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Big Splash at Retirement Village

Metlifecare is a leading New Zealand retirement village and aged care provider that owns and operates 23 retirement villages in prime locations throughout the North Island. With an ongoing development programme, the company has a village currently in stage two of construction in Glenfield Auckland – The Orchards.

Including a mixture of independent living and rest home care, the complex includes a 38m² indoor pool and spa pool designed by architect Alan Simpkin of Arcline Architecture Ltd. When it came to the heating and ventilation requirements for the pool, he approached Hot Water Heat Pumps Ltd to tender for the job. Alan said, “I’ve worked with Hot Water Heat Pumps in the past and they have never let me down. The team really know what they’re doing and have been delivering indoor pool heating and ventilation solutions for years.”

Protecting the building envelope

As always the initial focus of our design team at Hot Water Heat Pumps Ltd is evaluating the merits of each indoor pool site and client requirements. Without proper ventilation, moisture and condensation problems appear which can cause an unpleasant, unhealthy environment. Over time the building envelope deteriorates and remedial work can become costly. That's why the ventilation system is a priority over heating the pool water.

Hot Water Heat Pumps Ltd has developed a proprietary ventilation system called Vent-Air. The Vent-Air system is designed to control the humidity level, minimising condensation, and creating a pleasant environment for pool users. It does this by continuously replacing stale and humid indoor air with heated fresh outdoor air.

Once the ventilation system was designed, we custom-built the Vent-Air equipment and the Duoheat heat pump. Work is carried out by our specialist in-house installation team. The next stage involved installation of the under ceiling air distribution duct work. Increased energy efficiency is achieved by heat recovery from the latent heat extracted from the indoor pool enclosure reducing ongoing daily heating and ventilation costs.

Villagers in the swim

It took three years from initial negotiations until the pool complex was up and running, a fairly typical timeline in this type of project. The swimming and spa pools attract daily use by the residents who have moved into the buildings completed during the first stage of the project.

Metlifecare is delighted with the end result. There is no condensation or moisture in the environment, which means the facility will be in great shape for many years to come. The swimming pool, spa and air temperatures are kept at constant optimum temperatures with a multifunctional system that is not only affordable but also cost-effective to run. The Orchards also benefits from the reliability and convenience of a repair and maintenance contract with our service department.



SHOWCASE AT A GLANCE

Architect Arcline Architecture Limited

Builder Aspec Construction Limited

Pool Builder Morgan Pools Limited

Pool Heating and Condensation Control Systems
Hot Water Heat Pumps

Equipment

Vent-Air system comprising of a supply and return air handlers with heat recovery option

Duoheat heat pump model: 7GP25A18-3

Air Distribution system under ceiling duct