

Results of Annual Simulation

Installed Collector Power:	5.75 kW	
Collector Surface Area Irradiation:	7.22 MWh	1,323.17 kWh/m ²
Energy Produced by Collectors:	3,016.49 kWh	552.47 kWh/m ²
Energy Produced by Collector Loop:	2,880.92 kWh	527.64 kWh/m ²

DHW Heating Energy Supply:	3.8 MWh
Solar Contribution to DHW:	2880.92 kWh
Energy from Auxiliary Heating:	1525.51 kWh

Natural Gas (H) Savings:	13.3 m³
CO2 Emissions Avoided:	749.93 kg
DHW Solar Fraction:	65.4 %
Fractional Energy Savings (prEN 12976):	66.1 %
System Efficiency:	39.9 %

Basic Data

Climate File

Location:	Dublin
Weather Data Record:	DUBLIN
Global Radiation Annual Total:	1117.82 kWh
Latitude:	53.43 °
Longitude:	6.25 °

Domestic Hot Water

Average Daily Consumption:	260 l
Desired Temperature:	45 °C
Load Profile:	1 Hour Per Day
Cold Water Temperature:	February:7 °C / August:12 °C

System Components

Collector Loop

Manufacturer:	Ecologics
Type:	30 x 47mm Evacuated Tube
Number:	2.00
Total Gross Surface Area:	8.22 m ²
Total Active Solar Surface Area:	5.46 m ²
Inclination (Tilt Angle):	35 °
Azimuth:	0 °

Bivalent (Twin Coil) DHW Tank

Manufacturer:	T*SOL Database
Type:	DHW Tank - 300
Volume:	300 l

Auxiliary Heating

Manufacturer:	T*SOL Database
Type:	Gas Condensing Boiler - 9
Nominal Output:	9 kW



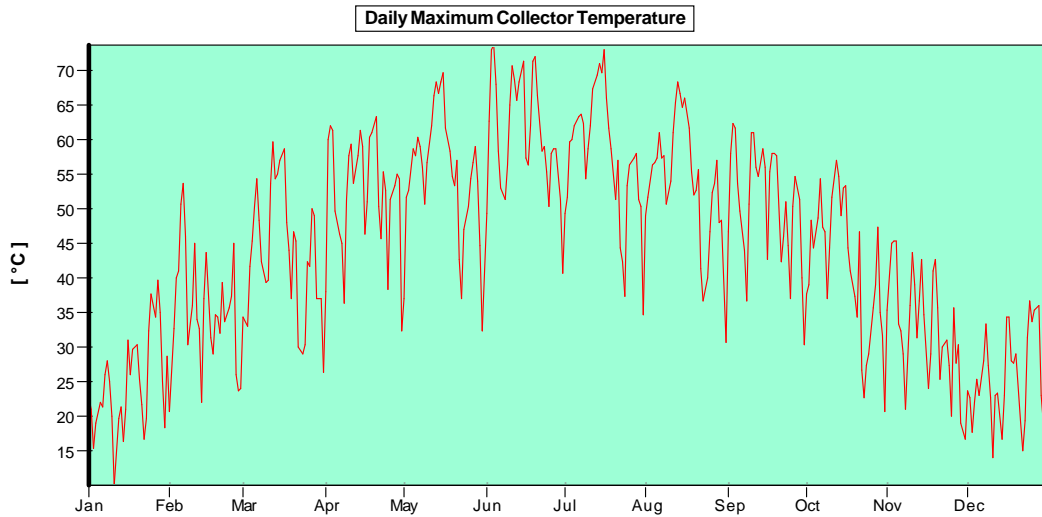
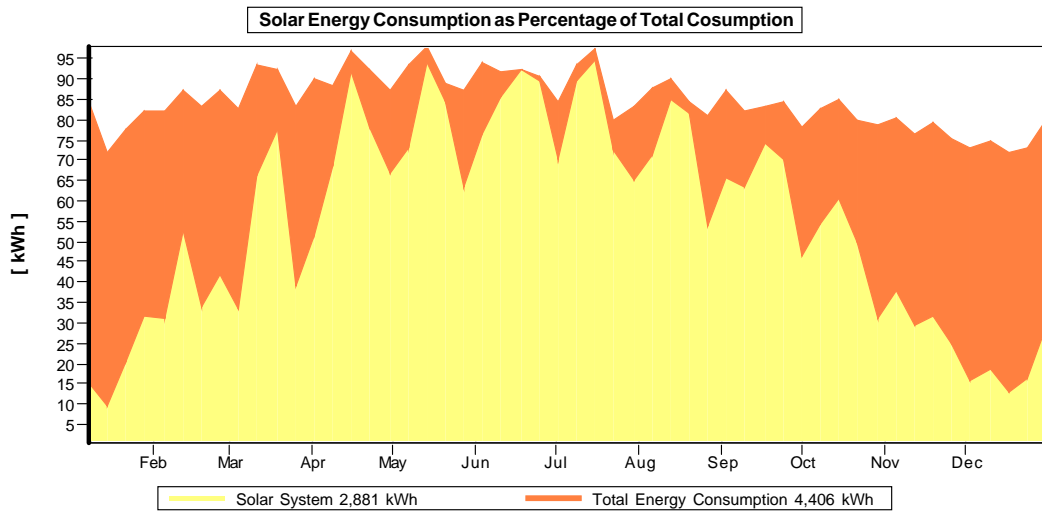
Original T*SOL Database



With Test Report



Solar Keymark



These calculations were carried out by T*SQL Pro 4.4 - the Simulation Programme for Solar Thermal Heating Systems. The results are determined by a mathematical model calculation with variable time steps of up to 6 minutes. Actual yields can deviate from these values due to fluctuations in the weather, consumption and other factors. The Schematic System Diagram above does not represent and cannot replace a full technical drawing of the solar system.