



**Install
a Rheem®**

COMMERCIAL CASE STUDY



Fortitude Valley Towers: A Sustainable Hot Water Solution for Brisbane's Premier Precinct

Located on the edge of Brisbane's CBD, Fortitude Valley is Australia's oldest dedicated entertainment and business precinct, where heritage meets modern innovation. The new Fortitude Valley Office Tower and 31 Duncan Street, redeveloped from the former Chinatown Mall, are A-grade commercial buildings offering over 25 floors of contemporary office space, end-of-trip (EOT) facilities, seven levels of parking, revamped retail areas, and a public arcade. To support their modern amenities, the towers required an eco-friendly hot water system to meet stringent sustainability standards.

THE CHALLENGE

The hot water systems was required to:

- Achieve a 5 Star Green Star rating and a 5.5 Star NABERS energy rating to ensure exceptional energy efficiency and minimal environmental impact.
- Reduce long-term operational costs to benefit property managers while maintaining high performance and tenant satisfaction.
- Integrate seamlessly with the Building Management System (BMS) for real-time monitoring and control of system performance.

THE SOLUTION

Rheem Commercial partnered with Performance Construction Hydraulics and Planet Plumbing to design and install a tailored hot water solution featuring Rheem Commercial Air-to-Water (A2W) 16kW Heat Pumps. This system was customised to meet the towers' sustainability and performance requirements:

Energy Efficiency: The A2W heat pumps deliver hot water up to 65°C with a Coefficient of Performance (COP) of up to 4, reducing energy consumption and costs.

Sustainability: The system supports the towers' 5 Star Green Star and 5.5 Star NABERS energy ratings, aligning with their eco-friendly goals.

BMS Integration: Equipped with the Rheem iQ controller, the system offers seamless BMS integration for real-time performance monitoring.

Reliability: Rheem Heavy Duty Electric boosters ensure a consistent hot water supply during peak demand, supporting all amenities.

THE IMPLEMENTATION

Rheem Commercial collaborated with Performance Construction Hydraulics to size the hot water plants and worked with Planet Plumbing and an external contractor to design the BMS integration and externally vented plant layout. Planet Plumbing expertly installed the A2W heat pumps, ensuring seamless operation within the towers' infrastructure.

THE IMPACT

The Rheem A2W heat pump system has equipped the towers with sustainable, high-efficiency hot water solutions, achieving the 5 Star Green Star and 5.5 Star NABERS energy ratings. The system reduces operational costs while ensuring reliable hot water for tenants, reinforcing the towers' status as leaders in eco-friendly commercial design.

THE KITS

Duncan St

- 2 x Air to Water Vertical Discharge 16kW Heat Pumps – model 95301600
- 5 x Rheem Storage Tanks 410L – model 61043050
- 1 x Rheem Heavy Duty Electric Boosters 3 x 3.6kW – model 61331507

Fortitude Valley Office Tower

- 2 x Air to Water Horizontal Discharge Ducted 16kW Heat Pumps – model 952016HS
- 5 x Rheem Storage Tanks 410L – model 61043050
- 1 x Rheem Heavy Duty Electric Boosters 3 x 3.6kW – model 61331507

CONTACT THE RHEEM COMMERCIAL TEAM TODAY

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