



## COMMERCIAL SOLAR

### JETA GARDENS AGED CARE - BRISBANE - QLD



Completed in 2015, the \$13 million resort-style Jade Building project accommodates 72 residents over three levels and six wings. It typifies the “4H model”, which takes elements of hotels, hospitals, holiday resorts and homes and incorporates them into aged care and retirement living. Rheem proposed and supplied a safe, reliable and effective hot and warm water supply, with an incorporated capacity to disinfect Legionella bacteria.

#### Hot Water Requirements

To minimise gas consumption and maximise energy savings, a renewable energy solar pre-heat system with gas boost supplies the centralised warm water system. This adequately services the sanitary fixtures with UV disinfection of legionella incorporated in the warm water flow.

#### Solution

Rheem devised a three-component solution consisting of solar pre-heat storage, a gas-boost plant and a Guardian warm water system. Rheem Commercial also provided design guidance on the ideal position of the solar component, ensuring optimisation of the building’s available north-facing roof space. Rheem provides six-monthly services including water testing for Legionella, throughout the system.

- Solar Plant: 36 x NPT200 Solar Collectors & 10 x 610430 Commercial Storage tanks
- Gas Boost Plant: 4 x 631275 Heavy Duty Gas heaters
- Warm Water Plant: 2 x 940160 Guardian & 2 x 940002 UV disinfection units
- Flow & Return Pump Sets: 2 x Rheem Rediset 32-80N Deluxe Dual Pump Sets

### FACTS & FIGURES

Rheem solar plants store 4100 litres for daily use, while the gas boost plant provides up to 3860 litres per hour @ 50°C rise recovering at 3000 litres per hour @ 50°C rise. It provides hot water during periods of no sunshine. The Guardian plant provides UV disinfection of the flow and return line at a flow rate of 320 litres per minute.

Developer/Operator: Jeta Gardens

Builder: Stokes Wheeler

Plumber: Kerr Plumbing

