Athletics Facility Enhancement Program – Steel was the obvious choice

GEORGE BROWN COLLEGE
TORONTO, ONTARIO

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The gymnasium at George Brown College in Toronto was in desperate need of an upgrade. Originally built in the 1970s, the gym was due for an overhaul. "All the exercise equipment was stuck in the same small space with no natural light. The only people who used it were gym rats," says Yew-Thong Leong, Principal Architect with SSG Architecture. "We were asked to put an addition adjacent to the gym. The college's recreational needs had changed. They wanted a yoga studio, among other things."

DESIGN AND CONSTRUCTION TEAM

CLIENT: George Brown College

ARCHITECT: SSG Architecture Inc.

STRUCTURAL ENGINEERS: Milman and Associates

GENERAL CONTRACTOR: The Michael Thomas Group Inc.

LIGHT STEEL FRAMING SUPPLIER: Bailey Metal Products

LIGHT STEEL FRAMING INSTALLER: Orient Construction Limited

STEEL DECK SUPPLIER: Canam Group

STRUCTURAL STEEL CONTRACTOR: Pengelly Iron Works

STEEL CLADDING SUPPLIER: Vicwest

One of the challenges the project posed was the need to add a modern addition to a historical building. "When you're building an addition to a historical building, you have to do it in such a way that it can be removed, and steel allows for that," Leong says. "The new building is entirely made of steel."

He adds that steel was also chosen for its strength and relatively light weight. "We left all the steel exposed. We wanted there to be a level of honesty about the design. We painted the steel pure white. It has a halo effect from the amount of light coming in – it simply glows."

Construction of the addition was completed a year ago. This latest addition was the third and final phase of the Athletics Facility Enhancement Plan.

"Steel doesn't look as heavy as concrete. The use of steel added a lighter feel to the space," says Leong. "The addition is amazing. It has incredible views and lots of natural light. It's been very well received."

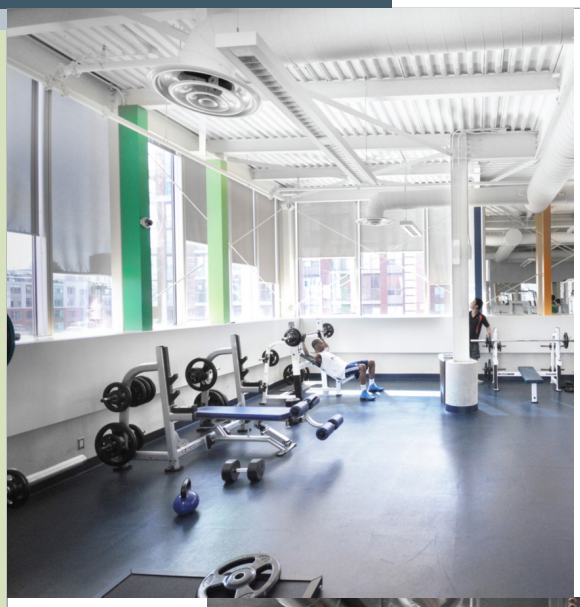
The new space is a lot friendlier, and it's encouraged more students to work out at the college, he says. "The faculty bumped a few things around. In the end, the addition became the weight-training room, with a lot of cardio machines. The yoga studio was better suited to the original building," Leong explains. "The addition has brought out a different population. It's quite well done, and we're very happy about it."

The final of 3 phases of the 'Athletics Facility Enhancement Program', was the addition to a portion of the rooftop to the historic 200 King St. E. building for George Brown College.

FIRE RATING
Roof: 0
Floors: 2 hours existing
Walls: 45 minutes

FLOOR SPECIFICATIONS
Floor Span: 10.97m (36 ft.)
Total Floor Depth:
38mm (1.42”) deck, no topping
529.55m^2 (5,700 sq. ft.)

ROOF SPECIFICATIONS
Roof Joist Span: 10.97m (36 ft.)
Roof Joist Depth: 460mm (18.1”)
Roof Joist Spacing: 1.83m (6 ft.)



The construction schedule dictated that the super structure would be erected during the fall and through the winter months. A dry construction method made winter installation a safe possibility. Prefabrication of components allowed for construction to continue safely while the existing building is occupied with staff and students.

Light steel framing was selected for its noncombustible construction properties, lightweight and its ability to integrating with the new structure. Steel allowed for easily customizing all the members and elements to align with the in congruencies of the historic structure’s differential grid spacing.

The addition provides space for the purpose of expanding the programs for the existing weight lifting and cardio facility which is currently housed in a window-less space within a 1970s gymnasium addition on the same floor. Once the existing facilities were vacated, they were renovated into a new cycle room and studios for movement classes.

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