

**Congratulations with your purchase of our high quality, corrosion free hot water cylinder. (HWC).**

If you are the installer, please follow the installation instructions carefully, AND check the final installation according to the instructions. The Xstream SOLARSTREAM™ range can only be installed in a HORIZONTAL position.

Our Solarstream range is fitted with a Heat Exchanger (HE), the so-called “Indirect Solar System” or “Closed System”. The water inside the HWC is heated via the HE that in turn forms a closed circuit with the Solar Panel (SP). This closed circuit is filled with a suitable anti-freeze fluid. This anti-freeze fluid then circulates through the HE and back to the SP and in the process the water inside the cylinder absorbs the heat indirectly from the HE, thereby protecting the SP (flat panel) from bursting in freezing conditions.

When connecting solar absorption panels of any kind to the SOLARSTREAM™ range, the element should be placed in the upper element position at the rear end of the tank. This will ensure maximum use is made for the solar energy, setting the thermostat at 60°C.

Remember that the HWC must be installed at a higher point than the highest point of the SP, so that the heated antifreeze from the SP can siphon through the HE inside the HWC. We supply our tanks with copper-to-copper conex fittings for ease of installation. Please hold the rear nut with a spanner when the connections are done to the fittings provided. No soldering is allowed. The supplied fittings must not be removed.

Proceed as follows:

- Position the SP onto the roof, facing north. Follow the instructions from the SP manufacturer to ensure a secured installation. Ensure that the SP is level by using a spirit level. Allow 800mm free space for the element to be replaced if needed in future.



- Position the Solarstream HWC above the SP with the cold inlet/ main supply on the HWC, when the SP is faced from the front, to the left of the SP. Ensure that the HWC is level.

- Connect the SP to the HE on the HWC as follows:

- From the top of the SP to the top of the HE on the HWC, marked “From top of panel”

- Install a conex-type T-piece to the HE and a 300mm length 22mm copper tube connect positioned vertically using a conex-type stopper

- Make sure there are no negative (downward) bends.

- From the bottom of the HE on the HWC (marked “to the bottom of panel”) to the \ bottom of panel.

- It is advisable to connect it the opposite bottom position on the SP, or if vacuum tubes with a manifold is used to the opposite end. Ensure that a negative flow is created by forming a “gooseneck” taking the solar return to a point below the manifold and then up again.



- Fill the SP and HE with suitable anti-freeze (non-toxic type). Fill it either from the bottom of the SP (with flexible hose and feeder, higher than HWC – keep the conex stopper off till it overflows) or fill from the top. Ensure no air is trapped inside the system. Ensure no leaks on the connections: Fill the system to its brim and connect the conex stopper.



- Connect the incoming cold line to the inlet (at bottom of HWC). Use a male inlet coupler (MIC).

- Ensure a suitable (up to 400kPa) pressure reducing valve (PRV) is connected to the incoming line AND that the cold supply is taken from a point AFTER the PRV. This will ensure balanced pressure (Hot and cold water supply at a mixing tap having the same pressure).

- Install a vacuum breaker at least 300mm above the HWC.

- Connect the hot water supply line from the outlet (on top of the HWC), also installing a vacuum breaker as per cold inlet.

- Connect copper tube to the temperature and pressure safety valve (T&P) and take it at a slope to a safe position. Try to minimize sharp bends.

- Use two spanners when connecting the conex (supplied) fittings. Hold the rear nut whilst tightening the connecting nut.
- The T&P valve can be adjusted to the required angle. Loosen the securing nut, adjust the angle and fasten the nut at the desired angle.
- Fill the HWC with water. Leave a hot water tap open to get any extra air out of the system.
- Once filled, close the tap.
- Proceed by connecting the electrical supply. Open the electrical box and connect the electricity line. Always ensure the electricity line is dead when working with electricity. Ensure a suitable qualified artisan performs this function. Recommended thermostat setting 60°C, using the middle position of the element (at the rear end of the HWC) for installation with solar panels.
- Install a suitable isolator switch within easy reach of the HWC.
- **ALWAYS ensure that the HWC is filled with water BEFORE the electrical supply is commissioned.** Failing this the HWC and submersible element might be damaged.
- Check all fittings for leaks, and ensure all supply lines are properly fastened and secured to fastening points; thereby minimizing strain on the fittings attached to the HWC.
- Never remove the supplied copper fittings from the HWC.

### Split system Installations

If forced circulation is required (where the HWC is positioned at a point lower than the SP) follow the instructions of the pump supplier. Always ensure that the fluid is circulated FROM the tank (HWC) TO the panel (SP). This will ensure that the cooler fluid is circulated through the pump.

**Fault Finder:** The water doesn't heat even in bright sunlight?

Check the system for an air lock. Loosen (best early in the morning before the panel is warm) the conex stopper at the top of the HWC and add more antifreeze. Close the system properly and repeat till problem has been solved. The best practice is to fill the panels from the bottom with a flexible hose held in a position higher than the HWC.

Please contact our Service Desk on +27 21 872 0900 if any further assistance is required.

**ENJOY YOUR HOT WATER SUPPLIED BY OUR XSTREAM CORROSION  
FREE HOT WATER CYLINDER!**



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