

Thermosiphon Systems

The thermosiphon system is Chromagen's most straightforward, efficient solar system, and requires low maintenance. Its high efficiency provides hot water after just a few hours of sunlight. This is the environmentally friendly answer to a family's hot water needs.

Based on natural water circulation and requiring no pump or control unit, the thermosiphon system is comprised of a solar collector and a storage tank. It also comes complete with all connecting fittings.



Solar Collector

Highly efficient, selective coated absorber plate, stainless steel or aluminum case, tempered solar glass and polyurethane insulation. Net area: 1.5 – 2.6 sq.m.

Solar Storage Tank

White polyester-coating or stainless steel exterior, 3 mm enamel-coated steel interior, polyurethane insulation, electric backup, regular or with heat-exchanger (double jacket, spiral). Capacity: 30 – 300 liters.

Connecting Kit

Chromagens unit arrives complete with fittings, check valve, safety valve, pipes and connections.

Steel Stand

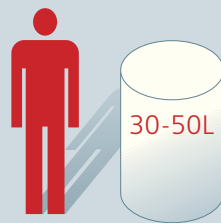
On flat roofs, the tank is elegantly supported by a galvanized steel stand. On pitched roofs, the collector lies flat on the tiles, while the tank sits on or under the roof.

Estimating Your Needs

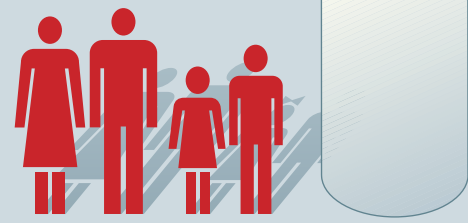
Chromagen will advise on customer requirements, and match the size of the collector to the tank size. The following table gives an indication of efficient configurations. There may be variations according to output demands and climate.

Tank size	Collector Model	Area of collector
120 liters	CR 100	1.9 sq.m.
150 liters	CR 110	2.2 sq.m.
170 liters	CR 120	2.6 sq.m.
200 liters	CR 120 or two CR 90	2.6 sq.m. or 2 x 1.5 sq.m.
300 liters	Two CR 110	2 x 2.2 sq.m.

Volume of water needed per day



Daily water consumption per individual



Daily water consumption per family

Chromagen's thermosiphon systems:

Open-loop System for Warm Climates

This simple and economic system is suitable for climates where there is no risk of freezing. Mains water flows to the tank and then to the lower part of the collector where it is heated. It then ascends the collector and flows on to the storage tank, and from there to the user. An electric backup provides energy during periods of cloudy weather.

Close-loop System for Cooler Climates

A close-loop system uses a wide-surface heat exchanger and allows anti-freeze to be added. This system also helps to avoid the buildup of scale in the collector. Heated water from the collector flows into the heat-exchanger, and then returns to the collector. An electric backup provides energy during periods of cloudy weather.

