

THE CENTRE FOR APPLIED TECHNOLOGY

EDMONTON, AB, CANADA

EDUCATION

OVERVIEW

In 2016, the Centre for Applied Technology (CAT) is the largest building on Northern Alberta Institute of Technology's (NAIT) Main Campus covering 51,600 square meters while hosting approximately 5,000 full-time students. CAT is more than 25% the total size of all NAIT's main Campus buildings combined and is 60% larger than NAIT's second largest building, the HP Centre. The building has been fitted with the Reliable Controls MACH-System™, which has aided in the building's LEED® Gold certification.

PROJECT DETAILS

Reliable Controls Authorized Dealer, Serv-All Mechanical Services, Ltd., successfully completed this new construction project for the NAIT CAT facility, which resulted in LEED Gold certification.

The networked, MACH-System™ hardware is connected to an operator workstation, which is installed on an internal IP network. Operators and facility managers use the workstation to access the full BACnet®-enabled system.

The mechanical equipment onsite includes BACnet-enabled chillers, boiler, and variable frequency drives (VFDs). Additionally, hard point control to air systems, heat pumps, standalone A/C units, VAV boxes, and fan coils are installed.

Chilled beams and chilled radiation panels make this project special. The project is unique because exhaust air from the basement is used to pressurize the parkade for heating and ventilation.

Achieving proper pressures from the 5-storey atrium to the outside proved to be a challenge, as did balancing the pressure from the parkade and basement with the parkade doors opening and closing.

This LEED Gold certified facility is projected to realize substantial energy savings.

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



PROJECT TYPE:
New Construction

INSTALLATION TYPE:
Boiler, Chiller, CO₂ Monitoring, Heatpump, Power, VAV, Water Monitoring

TOTAL AREA:
51,600 m² (555,422 ft²)

NETWORK:
BACnet, Ethernet, Modbus

POINTS:
3,500

EQUIPMENT INSTALLED:
13 MACH-ProSys™
20 MACH-ProCom™
482 MACH-ProAir™
110 MACH-ProZone™
5 MACH-Pro1™
3 MACH-Pro2™

RELIABLE CONTROLS® DEALER:
Serv-All Mechanical Services, Ltd.

