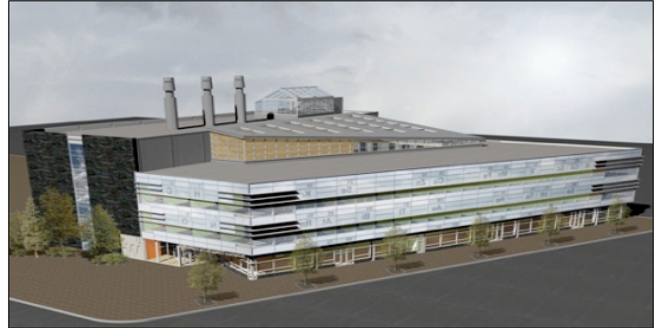


U of W Richardson College for the Environment Winnipeg, Manitoba

PROJECT SUMMARY

The University of Winnipeg (U of W) is finishing construction on what has the potential to become “North America’s Most Energy Efficient Laboratory Building.” The adoption of the Integrated Project Delivery (IPD) process enabled us to deliver a LEED Gold signature building with at least 45% less energy use while meeting very challenging program requirements on a tight budget and schedule.



To achieve high performance in laboratory design, the team designed a high performance envelope and developed innovative, practical and cost-effective laboratory ventilation volume control and heat recovery strategies. RCFE utilizes a three level lab air change rate: the Red-Light, Yellow-Light, Green-Light air change rate system correlates lab use with one of three appropriate air exchange rates. In addition to significantly reducing the amount of air required to safely operate the labs, the project team has incorporated an industry leading SEMCO heat recovery wheel, developed in collaboration with John Hopkins Research Labs and Hospitals, into the design. This heat recovery wheel will enable 80% heat recovery, including that from fume hood exhaust.

This \$43.8 million 140,000 sq.ft. facility has achieved Substantial Performance on target and in time for the Grand Opening June 27th, 2011.

SCOPE OF SERVICES

Integrated Designs Inc. is the Owners Representative and is also responsible for Design Facilitation, LEED Certification and implementation of the Best Practice and Fundamental Commissioning for this \$44M project.

PROJECT HIGHLIGHTS

- Working with the U of W Development Team, who are totally committed to demonstrating leadership in sustainable university development.
- Developing an innovative design that will set a new standard for laboratory buildings.
- Development of fully integrated standard operating procedures enabling the adoption of an industry leading heat recovery wheel that enables heat recovery on fume hood exhaust.
- Implementation of a three-mode Red-Yellow-Green light lab airflow control strategy to provide safe and efficient operation for various lab-operating modes.
- Implementation of a high level of Owner Involvement during the design and commissioning phases to establish buy-in and commitment for industry leading laboratory operations.