

FPC GL

TECHNICAL SPECIFICATION (AS PER LEGAL METROLOGY GUIDELINES)

1	System capacity	100, 200, 300 & 500 Liters per day
2	Make	V-GUARD INDUSTRIES LTD
3	System Water Output Temperature	30-35°C temperature rise from ambient temperature
4	Type of Collector	FPC (Flat Plate Collector)
5	Tank Mounting	Horizontal
6	Number of Collectors	(100 LPD -1 Nos of FPC, 200 LPD -2 Nos of FPC, 300 LPD -3 Nos of FPC & 500 LPD -4 Nos of FPC)
7	Application	Bathing / Washing
8	Utility Points	2 (100 LPD), 4 (200 LPD), 5(300 LPD) & 8(500 LPD)
9	Number of Persons Can Use Hot Water	2-3 (100 LPD), 5-6 (200 LPD), 8-9 (300 LPD), 14-15 (500 PD)
10	Back Up Heater Capacity	100-300 LPD - 2 kW with Thermostat, 500 LPD - 3 kW with Thermostat
11	Cleaning /Service Provision	Flange on one side of the tank
12	Support Structure	Angular Section steel with Black Powder coating for long Life
13	Working Pressure	1.0 kg/sq.cm
14	Min Area Required for Installation (NS x EW in meters)	2.53 x 1.12 m (100 LPD), 2.53 x 2.25 m (200 LPD), 2.53 x 3.36 m (300 LPD), 2.62 x 4.49 m (500 LPD)
15	System Height from Base	100-300 LPD: 1.72 m, 500 LPD: 1.82 m
16	Circulation	Thermosyphon type
17	Overnight Temp Drop	≤ 5°C
18	Weight of the Storage Tank	38 kg (100 LPD), 54 kg (200 LPD), 76 kg (300 LPD), 109 kg (500 LPD)
19	Inlet and Outlet Piping	100-300LPD :1.9 cm (3/4) 500LPD :2.54 cm (1)

Tank Specifications		
20	Inner Tank	MS Glass Lined
21	Inner Tank/End dish Thickness	100-300 LPD: 1.8mm (shell) & 1.8 mm (End dish) 500 LPD: 1.8 mm (shell) & 2 mm (End)
22	Tank Welding	High quality MIG Welding
23	Insulation	≥50mm thick High density PUF insulation with uniform density of Minimum 36 kg/m ³
24	Outer Cladding	PPGI (0.4mm Thickness)
25	End Caps	100 - 300 LPD: 0.4 mm PPGI, Color: Black, 500 LPD: Aluminum, Color: Black
26	Anode Protection	100-300 LPD: Magnesium Anode 350mm length 500 LPD: Magnesium Anode 350mm & 200 mm
27	System Inclination Angle	25 Degree
28	Tank Packing	100-200 LPD - 5 Ply Carton, 300-500 LPD - 7 Ply Carton

FLAT PLATE COLLECTOR		
1		Solar Flat Plate shall be BIS marked and as per IS : 12933/2003
2	Type	Copper-Aluminium
3	Collector size	203 x 103 x 10 cm + 0.5 cm
4	Collector Frame	Extruded Aluminium, 1.1mm, Aluminium extrusion, ANODISED

5	Finish	Powder coated off white
6	Glass retainer	Extruded Aluminium, 1.2mm
7	Finish	Powder coated
8	Header	Copper-2.54 cm (1)Ø, 0.5 mm thick
9	Riser	Copper - 1.27 cm (½)Ø, 0.50 mm thick- 9 Nos
10	Fin	Aluminium - 0.19mm thick
11	Width of Fin	12cm
12	Number of Fins	9
13	Bottom sheet	Aluminium sheet, riveted & sealed with silicone Sealant from inside
14	Glass	Toughened textured prismatic glass, 3.2mm thick
15	Glass Beading	EPDM
16	Grommets	EPDM
17	Flanges	Brass
18	Bottom Insulation	Fiberglass / Rockwool 50 mm thick

19	Side Insulation	Fiberglass / Rockwool 25mm thick
20	Reflective foil	Aluminium, 50 microns
21	Frame Corners	Sealed from inside with Silicone Sealant
22	Fasteners	(ss 304 grade
23	Coating	Selective, black chrome - NALSUN
24	Absorptivity	> 0.95
25	Emissivity	<0.2
26	Bonding between Fin & Raiser	Ultrasonic welding
27	Working pressure	1.0 kg/sq.cm
28	Collector insulation	Rock wool pads for side & bottom. - 2.5 cm
29	Flanges	Brass, round with four bolt holes.
30	Collector area	2.0 sq.m
31	Collector Weight	40 Kg
32	Collector Structure	Powder Coated steel