

Aged Care

New Zealand's aged care sector is coming under increasing demand as the nation's population ages. The number of older New Zealanders who will receive some form of age care is predicted to grow, with DHB expenditure on residential care nearly \$700 million.

Part of the wider healthcare sector, aged care facilities are often considered as critical environments where the effective maintenance and operation of HVAC and refrigeration systems has a direct impact on the ongoing health and wellbeing of aged residents.

Features of our Aged Care offering:



Compliance with regulatory standards and codes



Discrete on-site maintenance and workplace safety



Maximising plant efficiency and energy use

System hygiene and safety,

including filtration



Cost reductions through improved efficiency and minimisation of interruptions

System reliability and

redundancy



Providing a safe and comfortable environment

Optimum Air's preventative service and maintenance programs are designed around the pillars of resident care and comfort, indoor air quality, system performance and operations, safety and reliability and equipment lifecycle.

Optimum Air stands ready to assist aged care facilities to both meet and exceed their obligations for the benefit of aged care residents. As IQP (Independent Qualified Person) registrants, Optimum Air has the authority to sign off on maintenance works and ensure compliance in Aged Care buildings.

Integration at every level

From the Service and Maintenance of mechanical and building services including HVAC to the implementation of Smart Building Automation, our solutions are designed to reflect your specific needs.

Whether your aspirations are to optimise system performance, reduce energy consumption or meet regulatory compliance requirements Optimum Air Advisory brings together the full suite of the company's expertise and knowledge to support the whole-of-life management of our customers' properties.

	HVAC	ELECTRICAL
Core Services		
Maintenance	~	✓
Service and Repairs	~	~
Projects, Retrofits and Installations	~	~
Automation and BMS Controls	~	~
Advisory Services		
Energy	\checkmark	~
Design	~	~
Commissioning	~	~

Restarting and operating facilities in a COVID-19 world

With facilities having an eye to a future operating within a COVID-19 environment, it is clear that there are new operational challenges to face. Optimum Air is ensuring that we work closely with our customers to develop a strong, measured, and tactical COVID-19 risk mitigation plan that combines the latest technologies with new maintenance practices.

Acknowledging the challenges facing the aged care sector in this new environment, Optimum Air offers a suite of technologies and enhancements to traditional services that ensures risks are mitigated and efficiency is maintained.

IAQ Monitoring and Occupant Information

Existing BMS infrastructure can provide the ability to measure and verify indoor air quality parameters by adding sensors where there are gaps in the required data.

The information and intelligence gained from these sensors can then be utilised to change control parameters in the HVAC system and to provide instant feedback and information by way of easily accessible dashboards for employees, occupants and visitors.

Air Scrubber Technologies

The latest generation of air scrubber technologies use phase change or absorbent materials that automatically regenerate when saturated. These systems clean and recycle internal air and remove pollutants without the energy impact, since ventilation air is reduced to the minimum design rate. They key to these new generation of air scrubber technologies is the advancement in absorbent materials that are highly effective but also able to regenerate using low temperature heat.

Ventilation and Filtration

Considered vital in providing healthy spaces within facilities, ventilation strategies, such as demand control ventilation (DCV) can ensure humidity is kept at the ideal range. Through multi-faceted sensor technologies and existing BMS control algorithms, DCV strategies are further enhanced by actively monitoring key contaminants that vary the amount of ventilation air in order to meet pre-determined optimal dilution levels, ensuring occupant safety and comfort.

UV Lighting Disinfection Systems

The deployment and treatments delivered by UV-C technology eliminates HVAC systems as a potential source of coronavirus infection. With a 98%+ kill rate of coronavirus, the added benefit in a well designed UV-C application is the continuous cleaning of cooling and heating coils, with a resultant decrease in pressure drop and a subsequent reduction in fan energy consumption.

Advanced People Counting Intelligence

By combining anonymous imaging with the latest sensor and data analytics capabilities, people counting and situational awareness intelligence allows facilities to accurately calculate people density in order to pre-empt overcrowding or bottlenecks. By connecting to building automation systems, access control, signage systems and lift management systems, this technology can provide orderly queuing, entry and exit of both virtual and physical infrastructure.

> V-MAX[®] Grid for Coil Typical installation in a roof-mounted AHU



Managing Risk and Reliability to Critical Assets

In such a critical environment, the effective maintenance and operation of assets such as HVAC and refrigeration systems has a direct impact on the ongoing health and wellbeing of residents, staff and visitors.

Along with specialised air filtration systems, Optimum Air understands that aged care facilities demand strict temperature and humidity control and often contain specialist equipment that also requires consideration.

Improve the life expectancy of your assets

eValuate is a fully hosted solution in asset identification, life cycle and capital expenditure planning. By providing and assessing a detailed analysis of facility assets, eValuate develops a thorough service, maintenance and capital replacement plan.

By identifying each asset's energy savings potential, eValuate helps plan preventative maintenance, creates an asset replacement plan and identifies potential Green Star rating improvements. Through panoramic views of the entire asset portfolio across a facility, eValuate provides intricate details about each individual asset in order to make strategic, cost-saving decisions regarding service, maintenance and replacement.

Powered by the latest technologies, eValuate gives you complete and instant access to the status of your asset portfolio through the latest Dashboard technology



Turn your plant room into a value-generating asset

In aged care facilities, HVAC is an energy intensive system, accounting for a significant amount of the total energy consumption. Every efficiency improvement in HVAC performance can significantly reduce the energy profile of the facility, turning HVAC optimisation into a value generating opportunity.

Energy saving opportunities are often missed in this complex technical arena. Created with an in-depth understanding of all thermodynamic variables involved in managing plant room HVAC equipment, PlantPRO enables optimum control of every device and its integration into a single synergistic system.

PlantPRO[®]

About Optimum Air

Optimum Air is a building services company, providing HVAC&R management, smart building solutions across New Zealand. Founded by Airmaster, one of Australia's leading HVAC service solutions companies, Optimum Air draws upon the vast industry experience to deliver Airmaster's range of award-winning services and solutions to the New Zealand market.



