

212 NORTHBOURNE AVENUE

BRADDON, ACT, AUSTRALIA

CORPORATE

GREEN BY DESIGN

Widely considered one of the finest commercial buildings in the Australian Capital Territory, 212 Northbourne Avenue was recently refurbished to 4.5 NABERS standard.

PROJECT DETAILS

To achieve the initial goal of meeting 4.5 NABERS standards, new equipment was installed, including 4 new air handlers with BACnet® ABB VSDs, 35 VAV boxes (some with electric reheat), 1 scroll chiller with 6 stages of compressors, and 1 condensing boiler for providing reheat to the VAV boxes. A dedicated Ethernet – EIA-485 MS/TP arrangement was installed, allowing the boiler and chiller to connect to Ethernet MACH-ProSys™ (MPS) controllers connected to air handlers controlled by MACH1™ controllers. The VAV boxes were networked via EIA-485 to the MPS.

To meet NABERS standards and future audits, 9 electrical Modbus power meters were installed that allow the operator to monitor key energy consumption equipment. Also, there are 2 pulsed water meters; one reads the main meter into the building, a second monitors water usage in the tenant area. There are also 2 pulsed outputs for gas meters; one main, the second for mechanical equipment.

With the newly installed Reliable Controls® MACH-System, 212 Northbourne Avenue is ready to pursue both a GBCA Green Star rating and the NABERS Energy Star and Water Star ratings.

To learn more about projects using Reliable Controls® visit www.reliablecontrols.com/projects/overview



PROJECT TYPE:

Retrofit

INSTALLATION TYPE:

Boiler, Chiller, Gas Usage Monitoring, Power Monitoring, VAV, Water Monitoring

TOTAL AREA:

3,180 m² (34,217 ft²)

EQUIPMENT INSTALLED:

1 MACH-ProCom™
1 MACH-ProSys™
3 MACH-ProPoint™
6 MACH1™
35 MACH-Air™

NETWORK:

EIA-485, Ethernet, LAN

INTEGRATION:

BACnet®, Modbus

TOTAL SYSTEM POINTS:

312 points

ENGINEERING CONSULTANT:

Rudds Consulting Engineers

RELIABLE CONTROLS® DEALER:

Innovative Electrical Solutions

