

BISHOPDALE PRIMARY SCHOOL

CHRISTCHURCH, NZ

EDUCATION

OVERVIEW

Bishopdale Primary School enrolls approximately 130 pupils from year one (5 year olds) to year six (10-11 year olds) and is located 10 km northwest of central Christchurch in New Zealand. The junior and senior buildings each contain 3 classrooms. There is a large school hall, a junior and senior playground, two large court areas, and a very large grass area for sporting activities. The school is culturally responsive to the community that it serves and has a proud 50 year history of education, continuing to develop the next generation of learners.

PROJECT DETAILS

This project was successfully completed by Reliable Controls® Authorized Dealer IES Group Ltd., with the assistance of the engineering consultant Aurecon.

The network architecture consisted of 20 SMART-Space controllers with CO₂ and humidity installed throughout the building, a MACH-ProZone controller, and 5 MACH-ProPoint expansion modules, all networked to a MACH-ProWebSys controller and accessed through a graphical user interface. The building management system enables the client to control the slab temperature during cooling mode and the air temperature during heating mode. The heating and cooling required for the underfloor system is produced from the reverse-cycle heat pump/chiller.

Mechanical equipment controlled on this site included a main cooling/heating plant, exhaust and ceiling fans, motorized window actuators, domestic hot water systems, and the heat pump/chiller.

The underfloor heating/cooling was utilized to maintain comfort conditions and provided a captivating modern look, making the school stand out while offering comfort to its occupants.

Reliable Controls and IES Group Ltd. are pleased to have played an important role in the construction of this school.

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PROJECT TYPE:
New Construction

TOTAL AREA:
2,000 m² (21,527.8 ft²)

INSTALLATION TYPE:
CO₂ Monitoring, Heatpump, HVAC,
Under floor heating

EQUIPMENT INSTALLED:
5 MACH-ProPoint™
1 MACH-ProWebSys™
1 MACH-ProZone™
20 SMART-Space™ Controllers
RC-Studio®
RC-Archive®

NETWORK:
EIA-485, Ethernet, B/VPN

PROTOCOL:
BACnet®, SMTP

POINTS:
200

RELIABLE CONTROLS® DEALER:
IES Group Ltd.

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