

## Case Study - DHW Upgrade 180 Queen Street, Brisbane





Oventrop Regudis W-HTE The new benchmark in hygienic potable hot and warm water systems



Oventrop have successfully supplied new potable domestic hot water generation products at 180 Queen Street, Brisbane. The 1930 former National Australia Bank building managed by Cornerstone Property Services was heritage listed onto the Queensland Heritage Register in 1992. Today, 180 Queen is a 7-storey building, comprising street level retail and 6 floors of commercial office suites, a daily place of work for its many tenants on the doorsteps of Brisbane's Queen St Mall.

Specified by the Project Design Consultants Floth Pty Ltd and engaged by Dewpoint Group as the base building HVAC refit contractor. Oventrop were chosen as the most suitable solution as part of the buildings mechanical services refit, to provide the replacement of the existing per floor electric domestic hot water (DHW) tanks, with the Oventrop Regudis Heat Interface Unit (HIU) stations. A compact water to water potable hot water system that delivers the DHW, via primary heating hot water provided by the base building air cooled Multifunction Heat Recovery Chillers.

Each floor was fitted with a single "Regudis W-HTE" single plate HIU, providing up to 21 I/m of 43°c domestic warm water supply (WWS) via the plate heat exchanger (HEX), from the chillers continuous 48°c primary base building heating hot water supply. The Regudis HEX provides a hydraulic separation of the floors WWS, from the primary heating hot water supply, and ensures the WWS is delivered hygienically "Just in Time" for tenants, visitors and cleaners use.

The Regudis HIU products from Oventrop utilises the latest in electronic flow rate and temperature control, across the asymmetrical arrange plates of the HEX. This asymmetrical arrangement reduces pressure losses and allows for lower primary heating water flow temperatures, without compromising high discharge flow rates and flow temperatures to the taps.

In warm water systems installation such as 180 Queen St, Regudis complies to Australian Standards AS3500.4 clause 1.9.3 as an appliance, Plumbing Codes of Australia, and local government warm water system guidelines, without the need for an additional thermostatic mixing valve. While ensuring system hygiene to the individual facilities DHW design requirements.

180 Queen Street is an example of 'blue to green' concept that forward looking companies are adopting. In blue to green thinking, it's not enough for the refit or new built product to be just sustainable; it must also return something to its surroundings, its community, and the people who use it.

regudis.oventrop.com-floth.com.au-dewpoint group.com.au





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