

SABMag

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SPECIAL ISSUE

GEORGE BROWN COLLEGE WATERFRONT CAMPUS

2012 LEED BUILDINGS YEAR-IN-REVIEW

Reinventing Healthcare Education



EDUCATION
PROVIDER

Connect-i-City Well-being through connectedness

Top Ten Ways to get a greener building





2011 | Environment 3

On a campus best-known for producing high tech titans, the honour of the fastest growing faculty at the University of Waterloo belongs to the Faculty of Environment. Recently, Environment found itself with an enviable problem. A rapid expansion of programs, enrollment and funding meant the faculty's 401 graduate students, 2100 undergrads and 70 faculty members had outgrown their existing space.

Completed in 2011, Environment 3 [EV3] is the Faculty of Environment's newest building and the first LEED platinum certified building on an Ontario university campus. EV3's sustainable features start with its design. To minimize EV3's footprint on the bustling Waterloo campus, the design and build by Akitt Swanson & Pearce Architects, WalterFedy and Cooper Construction created a cutting-edge structural system, allowing the new EV3 to sit on top of the existing Environment 2 building.

Inside, students, staff and faculty enjoy the bright and spacious Minto Atrium containing a two-storey, plant-covered, living wall that is connected to the ventilation system, thereby removing volatile organic compounds, and acting as a living air filter for the entire building.

Water efficiency is achieved through automatic, low-flow faucets, and low-flush toilets and urinals using rainwater collected from the roof and filtered through the adjacent wetlands outside.

The careful placement of the windows maximizes daylight in working spaces with automatic sensors controlling artificial light during dark hours. Much of EV3's energy is supplied by an array of rooftop solar panels that are monitored on digital screens in the atrium. This helps students track energy and resource use in the building and provides a constant reminder that the Faculty of Environment practices what it teaches.

LEED PLATINUM



FACTS

- Built using 88% recycled steel
- Water consumption is 87% less than a standard plumbing system
- EV3 consumes 45% less energy than a standard building of its size
- Home to the new School of Environment Enterprise and Development [SEED] and the School of Planning

www.uwaterloo.ca/env/

LEED SCORE CARD - PLATINUM

[Platinum Rating Achieved November 2012]

Sustainable Sites	11/14
Water Efficiency	5/5
Energy & Atmosphere	10/17
Materials & Resources	9/14
Indoor Environmental Quality	13/15
Innovation in Operations	5/5
TOTAL	53/70