reinstallation. Sheet metal screwed fasteners shall be galvanized steel. The backsheet shall be galvanized steel not less than 0.6 mm thickness.

### GLAZING

The collector glazing shall be one sheet of clear float glass, with a minimum of 4 mm thickness, and a minimum transmissivity of 89 per-cent. The glazing shall be-thermally isolated from the casing by a continuous sunresistant gasket. There shall be a continuous secondary seal between the backsheet and casing to minimize moisture from entering the casing.

### INSULATION

The insulation shall be glass fiber blanket, density 24kg/m<sup>3</sup>, of a minimum 2.5 cm thickness, siliconed in place to the aluminum back-sheet. The sides and ends of the collector shall be insulated with a

Specifications subject to change without notice.

of 2.5cm foil-faced glass fiber.

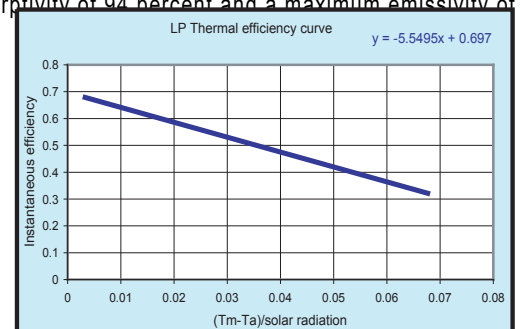
### ABSORBER PLATE AND PIPING

The absorber shall consist of a roll-formed copper plate of no less than 0.2mm thickness. Risers shall be a minimum of 15mm O.D. Type M copper tubing on no more than 10.5 cm centers partially soldered to the plate utilizing a non-corrosive solder paste with a melting point of 235°C.

The risers shall be brazed to 28mm O. D. Type M copper manifolds utilizing a copper phosphorous brazing alloy with no less than 15 percent silver content, and conforming to the American Welding Society's BCuP-5 classification. Grommets shall isolate the manifold from the aluminum casing. The absorber plate shall be designed for 10 bar maximum operating pressure.

### ABSORBER COATING AND PERFORMANCE CURVE

The absorber coating shall be a moderately-selective black paint with a minimum absorptivity of 94 percent and a maximum emissivity of 56 percent.



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