

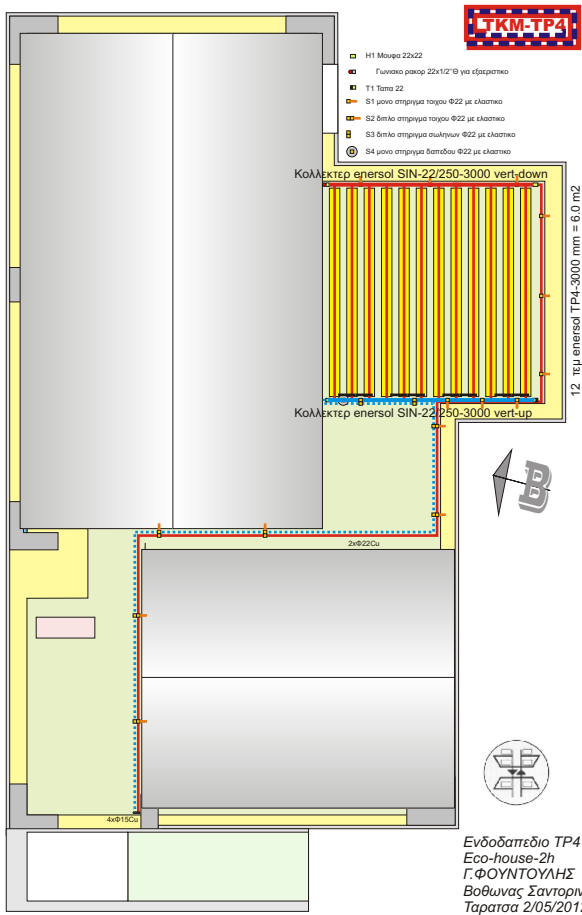


Installation Referenses of TP4-Enersol



TKM/TP4-Enersol ECO-house 12A Vothonas Santorini

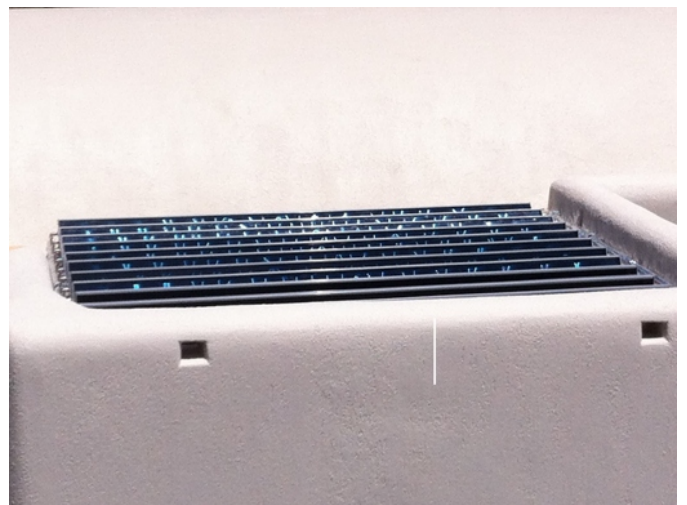
A two-store Eco house with heating and cooling floor system, 12 thermopanel, 500 L solar tank, 6 kW heat-pump (A/W), wall embedded fan coils, heated Yacousi.



Building with Energy classification (A+)



The Panels must be fixed towards a wall on at least one side, other distributor pipes can be mounted upon foundations.



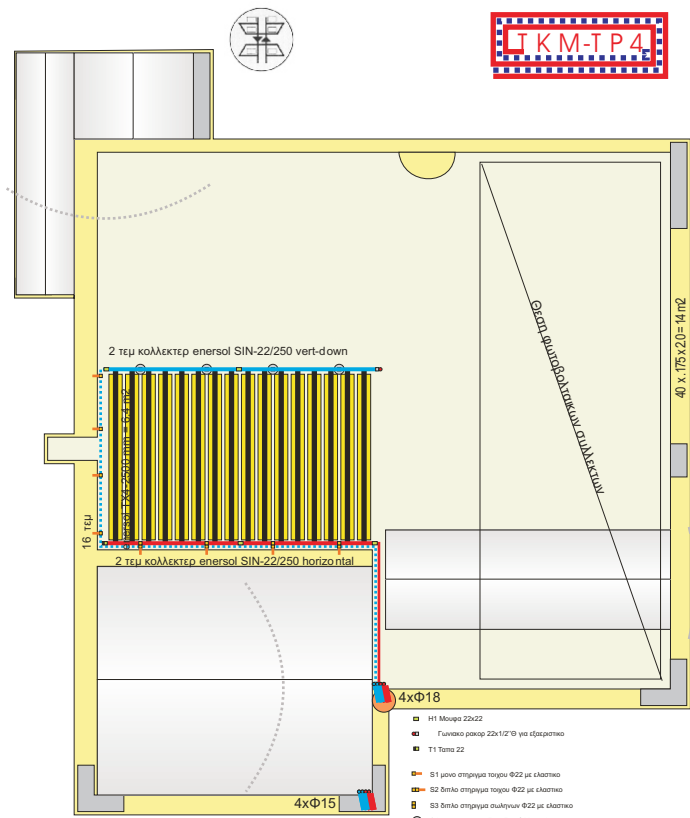
Panels can preferably be arranged in symmetric arrays. The hot water outlet pipe must higher than the inlet pipe.



Panels can be turned around in summertime in order to avoid excessive water heating when not habited.



The solar panels have a very low (20 cm) 'hight profile' and are not visible from the street level.



Ενδοδαπέδιο Τρ4
Eco-house-3
ΦΟΥΤΟΥΛΗΣ
κτίριο 3g Σαντορινή
Ηλιακό 27/12/2011

TKM/TP4-Enersol ECO-house 12B Vothonas Santorini

A two-store Eco house with heating and cooling floor system, 16 thermopanel, 500 L solar tank, 6 kW heat-pump (A/W), wall embedded fan coils, heated Yacousi.



Building with Energy classification (A+)



The Panels must be fixed towards a wall on at least one side, other distributor pipes can be mounted upon foundations.



Panels can preferably be arranged in symmetric arrays. The hot water outlet pipe must higher than the inlet pipe.



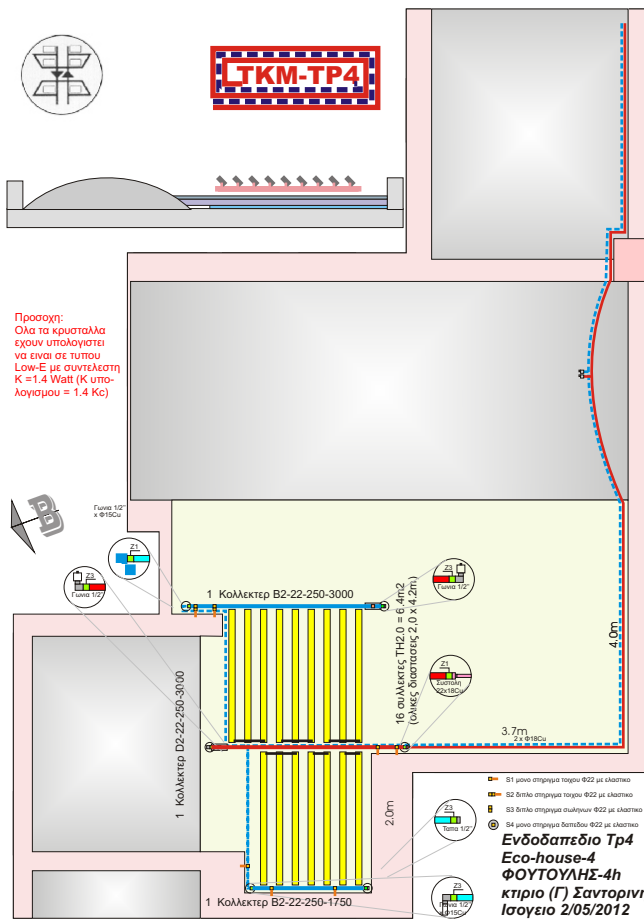
Panels are not affected by strong winds due to its free space the angle can easily be adjusted by turning in groups of four.



The non-pressurized solar water storage tank 500 L is well thermoinsulated to keep a mean temperature of 55-60°C.

TKM/TP4-Enersol ECO-house 12C Vothonas Santorini

A one-store Eco house with heating and cooling floor system, 16 thermopanel, 500 L solar tank, 4 kW heat-pump (A/W), wall embedded fan coils, heated Yacousi.



Building with Energy classification (A+)



The Panels must be fixed towards a wall on at least one side, other distributor pipes can be mounted upon foundations.



Panels can be arranged in non symmetric excentric arrays. Normally the middle double pipe is the hot water outlet.



A slight inclination is necessary for open circuit systems. On closed pressurised circuits the installation can be flat.

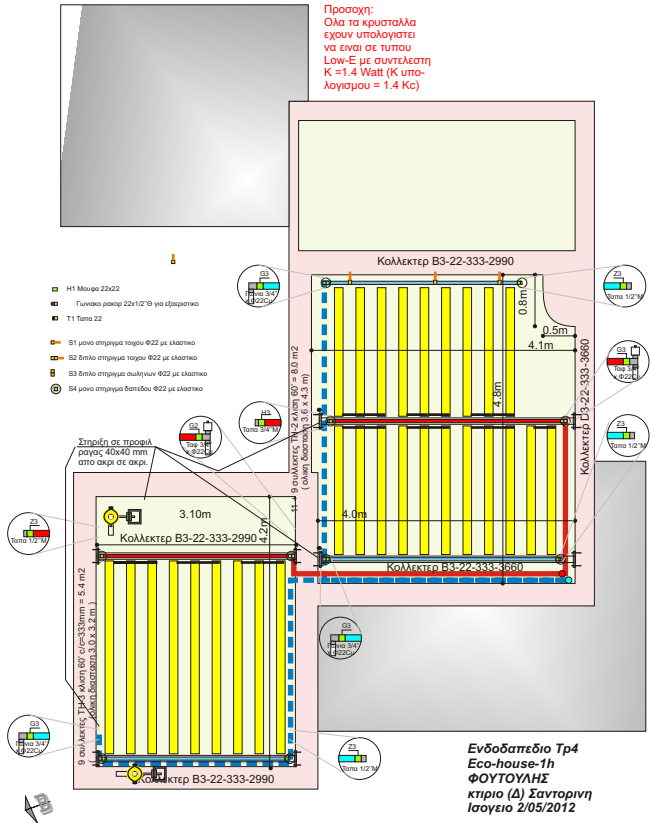


The solar panels have a very low (20 cm) 'hight profile' and are not visible from the street level.



TKM/TP4-Enersol ECO-house 12D Vothonas Santorini

A two-store family house with basement.
Low temperature radiator heating system.
Thermodynamic solar panels TD/(PV) for up to 75% low temperature solar heating.



Building on left hand side, Energy classification (A-)
Solar buffer tank 500 L, additional energy source oil burner



The backside of solar panels are temporarily covered by an aluminium plate which can be exchanged to PV-modules.



All roof areas are covered by 20 +9 solar panels (3.0/2.0 m) with high efficient selective surface ($a=95\%$ $e=5\%$)



The selfbearing collecting pipes are of stainless steel 304 and the connector couplings are in stainless steel SS 316



The preinsulated distributor pipe is fixed to the wall by ordinary pipe pipe fixtures with rubber surface.



300 m2 building with Energy classification (A+)

TKM/TP4-Enersol ECO T-house 11A Marapas Antiparos

A two-store Eco house with A/C heating & cooling system, 32 thermopanel TP3, 300 L solar tank, 12+15 kW heat-pumps, solar energy floor heating of bathrooms.



Master bed & bath extended module 5m x 5m



The solar panels are equipped with a 'blue' selective highly efficient al. surface ($a=95\%$ $e=5\%$) welded on copper pipes.



The solar panels have a very low (20 cm) 'high profile' and are not visible from the street level.



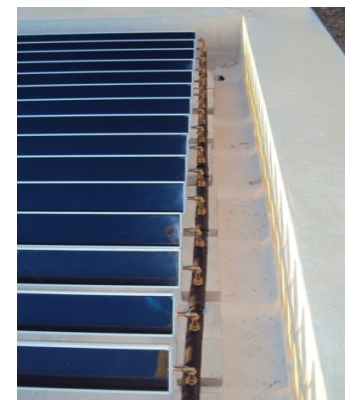
Panels can preferably be arranged in symmetric arrays covering of the whole of the available roof area.



The panels does not disturb the structural arctitecture lines if symmetrically incorporated on to the roof space.



The hot water collector pipe must be higher to air vents.



Cold water distributor pipe is mounted lower with elbows.



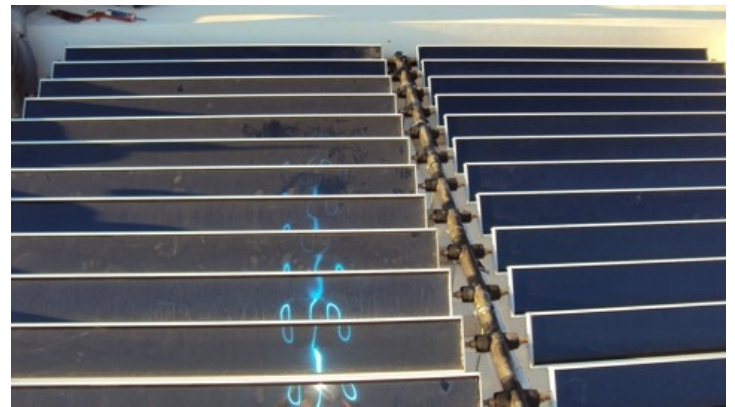
300 m2 building with Energy classification (A+)

TKM/TP4-Enersol ECO X-house 11B Marapas Antiparos

A two-store Eco house with A/C heating & cooling system, 32 thermopanel TP3, 300 L solar tank, 12+15 kW heat-pumps, solar energy floor heating of bathrooms.



Master bed & bath extended module 5m x 6m



The solar panels are equipped with a 'blue' selective highly efficient al. surface ($a=95\%$ $e=5\%$) welded on copper pipes.



The solar panels have a very low (20 cm) 'high profile' and are not visible from the street level.



Panels can preferably be arranged in symmetric arrays. The hot water outlet pipe must higher than the inlet pipe.



The panels are mounted on collector pipes with c/c 250 mm and are thus not affected at all by any strong winds.



The distributor pipe can be fixed towards a wall on one side or be mounted directly on small concrete foundations.