



Telesat Building Control System



PROJECT DETAILS

LOCATION:
ONTARIO – GREATER OTTAWA
MARKET SECTOR:
COMMERCIAL OFFICE
DELIVERY METHOD:
BID AND SPEC, DESIGN/BUILD

Morguard's Telesat building is a multi-tenant, multi-tower office property best known in Ottawa by the name of its major tenant, Telesat.

We designed and installed a Distech Controls system to replace a proprietary building control system. In addition to providing Morguard with state-of-the-art control based on open standards, the new system also produces significant energy cost savings. It paid for itself in just 8 months, and has reduced the property's energy expenses more than \$200,000 per year over the previous system.

The new system provides two key features that contribute both to energy cost savings and tenant comfort:

1. Optimal Start

The Distech Controls system provides the building with greater intelligence. By tracking the rate at which the building cools in the winter and warms in the summer, the system anticipates the optimal time to start to achieve the desired temperature in each occupant zone.

In contrast, the previous system would have started up at a pre-designated time, regardless of need. Optimal Start is particularly valuable during "in-between" seasons (Spring and Fall), when outdoor temperature is near-ambient.

The lighting control now operates using similar intelligence. Rather than the lights turning on at a pre-designated time, they turn on within an allowable time frame and only once a real person turns on the first light in a particular zone.

2. Night Purge

During warm months, the building may become very warm while the HVAC system is unoccupied. In these circumstances, starting up the system in the morning can require a massive drag on energy. To avoid this, the Distech Controls system that we installed uses a more efficient Night Purge feature to purge all of the hot out of the building before the system starts up.

In 2014, this project was awarded Distech Controls' Greenest Building award, based on the system's demonstrable 8-month payback. Morguard has recognized the system for generating energy savings of \$600,000 over 2.5 years.