



# Harnessing nature for a better tomorrow.

SOLAR WATER HEATER

**FPC SERIES** 

Harnessing the sun



Sacrificial
Anodic Corrosion
protection



ISI Electric Back up heater optional



FPC NO	FPC NON-PRESSURISED MODEL												
Model	Utility points	Number of persons using hot water	Working Pressure Kg/Sq. cm	Number of collector	Back up heater (optional)	Inner tank	"Inlet/outlet pipe size of storage tank"	Outer Cover	Tank Insulation	"Approx.wt of one complete system without water Kg"	"Approx. System height from the roof m"	"Min. required over head tank height from the roof m"	"Min. space area reqd. (NS X EW) m"
100 LPD	2	2-3	1	1	2KW	SS 304 L	1.9 cm (3/4")	Precoated GI sheet	PUF	75	1.425	1.575	2.587 x 1.172
200 LPD	4	5-6	1	2	2KW	SS 304 L	1.9 cm (3/4")	Precoated GI sheet	PUF	129	1.576	1.726	2.718 x 2.320
300 LPD	5	8-9	1	3	2KW	SS 304 L	1.9 cm (3/4")	Precoated GI sheet	PUF	193	1.78	1.93	3.015 x 3.335
500 LPD	8	14-15	1	4	4KW (2x2 Nos)	SS 304 L	2.54 cm (1")	Precoated GI sheet	PUF	267	1.846	1.996	3.011 x 4.485

FPC PR	FPC PRESSURISED MODEL											
Model	Utility points	Number of persons using hot water	Working Pressure Kg/Sq. cm	Number of collector	Back up heater (optional)	Inner tank	"Inlet/outlet pipe size of storage tank"	Outer Cover	Tank Insulation	"Approx.wt of one complete system without water Kg"	"Approx. System height from the roof m"	"Min. space area reqd. (NS X EW) m"
100 LPD	2	2-3	8	1	2KW	SS 304-L	1.9 cm (3/4")	Precoated GI sheet	PUF	83.5	1.702	2.6 x 1.12
200 LPD	4	5-6	8	2	2KW	SS 304-L	1.9 cm (3/4")	Precoated GI sheet	PUF	138.5	1.702	2.6 x 2.24
300 LPD	5	8-9	8	3	2KW	SS 304-L	1.9 cm (3/4")	Precoated GI sheet	PUF	192	1.702	2.6 x 3.37
500 LPD	8	14-15	4	4	4KW (2x2 Nos	SS 304-L	2.54 cm (1")	Precoated GI sheet	PUF	285.5	1.75	2.95 x 4.65

## **V-Guard Solar Water Heater:**

Energy- friendly, eco-friendly, user-friendly water heaters with state-of-the-art technology. V-Guard solar water heaters give round-the-clock hot water for you and your family.

## **Working Principle:**

When the sun's rays strike the absorber fins, most of the energy is absorbed and transformed into heat which is conducted to the water flowing in riser tubes attached to the absorber plate. The water is circulated to the storage tank and continues to re-circulate till the evening. The circulation takes place through the process of natural convection (Thermosyphoning).

ANNUAL SAVINGS ON ELECTRICITY BILLS (SAMPLE CHART)							
Electricity consumed for heating 100 litres of water in a25 Lit. electric water heater	4.65 Elect. Unit/day (approx.)						
4.65 x 300 (sunshine days)	1395 Elect. Unit						
1395 x 7.5 (rate/unit)*	Rs. 10462/- (approx)						

No. of units saved will depend on the usage.

\*Rate is applicable in Kerala for consumption of 500 and above units per month

Note: Only 300 days of a year have considered. Rest of the days are assumed to be cloudy and overcast

### **Technical features:**

• Collector box is made of specially extruded aluminium channel for durability and good aesthetic look • The top cover is made of toughened glass with high transmissivity • Absorber fins are made of high quality aluminium and coated with high absorptivity low emissivity solar selective coating • The risers and headers are made of thick gauged high quality copper tubes • The absorber fins are ultrasonically bonded to the riser tubes for high thermal efficiency and longer life • The storage tank is made of high quality stainless steel and is well insulated with PUF to minimise heat loss to the surroundings • Clear sunny days, the system is capable of generating 50°C to 70°C of hot water • Weather proof, ISI marked back up heater with adjustable, automatic temperature controller.

Large scale systems such as 1000 Lpd, 2000Lpd, 3000Lpd, 4000Lpd and 5000Lpd are available in non-pressurised category. 1000Lpd is available in pressurised category too.

• Due to the continuous development & product improvement, the company reserves the right to change the specification without any prior notice.

# V-Guard Industries Ltd.

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