THE BAHEN CENTRE FOR INFORMATION TECHNOLOGY

40 St. George Street, University of Toronto
Toronto, Ontario, Canada

Rebecca Ho - Lighting/Electrical Option

Photo Credit Diamond and Schmitt Architects Incorporated

Project Team

Owner: University of Toronto
Architect: Diamond & Schmitt Architects Inc.
Structural Engineers: Read Jones Christoffersen Ltd.
Construction Management: PCL Constructors Canada Inc.
Mechanical Engineers: Keen engineering
Electrical Engineers: Crossey Engineering Ltd.
Lighting Design: Crossey Engineering Ltd.
Cost Consultants: Helyar Associates

Building Information

•Facility for information technology, electrical engineering, and industrial engineering education at the University of Toronto.

•Total building area 377,000 sq ft (8 stories)

•Project cost $100 Million dollars ($150 Million Canadian dollar)

•Featuring lecture halls, seminar rooms, offices, and laboratories.

•It is the largest of its kind among Canadian universities nationwide.

Mechanical

•All air supply through the building is achieved through underneath raised floor tiles and feeds in to recessed diffusers located in the floors.

•Main air handling units for the building is installed in the penthouse. Chillers are located in the basement and cooling towers are located on the roof.

Lighting

•Lecture halls are lighted with MR16 lamp fixtures, with asymmetrical fluorescent fixtures for the front of the room.

•Custom-made high bay metal halide fixture is used throughout corridors on all eight stories of the building.

•Fiber optic lights runs vertically through the grand spiral staircase in the atrium, along with fluorescent fixtures installed on the underside of the staircase lighting up the stairs.

•Custom made indirect fluorescent fixtures, made of silver perforated aluminum, lights up the rippled concrete detail on the ceiling above main hallways throughout the building.

Electrical

•The University of Toronto central power plant supplies the building with incoming electrical power at 13.8kV.
•Power is then transformed to 347/600V for mechanical and lighting equipment, and 120/208V for receptacles throughout the building.
•All the power is distributed through under raised floor tiles throughout the entire building.

Structural

•The Bahen Centre is mainly considered as a standard reinforced concrete structure.

Construction

•The project delivery method for this project was Construction Management and Cost Plus by PCL Constructors Canada Inc.