



This state of the art facility was built to enable integrated, patient-centered clinic care and research. Faculties and healthcare stakeholders work side-by-side, sharing space, ideas and innovations. The building includes classrooms, offices, laboratories and a cafeteria. Every day, the building's halls are filled with researchers, staff, faculty and thousands of medical and nursing students.

From the start, the design team committed to maximizing the building's energy efficiency, maintaining a healthy indoor environment and minimizing environmental impact. Completed in 2009, ECHA has since earned LEED® and BOMA BEST® certification, as well as a prestigious TOBY® Award.

Reductions

22%  ↓

ENERGY USE (Modeled)

41%  ↓

WATER USE (Modeled)

84%  ↓

CONSTRUCTION AND
DEMOLITION WASTE

➔ See next pages for details

Green Features



TRANSIT HUB



GREEN ROOF



INTERDISCIPLINARY,
SHARED WORKSPACES



RIGHT TO LIGHT

TOURS AVAILABLE

Take a green building tour and see some of these features up close.

Email emso@ualberta.ca

Certifications & Awards



LEED® Canada
New Construction 1.0

Silver
35 Credits

Date certified: February 16, 2016



BOMA BEST®
Gold - 83%
2014



**The Outstanding
Building of Year®**
BOMA Regional, 2014



Prominent, accessible and brightly-lit stairs encourage walking around the building. Stair use reduces the energy needed to run elevators for short trips.



ACTIVE TRANSPORTATION

- Building integrates with the Health Sciences/Jubilee LRT Station and is steps away from several bus routes.
- Conveniently located bicycle racks are accessible year-round. Limited access to change rooms is provided to staff and student associations.



ENERGY

- Designed to use 22 per cent less energy compared to a model building meeting minimum code compliance.
ASHRAE 90.1-1999 reference building.
- High-efficiency lighting is sensor controlled in low-traffic and/or day lit areas.
- On-demand domestic water heaters eliminate inefficient storage tanks.
- Large windows and skylights allow daylight to partially offset electrical lighting.
- Motion sensors detect when spaces are unoccupied and reduce air circulation.
- Exhaust air is used to preheat fresh air intake.



ENVELOPE

- Low thermal emissivity glass reduces heating and cooling needs.
- Window shades reduce cooling load.
- Reflective roof keeps building cooler in summer.
High albedo with Solar Reflectance Index of 70 or higher.
- Green roofs on two auditoriums insulate the building in winter and cool the building in summer.
- Walls and roofs built with high R-value materials.
Roofing materials: R 38.8 Wall materials: R 17.3



LOW-IMPACT DEVELOPMENT

- Nighttime lighting is minimized and light pollution mitigated.
- Organic waste is collected in nutrition nooks and in the cafeteria. In 2014, the building reported a waste diversion rate of 60 to 69 per cent.
- LED (light-emitting diode) and low-mercury lighting was selected for the building and grounds.



CONSTRUCTION & DEMOLITION MATERIALS

- 84 per cent of construction and demolition waste was recycled or reused.
- 12 per cent of materials used in construction were recycled-content materials.
- 68 per cent of wood used in construction was certified by the Forest Stewardship Council (FSC).
- Adhesives, paints, and carpets are low-VOC emitting.
Volatile Organic Compounds can cause health problems when inhaled or consumed.



WATER

- Low-flow commercial use faucets and urinals are sensor controlled.
- Dual-flush toilets require less water when properly used.
- The cooling system is closed-loop, saving water compared to a once-through system.



EDUCATIONAL PROGRAMMING

- Green Buildings signage identifies interactive sustainability elements and educates occupants on ECHA's hidden green building features.
- Community and commitment to sustainability are strengthened through ECHA's building-wide newsletter.



CAMPUS-WIDE PROGRAMS AND POLICIES

- District Energy System efficiently delivers heating, cooling and electricity. Connected buildings do not require chillers or boilers.
- The Building Automation System adjusts temperature depending on weather and occupant schedules.
- Buildings are cleaned using high efficiency machines to save resources and ozonated water to avoid harsh chemicals in the indoor environment.
- All cleaning products used on campus are third party green certified.
- Grounds are landscaped with native and drought tolerant plants in mulch beds to minimize irrigation in Alberta's hot, dry summers.
- Water from annual fire pump testing is stored and used for irrigation.



11405 87 Avenue, Edmonton AB T6G 2E1

Architects: HOK Architects

Engineering: Stantec, Dialog, ISL

Construction: PCL Construction

Commissioning: ICx. Solutions

Landscape: Carlyle + Associates

Sustainability: EcoAmmo

Energy Management and Sustainable Operations:

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