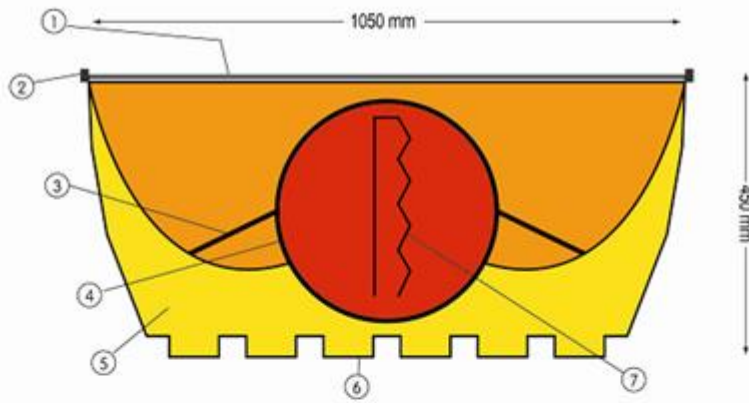


**INSTALLATION MANUAL
&
USERS MANUAL**



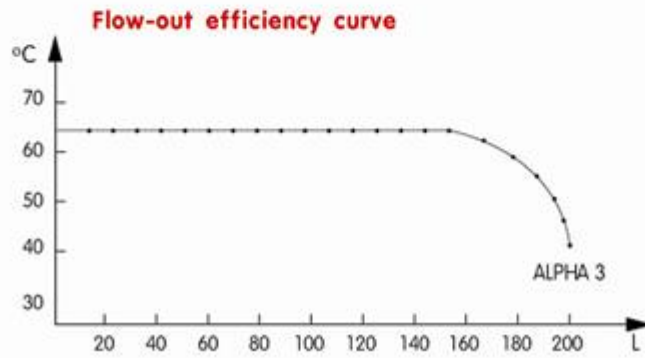
INTEGRATED SOLAR WATER HEATER

ALPHA3



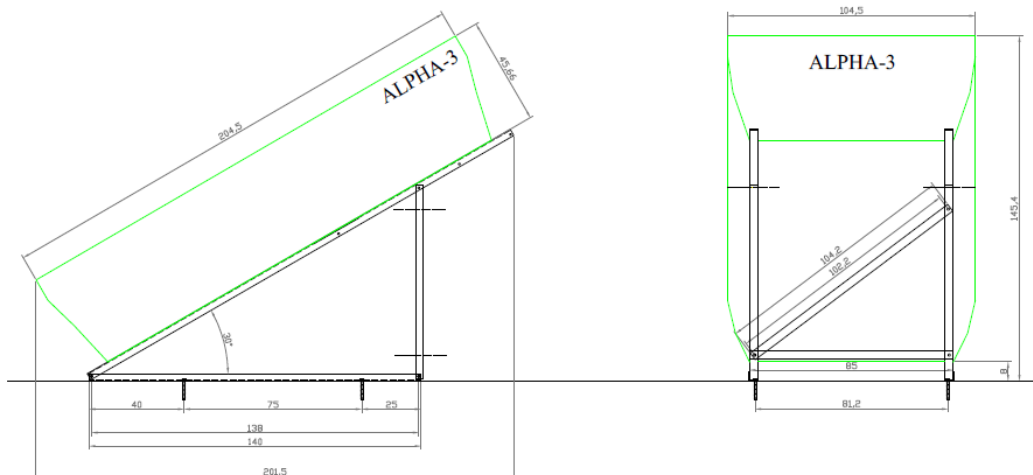
TECHNICAL SPECIFICATIONS

1. Glazing 4mm low iron prismatic tempered glass.
2. Aluminium strip sealed with EPDM rubber.
3. Fins collecting & transferring energy and parabolic concentrating mirror.
4. Collector - tank of low carbon steel, glass coated (enamelled) oven treated at 860 °C. Magnesium anode protection.
5. 30-50mm foamed polyurethane insulation.
6. Casing of ABS plastic 3,0mm with UV stabilizer.
7. Back up heating available.



inclination 30°
weight = 106 kg
nominal capacity = 200 ltr.

Dimensions in "cm"



1. INSTALLATION

- 1.1. Transfer the product to the exact location where it will be installed, and place it in an upright position (the pipe with the red rubber ring should be on the top), carefully standing it on its base (photo 1). Make sure there are no obstacles shading the collector (trees, high walls etc.). If however there are high obstacles, the product must be moved further back so that the distance between the product and the obstacle is twice the height of the obstacle.



Photo 1

- 1.2. Unfold the supporting aluminum frames which are folded in the back of the product and screw them together as in photo 2.

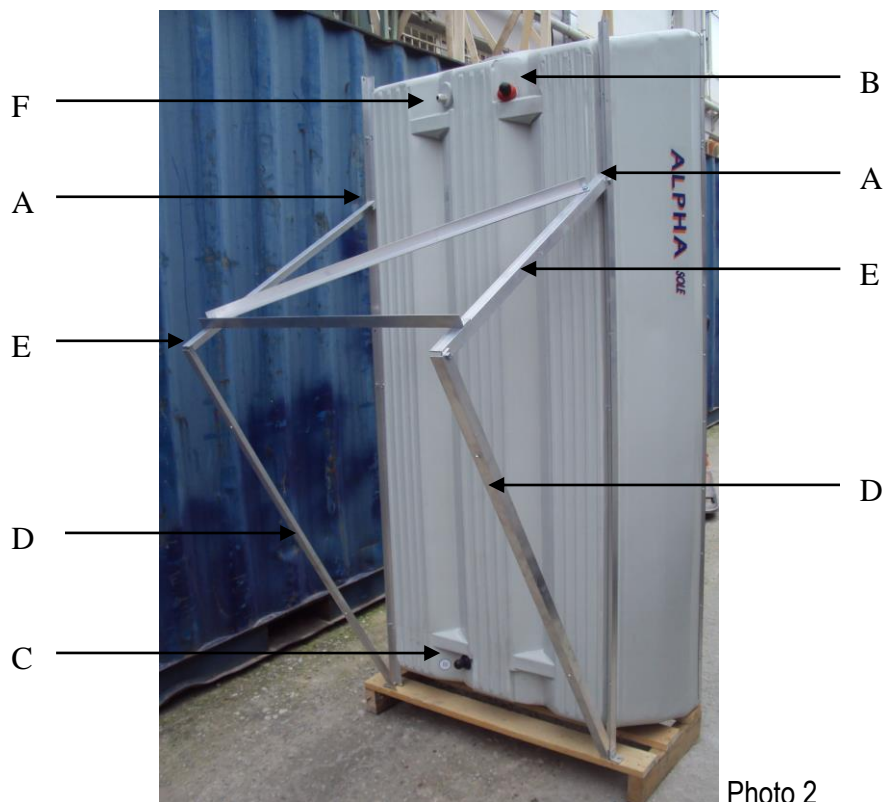


Photo 2

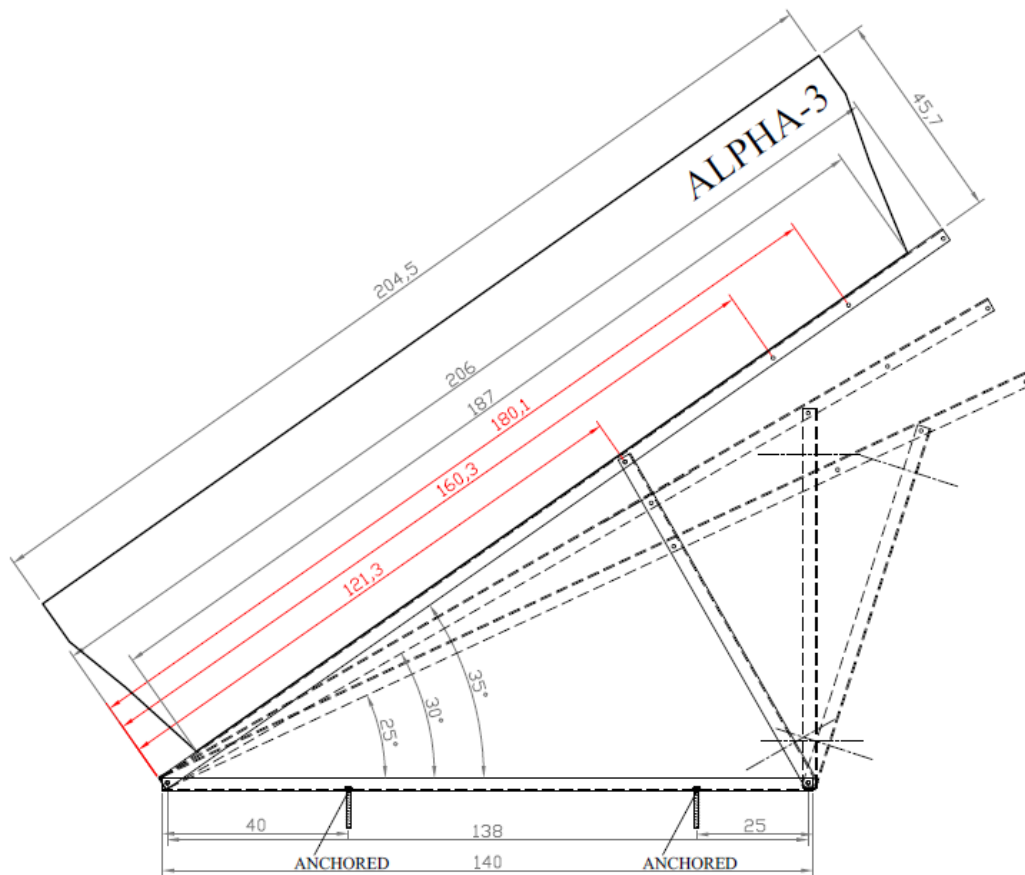
- 1.3.a) Inclination adjustment – for maximum efficiency on an annual basis adjust the product's inclination by moving the support at points A (photo 2) to one of the 3 holes which are found on the aluminum supports which are fixed on the back of the product along the length.

The suitable positions are as follows:

The highest hole (tip) is for areas 25-35° latitude (inclination 25°)

The middle hole is for areas 30-40° latitude (inclination 30°)

The lowest hole for areas 35-50° latitude. (inclination 35°)



b) If however maximum efficiency is of no concern for the whole year and enhanced efficiency is required during the summer (which will result in decreased efficiency during the winter) move the support points A (photo 2) one hole higher than the proper place which is described earlier. This can be applied in the case of hotel installations, specifically for hotels which are fully booked during the summer and are either closed or have very few guests during the winter.

If on the other hand enhanced efficiency is required during the winter (resulting in decreased efficiency during the summer) then the support points A are moved one hole below the proper hole.

After adjusting the product's inclination, the collector must have a south facing position if your location is in the northern hemisphere or a north facing position if your location is in the southern hemisphere.

1.4. Carefully lower the product so that the support frames touch the ground (photo 3) and provided this is the most suitable place (no obstacles etc.) secure it to the ground with 4 raw-plugs through the holes on the base of the support frames.



Photo 3

2. PLUMBING CONNECTION

2.1. A pipe with a blue rubber ring is situated at point C (photo 2). This is the cold water supply inlet. Screw the safety valve on this pipe, and then connect the cold water mains. The safety valve can be found in the small package containing screws etc. accompanying the product.

However in the case where a water supply mains with pressure does not exist and water is supplied through a water tank which is situated a little higher than the product, do not use the safety valve. The safety valve requires at least 1 bar pressure in order to allow the water to pass through. A gate valve should also be connected to the cold water pipe so that the water supply can be shut off when necessary.

2.2. A pipe with a red rubber ring is situated at point B (photo 2). This pipe is the hot water outlet. Connect this pipe to the hot water distribution network for consumption.

3. WARNING

The hot water pipe must be well insulated in order to prevent the reduction in temperature before the water reaching consumption. If the ambient temperature of your area reaches temperatures lower than 0°C, it is necessary to insulate the cold water pipe as well, in order to prevent it from freezing and breaking.

This product has been manufactured to withstand up to -15°C for 2 consecutive days. In case we have such conditions for more consecutive days, a hot water tap must be left open and some water must run through it continuously to avoid any damage or switch on the electric heating element for 1 hour per day/night.

4. ELECTRIC HEATING ELEMENT CONNECTION (OPTIONAL)

If desired, the electric heating element of the solar water heater can be connected as an auxiliary source for cloudy days or days that the quantity of hot water is not sufficient. The connector is located near the hot water pipe at point R (photo 3). Use a 3 X 4 cable or if the distance to the electricity mains is short you can use a 3 X 2.5 cable which has a smaller size or just follow the regulations of electrical connections in your country. Make sure that the ground (green wire) has been connected properly to the ground of the building.

The electric heating element could be 1.5, 2.0, 3.0 or 4.0kW and contains a thermostat incorporated in it which has been fixed at 60°C at our factory. If a different temperature is required open the metallic cover located at point R (photo 3, 4) and regulate it with a screwdriver to the desired position. We recommend you do not surpass 70°C.

5. MAINTENANCE

The only maintenance this product requires is the replacement of the magnesium anode every 2-3 years (depending on the water quality). The magnesium anode protects the tank from electrolysis. It is attached to the electric heating element so the whole kit is removed and replaced in a few moments from point R (photo 3, 4) on the top side of the product.



Photo 4

6. USER'S INSTRUCTIONS

Do not use the hot water the first day of installation even if it is a sunny day. Allow the product to heat the metal masses of the boiler which have a large thermocapacity. The second day, use the hot water after 14:30 hours.

Your solar water heater has a specific capacity of water. This quantity will reach the season's maximum temperature at 15:00 hours during the winter and 17:00 hours during the summer. Maximum temperatures range from 60°C to 80°C depending on the season, the product's inclination and provided we have not consumed any water earlier in the day.

Therefore for maximum efficiency the best hours to use the hot water provided are between 15:00 – 22:00 hours.

When we consume approximately 80% of the quantity of the water, the rest of the water will turn cold since in the meantime it has been cooled from the quantities of water which automatically enter the boiler to replace the hot water which has been consumed.



SOLE S.A. Version 2. July 2017
SOLAR DOMESTIC APPLIANCES MANUFACTURER
Lefktron & Laikon Agonon, 136 71 Acharnai – Athens – Greece
Tel.: (+30210) 2389500 • Fax: (30210) 2389502
Email: export@sole.gr • www.sole.gr • www.eurostar-solar.com