



Blue sky over the USDA Laboratory

The consolidated laboratory of The United States Department of Agriculture (USDA) in Ames, IA recently finished the installation of the main atrium skylight manufactured by Unicel and designed by the St. Louis office of Hellmuth, Obata + Kassabaum (HOK). Unicel also manufactured another sloped skylight that had been set up in a neighboring building.

As sustainability and the LEED rating system are the main drivers of the architectural program, the atrium skylight incorporates a sunshade based on arched perforated aluminum panels. It was conceived to integrate daylight in the laboratory activities and eliminate the damaging effects of direct sunlight, while minimizing solar heat gains.

A sun path diagram was used to determine the annual solar angles received by the skylight in order to program and calibrate a year-long optimal performance system. To achieve this, the skylight is controlled by 18 separate motors, each operating 4 banks of 4 shades.

The skylight installation is part of the 'Ames Modernization Program', a two-phase construction program aimed at remodeling and creating new spaces to host the offices and laboratories of three key USDA agencies. The facility in Ames has a strategic importance as it is the only complex in the country to diagnose both domestic and foreign animal diseases.

Operations schedule for June-August 2008

Date	Holiday	Office	Plant
June 24	St. Jean Baptiste Day (Québec only)	open*	closed
June 30	Confederation Day (Canada only)	closed	closed
July 4	Independence Day (USA only)	open	open
July 19 - Aug. 3	Construction Holiday (Québec only)	open*	closed

*Vision Control® sales only

LEED or die

by Viviane Chan

Despite what some press articles might say about it being a hit, this year's AIA show in Boston was, according to many exhibitors, a disappointment. Perhaps its success lay hidden behind classroom doors, as most architects were so busy with seminars that many did not have the opportunity to see the exhibits.

However, since so many of the educational sessions were sustainable-oriented, it only goes to show that LEED is where you have to be if you want to succeed in today's architectural environment. Upon walking the show myself, I noticed that so many companies had, in some form or another, a LEED offering (or so they claimed). Many people think that in order to be "in", you must be "green". We would take that one step further and say that in order to survive nowadays, you must be environmentally performant.

I observed that more products are now offering diffused daylight in various shapes or forms (e.g. polycarbonates, aerogels, etc.) but there are still not many competitive products to Vision Control, which has enormous LEED potential in energy savings and daylight control...with the added advantages that you all know of: privacy, sound control, security, and no maintenance.

Conclusion: not only were we "in" before our time, but we will survive.

University of Toronto gets all dressed for school

Unicel was called upon by Baird Sampson Neuert Architects to manufacture a turnkey project for the University of Toronto at Scarborough (UTSC). Due to the product variety involved, this can be considered an "all dressed" project, one of the loftiest undertakings for Unicel so far.

As required by the architects' plans, Unicel is manufacturing the curtain wall that will envelop the East and West terraces of the UTSC Science Wing addition with Vision Control® panels. Some of the panels will be motorized, while the others will be manually operable. The latter constitute the novelty of this project: the Vision Control® panels are top hinged in order to allow building ventilation.

The exterior glass will offer a more technology-forward look to the building, in line with the educational objectives, compensating for the massive concrete structure of the facilities.

The Science Wing is the largest structure on the campus, accommodating the most successful four departments of the university.