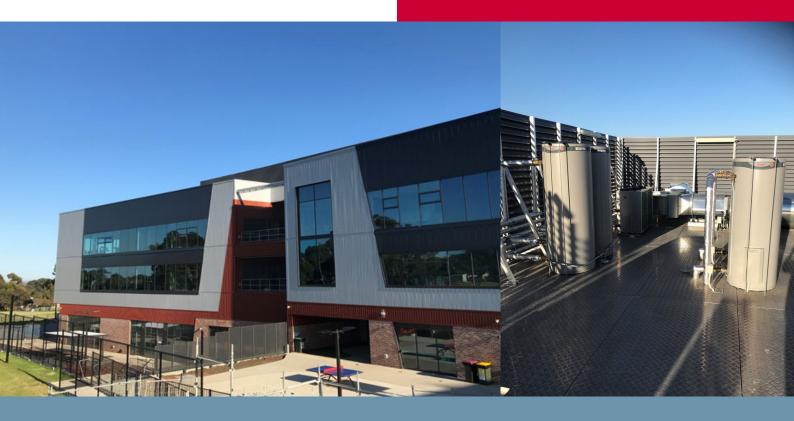


COMMERCIAL CASE STUDY



Rheem's Air-to-Water Heat Pump Enhances Morialta Secondary College

Morialta Secondary College, a new co-educational school in Adelaide's eastern suburbs, serves over 1,000 students with modern classrooms, sports facilities, and a café. Rheem partnered with Aurecon and Connekt Plumbing to install a high-efficiency Air-to-Water (A2W) Heat Pump system, ensuring reliable hot water delivery while supporting the college's sustainability goals and operational excellence.

THE CHALLENGE

The college needed a reliable hot water system to service diverse facilities while aligning with its sustainability goals. Key challenges included:

- Ensuring consistent hot water supply across multiple buildings with varying demand.
- Achieving high energy efficiency to reduce costs and environmental impact.
- Operating effectively in Adelaide's variable climate.
- Complying with strict environmental and building regulations.

THE SOLUTION

Rheem provided a tailored solution featuring:

- YF Series A2W Heat Pumps: Multiple units installed to deliver hot water at up to 65°C with a high Coefficient of Performance (COP) of 4.0.
- Low-GWP Refrigerant: Use of R1234yf refrigerant with a Global Warming Potential of <1, enhancing sustainability.
- Compact Design: Non-ducted heat pumps installed to optimise space in plant rooms.
- Collaborative Installation: Worked with Aurecon and Connekt Plumbing to ensure compliance with Australian Standards (AS/NZS 3500) and seamless integration with existing infrastructure.

THE KIT

- 3 x Air to Water (A2W) 16kW Commercial Heat Pump – model 95301600 (Non-Ducted)
- 5 x Rheem Storage Tanks 410L model 610430
- 5 x Rheem Heavy Duty Electric Water Heater – 315L with 3 Elements
- 1 x Rheem Heavy Duty Electric Water Heater – 50L
- 3 x Redi-Set DLX



THE IMPACT

The system delivered significant benefits:

- Reliability: Provided consistent hot water for learning spaces, sports facilities, and the café, meeting peak demand.
- Energy Efficiency: Achieved up to 40% energy savings compared to traditional systems, reducing operational costs.
- Sustainability: Ultra-low GWP refrigerant and high COP minimised environmental impact, supporting the college's green objectives.
- Space Optimisation: Compact heat pumps freed up valuable plant room space.
- Regulatory Compliance: Met all environmental and building standards, ensuring long-term operational success.

This project highlighted Rheem's ability to deliver sustainable, efficient, and reliable hot water solutions, enhancing Morialta Secondary College's innovative and ecofriendly learning environment.

CONTACT THE RHEEM COMMERCIAL TEAM TODAY

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