



Solar Hot Water Specification

SplitLine System with 200L Tank,
Evacuated Tube Collector with Gas Boost



This split configured solar hot water system consist of a 200 litre ground mounted tank and a 20 tube evacuated tube collector, and have been designed to provide energy efficient water heating and installation flexibility, without compromising the aesthetics of the home.

Providing reliable hot water in any weather, this system is complimented with a 20lpm or 26lpm gas auxiliary boost to supplement the heating required on days of high consumption and/or low solar gain.

How Chromagen's SmartLine Solar Hot Water Works:

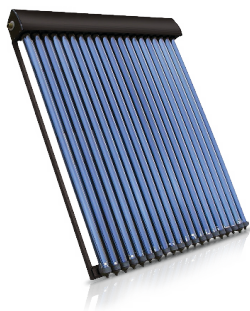
1. Roof-mounted thermal collectors harness the free abundant heat energy from the sun
2. Water from the tank is circulated via a small pump through the roof-mounted collectors and is heated
3. The heated water returns to the tank and is stored for later use
4. On days of high consumption and/or low solar gain the gas continuous flow booster assists in reaching the desired water temperature



System Specification

Evacuated Tube Collectors

Evacuated tube collectors are designed to efficiently collect the thermal energy from the sun in a variety of challenging conditions. Utilising a vacuum which allows for the ultimate in heat retention, the tubes themselves contain no water; therefore are not subjected to freezing, making them ideal for cold climates. Along with a single large bore header pipe, evacuated tubes are ideal for hard water applications.



Specifications

Model / Type	30 Tubes
Total Width x Height x Depth (mm)	2440 x 2020 x 155
Number of tubes per collector rack	30
Length of tubes (mm)	1800
Total Gross Area (m ²)	6.2
Aperture Area / Absorber Area (m ²)	2.82 / 2.4
Cover tube / Inner tube dia (mm)	58 / 47
Cover tube glass thickness (mm)	1.6
Collector Weight Empty / Full (kg)	119 / 121
Maximum / Operating Pressure (kPa)	1000 / 600

Flat Roof Stand (Optional Extra):

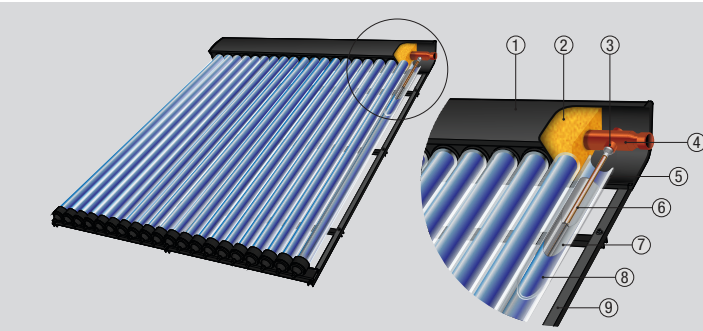
For flat or low pitched roofs, collector can be mounted with an optional stand to ensure they are angled for the best solar gain.



Specifications

Model / Type	30 x Evacuated Tubes
Dimensions (H x W x D) (mm)	1125 x 2440 x 2050
Recommended Leg Spacing	1170

* Height shown as maximum. Stand is adjustable



Material Specifications

1	Header block & mounting Frame	Black coated aluminium
2	Header pipe insulation	Polyurethane, mineral wool foam
3	Heat pipe absorber	Copper
4	Header pipe	Copper
5	Outer tube (Twin layer with vacuum)	Borosilicate glass 3.3
6	Heat rod	Copper with internal heat exchanger fluid
7	Inner tube	Aluminium
8	Inner tube absorber surface treatment	Ultra-selective coating

Storage Tanks

The thermal storage tanks are specifically designed for the efficient storage of solar-heated water. Decades of design evolution is evident in the state-of-the art engineering, rugged construction and carefully selected materials that provide the ultimate in thermal insulation.



Specifications

Tank Orientation	Vertical
Storage Size	Standard
Storage capacity (L)	200
Diameter (mm)	510
Height (mm)	1680
Cold water inlet (mm from base)	255
Hot outlet (mm from base)	1425
Collector cold flow (mm from base)	255
Collector return (mm from base)	555
Open loop dry weight (kg)	52

Auxiliary Gas Boosting

When there's not enough solar to get the job done, an Eternity gas boost will supplement the heating required to ensure you are never without hot water. Featuring a high 6+ Star energy rating, these units are highly efficient, heating water on demand.



Specifications

Eternity Model	M20	M26
Energy Star Rating	6.5	6.3
Thermal Efficiency (%)	84.1	84.0
Flue System	Forced Flued External	
Rating (l/min @ 25°C rise)	20	26
Nominal Gas Consumption (MJ/h)	160	200
Weight (kg)	16	21.5
Height x Width x Depth (mm)	595 x 375 x 165	645 x 413 x 195
Water connection diameter (mm)	15 BSP	
Gas connection diameter (mm)	20 BSP	
Water Pressure Min / Max (kPa)	150 / 1000	
Water Pressure Optimal (kPa)	350	
Min operating flow rate (l/min)	2.5 (min 3.0 for start up)	
Anti-frost	Standard	
Pwr Supply Mains Voltage (AC)	240V / 50Hz	
Pwr Supply Controller Voltage (DC)	12	
Ignition	Electronic	
Gas Types	Natural Gas / LPG (Propane)	