

University of Ottawa School of Information Technology and Engineering

Ottawa, Ontario, Canada



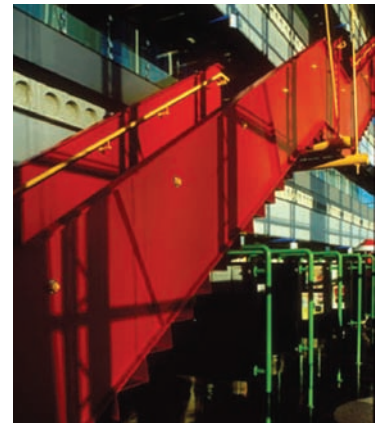
With its elegant 90-meter-long (300 foot), four-storey high glass atrium overlooking the Rideau Canal, the University Ottawa's School of Information Technology and Engineering (SITE) is one of the most striking buildings in the nation's capital. The 16,900 square-meter (182,000 square-foot) concrete structure utilizes a precast prestressed hollow core plank floor system.



Distinguished with a rotunda on its north side, the school includes seven multimedia classrooms, four teaching laboratories and 20 research laboratories. IKOY Architects designed the five-storey building.

The building's atrium functions as both a food court and a virtual library with 180 computer stations where students plug in their laptop computers. The atrium is the heart of an energy-efficiency system that marries the power of the sun with the school's mechanical distribution system. Radiant heating hitting the atrium floor and wall panels is transferred to the rest of the

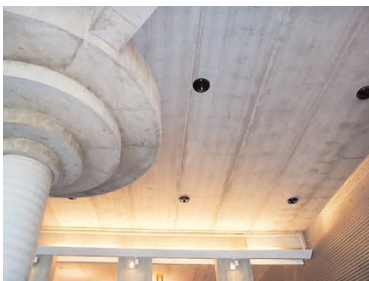
building through a heat pump and radiant cooling system.



Although the building appears to be a simple structure, the construction detailing, scheduling and coordination required to achieve that impression was



complex. Every element is exposed, as the architect wanted to feature the 'inner' beauty of the building.



The construction manager was constantly challenged to find innovative ways to overcome potential schedule delays. This was not a solo effort on their part. When there was a problem, the university, the construction manager, the consultants and the trade contractors pulled together quickly to find a mutually agreeable solution. They knew the only way this building would be successfully completed was through teamwork.

The architectural precast concrete wall panels consisted of a total of 175 panels with a total

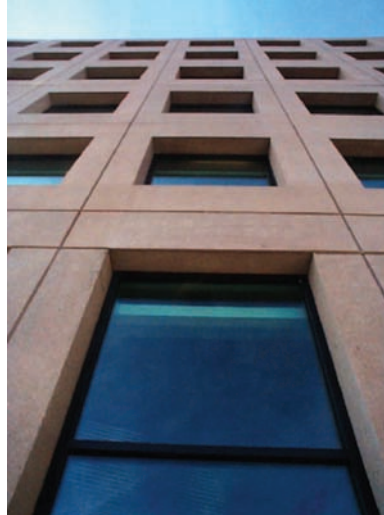


surface area of 3,160 sq-m (34,000 sq-ft). The challenge was to design panels hung from the structure without any visual connections. The panels are located on the building's perimeter with window openings that complicate the design and the installation.

The installation of precast panels on the exterior concrete frames and walls forced the precaster to deal with an exceptional level of installation tolerances and quality. A very



tight control on the concrete mixing process as well as sand-blasting the panel surfaces gave the building the appearance (colour and texture) sought. The panels achieved the goal set out - the architectural beauty of precast concrete.



CREDITS:

Design Architect: IKOY Architects

Owner: University of Ottawa

Construction Manager: Paul Daoust
Construction Canada Ltd.

Structural Engineer: Sauvé Boucher
Associates

Structural Precast Concrete: Granite
Prestressed Concrete Ltd.

Architectural Precast Concrete:
Saramac, Inc.

Total Area: 16,380 m²

Total Construction Cost: \$42.8 million