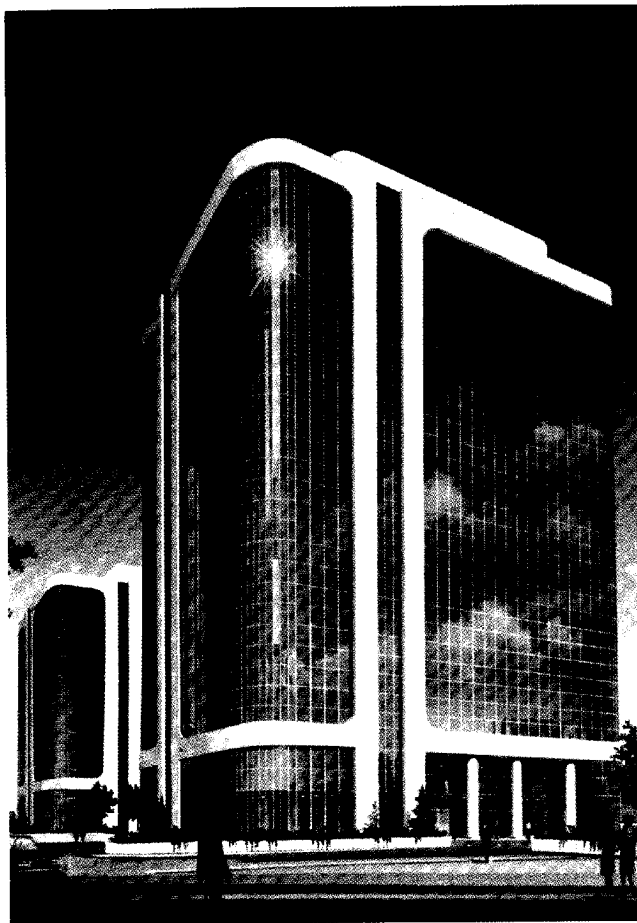


RSIO

Case History Report

OFFICE BUILDINGS

Reinforced concrete is our material of choice in multi-storey office buildings says major developer. . .



Concrete is so automatically the material of choice for use in its multi-storey office buildings, that for the past six or seven years Inducon has stopped doing comparative analysis between concrete and other structural materials says Robert Yaworski, Vice-president, Construction, Inducon Development Corporation.

"In our minds concrete has proven itself over and over again as a versatile and economical building material," says Yaworski. "We feel confident each time we make the choice to use concrete."

As Toronto's largest developer and builder of suburban multi-storey office buildings Inducon is a leader in the construction field.

Inducon consists of two sister companies, within which there are several divisions. Inducon Developments Corporation buys and develops properties. Inducon Design/Build Associates is composed of Inducon Consultants of Canada, Inducon Construction (Northern) Inc. and PM3, the project and management arm.

Even when Inducon performs strictly in the role of consultant, the structure is designed in concrete. "Since we at Inducon use concrete for our own buildings, it follows that we recommend the material when we do design work," says Yaworski. "Obviously we want the best for our clients."



"At the point when we decide to build we certainly don't want to have to wait for structural materials to become available," says Yaworski. "One of the major advantages of concrete is that we can start building usually within a matter of several weeks once we have accessed market conditions as to our startup time."

From the moment Inducon starts construction the emphasis is on closing in the building quickly and therefore readying it for occupancy.

**"We want the best
for our clients"**

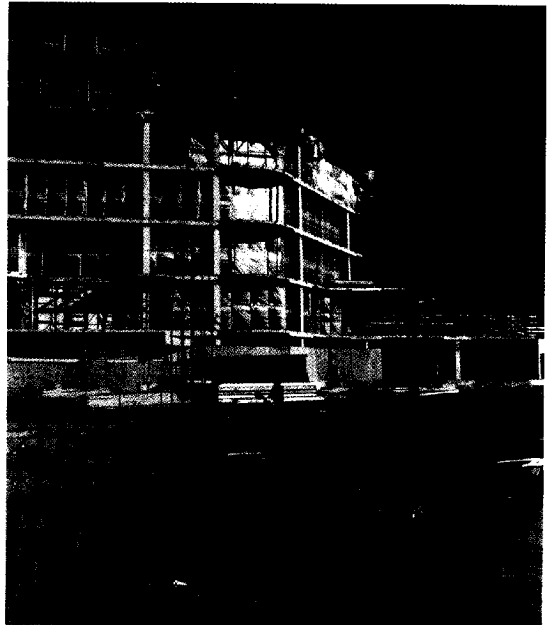
"Our end goal is to have the building ready for leasing as quickly as possible, especially since in many cases we have clients ready and waiting to occupy the space," says Dave Lamb, Manager of Structural Engineering, Inducon Consultants.

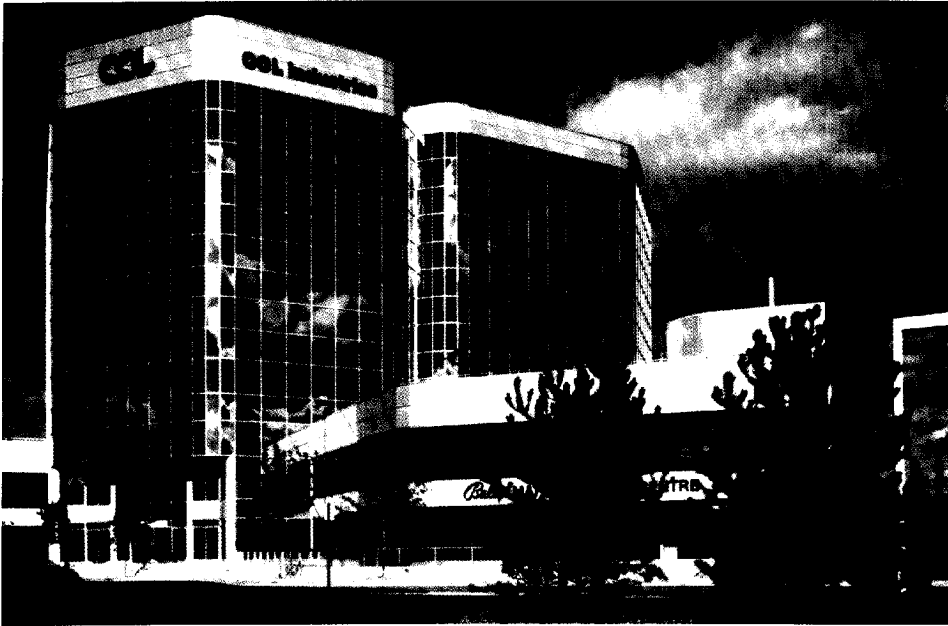
"The innovative and leading-edge use and development of flying forms in Toronto and region means that the repetitive floor system technology is in place. As a result we can often complete as much as a floor a week. When high early strength concrete is used, the process is really speeded up and streamlined."

Cecil Magee, Manager of Construction Services for Inducon's PM3 division, agrees that concrete is the way to go. "I can't imagine a more economical way to build our office buildings," says Magee. "With cast-in-place reinforced concrete you know exactly what you are getting since the material is formed on the job. This on-site work gives us a real measure of control as we build."

**"Concrete has
built-in fire proofing"**

In the competitive world of office building, Inducon may well purchase a piece of land, service and then hold on to it for several months says Yaworski. The start of building is determined by the company's market analysis division, based on the economic climate and potential movement of companies into that particular location.



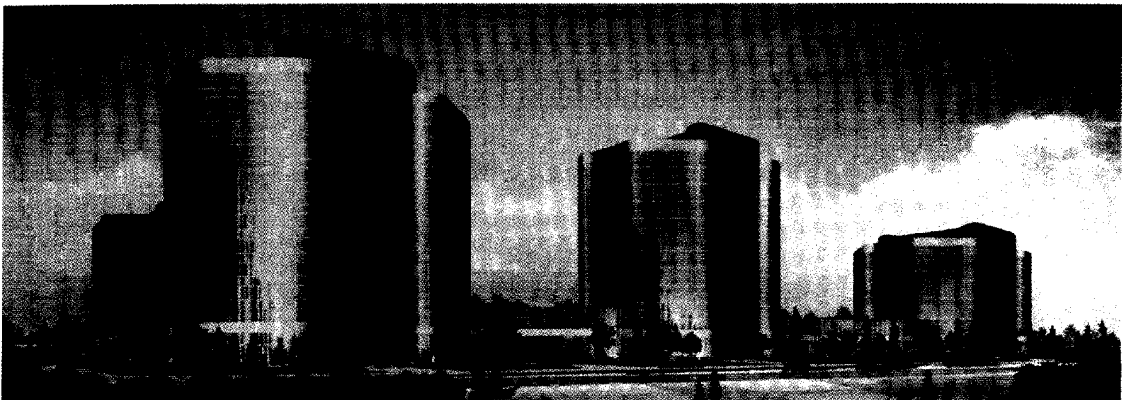


“Concrete has proven itself over and over”

Since cast-in-place concrete also has built-in fire proofing capabilities Inducon does not have to worry about external treatments. This means that we save several steps in the overall building process,” adds Lamb.

Although Inducon routinely uses cast-in-place concrete in its multi-storey office towers, in the case of several buildings the advantages garnered in the choice of reinforced concrete have been particularly evident.

At the 16-storey, 2-level underground parking West Metro Phase Three building in Etobicoke, the design calls for a large ground level podium area for truck traffic and emergency vehicles. By choosing concrete, Lamb estimates that Inducon was able to save at least one foot in the overall parking garage storey height since the concrete structure is much shallower than a comparable structure of other materials.





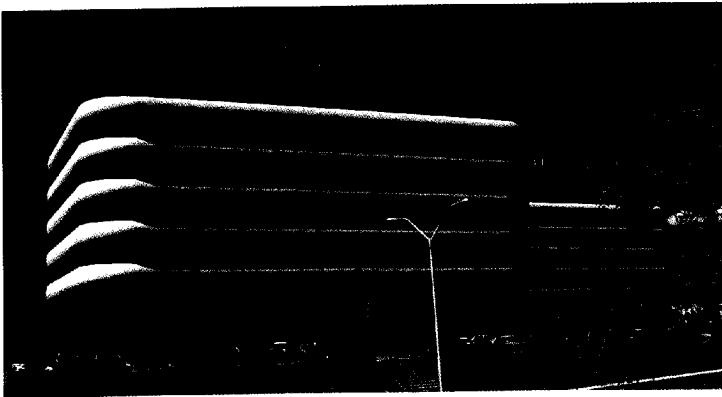
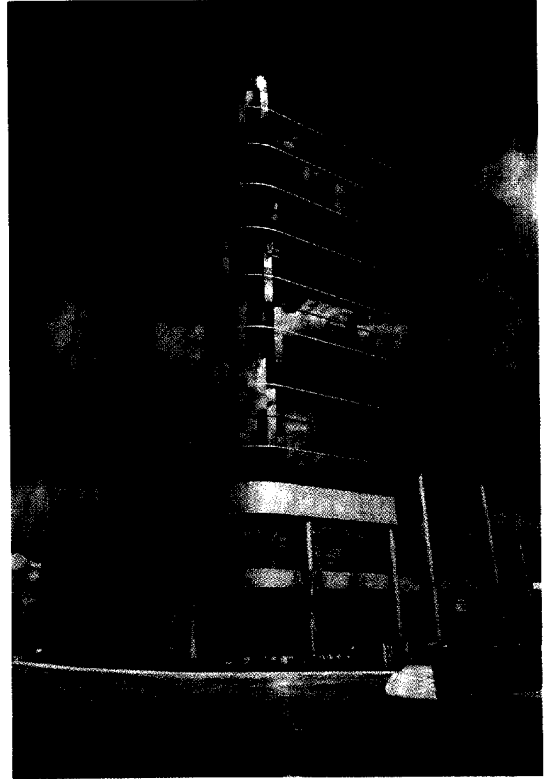
By utilizing a reinforced concrete core in the West Metro building, as well as in Markham's 11-storey President's Choice, Lamb says that Inducon saved both money and time as there was no need for any external bracing.

"Since these brand new office buildings do not need the external bracing, there is more flexibility in the cladding of the building. In addition, Inducon is able to design much wider window space using curtain walls. Given the amount of time many office workers spend in their offices, this added feature is most welcome."

"The weight of the reinforced concrete structure increases the stability of the building against overturning due to earthquake and wind loads," says Lamb. "We always build with an eye to the worse case scenario."

Without a doubt, Yaworski says, Inducon will continue to choose concrete over other competing structural materials. "We are talking about a flexible material that is almost always available. Reinforced concrete, with its high strength specialty varieties, allows for choice even once a builder has chosen to work with concrete," says Yaworski.

"As a builder and developer I have to ask myself . . . Why look for another material when concrete fits our needs so well?"



Credits

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INDUCON DESIGN/BUILD ASSOCIATES

Photos: Kendrick Communications



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