

COMMERCIAL CASE STUDY



Water-to-Water Heat Pump at state-of-the-art Hospital Facility

Hollywood Private Hospital, Western Australia's largest private hospital, admits over 75,000 patients annually.

To support its ongoing expansion, including a state-of-the-art Emergency Department, the hospital required an advanced water heating system to ensure safety, reliability, and efficiency for staff, patients, and visitors.

THE CHALLENGE

The hospital's new Emergency Department features 13 patient bays (including an isolation room), consultation rooms, a resuscitation room, and three 30-bed wards.

This expansion demanded a hot water system that could meet stringent health, safety, and efficiency standards while supporting the hospital's high operational demands. The solution needed to be innovative, reliable, and seamlessly integrated with the hospital's existing infrastructure.

THE SOLUTION

Rheem Commercial, in collaboration with Accord Plumbing, delivered a pioneering water-to-water (W2W) heat pump system—the first of its kind in Western Australia. Unlike traditional air-source heat pumps, the Rheem W2W heat pump utilises excess heat from the hospital's chilled water line. This innovative approach not only provides hot water but also returns cooler water to the chiller, reducing its workload and boosting overall energy efficiency.

Key features of the system include:

Energy Efficiency: By harnessing waste heat from the chiller system, the W2W heat pump minimises energy consumption, creating a more sustainable operation.

Seamless Integration: The Rheem iQ controller integrates with the hospital's Building Management System (BMS) via BACnet, enabling remote monitoring, diagnostics, and easy control.

Reliability: Designed for high-demand environments, the system ensures a consistent hot water supply critical for patient care and hospital operations.

THE IMPLEMENTATION

Rheem Commercial worked closely with Accord Plumbing to install the system.

The installation reflects exceptional craftsmanship, as evidenced by the precision and quality visible in the project images.

The collaborative effort ensured the system was tailored to the hospital's specific needs, delivering both performance and reliability.

THE IMPACT

The Rheem W2W heat pump system has transformed Hollywood Private Hospital's ability to provide safe, efficient, and reliable hot water across its expanded facilities.

By prioritising energy efficiency and integrating advanced technology, the solution supports the hospital's commitment to world-class healthcare while reducing operational costs and environmental impact.

This project sets a new standard for sustainable, high-performance water heating solutions in healthcare settings, demonstrating the power of innovative technology and expert collaboration.

THE KIT

- 1 x 95403500 35kW W2W Heat Pump
- 2 x RT1000N9ALU Rheem RT series
 1000L tanks
- 1 x 613050 Rheem 50L HD Electric storage
- 2 x 99501293 Rheem Rediset 32-80
 DLX building circulation pumpset
- 1 x BACnet BMS interface card

CONTACT THE RHEEM COMMERCIAL TEAM TODAY

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