

THERMANN CASE STUDY – Astina Apartments



PRODUCT
4 x Thermann
50L Manifolded
Commercial Continuous
Flow gas water heaters

LOCATION
External

GAS TYPE
Natural Gas

OPTIONS
System controller, Remote controller,
Dual recirculation pump and IoT monitoring



DETAILS

- ▶ **STATE**
New South Wales
- ▶ **LOCATION**
Penrith
- ▶ **BUSINESS**
Hotel & Apartments

An iconic project for Western Sydney, Astina Suites is Penrith's first luxury apartment hotel. Situated in the heart of the CBD, it's an 8-story building featuring stunning ground floor retail, office and 5-star lobby finishes, grand porte cochere, 58 serviced apartments, rooftop pool bar, and function room. Apart from luxurious accommodation, Astina apartments is has fast earned a reputation amongst the local sporting communities thanks to its techno gym and Recovery Studio complete with float tank, spa, sauna, steam room and ice baths.

The apartments are located between levels 2 - 7, and are a mix of 2 and 3 bedroom configurations. Each level features 10 suites, except for level 7 which features 8 penthouse suites. Each generous suite ranges from 80-100m² and includes ensuite bathrooms off each room with dual shower heads, full kitchen, lounge, dining, laundry, and a balcony overlooking the blue mountains. With a large hot water demand, T&C Plumbing Services recommended and installed a Thermann Commercial tankless manifold system.

This system is comprised of 4 x 50L Thermann Commercial Continuous Flow continuous flow natural gas water heaters, installed on the buildings roof. Featuring dual heat exchanger condensing technology, the system is connected to a system controller which determines the operating logic of the water heating plant to maximise energy efficiency and heating performance. It 'actively' shares the heating load across the bank of units for even wear through the products life, and can switch units on (or off) to deliver maximum efficiency and minimal pressure loss. Although the system delivers huge capacity, it does so with a relatively small footprint. This was one of the key reasons T&C chose Thermann for the Astina job.

Thermann Commercial systems are modular. They can be ordered and supplied to site as a factory constructed manifold, and craned into place, however, the system at Astina Apartments was delivered in components -

heaters, frames, pumps, and an accessory box separately. These components are individually small enough to fit in a service elevator, making the trip up to the roof level as easy as selecting the top floor. This avoids the cost, time constraints and planning associated with ordering factory delivered systems.

Todd from T&C remarked that he assembled the units offsite first as a test run. He was dubious as to how easily the units could be assembled. He later commented on how easily they went together. "I'll never have to preassemble and reassemble the units again". With the ability to be delivered to site in a ute, and with stock available in Reece branches, this system was available on very short notice.

This system was specified as tankless, which removed additional weight and engineering effort from the construction from part of the roof. Apart from improving onsite handling, multiple units can be easily manifolded to reach the required load. The dual recirculation pumps provide automated redundancy in case of a pump fault, as the system will automatically switch to the other pump without needing manual intervention. This Thermann system is also connected to IoT monitoring, which not only provides monitoring for maintenance purposes (like the situation above), but can provide data around use and system efficiency. So far we can see that the system has performed flawlessly, and well within the limits of the systems capability. This was particularly important to the developers who share a strong interest in the both the buildings ongoing running costs, and initial capital outlay for the system.

Thermann Commercial Continuous flow models feature robust, commercial grade heat exchangers and are available in 28L, 32L & 50L/min sizes. For more information, visit your local Reece branch or download the Thermann Commercial Guide at www.thermann.com.au/commercial