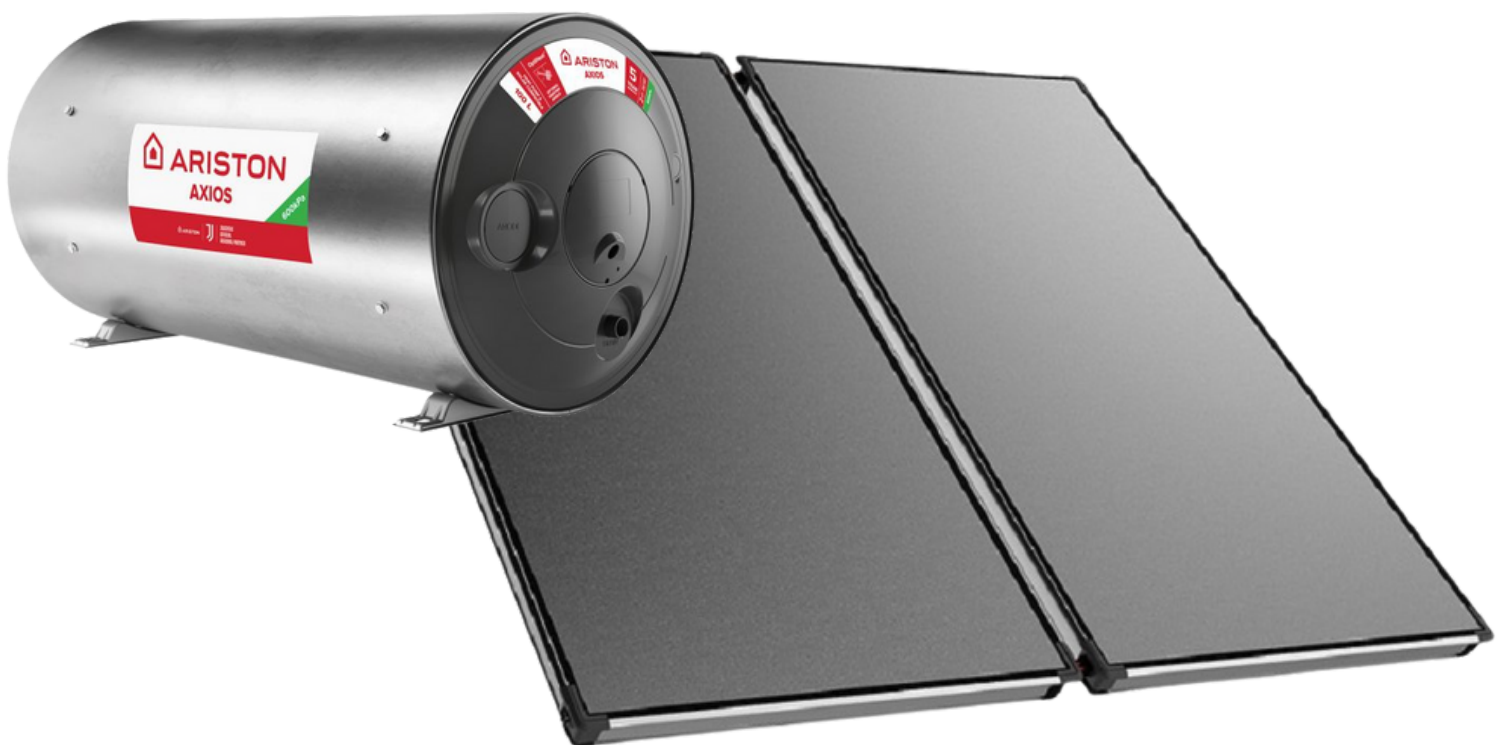




**CLOSE COUPLE  
SOLAR GEYSER SYSTEM  
100 - 250 LITRES  
*PRODUCT MANUAL***



# Introduction

## Installation Guide for The Water Solar Company Solar Geyser System

Congratulations on purchasing The Water Solar Company solar geyser system. Our state-of-the-art collectors combine advanced technology with sleek design, resulting in a high-quality product that you're sure to love.

Before beginning installation of any of The Water Solar Company's products, it is crucial that you read and understand this manual thoroughly. Please note that this manual pertains specifically to the system(s) displayed on the cover page and header. If you have any questions or concerns about the installation process after reading this manual, please contact a The Water Solar Company representative prior to beginning installation.

This manual is intended to serve as a guide to help you correctly install The Water Solar Company's components. However, it's important to note that it does not replace the knowledge and expertise of suitably trained installers. Use discretion and seek professional assistance if needed.

**The Water Solar Company Solar geyser components must be installed in compliance with the following regulations:**

**SANS 198  
SANS 10252 -1  
SANS 10254  
SANS 10106  
SANS 60335-2-21  
SANS 10400 – parts A, B, L, XA SANS 10142-1**

**No modifications from these standards are allowed.  
All local bylaws and estate laws must also be adhered to**

### **Important Standards and Guidelines for The Water Solar Company Product Use**

**To ensure safety and retain warranty benefits, compliance with all standards is mandatory. Non-compliance may result in injury, death, or void warranty.**

**Any attachment, connection, integration, or association of parts that impacts The Water Solar Company product operation or performance may void the warranty. Only authorized parts supplied by The Water Solar Company will be covered under warranty, and written authorization is required for any non-supplied parts.**

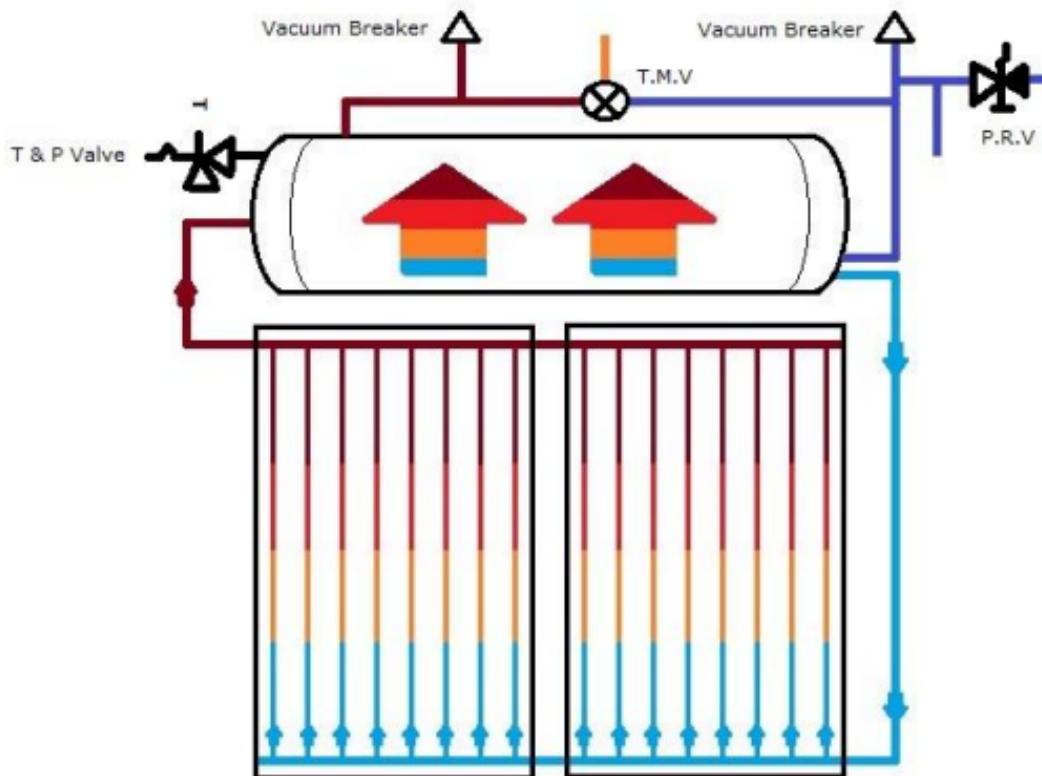
**Please note that The Water Solar Company cannot guarantee the final fitness of water for consumption, as the system does not affect water quality.**

## System Description

### How the system works

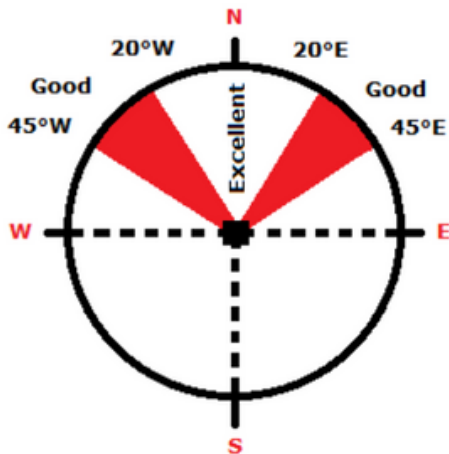
The Water Solar Company's line of systems operates on the Thermosyphon principle. This method utilizes the sun's heat to warm water in a flat plate collector, moving it to a storage tank positioned above the collector.

The heated water in the collector ascends to the top (Hot water storage tank) as it becomes lighter. On the contrary, cooler and denser water sinks to the bottom of the collector, where it will be heated.



# Orientation & Placement

In the southern hemisphere, installing solar panels facing true north is ideal. Deviations of up to 45° on either side of North are acceptable and have minimal impact on system performance. While The Water Solar Company suggests staying within this 45° range, exceptions can be considered if achieving this angle is not possible. For a customized design, reach out to a representative from The Water Solar Company.



The collector should be installed in an area that is free from shade all year round or one that does not experience shading between 9:00 am and 3:00 pm.

For optimal performance, The Water Solar Company suggests mounting the collector at an inclination or tilt angle ranging from 20° to 50°.

Prior to installation, ensure that the chosen roof area is structurally sound and can support the added weight. If there are concerns about the roof's capacity to handle the load, seek advice from a qualified professional before proceeding with the installation.

## Freeze Protection

The retro-fit range from Water Solar Company includes direct systems with smart temperature differential controllers. When preset freeze protection temperatures are reached, the circulation pump is triggered to circulate warm water through the collector briefly to prevent freezing. To enhance safety and the durability of your system, especially in regions prone to frost or power outages, it is essential to install a UPS backup.

## Hail Resistant

The flat plate collectors from The Water Solar Company are designed to be hail-resistant, featuring 3mm tempered glass that can endure hailstones up to 35mm in diameter.

## Scale Resistance

In regions with low water quality, it's crucial to prevent scale and mineral build-up from impacting the efficiency and lifespan of your The Water Solar Company direct system.

If unsure about the water quality in your area, seek advice from your local municipality or a The Water Solar Company representative.

Typically, water quality is deemed acceptable when it has fewer than 600 parts per million total dissolved solids.

# Safety Precautions

## General Safety Information

**WARNING!** This appliance is capable of producing temperatures that exceed 50°C.

In certain circumstances safety valves could open to expel hot water and relieve pressure, Never obstruct these valves and always leave them open to the atmosphere.

This apparatus is intended for water heating only.

Any and all work carried out in regards to the installation, commissioning and maintenance of any The Water Solar Company Solar water heating system in its entirety is to be carried out by qualified and suitably trained professionals.

## Safety Consideration for Installation & Operation

All installations are to be carried out in accordance with the Occupational Health and Safety Act (Act 85 of 1993) requirements and any relevant local authority prescriptions.

## General Points to Consider

- Assess site specific risks and mitigate to an acceptable level prior to installation, if required consult a trained professional.
- 
- Water temperature can reach boiling point and collectors can stagnate at temperatures that exceed 150°C. Cover collectors during installation to prevent heating, and limit the risk of scalding.
- 
- Be aware of any overhead power lines outside and electrical wiring inside the ceiling space.
- 
- Handle collectors with care to prevent glass breakage, damage to property and personal injury.
- 
- All safety gear must be worn at all times where relevant; these include but are not limited to safety goggles, gloves, hard hats and safety shoes.
- 
- Ensure installation personnel are competent and in suitable physical condition.
- 
- Any scaffolding or specialized safety equipment must be installed by certified personnel.
- 
- Installers must be trained and conversant with the assessment of height hazards, safety procedures at heights and relevant safety equipment.
- 
- All personnel working on the installation of a solar water heater must be issued with the appropriate safety equipment.
- 
- Ensure that occupants are aware of all health and safety implications relevant to them.
- 
- Do not attempt to install a solar water heating system if weather conditions are not suitable i.e. high winds, Rain and lightning, etc.
- 
- In the event of prolonged periods of non-usage .e.g. occupants on vacation, ensure that the controller is set to
- 
- ‘Holiday Mode’ to regulate the high temperatures that may be achieved (See controller manual).

# Installations

## System Components

### Main Components

1 x Geyser

2 x Flat plate collector

### Storage Tank



The storage tank is structured with an outer chromadek wrap featuring two polypropylene end caps. Inside this wrap, there is an inner steel tank separated from the outer wrap by polyurethane foam insulation. The interior of the steel tank is coated with a pex (plastic) lining, and it includes 5 x 20mm female ports for plumbing connections.

### Flat Plate Collector



The Water Solar Company 2m<sup>2</sup> / 2.4m<sup>2</sup> Flat plate collectors are manufactured from high quality materials which consist of:

3mm low iron ,refractive and tempered safety glass

0.5mm Aluminium complex anodised selective coated absorber

Copper headers and riser tubes

35mm glass wool insulation

Profiled aluminium 'smart design' casing

# Temperature Differential Controller



The Geysertwise TSE, from The Water Solar Company, is a flexible and effective control system made for Close Coupled Solar Geyser Systems and Standard Geyser Systems. With a variety of functions, this device acts as a dependable geyser timer and a timer for a thermosyphon solar system, delivering improved control and monitoring options.

## Geysertwise TSE Technical Parameters:

**Operating Voltage: 230VAC / 50HZ.**

**Main Relay Contact Rating: 30AMP (Max 4KW).**

**Operating Voltage Range: 220V – 250V AC.**

**Temperature Display Range: 0 – 99°C (“-5” when below -5°C, “EA” when above 99°C).**

**High Temperature Warning: Above 84°C.**

**Temperature Setting Ranges: 30 – 75°C (for electric water heating).**

**Heat Failure Detection: Activates when the increase is at a rate of less than 4°C per hour.**

**Mechanical Thermal Cut-Out: At 90°C. Adjust for systems expecting temperatures above this threshold.**

**Dry Heat Detection: Alerts for an empty cylinder.**

**Temperature Tolerance: ± 2%.**

**Temperature Differential Setting: 1°C.**

**Switching Differential: 6°C.**

**Temperature Probe Failure Detection: For the tank.**

**Temperature Probe Range: -30 to + 130°C.**

## **Additional Components include:**

- 1 x Thermostatic mixing valve**
- 1 x Flat roof stand (On request)**
- 1 x T & P Valve**
- 1 x 20mm drain cock**

*Components not supplied may include any and all relevant plumbing and electrical components required but not listed above, i.e. capillary fittings, Copper tubing, electrical cable etc.*

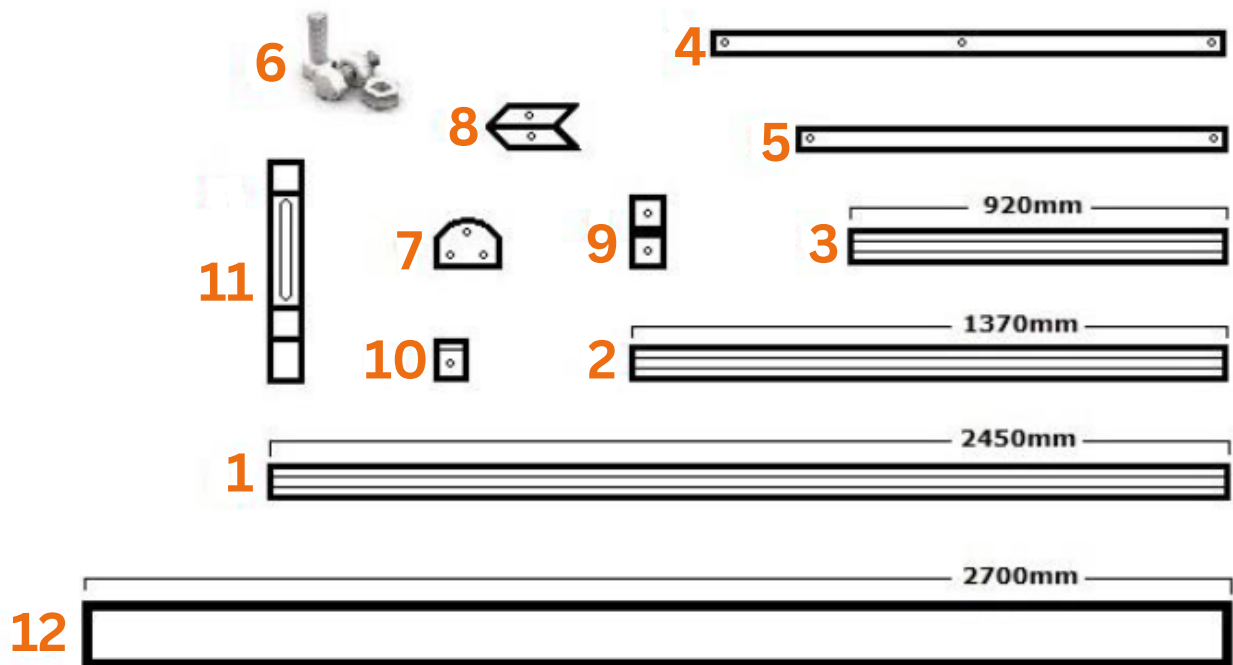
## **Important Considerations and good practise**

- All plumbing must conform to the relevant governing bodies, as this is a retro-fit system and the storage tank may have been installed prior to the addition of the solar component; ensure that the storage tank complies with SANS 10254.
- Ensure a minimum distance of 3m of copper tubing separates the collector from the tank.
- An isolating valve must be installed on the supply and return pipe to and from the collector as well as the bottom of the collector (side not being supplied by water) this is for maintenance and safety purposes, Always ensure that the collector is covered when carrying out any maintenance that may require these valves to be shut, ensure that after the maintenance is carried out that these valves are reopened to prevent any pressure build up that may cause damage to the collector and or pipe work.
- Only compression fittings shall be used on the collector and within 1m of these connections, for the rest of the circulation loop high temperature solder may be used.
- All Brass fittings and or valves, safety or otherwise will be DZR rated, and approved for use by SABS.
- All pipe work to and from the collector must be copper (Class 1 minimum).
- The pump shaft may only be installed as per the manufacturer's instruction (See pump Installation manual).
- All pipe work to and from the collector, and any pipe/s transporting hot water are to be insulated, insulation will be heat tolerant and made UV resistant.
- SABS approved plastic piping may only be used inside the building, downstream from the thermostatic mixing valve.
- The thermostatic mixing valve provided must be installed to ensure safe use of the system, and should be accessible for maintenance purposes.
- During installation ensure no debris e.g. Metal filings, packaging residue, saw dust etc. enters the system, if this does occur flush the system prior to filling.
- Cover collector while installing the pipe work to prevent stagnation and possible scalding.
- Exercise caution while lifting and installing the collector onto the roof, ensure that there are enough personnel present to bear the weight and that there are adequate lifting tethers and safety rigging as required.



# Flat Roof Stand Assembly and Installation

## Components



A combination of powder coated aluminium and powder coated Marine grade stainless steel make up  
The Water Solar Company adjustable Flat roof stand.

- 4 x Side supports (Aluminium)
- 4 x Vertical supports (Aluminium)
- 4 x Cross supports (Aluminium)
- 4 x back cross braces (Aluminium)
- 4 x Side braces (Aluminium)
- 8mm Stainless Steel Nuts and Bolts (316 SAE Marine grade)
- 4 x Side angle plates (316 SAE Marine grade)
- 8 x Foot plates (316 SAE Marine grade)
- 8 x Corner brackets (Aluminium)
- 8 x securing clips (316 SAE Marine grade)
- 4 x Cradles (316 SAE Marine grade)
- 1 x Load support



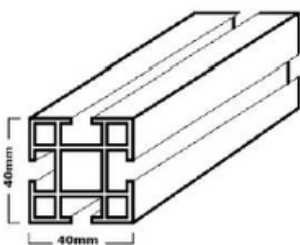
The standard vertical support is 1370mm, however upon request, if required, longer or shorter vertical supports may be provided in order to obtain the optimum inclination or tilt angle

### Inclination and tilt angle

The optimum angle is equal to the latitude of the location plus 10°. i.e. a location with latitude of 25° would indicate an optimum inclination of 35°, 15° either side of these figures will make very little difference in terms of performance.

Please note that a min 20° and max 50° tilt angle must be respected at all times.

### Assembly

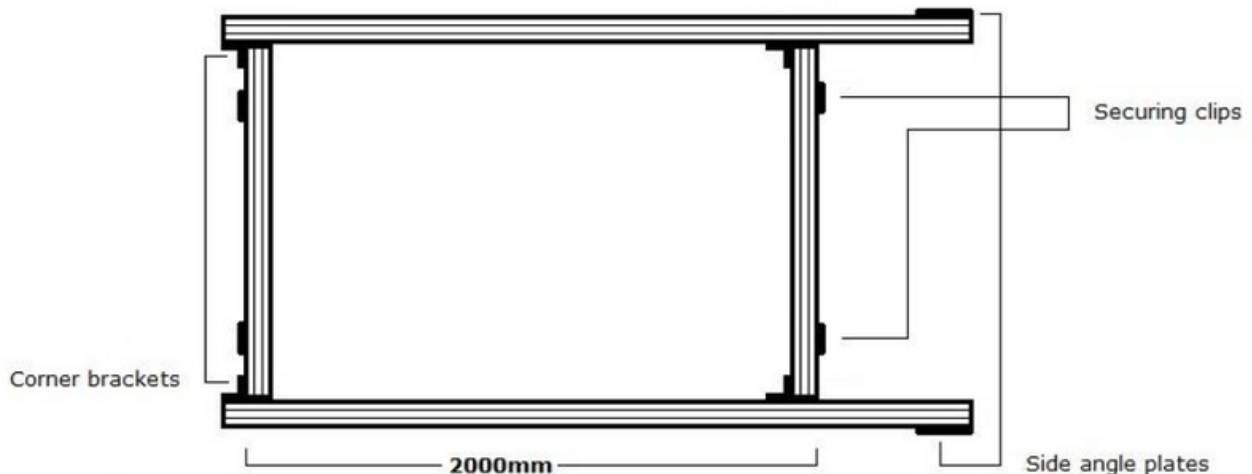


The Water Solar Company unique powder coated aluminium profiled channel allows for easy assembly, slide the 13mm head of the 8mm bolts provided into the channel to assemble components

**Important:** Before assembly divide the materials into two equal quantities, the SunScan SunStream Direct 300L system requires two identical stands to be made, follow Steps 1 – 7 and repeat.

### Step 1

Lay the two side supports (1) on a flat area roughly 1m apart, insert the two cross supports (3) at either end and between the side supports, place 2 bolts in the channel of each cross support that faces outward and attach two securing clips (10), using corner brackets (9) and nuts and bolts (6) secure the cross supports to the side ensure that the distance between the two cross supports measure 2000mm (outside measurement)



### Step 2

Using nuts and bolts attach two of the four side angle plates (7) (one of each) to either side of the two side supports then attach a vertical support (2) to the side angle plate on either side.

### Step 3

Using nuts and bolts attach each side brace to the vertical and side supports.

### Step 4

Using a bolt through the centre holes attach the two back cross braces (4) together, attach the back cross bracing to the vertical supports. Attach a foot plate (8) to the end of each vertical support; attach a foot plate to the bottom end of each side support.

### Step 5

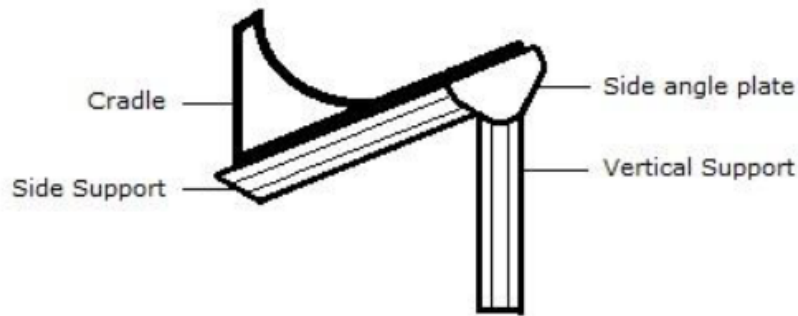
Flip the structure 180° so that the foot plates are on the flat area.

### Step 6

Adjust the inclination by loosening the side angle plates on the side supports and carefully, sliding the vertical supports up or down the side supports, once a suitable tilt angle has been acquired make sure that all the nuts and bolts have been securely tightened.

### Step 7

Attach two of the cradles (11), one to either side of each of the side supports.



## Installation

Always ensure that materials used to fasten the collector and or frame to the roof do not accelerate corrosion, and that no galvanic action occurs, if required U.V. resistant insulators must be used

### Step 1

Lift the two assembled frames onto the roof carefully using tethers and rigging as required

### Step 2

In the case of a zinc roof SunScan recommends that a minimum of 8 x 8mm 'J' Bolts are used to secure the flat roof stand, place the two stands side by side in the intended position, making sure to line up with the existing timber structure inside the ceiling space, if this is not possible additional timber support beams may be required, also ensure that these structures have been assessed and can bear the additional weight.

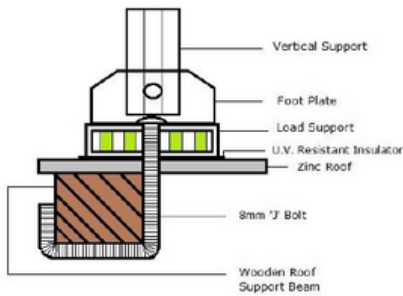
### Step 3

Place the load support under the four rear foot plates, using the foot plates and a pencil, mark out where the eight 8mm holes (for 'J' Bolts) are to be drilled, remove the stand and drill the holes.

### Step 4

Place the stand and foot plates over the holes and insert the U.V. resistant insulator, from inside the roof space thread the 'J' Bolts through the holes, ensure that there are at least two personnel to achieve this goal, secure a nut to the end of the 'J' Bolt and tighten, repeat this process for all eight foot plates.

Diagram: Zinc roof installation



**Step 5 Waterproofing**  
Ensure that any holes or modifications to any roofing are adequately waterproofed. The Water Solar Company recommends a UV resistant sealant.

## **Storage Tank Installation**

**Note:** Before installing or maintaining any plumbing or electrical component ensure that any water and or electricity supplied to the component is shut off upstream from where the intended work is to be carried out.

The Water Solar Geyser system is designed to operate at a working pressure of 400kpa, a pressure reducing valve with a rating not exceeding 400kpa must be installed.

Our Solar Geysers are manufactured by Heattech and Kwikot

### **Mounting to a SunScan flat roof stand:**

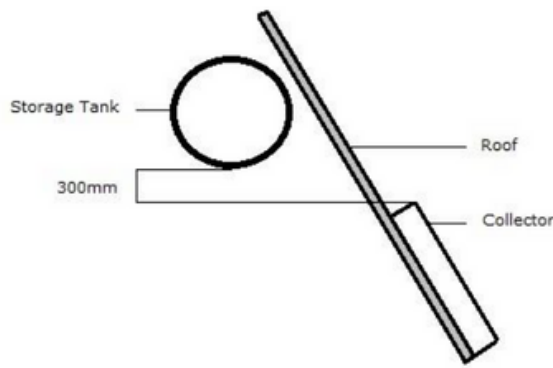
#### **Step 1**

Place the hot water tank into the four cradles, using two stainless steel straps and nuts and bolts, on either end of the tank tension the straps around the tank and secure to the cradles using the machined sections in the centre of each cradle as a fastening point.

#### **In Roof:**

Ensure that a suitable structure has been constructed inside the ceiling space and that supports to bear additional weight comply with SANS 10400 pt L, also take note of SABS0163, SABS 0400-1990 Part L and SANS 10106 5.3.3

Ensure that the bottom of the Hot water tank is positioned at least 300mm above the top of the intended position of the collector.



### Mounting the collector

Ensure that the thermal probe pocket located on the top left corner of the collector is always installed at the highest point, and that the collector is installed the right side up.

### Mounting to a The Water Solar Company flat roof stand:

#### Step 1

Mount the collector to the flat roof stand using the 4 securing clips provided, allow the two securing clips located on the bottom cross support to slot into the aluminium profile of the flat plate collector, attach two securing clips to the top cross support and repeat process, tighten the nuts to ensure the collector is fastened to the stand.

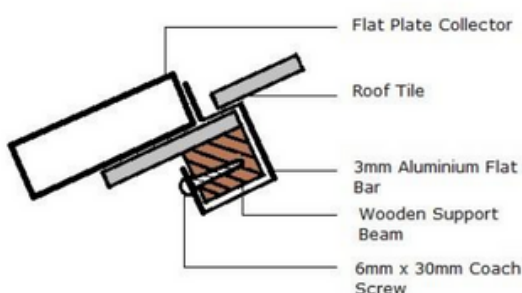
### Typical flush mounting:

#### Step 1

Using aluminium flat bar (4 of 40mm x 300mm x 3mm), drill an 8mm hole into one end of the flat bar and attach to the collector turning a 8mm bolt into the riv-nuts located on the collector (2 x top, 2 x bottom), slip the flat bar under the roof tile, bend the flat bar to fit the roofing profile. Use a coach or wood screw (minimum of 6mm x

30mm) to fasten the flat bar to the wooden support beam, repeat this process (top and bottom) until all four points are secured.

Diagram: Tiled roof installation

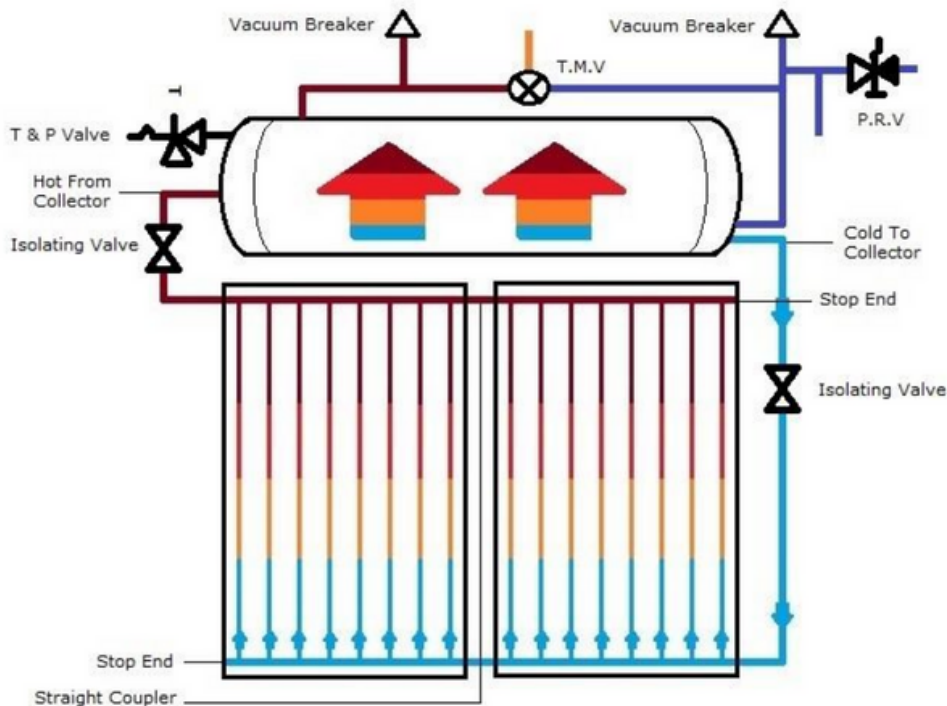


### Waterproofing

- Make sure all openings or alterations in the roof are properly waterproofed.
- The Water Solar Company suggests using a UV-resistant sealant.

## Plumbing Installation:

- While tightening compression fittings, use one spanner to secure the weld nut and another to tighten the compression nut.
- Avoid gripping any pipe work and be cautious not to over tighten.
- The Water Solar Company 300L Sunstream system utilizes two 2m<sup>2</sup> collectors connected in parallel.



## Safety Valves and Vacuum Breakers

To ensure compliance, all safety valves, pressure reducing valves, and vacuum breakers must be installed according to SANS 198, SANS 10254, and SANS 10106.

## Installation of the Cold Supply and Hot return to and from Collector

Always ensure that the hot return from the collector is connected to the highest connection point, and that the cold supply to the collector is connected to the lowest connection point opposite to the 'hot return from collector' connection. (See diagram A), Use two 22mm straight compression type fittings to connect the collectors in parallel and two 22mm compression type stop end fittings to close the two opposing ports still open (See diagram A) Do not create sharp or unnecessary bends in the pipe work and ensure a gentle gradient to and from the collector. Install isolating valves on the cold and hot supply and return to and from the collector (for maintenance purposes)

## Installation Guidelines for Anti-Scalding/Thermostatic Mixing Valve

- Ensure that the hot and cold water supplied to the valve have equal pressure and follow any marked directions for water flow.
- For safety, it's crucial to have a thermostatic mixing valve installed to regulate water temperature at the point of use. Set the valve to an appropriate maximum temperature within the range of 38°C – 65°C and avoid setting it to bypass.
- We suggest setting the temperature at the point of use to not exceed 55°C.

### Electrical Installation Guidelines:

- Only a certified electrician should handle the installation and connection of electrical components.
- Important note: Avoid any alterations to the original geyser thermostat to preserve all fuse and thermal cut-out protections.

### Checklist:

**Before handing over the system, ensure the following checklist is completed:**

- Ensure all air has been removed from the system (Refer to step 1, 4.8 commissioning).
- Check for any water leaks in the system or in pipes supplying water to usage points.
- Confirm that roof tiles are correctly positioned.
- Verify that roof flashing and waterproofing are watertight.
- All drain pipes are free of obstruction
- All hot water pipe work and piping to and from the collector is insulated



## Commissioning

- Check that all nuts and bolts securing the collector and hot water tank to the stand are tight and that all anchoring points to the roof are secure.
- Make sure all plumbing connections have been tightened and all pipe work has been secured.
- Check that the drain cock is closed
- Ensure that all electrical connections are secure and covered.

### Step 1:

- Check that there is water supplied to the property and that at least one hot water point supplied by The Water Solar Company system is open. This will allow any trapped air in the system to be released.
- Open the valve at the hot water tank to fill it.
- Before filling, make sure the point of use opened previously is free of air. This process may take a few minutes.
- Once a steady stream of water flows, close all points of use to pressurize the system.

### Step 2:

Inspect all plumbing joints for water leaks, especially at the highest point of the hot return from the collector. Turn the nut of the compression fitting a quarter turn counterclockwise (open) to release any remaining air trapped in the collector and connecting pipe work. Caution: Avoid unscrewing this fitting completely. Once a steady trickle of water emerges, tighten the fitting securely and check for any remaining leaks.

### Step 3

- Turn off the main water supply to the system.
- Open any inline strainers and remove any accumulated debris, especially crucial for new properties due to potential debris in the mains water supply.
- Reopen the supply after completing the cleaning.

### Step 4

Uncover the collector and let the system heat up. If necessary, use a multi-meter to check if the heating element is activating and drawing the correct amperage.

### Step 5

Check the system for any leaks again once it has been heated.

## Operating Instructions

### Startup Procedure

In case of any water supply interruption to the property or solar system due to municipal works or maintenance, requiring re-commissioning, follow steps 1-6 of section 4.8 Commissioning. Always remember to adhere to the necessary safety procedures.

### Emergency Shutdown Procedure

In case of system damage or hot/cold water leaks, promptly close the supply shut-off valve and switch off power to the controller and heating element.

### System Performance

- The amount of hot water produced and available depends on usage patterns and weather conditions.
- Solar radiation is highest on clear, sunny days from 9 am to 3 pm, allowing the system to operate at approximately twice the maximum ambient temperature during use and reach temperatures exceeding 70°C when not in use.
- Regularly prune any trees that could create shading during these times.
- To optimize your solar water heating system, consider the following tips:
- Opt for showers over baths as they generally consume less hot water.
- Schedule the majority of your hot water usage in the evening to make the most of the free energy collected during the day.

### High Water Temperatures

The Water Solar Company system has the potential to achieve temperatures surpassing 50°C, especially during extended exposure to direct sunlight, particularly in the summer, or extended periods of low water usage. It is crucial to exercise extreme caution.

While each system is equipped with a thermostatic mixing valve to control the temperature at the point of use, it is advisable to always test the water before using it to confirm its suitability for the intended purpose and to prevent scalding.

# Maintenance

## Regular maintenance

Please note: The following are recommended schedules and may require more frequent maintenance based on water quality, such as areas with high levels of water deposits like magnesium and calcium.

If any maintenance work necessitates isolating the collector using the two isolating valves on the hot and cold return and supply pipes to and from the collector, always remember to cover the collector during this period and reopen the valves once the maintenance is completed.

- Make sure the collector is clean to maintain performance. Use a soft cloth and fresh water to wipe the glass clean in the morning.
- Regularly check for system damage and leaks in the pipes.
- Drain and flush the system twice a year to eliminate scale buildup from poor water quality.
- Inspect all valves, including temperature and pressure relief valves, pressure reducing valves, expansion valves, vacuum breakers, and thermostatic mixing valves bi-annually by a professional.
- Small water releases from certain valves during heating are normal due to water expansion. Continuous leaks may indicate failure and require replacement.
- If in doubt, consult an authorized installer.
- Ensure the discharge from these valves remains open and unsealed.
- Regularly check and clean all filters and strainers.
- Inspect the mountings on the collector for weathering and fatigue.
- Monitor pipe insulation for any degradation or damage, replacing it as needed. Always be cautious of high temperatures from the collector and pipes during maintenance to avoid scalding. Ensure proper safety measures are in place.
- If you notice a change in temperature at the usage point, contact an authorized installer as the thermostatic mixing valve may require adjustment or repair.
- Any necessary repairs or part replacements should be carried out by an authorized installer.
- In case of an emergency, such as visible damage to the collector, tank, or pipes, immediately shut off the water supply and power to the heating element, then contact an authorized installer.
- Solar Lifestyles cc t/a SunScan Solar Energy Technologies and its affiliates are not liable for any injuries, deaths, or property damage resulting from inspections, whether visual or otherwise, conducted by individuals.

## Troubleshooting Steps:

- **Before trying any of the troubleshooting methods mentioned below, make sure that the power to the heating element is not cut off. Check that all relevant circuit breakers and isolator switches are in the "on" position.**
- **Confirm that the water supply to the storage tank is not disrupted or accidentally drained. For instance, due to municipal work on water mains.**

<b>Problem</b>	<b>Possible cause</b>	<b>Corrective action</b>
Little to no solar heat contribution	Low solar radiation, Shading, Tempered glass cover is dirty, Air trapped in the collector and or piping to and from collector, Hot water leak	On days with low solar radiation ensure that the backup heating element times are adjusted according to hot water requirements, Always ensure that any trees that may cause shading are pruned regularly, visually inspect collector and clean tempered glass if required, Natural convection will not occur successfully if there is any air trapped in the collector or piping connecting to tank, purge air by opening a connection very slightly at the highest point, this must only be done by a trained professional, Inspect the system for any leaks, if a leak is suspected shut off water supply to system and contact your dealer.



# Technical Specification

## SS-FP RANGE

<b>Collector Type</b>	<b>SS-FP-2.0</b>
-----------------------	------------------

<b>General Information</b>	
Standard Dimensions	2.005m x 1.003m
Gross Area	2.01
Aperture Area	1.86
Absorber Area	1.745 m <sup>2</sup>
Number of Covers	1
Cover Material	tempered glass
Cover Thickness	3mm
Cover Transmission	88%
Weight	32kg
Power output at 1000W/m <sup>2</sup> ( $t_m - t_a$ ) = 30 °C	1029 W

<b>Casing</b>	
Frame Material	Aluminium
Frame Colour	Bronze Brown
Back Plate Material	Aluminium
Sealing Gasket	Ethylene-Propylene Diene Monomer

<b>Absorber</b>	
Material	Aluminium
Thickness of Absorber Plate	0.5mm
Surface Treatment	Cu and Al complex
Volume of Absorber	1.66 L
Header Material	Copper
Header Tube Size	22mm
Riser Material	Copper
Riser Tube Size	12mm
Operational Pressure	600kPa
Test Pressure	1500 kPa
Stagnation temperature	153 °C

<b>Thermal Insulation</b>	
Insulation Material	Glass Wool
Back Insulation Thickness	35mm
Side Insulation Thickness	25mm



**+27 62 375 5088**



**+27 65 321 5803**



<https://www.thewatersolarcompany.co.za/>



<https://maps.app.goo.gl/MBR2LMW3T6f9TtHV9>



<https://www.facebook.com/watersolarcompany>



<https://www.youtube.com/@TheWaterSolarCompany/>



<https://www.instagram.com/watersolarcompany2023/>