

# CIGI CAMPUS

WATERLOO, ON, CANADA

EDUCATION

## EFFECTIVE HEATING AND COOLING ON CAMPUS

The Centre for International Governance Innovation (CIGI) Campus is a hub for Canadian-based study and research in international affairs. The 10,684 m<sup>2</sup> (115,000 ft<sup>2</sup>) campus is home to academic and research partnerships between the CIGI and other institutions, including the Balsillie School of International Affairs (BSIA). This building is a campus for reflection, collaboration, and discussion of global issues.

## PROJECT DETAILS

Reliable Controls Authorized Dealer, Jade Logic Building Technologies Inc., completed a project for CIGI Campus, a facility, which has won numerous architectural awards for its design. The networked hardware in this project included a system located on the client's local area network and accessible through a dedicated VPN. The building utilizes both in-floor and ceiling radiant slab heating, in addition to ceiling slab cooling. A heat recovery chiller is utilized in the shoulder seasons and winter months.

This project presented several challenges, which were resolved through the implementation of the Reliable Controls MACH-System. The operation of the in-ceiling, chilled water systems required special dew point control to ensure that condensation on the surfaces would not be present during the cooling season. The building contains a full, theatre-style auditorium with acoustic silencing. Additionally, the exterior and center court area of the building includes floor to ceiling windows, which creates multiple heating and cooling loads on various faces throughout the year.

The successfully completed project provides close control of the building's heating and cooling system, ensuring the comfort of the occupants and energy efficient operation of the campus.

To learn more about projects using Reliable Controls® visit  
[www.reliablecontrols.com/projects/overview](http://www.reliablecontrols.com/projects/overview)



**PROJECT TYPE:**  
**New Construction**

**INSTALLATION TYPE:**  
**Boiler, Chiller, CO<sup>2</sup> Monitoring, Fan Coil Unit, Heatpump, Lighting, Power Monitoring, VAV, Water Monitoring**

**TOTAL AREA:**  
**10,684 m<sup>2</sup> (115,000 ft<sup>2</sup>)**

**EQUIPMENT INSTALLED:**  
**60 MACH-Air™**  
**6 MACH-ProSys™**  
**6 MACH-ProCom™**  
**6 MACH-ProPoint™**  
**6 MACH-ProZone™**

**NETWORK:**  
**EIA-485**  
**Ethernet**  
**LAN**

**INTEGRATION:**  
**BACnet®**  
**MODBUS**

**TOTAL SYSTEM POINTS:**  
**1200 points**

**RELIABLE CONTROLS® DEALER:**  
**Jade Logic Building Technologies Inc.**

www.reliablecontrols.com