

Results of Annual Simulation

Collector Surface Area Irradiation:	5.69 MWh	1,104.96 kWh/m ²
Energy Produced by Collectors:	1.94 MWh	377.06 kWh/m ²
Energy Produced by Collector Loop:	1.49 MWh	288.35 kWh/m ²
DHW Heating Energy Supply:	1.19 MWh	
Solar Contribution to DHW:	1.49 MWh	
Energy from Auxiliary Heating:	0.37 MWh	

Natural Gas Savings: 148.3 m³
CO2 Emissions Avoided: 336.53 kg

DHW Solar Fraction: 80.1 %
System Efficiency: 26.1 %

Project Data

Location:	Wales
Weather Data Record:	"Ogwr UK"
Global Radiation Annual Total:	983.6 kWh
Latitude:	51.52 °

Basic Data

Domestic Hot Water

Average Daily Consumption:	70 l
Desired Temperature:	50 °C
Load Profile:	Detached House (morning max)
Cold Water Temperature:	8 °C 12 °C

System Components

Collector Loop


Manufacturer:	thermo solar Vertrieb
Type:	 HELIOSTAR 400 V-A
Number:	3.00
Total Gross Surface Area:	6.09 m ²
Total Active Solar Surface Area:	5.151 m ²
Inclination (Tilt Angle):	45 °
Azimuth:	0 °


Bivalent (Twin Coil) DHW Tank

Manufacturer:	T*SOL Database
Type:	 DHW Tank - 200
Volume:	200 l

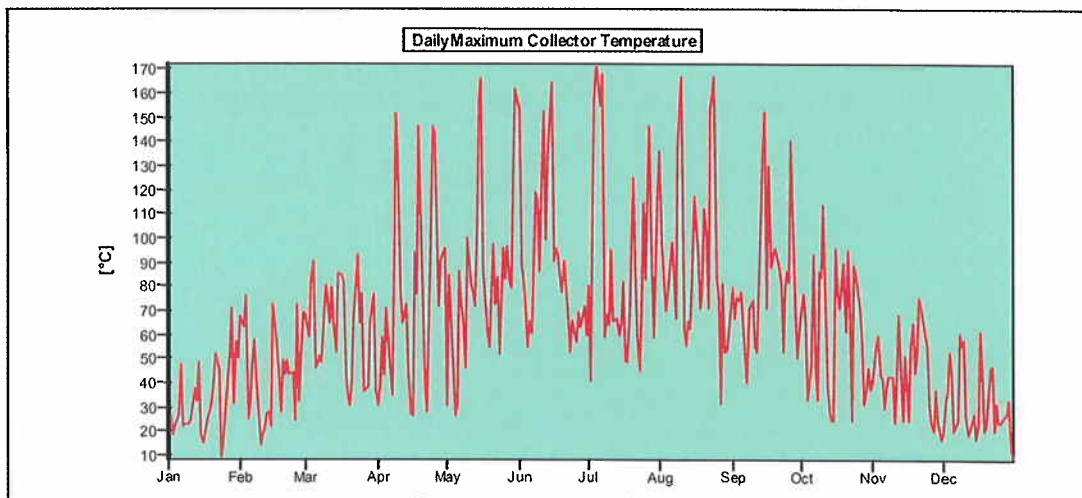
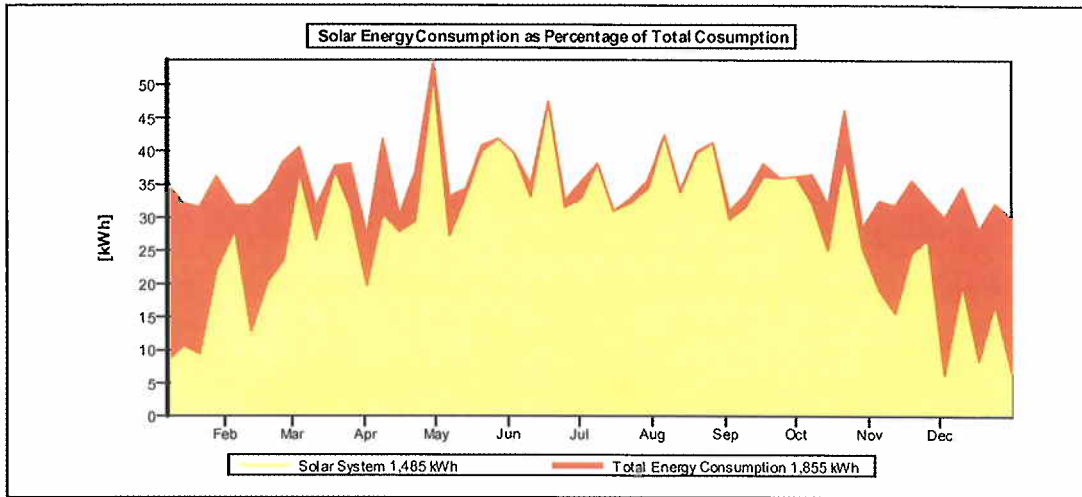
Auxiliary Heating

Manufacturer:	T*SOL Database
Type:	 Gas Condensing Boiler - 22
Output:	22 kW

 Original T*SOL Database

 With Test Report

 Proof of Conformity Available



These calculations were carried out by T*SOL Pro 4.3 - 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.