

The Xstream MAINSTREAM® range is factory fitted with:

- A. Xstream hard water incalloy element – good for any water condition (fitted with anode - increased element life-span).
- B. TSE 11 thermostat.
- C. Cobra temperature and pressure safety valve (T&P).
- D. Cobra drain valve fitted with lock nut.



What size solar panel or what tube set to use with the geyser?

Volume	Geyser Size - Litre					Panel Size - m ²				Manifold and Tubes		
	100MS	150MS	150MSD	200MS	200MSD	1.5 m ²	2.0 m ²	2.4 m ²	3.0 m ²	10 Tube	15 Tube	20 Tube
100 Litre	✓					✓				✓		
150 Litre		✓					✓				✓	
200 Litre				✓					✓			✓
300 Litre			✓✓				✓✓				✓✓	
350 Litre			✓		✓			✓✓			✓✓	
400 Litre					✓✓				✓✓			✓✓



Connected to Solar Panels



Connected to Evacuated Tubes



Interconnected for increased volume



- For direct solar water heating with flat panel or indirect with evacuated tubes.
- High pressure, 400kPa Horizontal hot water cylinder.
- Fitted with incalloy element; thermostat; drain valve; temperature and pressure (safety) valve.



- As per Mainstream above with additional ports for interconnection of tanks for increased volume (300 litre plus).
- Second element position in upper half of tank for less electricity usage (less water heated electrically).



- For indirect solar water heating with flat panel.
- High pressure, 400kPa Horizontal hot water cylinder.
- Fitted with incalloy element; thermostat; drain valve; temperature and pressure (safety) valve and internal heat exchanger.



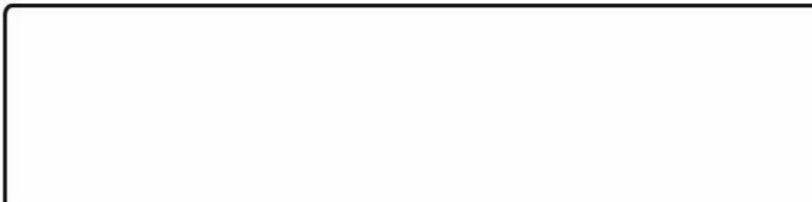
- Unique balanced-pressure hot and cold water supply, suitable for shower mixing.
- No water wastage - re-using of expansion water.
- Cistern-type, open to vent system.



- Open to atmosphere non-ferrous insulated thermal energy storage tank with various design options to choose from.
- Bigger volume storage tanks, 2000 and 650 litre options, with various inter-connectable design options.
- Tank provides for various heat exchanging configurations.



- Open to vent thermal 360 litre storage container with removable lid.
- Various heat exchanging configurations.
- Suitable for installations in the open.



For total reliability you can count on.

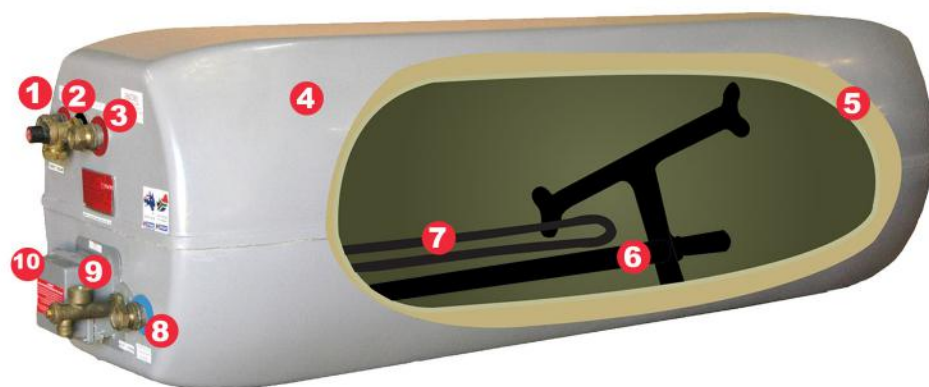


Xstream's edge

The most important part of a hot water cylinder is the inner tank. It must perform under pressure at high temperatures and survive an extremely aggressive chemical environment.

We use epoxy vinyl ester resin and glass in the construction of our inner tanks, thereby eliminating known causes of inner tank failures associated with traditional metal tanks. Non-ferrous materials (like those used by us) cannot corrode (a major reason for tank failures) nor can any galvanic reactions (where dissimilar materials are interconnected) occur - our tanks are totally corrosion free, no metal is used in the construction thereof.

Typical Xstream Mainstream® tank



1. Solar inlet from top of panel
2. Temperature & pressure (safety) valve
3. Hot water outlet
4. UV resistant and corrosion-free outer casing
5. High density polyurethane insulation
6. Inlet diffuser (baffle)
7. Incolloy hard water element at base of cylinder
8. Solar outlet to bottom of panel
9. Inlet/draincock
10. Electrical box (IPX4 rated)

Design features

For the installer

- All the fittings are positioned on one side of the tank for ease of connections and less pipe work.
- Can be easily stacked and interconnected for bigger volume requirements.
- The tank is lightweight, easy to handle and install, less labour required.
- Drain- and safety valve factory fitted.
- Stainless steel loop straps available on request for wall or roof installations.

For the home owner

- The tank can be manufactured in any colour in order to blend in with the environment.
- Can be installed either in- or outside.
- The tank is solar ready – a solar absorption panel or tube set can be connected at any future time.
- Low overnight heat losses as non-ferrous materials do not transfer heat, saving you on your electricity bill.
- Maximum hot water draw-off due to our efficient baffle/spreader, that prevents internal mixing of existing hot and incoming cold water.

Design aspects

Material selection is crucial as mentioned before.

Our non-ferrous tanks are:

- Totally corrosion free – they will never rust.
- No galvanic reactions will occur in our tanks.
- Made from (non-ferrous) materials with uniform expansion rates (expansion caused by hot and cold cycles inside the inner tank) that totally eliminates the need for protective linings of any sort – (protective linings are used as protection against corrosion in metal tanks, but these can crack or delaminate in use, triggering corrosion in metal tanks).

How the Mainstream works

Our Mainstream range are closed-vent tanks with a pressure rating of 400 kPa.

In referring to these tanks as “high pressure tanks” what is meant is that these are closed-vent tanks – as you open the hot water tap cold water basically pushes the hot water out, thus the tank can be positioned at a point lower than the draw-off point.

In order to prevent the hot and cold water mixing inside the tank a diffuser is installed, keeping the incoming cold water at the bottom of the tank where the electric element is positioned in order to reheat the incoming cold water. The tank is basically a storage tank of thermal energy (hot water). Once heated the tank's purpose is to keep the water hot for later usage. Various heating sources can be used with the Xstream tank – electricity (element), solar panels or tubes or heat pumps. The tank is factory fitted with the necessary in- and outlet ports to accommodate these connections at any future time.

It is therefore very important to weigh up all the options when replacing or installing a storage tank – the better it is insulated the longer the water inside the tank will remain hot and less electricity will be used in maintaining the temperature inside the tank.

The Xstream Mainstream Specifications:

Capacity in Litre	Height	Width	Length	Weight	Element
50	485 mm	485 mm	745 mm	13 kg	1 kW
80	485 mm	485 mm	925 mm	15 kg	1 kW
100	485 mm	485 mm	1 047 mm	21kg	2 kW
150	485 mm	485 mm	1 520 mm	25.5 kg	2 kW
200	485 mm	485 mm	1 920 mm	33.5 kg	3 kW

Note: 50l available in solar on request only