

Sizing chart - domestic

How to correctly size your new Greenland Systems solar hot water system

With a long service life, a correctly sized Greenland Systems evacuated tube solar hot water system will typically save Tasmanian householders between 60-80% off their yearly hot water bill and reduce Tasmania's reliance on Basslink (coal fired power from Victoria).

Four simple steps

1. Determine household hot water requirements
2. Conduct site analysis
3. Size cylinder and evacuated tube collector
4. Determine boosting options

1. Household requirements



- Small
- Single person, shack



- Medium
- Couple, retired couple, couple & 1 child



- Large
- Family, couple with regular guests

2. Site analysis

a. Roof orientation

Ideally true north (magnetic north, add 12-15 degrees to west).

b. Roof pitch

Ideal pitch = site latitude (~ 40° Tasmania-wide). Add 5-10° to increase winter solar performance (also reduces risk of overheating during summer).

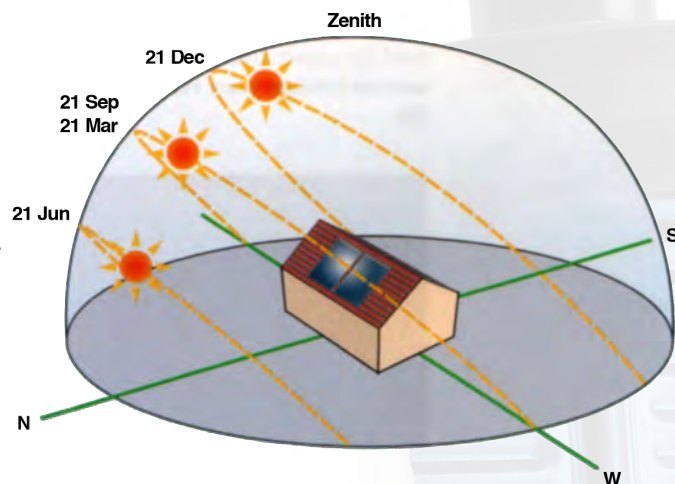
c. Shading

Ideally no shading on collector from at least 10:00am - 2:00pm (winter months).

d. Solar line length

Distance between solar collector and cylinder:
 < 5 metres: excellent
 5-10 metres: very good
 > 12 metres: must factor in heat losses.

NB: Solar rated, high temperature copper pipe insulation only (minimum 19mm diameter).



Sizing chart - domestic (cont)

3. Size cylinder and evacuated tube collector



- GL10008-170
- GL100-08 (8x100mm) tubes
- 160 litre Everlast cylinder
- Small household



- GL10012-260
- GL100-12 (12x100mm) tubes
- 250 litre Everlast cylinder
- Medium household



- GL10016-320
- GL100-16 (16x100mm) tubes
- 315 litre Everlast cylinder
- Large household

4. Boosting options

Electric: Tariff 42 HydroHeat, Tariff 61 OffPeak or Tariff 31 Standard/PAYG.

Gas: Natural gas or LPG (bottle) gas.

Wood: Wetback stove connection.

NB: System sizes are an indication only, and may change depending on boosting options available, and other site factors. Please consult our domestic solar engineers for further clarification.



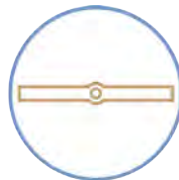
- Custom system
- GL100-24 (24x100mm) tubes
- 550 litre cylinder (multi coil)
- Domestic solar underfloor and radiator heating, commercial

Types of evacuated tubes

Twin wall tube



58 mm
2 mm \varnothing glass
Vacuum between inner & outer glass



GL100



GL100-PT



GL100-DF

2.8 mm \varnothing AS/NZS 2712 hail resistant boron glass
Vacuum within entire tube

Greenland Systems tubes



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