(Photo supplied by Sola Edwards Adelaide)

HOW IT WORKS – The Edwards Commercial Solar Packages are designed to be either a **'Direct'** or **'Indirect'** pumped system. This forced circulation of water through the solar collectors effectively "scrubs" more available energy from the collectors than conventional thermosyphon systems.

When the water in the solar collectors is 7°C higher than the water near the bottom of the storage tank, the solar controller (supplied as standard) turns the solar circulation pump on and water is circulated from the tank to the collectors until the temperature differential is 2°C where the solar circulation pump turns off.

COM-SOL KITS – Each Commercial Solar package is supplied with the relevant sized **Com-Sol Kit** to suit the roof building structure. It comes with a circulation pump to suit the number of solar collectors, a solar controller, all required connectors and collector frames. (Frame type is dependent upon the roof structure you are installing it on) E.g.: Pitched or Flat. **Note:** Com Sol Kits do not include solar collectors or expansion tanks, these must be ordered separately.

SOLAR COLLECTOR FRAMES – The appropriate solar collector frames are supplied with the Com-Sol Kit dependant on the roofline. E.g. Pitched or Flat. There are three models available for either a pitched or a flat roof:

Cyclone Flat Frame for Pitched Roof

- Model 180 – cyclone flat **(1 collector)**
- Model 305 – cyclone flat **(2 collector)**
- Model 440 – cyclone flat **(3 collector)**

Pitched Variable for Flat Roof

- Model 180 – pitched variable **(1 collector)**
- Model 305 – pitched variable **(2 collector)**
- Model 440 – pitched variable **(3 collector)**

SOLAR COLLECTORS – There are two types of solar collectors available for use with the commercial solar Com-Sol Kits. The Edwards Australis Series 2 and the Edwards Titan Series 2. **Note:** When solar collectors have been installed on the roof, do not expose them to the sun without water in them for prolonged periods. Arrange for them to be covered with shade cloth or similar.

Australis Series 2

- 6 copper risers
- Aluminium absorber plate (black polyester coating)
- Night Sky Colorbond casing
- 3.2mm thick Tempered, Low iron safety glazing
- Water Collector Volume = 2 litres
- Dimensions: 1941 x 1027 x 84 mm

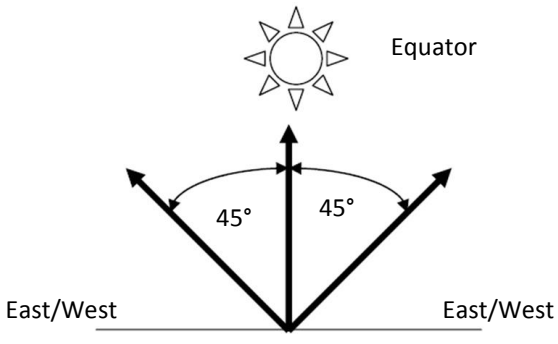
Titan Series 2

- 7 copper risers.
- Copper absorber plate (with sputtered surface)
- Night Sky Colorbond casing.
- 3.2mm thick Tempered, Low iron safety glazing
- Water Collector Volume = 1.5 Litres
- Dimensions: 1941 x 1027 x 84 mm

INSTALLATION DETAILS

Location of Solar collectors – Before commencing installation the solar collectors, inspect the roof structure to ensure that the solar panels are located on an area of the roof that will be unshaded all year. Carefully check high buildings or trees in the vicinity for winter shade. If needed, discuss with the client the lopping or removal of any trees.

Orientation of Solar Collectors – For optimum performance, the solar collectors should be installed facing towards the equator. Always check the orientation and use a compass. Variations up to 45° east or west will have minimal effect on the annual solar contribution (less than 5%). Variations more than 45° east or west will require additional solar collectors.



Minimum Inclination (angle) **-** The most common installation uses a roof of 22° pitch, but solar collectors may be installed on an angle that varies from the latitude angle up to +/- 20%. This will have minimal effect on the total annual solar contribution (less than 5%). Roof pitches below the minimum recommended angles shown below will require a 'raised pitch' frame available from Edwards.

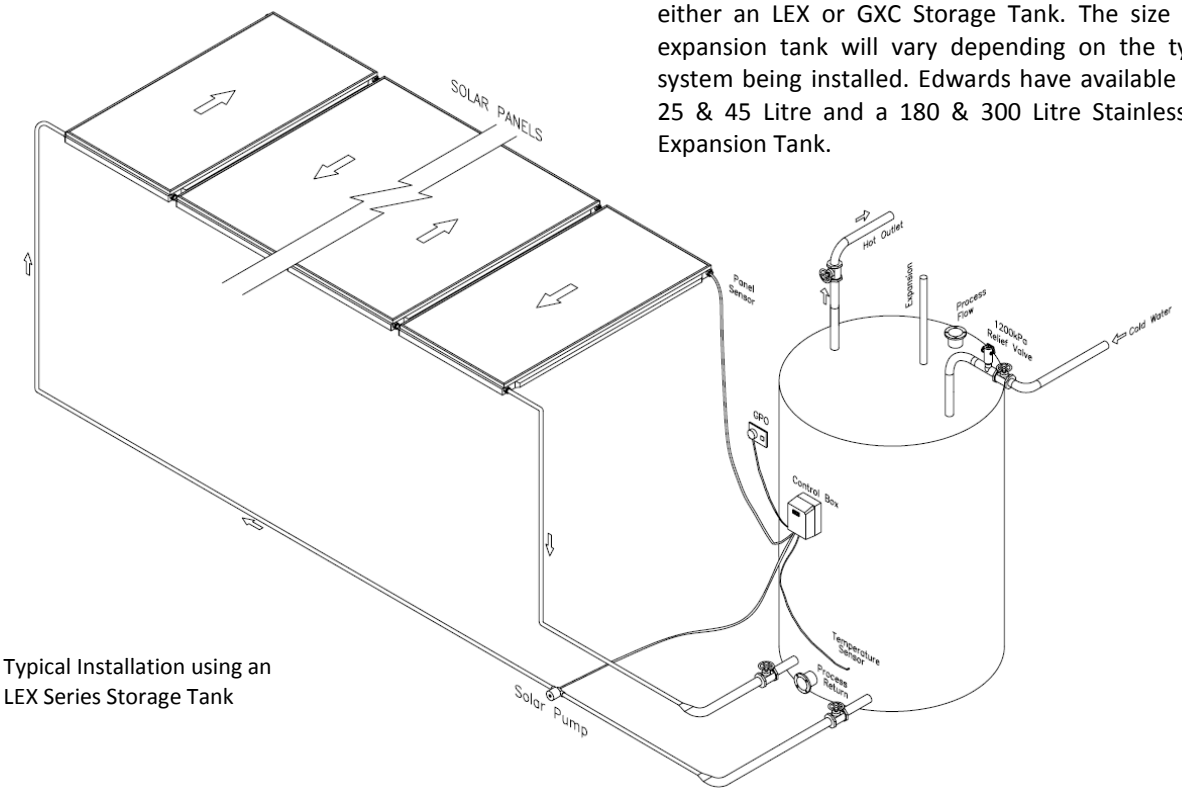
Minimum inclination angles for locations south of the tropic of Capricorn (23.5°):

Adelaide	15°	Alice Springs	10°
Brisbane	10°	Melbourne	18°
Perth	15°	Sydney	15°

Frost Prone Areas – Any areas that have recorded temperatures of 1°C or less must have anti-freeze protection for the solar collectors. If this has not been supplied, contact Edwards as **Anti-Freeze Protected** systems are available.

SOLAR STORAGE TANKS – Instead of joining a number of small tanks together, Edwards has a single tank that is simple to install and saves space. Edwards have various storage tank models such as the **SV, LEX & GXC Series** to suit the available application and plant room space.

EXPANSION TANKS – An appropriately sized expansion tank (not supplied as standard) must be installed at the highest point of the treated water circuit (e.g. above the solar collectors) when hooked up with either an LEX or GXC Storage Tank. The size of the expansion tank will vary depending on the type of system being installed. Edwards have available a Poly 25 & 45 Litre and a 180 & 300 Litre Stainless Steel Expansion Tank.



Typical Installation using an LEX Series Storage Tank

Care has been taken to ensure that all information is as accurate as possible at the time of publication. However, specifications, methods and figures are subject to change without prior notice.

DISTRIBUTOR:

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