



INSTRUCTIONS BOOKLET  
FOR INSTALLATION, USE AND MAINTENANCE

**SOLAR HOT WATER**  
**HEATING SYSTEM**

## SOLAR HOT WATER HEATING SYSTEM



Dear Customer

Thank you for choosing a Solar Hot Water Heating System by VERSOL GROUP.  
In your interest and to maintain the highest level of performance and duration of your appliance, we recommend that you follow the instructions contained in this booklet and have regular maintenance performed by qualified personnel.  
We would like to remind you that failure to follow the instructions contained in this booklet may invalidate the guarantee.

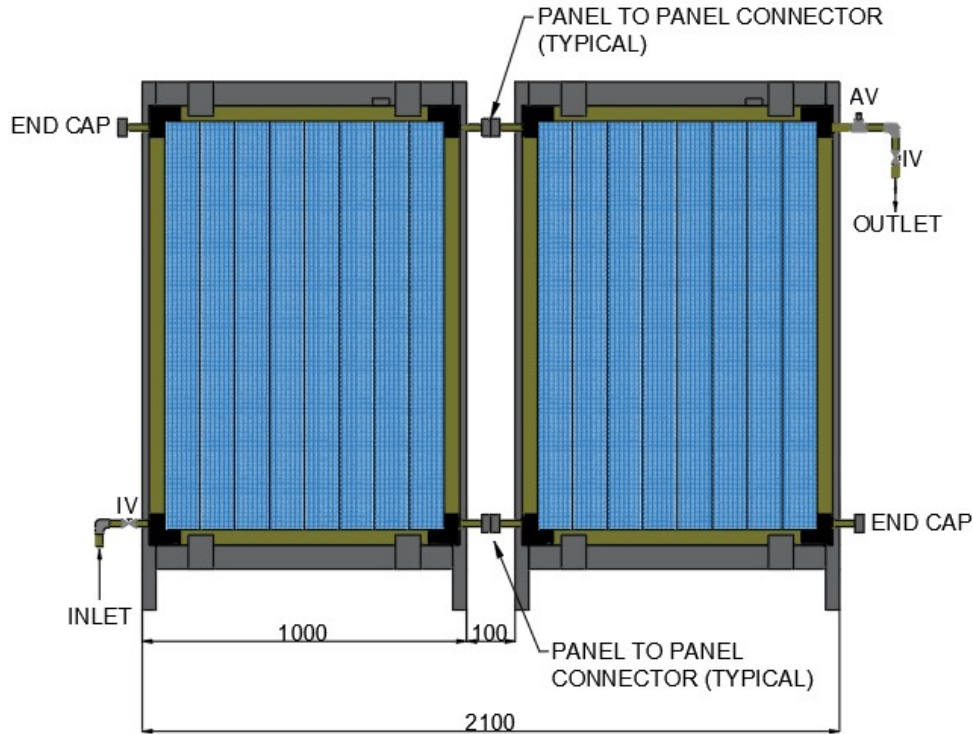
**CE** 0085

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### GENERAL INSTRUCTIONS

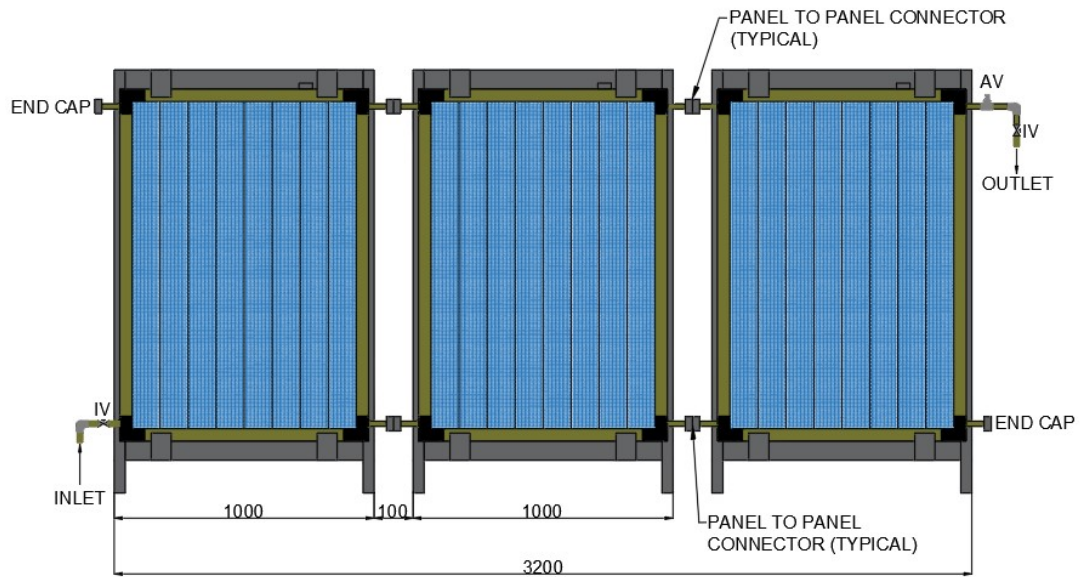
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## 2 SOLAR PANEL IN ONE BANK (FPKIT-2) (Distance Between Panel to Panel with Valve & Accessories BOQ)



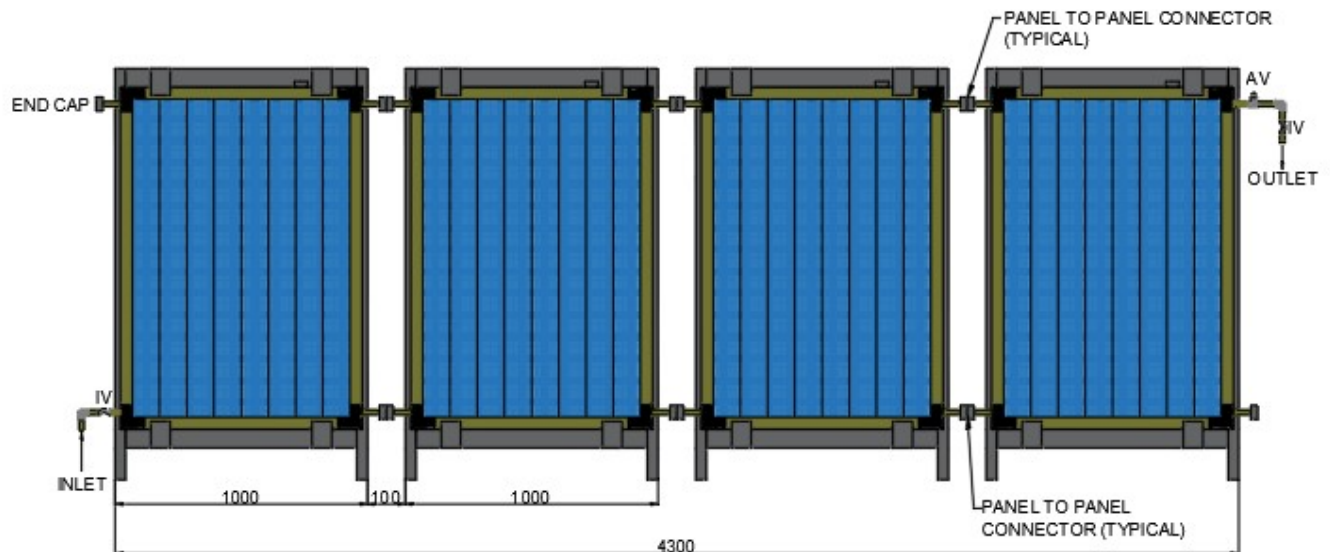
<b>Number of Solar Panel</b>		<b>02 Nos</b>	
<b>Number of Solar Panel Frame</b>		<b>02 Nos</b>	
<b>End Cap 22mm</b>		<b>02 Nos</b>	
<b>SOLAR PANEL INLET</b>			
<b>SR. NO.</b>	<b>ITEM</b>	<b>SIZE</b>	<b>QTY</b>
1	Isolation Valve	3/4"	1
2	Connector Kit	3/4"	1
<b>PANEL TO PANEL KIT</b>			
1	Panel to Panel Connector	3/4"	2
<b>SOLAR PANE OUTLET</b>			
1	Airvent	1/2"	1
2	Isolation Valve	3/4"	1

### 3 SOLAR PANEL IN ONE BANK (FPKIT-3) (Distance Between Panel to Panel with Valve & Accessories BOQ)



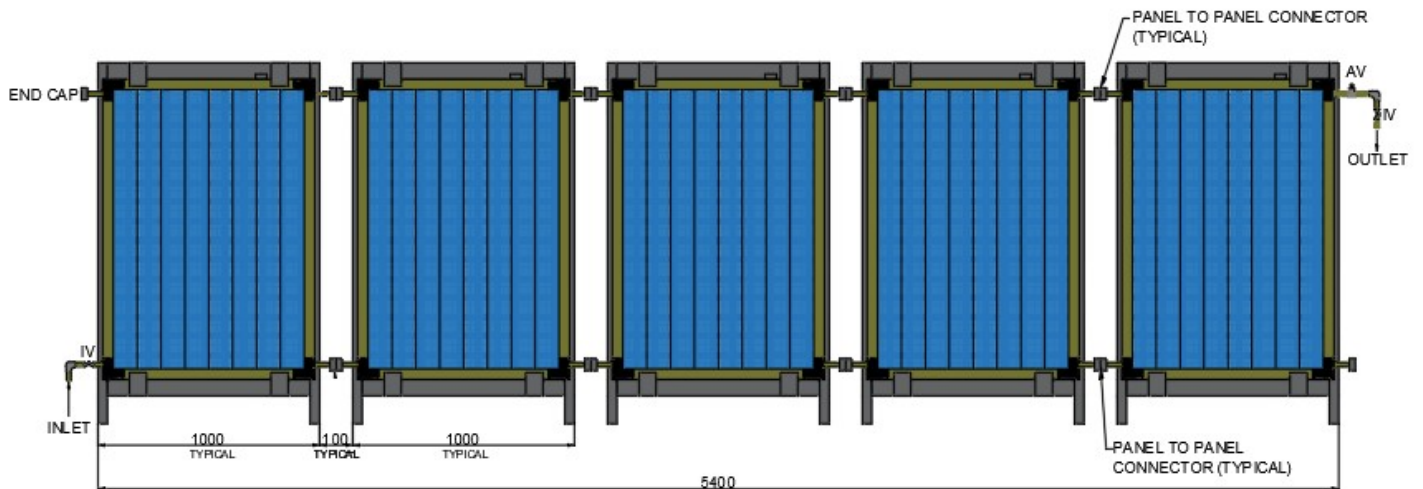
<b>Number of Solar Panel</b>		<b>03 Nos</b>	
<b>Number of Solar Panel Frame</b>		<b>03 Nos</b>	
<b>End Cap 22mm</b>		<b>02 Nos</b>	
<b>SOLAR PANEL INLET</b>			
<b>SR. NO.</b>	<b>ITEM</b>	<b>SIZE</b>	<b>QTY</b>
1	Isolation Valve	3/4"	1
2	Connector Kit	3/4"	1
<b>PANEL TO PANEL KIT</b>			
1	Panel to Panel Connector	3/4"	4
<b>SOLAR PANE OUTLET</b>			
1	Airvent	1/2"	1
2	Isolation Valve	3/4"	1

**4 SOLAR PANEL IN ONE BANK (FPKIT-4)  
(Distance Between Panel to Panel with Valve & Accessories BOQ)**



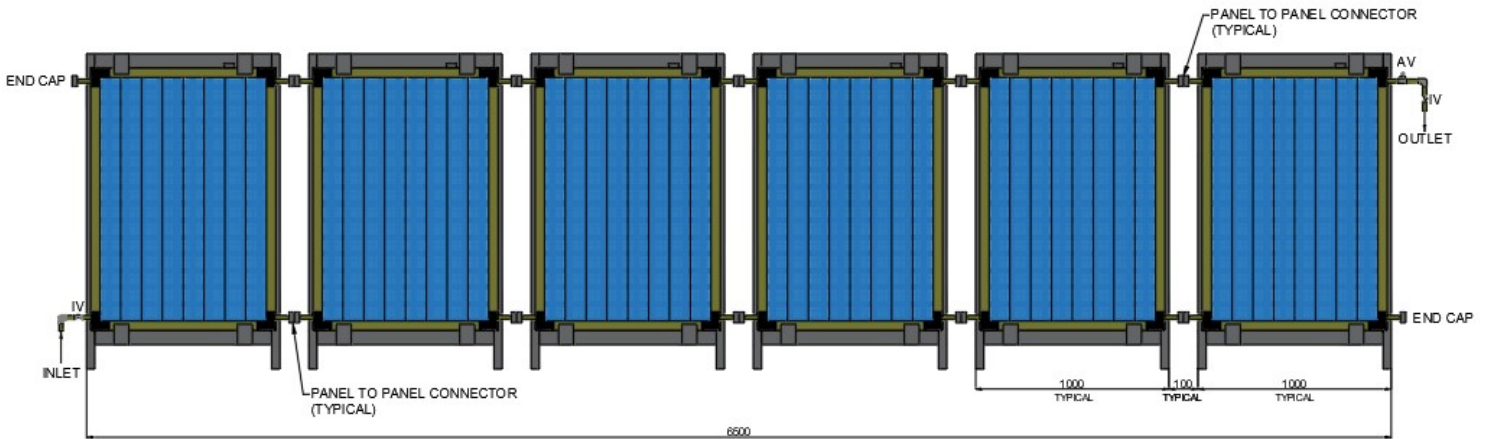
<b>Number of Solar Panel</b>	<b>04 Nos</b>		
<b>Number of Solar Panel Frame</b>	<b>04 Nos</b>		
<b>End Cap 22mm</b>	<b>02 Nos</b>		
<b>SOLAR PANEL INLET</b>			
<b>SR. NO.</b>	<b>ITEM</b>	<b>SIZE</b>	<b>QTY</b>
1	Isolation Valve	3/4"	1
2	Connector Kit	3/4"	1
<b>PANEL TO PANEL KIT</b>			
1	Panel to Panel Connector	3/4"	6
<b>SOLAR PANEL OUTLET</b>			
1	Airvent	1/2"	1
2	Isolation Valve	3/4"	1

**5 SOLAR PANEL IN ONE BANK (FPKIT-5)  
(Distance Between Panel to Panel with Valve & Accessories BOQ)**



<b>Number of Solar Panel</b>	<b>05 Nos</b>		
<b>Number of Solar Panel Frame</b>	<b>05 Nos</b>		
<b>End Cap 22mm</b>	<b>02 Nos</b>		
<b>SOLAR PANEL INLET</b>			
<b>SR. NO.</b>	<b>ITEM</b>	<b>SIZE</b>	<b>QTY</b>
1	Isolation Valve	3/4"	1
2	Connector Kit	3/4"	1
<b>PANEL TO PANEL KIT</b>			
1	Panel to Panel Connector	3/4"	8
<b>SOLAR PANEL OUTLET</b>			
1	Airvent	1/2"	1
2	Isolation Valve	3/4"	1

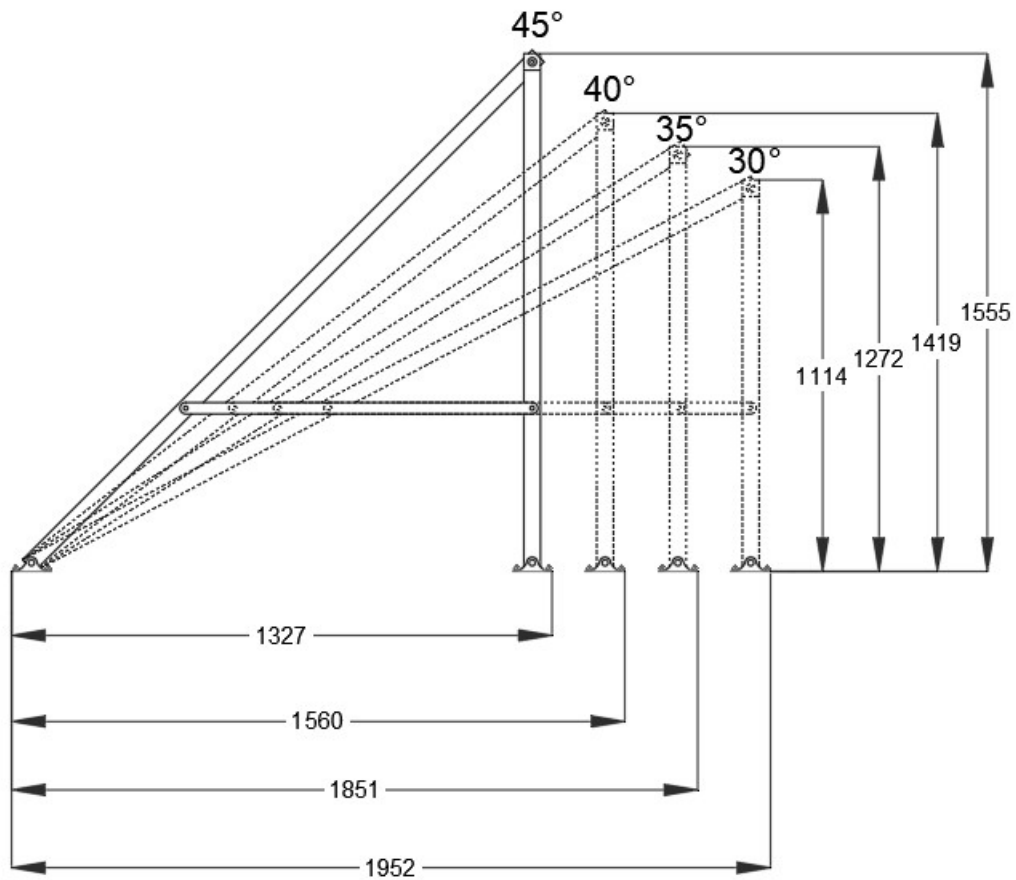
**6 SOLAR PANEL IN ONE BANK (FPKIT-6)**  
**(Distance Between Panel to Panel with Valve & Accessories BOQ)**



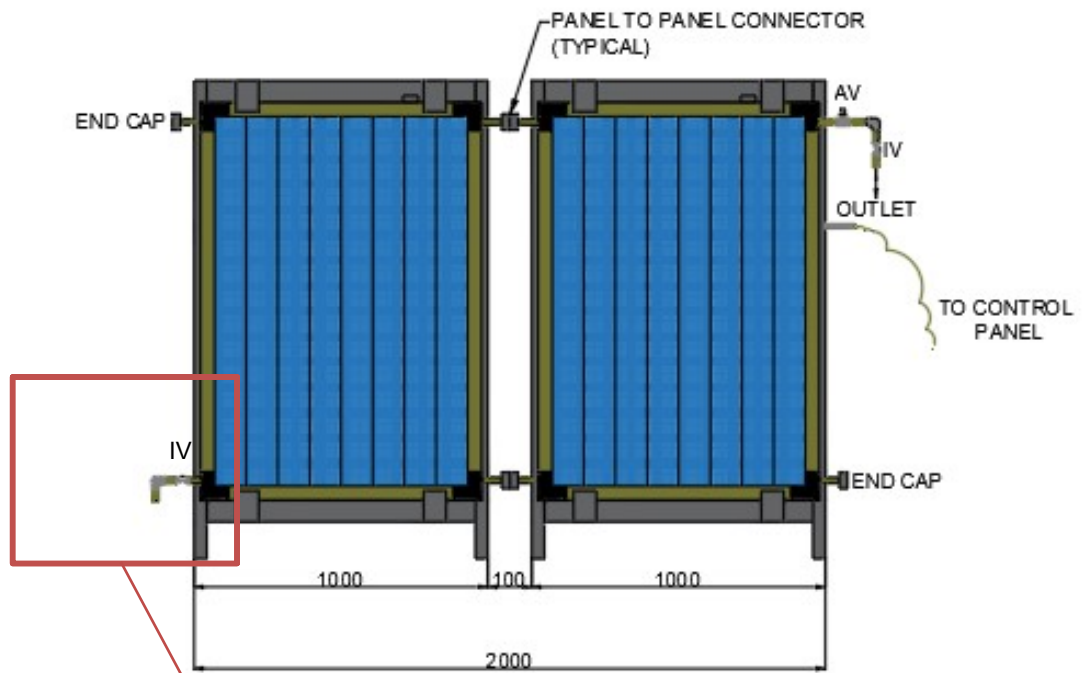
<b>Number of Solar Panel</b>		<b>06 Nos</b>	
<b>Number of Solar Panel Frame</b>		<b>06 Nos</b>	
<b>End Cap 22mm</b>		<b>02 Nos</b>	
<b>SOLAR PANEL INLET</b>			
<b>SR. NO.</b>	<b>ITEM</b>	<b>SIZE</b>	<b>QTY</b>
1	Isolation Valve	3/4"	1
2	Connector Kit	3/4"	1
<b>PANEL TO PANEL KIT</b>			
1	Panel to Panel Connector	3/4"	10
<b>SOLAR PANEL OUTLET</b>			
1	Airvent	1/2"	1
2	Isolation Valve	3/4"	1



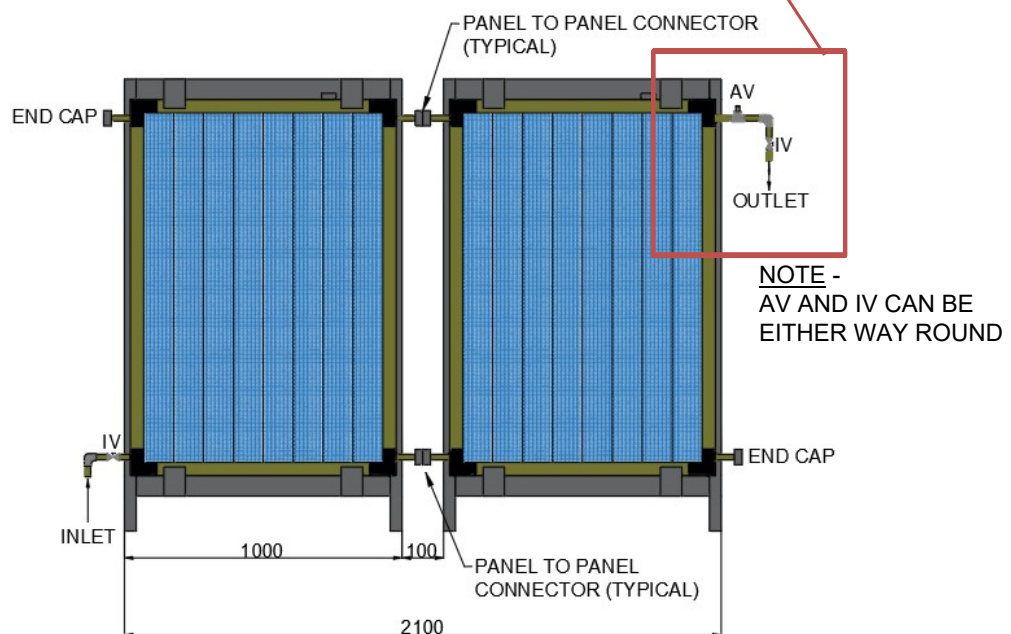
## Solar Panel Frame Angle of Inclination



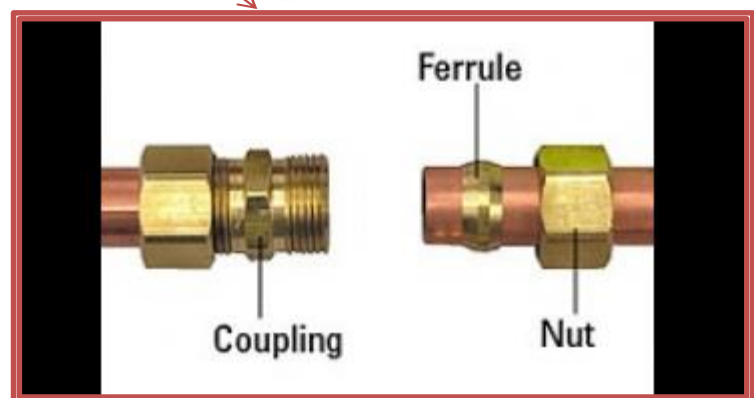
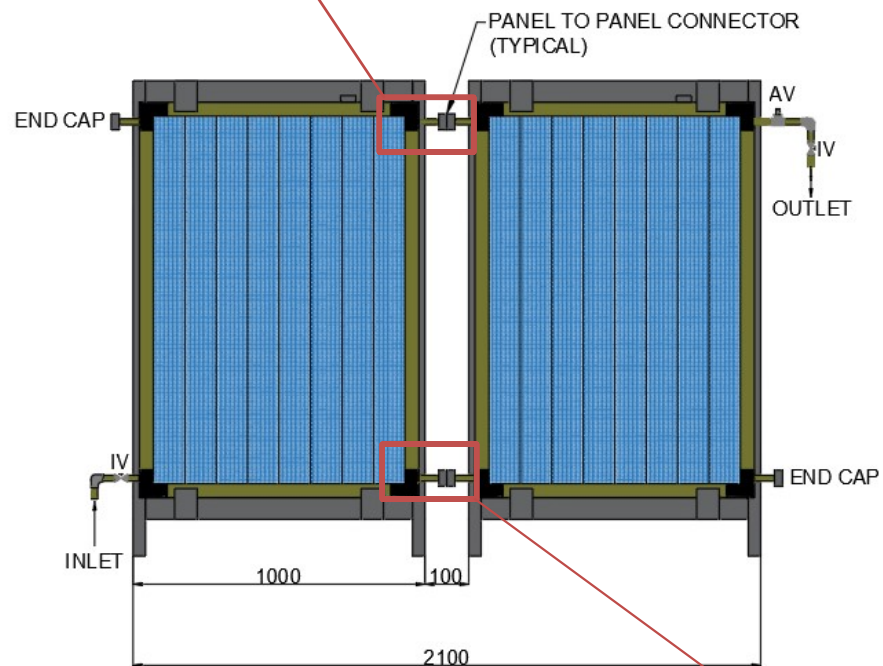
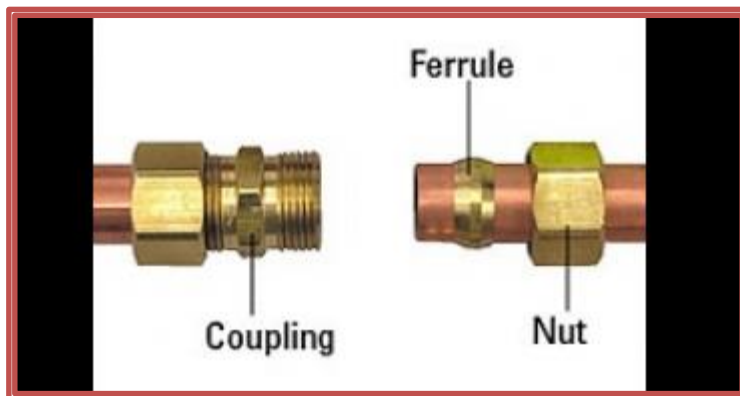
## SOLAR PANEL INLET ASSEMBLY



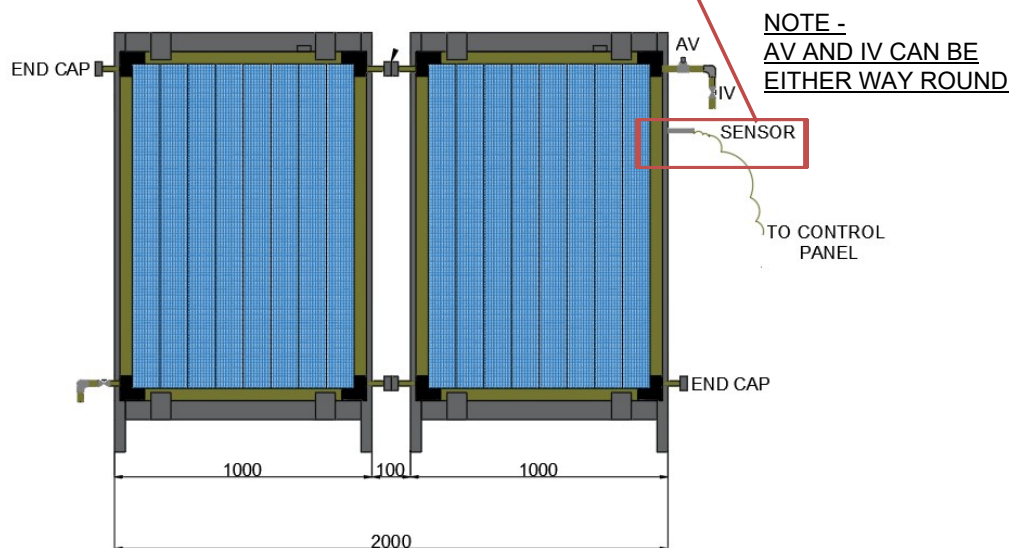
## SOLAR PANEL OUTLET ASSEMBLY



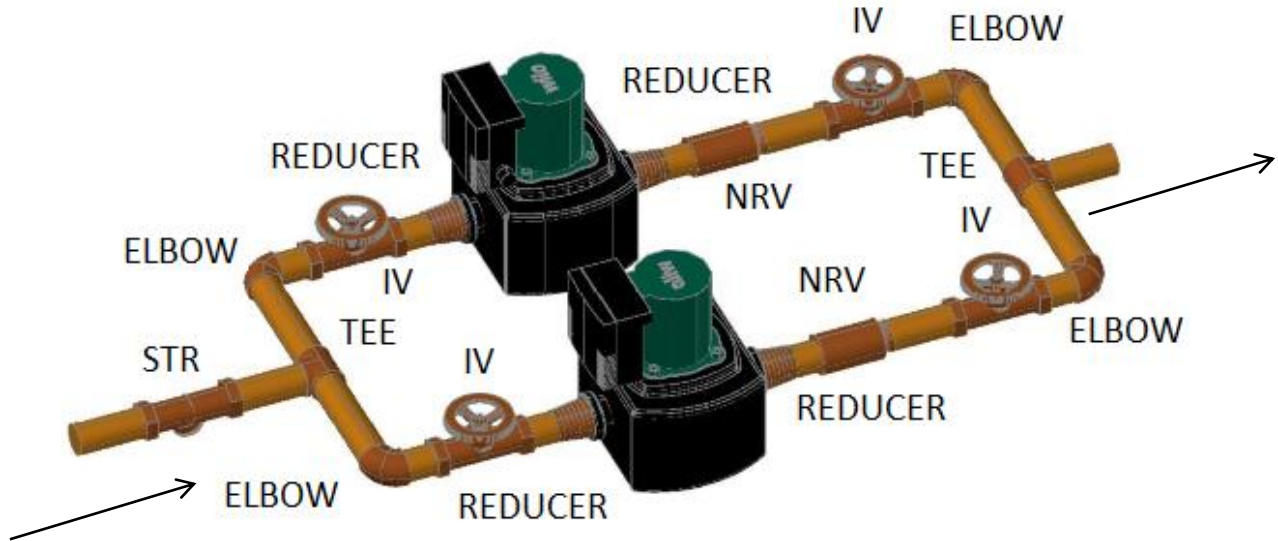
## SOLAR PANEL TO PANEL ASSEMBLY KIT



## SOLAR PANEL SENSOR CONNECTION



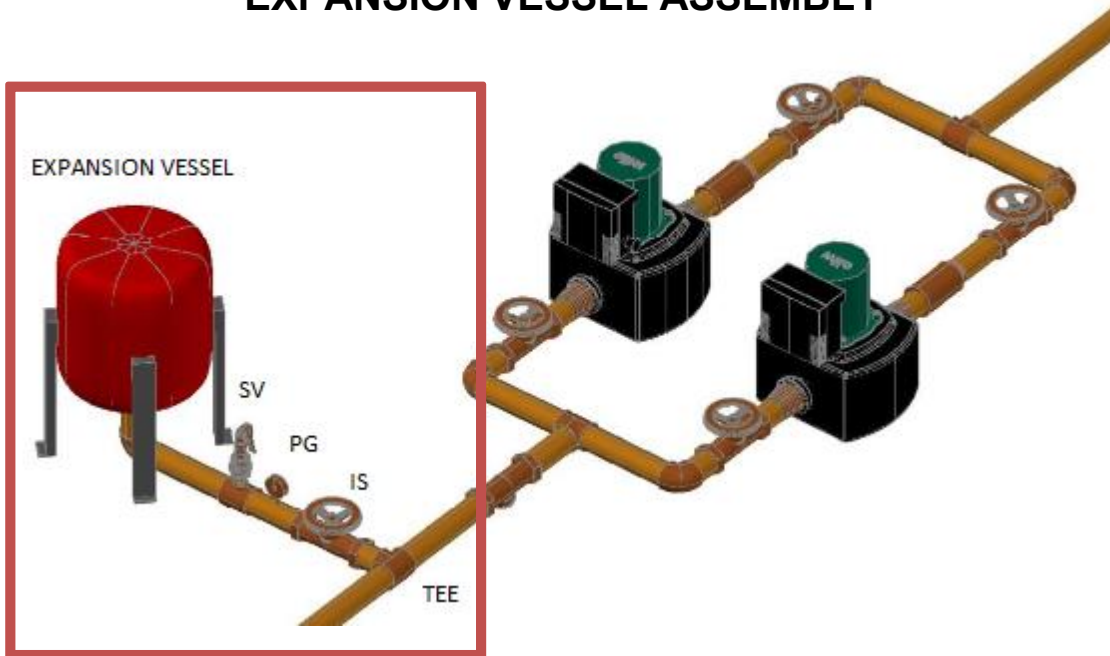
## SOLAR CIRCULATION PUMP ASSEMBLY



<b>Number of Pumps</b>		<b>02 Nos</b>	
<b>Pipe Details</b>		<b>1" Pipe at 1 Length</b>	
<b>PUMP INLET (Common)</b>			
SR. NO.	ITEM	SIZE	QTY
1	Strainer (STR)	1"	1
2	Socket	1"/28mm	1
3	Tee	28mm/28mm/1"	1
4	Elbow	1"	2
<b>PUMP INLET</b>			
1	Socket	1"	2
2	Isolation Valve (IV)	1"	2
3	Reducer	1-1/2"(F) / 1" (M)	2
<b>PUMP OUTET</b>			
1	Reducer	1-1/2"(F) / 1" (M)	2
2	Non Return Valve (NRV)	1"	2
3	Socket	1"/28mm	2
4	Isolation Valve (IV)	1"	2
5	Elbow	1"/28mm	2
6	Tee	28mm/28mm/1"	1

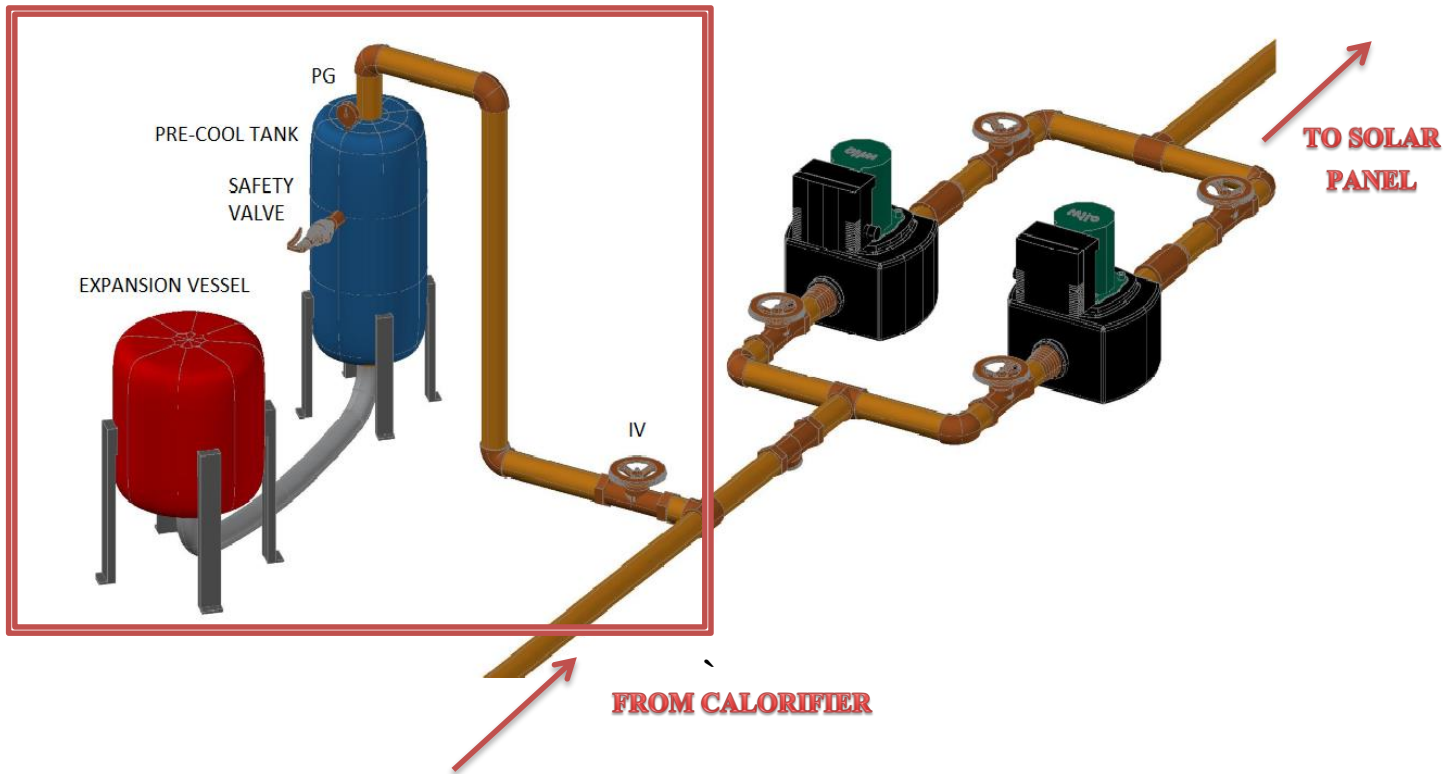


## EXPANSION VESSEL ASSEMBLY



<b>Number of Expansion Vessel</b>		<b>01 No.</b>	
<b>INLET</b>			
SR. NO.	ITEM	SIZE	QTY
1	Isolation Valve (IS)	1"	1
2	Pressure Gauge (PG)	1"	1
3	Safety Valve (SV)	1"	1
<b>Note:</b>			
-Expansion Vessel to be Installed in the suction side of solar circulation pump			

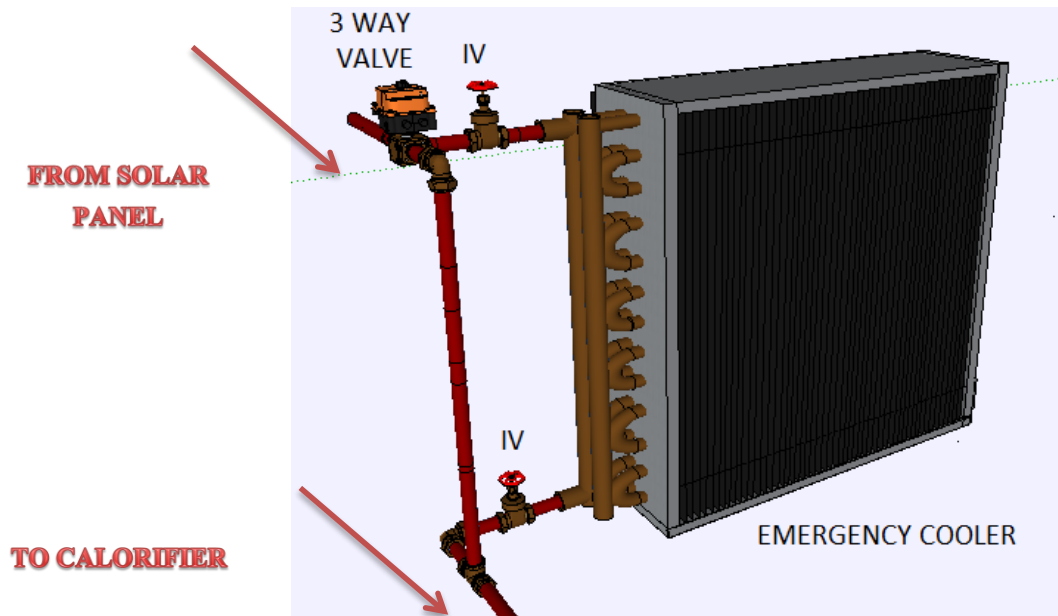
## EXPANSION VESSEL WITH PRE-COOL TANK ASSEMBLY

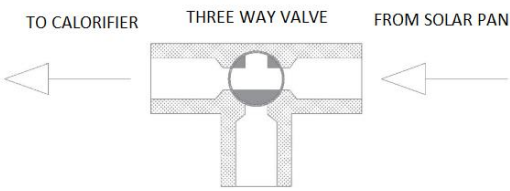
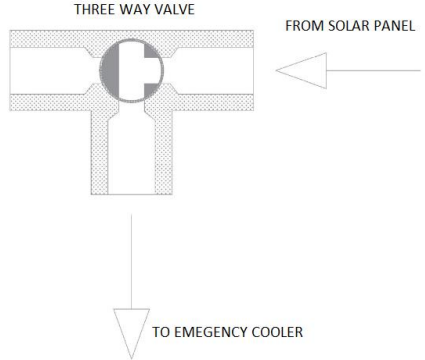


Number of Precool Tank		01 No.	
Number of Expansion Vessel		01 No.	
<b>INLET</b>			
SR. NO.	ITEM	SIZE	QTY
1	Isolation Valve (IS)	1"	1
2	Pressure Gauge (PG)	1"	1
3	Safety Valve (SV)	1"	1
<b>Note:</b>			
-Expansion Vessel to be Installed in the suction side of solar circulation pump			

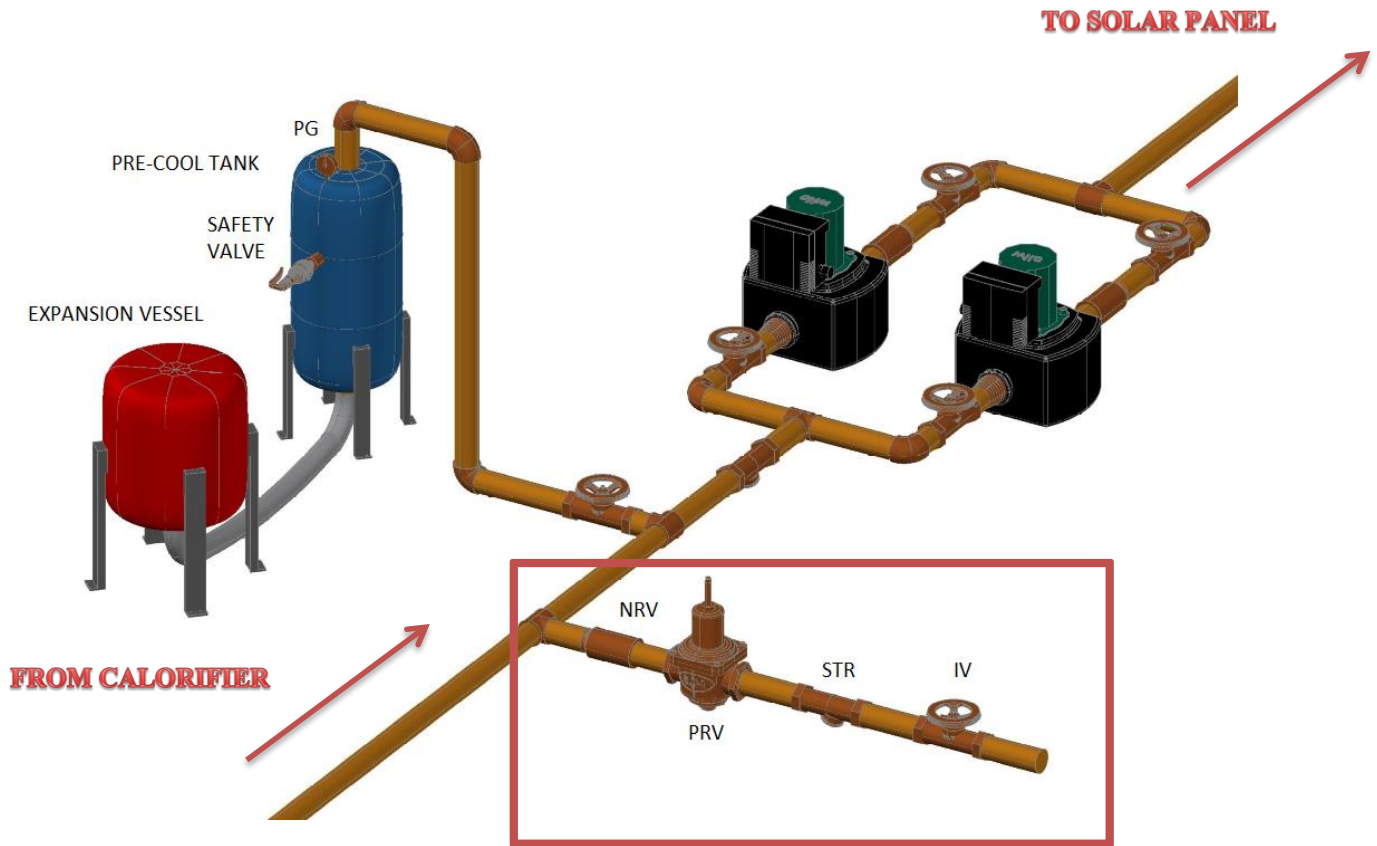


## EMERGENCY COOLER TANK ASSEMBLY



Number of Cooler		01 No.	
<b>COOLER INLET</b>			
SR. NO.	ITEM	SIZE	QTY
1	Three Way Valve		1
2	Isolation Valve		1
<b>COOLER OUTLET</b>			
1	Isolation Valve		1
<b>Note: Three Way Valve Normal Operation</b>		<b>Note: Three Way Valve Cooling Operation</b>	
			

## FEEDER LINE ASSEMBLY



FEEDER LINE VALVES AND FITTINGS BOQ			
SR. NO.	ITEM	SIZE	QTY
1	Socket	1" / 28mm	1
2	Non Return Valve (NRV)	1"	1
3	Nipple	1"	1
4	Pressure Reducing Station (PRV)	1"	1
5	Nipple	1"	1
6	Strainer (STR)	1"	1
7	Nipple	1"	1
8	Isolation Valve (IS)	1"	1

**NOTE:**

**-Primary/Solar Line Feeder Line should be installed at the suction side of the pump**

## CALORIFIER CONNECTIONS

**MAGNESIUM ANODE**



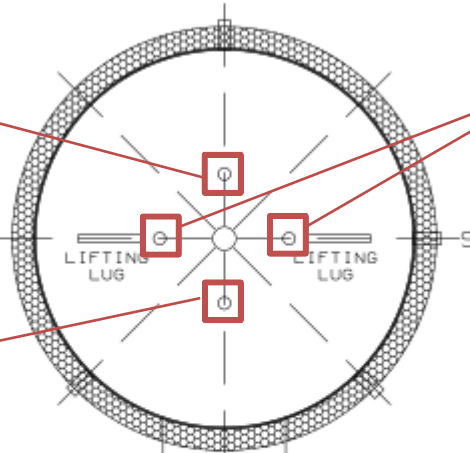
**ANTI VACUUM VALVE**



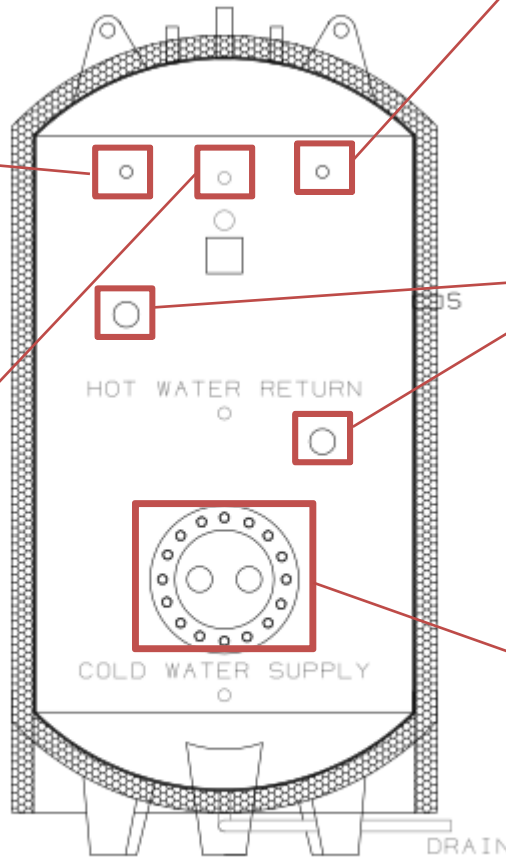
**PRESSURE GAUGE**



**SENSOR**



**TOP CONNECTION**  
HOT WATER SUPPLY



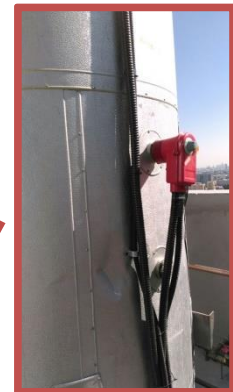
**CONNECTION**



**SAFETY VALVE**



**TEMPERATURE GAUGE**



**ELECTRIC HEATER**



**PRIMARY TOP INLET & BOTTOM OUTLET**



Versol Poland | Versol Italy | Versol UK | Versol USA | Versol Middle East | Versol India

