

Ao TAWHITI UNLIMITED DISCOVERY

CHRISTCHURCH, NEW ZEALAND

INTRODUCTION

Ao Tawhiti is a special character state school in Christchurch that operates with the tenet that the child is central in directing their own learning. Students have the flexibility to choose from a variety of interchangeable classes and subjects to create their own learning program. The four-story facility is designed to serve up to 670 students, with technology and drama classes, science and music areas, a gym, a commercial-grade kitchen, and a central atrium for assemblies and performances.

PROJECT DETAILS

Authorized Dealer [IES Group](#) installed a Reliable Controls building automation system during construction of the school. Mechanical services contain heating and cooling systems, variable refrigerant flow and volume conditioning systems, air-handling units fitted with a rotary heat exchanger and reversible heat pump, package units, a fume cupboard, a dust collector, exhaust and supply fans, smoke fans, and air curtains. The main switchboard is housed in the plant room, and each floor has a dedicated mechanical service switchboard. Atrium smoke spill fans are powered from an essential mechanical services switchboard in the plant room.

IES Group installed 44 Reliable Controls SPACE-Sensor Temperature devices with CO₂ sensors to control fresh-air motorized dampers on the variable refrigerant flow units. A MACH-ProWebSys controller with a browser user interface is networked to one MACH-ProCom controller, four MACH-Pro2 controllers, and two MACH-ProZone controllers.

RC-Archive software provides facility managers with a robust record of building performance by delivering continuous downloads of data logs to a SQL database.

Reliable Controls and IES Group are pleased to be part of New Zealand's first vertical school and to provide a simple, flexible, sustainable building automation system that will empower student learning at Ao Tawhiti for years to come.

Interested in Reliable Controls technology for your next project?
Find an Authorized Dealer near you:
reliablecontrols.com/sales
Explore other Reliable Controls projects:
reliablecontrols.com/projects/profiles



MARKET SEGMENT:
Education

PROJECT TYPE:
New construction

INSTALLATION TYPE:
HVAC

PROTOCOL:
BACnet, Modbus, SMTP

TOTAL AREA:
5,420 m² (58,340 ft²)

INSTALLED EQUIPMENT:
4 MACH-Pro2™ controllers
1 MACH-ProCom™ controller
7 MACH-ProPoint™ expansion modules
1 MACH-ProWebSys™ controller
2 MACH-ProZone™ controllers
44 SPACE-Sensor™ Temperature devices
RC-Archive® software

TOTAL SYSTEM OBJECTS:
300

RELIABLE CONTROLS® AUTHORIZED DEALER:



reliablecontrols.com

