

## Device Component

**The system consists from four main parts:-**

**1- Solar collector which includes:-**

**a) Receiver**

Which fabricated from high goodness imported copper pipes formed as a coil between two steel plates by a special forming in the company according to **HEATCO** design which depend on easy flow of water.

And the bored surface is painted by black coated material which has high absorption of sun rays to achieve high temp. Degree and the other side are coated by anti rust paint.

**b) Outside Cover**

From imported heat treatment glass (Low iron temp glass) to achieve pure sun rays also can operate with high temp degree and is fixed in suitable inclined degree to overcome any reflection of sun rays for highest efficiency.

**c) Temp Insulator**

With 5 cm thickness so the radiation will be less than 4% and is from fiberglass wool which has high density to isolate the temp.

**d) Outside Casing**

**HEATCO** has the pleasure to give the new special production to our customers from imported fiberglass so that our company casing is the only one that made the outside from different color fiber glass which accomplished all style also to solve the minerals problem which is easy to corrosion.

## **2- Storage Heater:-**

Which consist of two jackets inner and outer jacket:

### **\* Inner Jacket**

- Is fabricated from galvanized steel or stainless steel 304.
- Our production is tested under high hydraulic pressure 12 kg/cm<sup>2</sup> which is the highest tested pressure, also the storage is welded by the best welding material (are welding & automatic welding).
- The tank is supplied with inlet & outlet nozzles for cold & hot water with access door cleaning, all nozzles is invisible to achieve good looking finishing auxiliary.
- The tank is supplied with electrical heater (temporary) with a determined power for the tank capacity and thermostat to control it.

### **\* Outer Jacket**

It fabric created from fiber glass in different colors.

## **3- Internal connection**

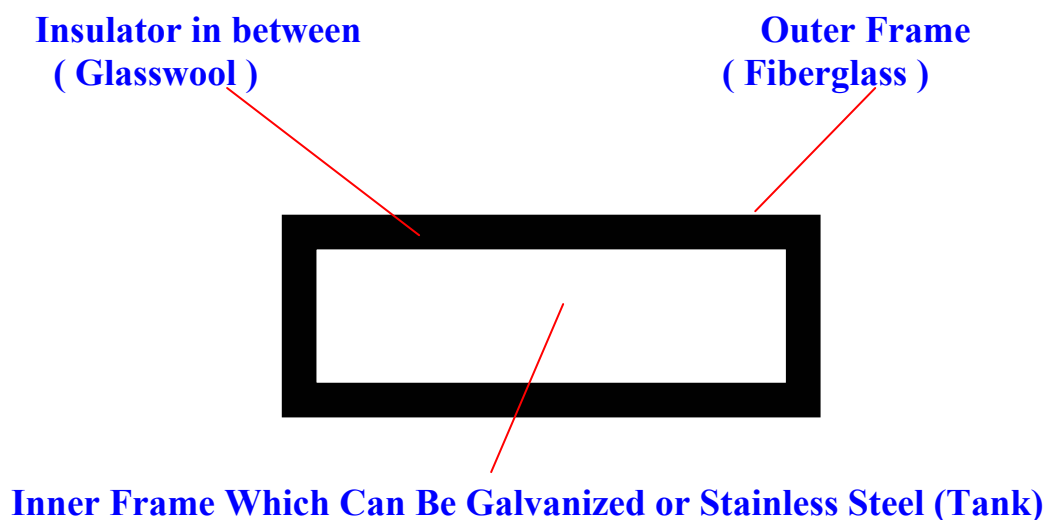
A group of pipes distributed between the tank and the collector and it is a fixed connection from copper or other material or other rigid connection under 12 bar pressure and is isolated by clime flex which is high efficiency isolating material with good appearance , also the connection allow easy flow of water.

## **4- Holders Plat forms**

- From steel sections.
- Easy to disconnect & reconnect the plate form.
- The weight of the device is distributed in maximum.
- Plate form can over come a 100 km/hr wind speed.
- Plate form is coated by anti rust material.

## **Advantage of fiberglass**

- 1- Fiberglass is a high efficiency material in keeping the temp. With a long period inside the tank which not allowed in any other material.
- 2- Long life time of fiberglass is 1.5 - 2 times the life time of any other material.
- 3- Tank is fully sealed so no dust or humidity can be effect the tank to avoid damaging the insulating wool or lowering it's efficiency this is prevent temp. Loss from tank as to increase the efficiency which not appears in other types.
- 4- The light weight of solar collector achieves easy maintenance and moving.
- 5- The fiber glass is easy shaping material so it can formed of different shapes according to customer request.
- 6- Different color of fiberglass is suitable for different places and customer style.
- 7- Fiber glass fabricated using a cylinder press which is not accepts to change in dimension which can occur in different material so all devices is the same not changed.



### Technical Specification of Storage

#### Type GF with Capacity 200 to 600 Lt.

1	Outer jacket	from different color fiber glass with good appearance shapes
2	Inner jacket	from galvanized steel with thickness 2.5mm
3	Isolating material	from fiber glass wool with high density & thickness 5cm from all sides
4	Testing pressure	12KG/cm <sup>2</sup>
5	Operating pressure	6KG/cm <sup>2</sup>
6	Electrical heater (temporary)	2000 watt/hr and operated by thermostat
7	Life Time	15 - 20 year

### Technical Specification of Storage

#### Type SF with Capacity 200 to 600 Lt

1	Outer jacket	from different color fiber glass with good appearance shapes
2	Inner jacket	from Stainless Steel with thickness 2.5mm
3	Isolating material	from fiber glass wool with high density & thickness 5cm from all sides
4	Testing pressure	12 kg/cm <sup>2</sup>
5	Operating pressure	6 kg/cm <sup>2</sup>
6	Electrical heater (temporary)	2000 watt/hr and operated by thermostat
7	Life Time	21 - 30 year

### Technical Specification Solar Collector

1	Receiver	Fabricated from high goodness imported copper pipes which achieve the highest international specification
2	Outside casing	From fiber glass which is available in all colors according to the building shape.
3	Standard dimension	202 cm x 102 cm x 8 cm
4	weight	30 Kg approx
5	Insulator	5 cm thickness high density fiber glass wool
6	Heating Rate	200 L /Daly from 50 to 60 C° in winter and from 70 to 85 C° in summer
7	Coating	With dark black which has high absorption of sun rays

8	Test pressure	10 Kg/cm <sup>2</sup>
9	Operating pressure	6 Kg
10	Glass	With thickness 3 mm to achieve receiving of pure sun rays and operate with high temp degree
11	Heat efficiency	86%
12	Heat losses	4% to 6 %
13	Life time	15 to 20 year