



Quality
Endorsed
Company

ISO 9001 Lic. 22161
Standards Australia

ESTEEM™
EVACUATED TUBE SOLAR HOT WATER

Solar Power. Introduced 1945.

Hills, long known as the 'clothesline' or 'hoist' company, is now much more than a manufacturer of clever clotheslines. Hills is now a diversified manufacturer of innovative Australian products and services that highlight the quality and dependability that people have come to expect from Hills.

Hills operates businesses in three industry segments: Home, Hardware and Eco; Electronic Security and Entertainment; and Building and Industrial. Market capitalisation for the Group is in excess of \$1 billion and Hills currently employs more than 3,000 people in Australia and New Zealand.

Hills Industries Limited, an Australian icon, is a public company listed on the Australian Stock Exchange (Code: HIL).



Hills. Proudly an Australian Company.



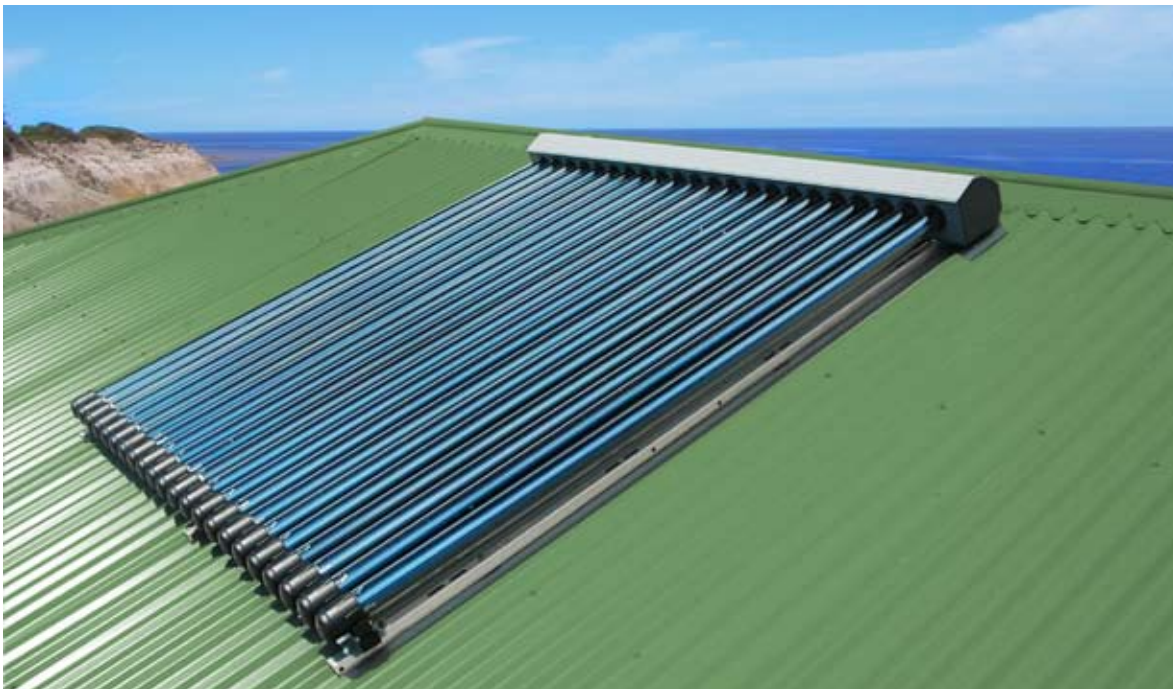
Clean. Green. Efficient. Evacuated Tube Technology

As we embrace the 21st century our ideals need to change. Our planet's precious resources are dwindling and we must look at clean alternative energy supplies.

The Sun can provide all the energy we require and as manufacturers of the Hills Hoist in 1946, the most environmentally friendly way to dry clothes, we again look to the Sun. We recently launched the Hills ESTEEM™ Solar Hot Water System, using advanced Evacuated Tube technology.

This simple solution, when installed in your home, can reduce CO₂ emissions by up to four tonnes per year, which is equivalent to taking a small car off the road. At Hills we continue to develop products that use alternative energy supplies, as we believe our planet and our families are our most important assets.

Heating your household water is the major consumer of energy in most homes. Installing a Hills ESTEEM™ Solar Hot Water System will not only help the environment by reducing CO₂ emissions, it can also reduce your hot water heating costs by up to 80%.



Relax

...it's **Solar**

ESTEEM™
EVACUATED TUBE SOLAR HOT WATER



Relax ...it's Solar

Hills Solar Evacuated Tubes

Evacuated Tube technology delivers significantly better performance than traditional absorbers on the market today. Their advanced design incorporates tubes that consist of 2 layers of high quality borosilicate glass with a vacuum layer between them. This vacuum acts like a thermos flask, retaining up to 92% of the thermal energy, resulting in increased efficiency. The Sun's thermal energy is then transferred to the manifold via the heat pipe located inside each tube.

The small amount of evaporative liquid in each tube is super heated by the Sun's energy and forms a vapour. The vapour rises to the top of each pipe. This heat is then transferred to the water flowing through the manifold. The heated water is then returned to the tank.

The cylindrical design of the tubes ensures effective collection of the Sun's thermal energy throughout the day.

Hills Solar Evacuated Tubes are frost tolerant and have passed the AS/NZ 2712:2007 standards for both hail and freeze resistance. Hills ESTEEM™ Solar Hot Water Systems have passed the freeze test to -15° C without the need for a heat exchanger or glycol.

Stainless Steel Tanks

Hills ESTEEM™ Solar Systems use stainless steel tanks which have a natural oxide barrier to corrosion. Stainless steel tanks are tough, durable and lighter than their equivalent vitreous enamel mild steel tanks. The tanks are of a high quality with a 10 year warranty.

Gas and Electric Boosting

When radiant energy is low as a result of cloud cover, Hills ESTEEM™ provides gas or electric boosting to ensure you have hot water.

Hills ESTEEM™ Gas Boosted Solar Systems use the Bosch continuous flow boosters, available in both 21e, which will deliver up to 21 litres of hot water per minute, or the Bosch 26e, which will deliver up to 26 litres of hot water per minute on a low solar gain day.

Hills ESTEEM™ Electric Boosted Solar Systems ensure the water is maintained at 60° C. The system comes with a standard 3.6kw bottom-heating element; however, this can be changed to a 2.4 or 4.8kw element to conform to different State regulations. Clever positioning of the element at the bottom of the tank ensures you will have a full tank of hot water available.

Some States may offer a lower tariff on electric boosted hot water heating.

Renewable Energy Certificates (RECs)

RECs are a form of currency created by the Federal Government under the Renewable Energy (Electricity) Act 2000 and are used to demonstrate compliance with the requirements of the Government's Mandatory Renewable Energy Target (MRET) scheme. Hills ESTEEM™ Solar Systems qualify for these generous Government Rebates (conditions apply). There are 4 Australian zones which will determine the amount of RECs per system. Some State Governments and local Councils also offer generous rebates on Hills ESTEEM™ Solar Systems. This can mean a rebate of up to a third of the cost of your Hills ESTEEM™ Solar Hot Water System. For a complete list of RECs zones by postcode please visit www.orer.gov.au

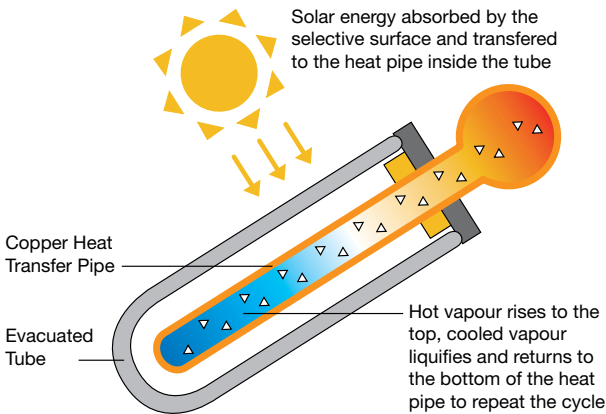
When checking the RECs listing for Hills ESTEEM™, please note the systems are listed under the manufacturer Endless Solar.



Frequently Asked Questions

Why choose a Hills ESTEEM™?

Evacuated Tube technology has been used in Europe for many years and is more efficient in cooler climates than standard flat panel solar systems. At Hills we have undertaken research to choose a quality system that will perform best in all conditions especially in winter when thermal energy is at its lowest therefore giving you the best possible performance all year.



Will my system work on a cloudy day?

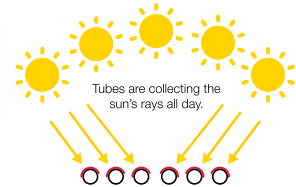
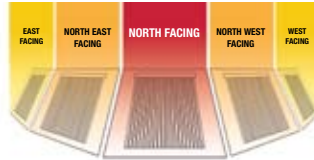
Even on cloudy days you will still achieve some solar gain. The Hills ESTEEM™ Solar System is supplied with an electric or gas booster to provide continuous hot water when thermal energy from the sun is low.

Why does Hills ESTEEM™ use stainless steel storage tanks?

Stainless steel tanks have a natural oxide barrier to corrosion, therefore eliminating the requirements for a sacrificial anode, which saves the cost of replacement approximately every five years. The Hills ESTEEM™ Stainless steel tank will have a longer life than standard vitreous enamelled tanks and include an impressive ten year warranty.

Which is the best collector orientation?

The ideal location for collectors is facing due North, however 45 degrees North West or North East is acceptable with minimal effect.



What Government rebates and incentives is the Hills ESTEEM™ eligible for?

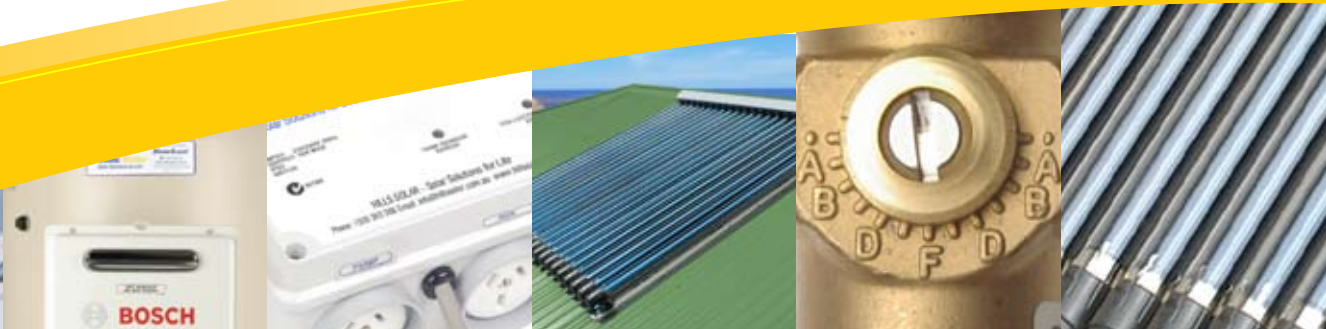


Providing you meet the Federal Government's criteria all Hills ESTEEM™ Solar Systems are eligible for RECs (Renewable Energy Certificates). There is also a \$1,600 Federal Government rebate. For more information visit <http://www.orer.gov.au> (Office of the Renewable Energy Regulator). Some States and local councils also offer incentives for the installation of solar hot water systems, check with your state government or local council for up to date information on rebates for installing a solar hot water system.

Will my Hills ESTEEM™ freeze?

Hills Solar Evacuated Tubes are frost tolerant and have passed the AS/NZS 2712: 2007 Standards for both hail and freeze resistance. Hills ESTEEM™ Solar Hot Water Systems have passed the freeze test to -15°C without the need for a heat exchanger or glycol.

For more information please contact the Hills Solar Consumer Hotline on 1300 363 386 or visit our website at www.hillssolar.com.au or email to sales@hillssolar.com.au



Hills ESTEEM™ System Selector*



10 Tube Collector



160 Litre Tank



22 Tube Collector



250 Litre Tank



30 Tube Collector



315 Litre Tank

Suggested Tank Size	
160 Litre# ~ Electric / Gas Boosted ~ 1 to 2 People	
250 Litre# ~ Electric / Gas Boosted ~ 3 to 4 People	
315 Litre# ~ Electric / Gas Boosted ~ 5 to 6 People	

*Suggested usage only.

Product Code	Electric Boosted Systems
EB-160-E-10	160L Electric Boosted 10 Tube Collector
EB-250-E-10	250L Electric Boosted 10 Tube Collector
EB-250-E-22	250L Electric Boosted 22 Tube Collector
EB-250-E-30	250L Electric Boosted 30 Tube Collector
EB-315-E-22	315L Electric Boosted 22 Tube Collector
EB-315-E-30	315L Electric Boosted 30 Tube Collector
EB-315-E-40	315L Electric Boosted 40 Tube Collector

Product Code	LPG Boosted Systems
GB-250-21LP-10	250L 21e LPG Boosted 10 Tube Collector
GB-250-21LP-22	250L 21e LPG Boosted 22 Tube Collector
GB-250-21LP-30	250L 21e LPG Boosted 30 Tube Collector
GB-315-21LP-22	315L 21e LPG Boosted 22 Tube Collector
GB-315-21LP-30	315L 21e LPG Boosted 30 Tube Collector
GB-315-25LP-30	315L 26e LPG Boosted 30 Tube Collector
GB-315-25LP-40	315L 26e LPG Boosted 40 Tube Collector

Product Code	Natural Gas Boosted Systems
GB-250-21NG-10	250L 21e Gas Boosted 10 Tube Collector
GB-250-21NG-22	250L 21e Gas Boosted 22 Tube Collector
GB-250-21NG-30	250L 21e Gas Boosted 30 Tube Collector
GB-315-21NG-22	315L 21e Gas Boosted 22 Tube Collector
GB-315-21NG-30	315L 21e Gas Boosted 30 Tube Collector
GB-315-25NG-30	315L 26e Gas Boosted 30 Tube Collector
GB-315-25NG-40	315L 26e Gas Boosted 40 Tube Collector

Product	Parts	Labour*
Tank	10 years	1 year
Evacuated Tube Collectors	10 years	1 year
Gas Booster Heat Exchanger	10 years	3 years
Gas Booster - Other Parts*	3 years	3 years
Electrical Components	1 year	1 year
Pump	1 year	1 year
Mounting Frame	10 years	1 year

*Conditions Apply. For full details please visit our website or view the warranty card.



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Authorised Hills Solar Dealer:

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System configurations may be subject to change without notice.

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AS/NZS 2712

