

# NuDura, Strescore speed up construction



St. Thomas University, Fredericton, NB is adding a new building to existing facilities at the former Keddy's Motor Inn site on Forest Hills Rd. Bird-Stairs Ltd. supplied their NuDura ICF wall system for this 1,200 m<sup>2</sup>, three-storey building. Lafarge Construction Materials supplied 350 m<sup>3</sup> of concrete for the ICF walls. Construction will be completed prior to the return of students for the fall term. Inset: Strescon Limited supplied and installed 2,100 m<sup>2</sup> of their Strescore hollow core slabs, an interesting combination of the locally manufactured floor system with ICF walls.

By Kate Merlin  
Contributing Writer

To meet the growing demand for student residence accommodation, St. Thomas University in Fredericton, NB is building a new residence extension on the old Keddy's Hotel property it recently purchased.

A.D.I. Design Group of Fredericton, NB won the proposal to design and construction manage the new state-of-the-art student residence and put architect Dave Beatty in charge of the design.

The project offered several design challenges for Beatty, since it had to address several concerns, including fire safety, sound transmission, durability, energy efficiency and an aggressive construction schedule that would start in mid-winter. After choosing a framing system that incorporated insulating concrete forms (ICFs) for the exterior walls and interior partitions of masonry block, the floor system had to be considered.

A.D.I. learned that Strescon had supplied the Strescore floor system with ICF walls on numerous projects in the Maritimes. Strescon Limited was contacted for a precast solution to their needs. At the time Strescon was working on a new student residence at the University of New Brunswick (Saint John campus) and a tour was quickly arranged. After reviewing first hand Strescon's Strescore floor system, weighing the pros and cons of a precast solution and getting budget figures, A.D.I.

were thoroughly convinced they had secured their floor system and could finalize their design.

Strescon supplied and installed approximately 23,000 square feet (486 pieces) of Strescore floor slabs that allowed all trades to perform their work without hold-ups. Strescon erected up to 85 pieces a day and maintained the tight schedule. Other construction materials would have a hard time meeting such an aggressive schedule.

The Strescore floor system provided an immediate safe working platform for all trades plus sped up the construction schedule. In the end, the Strescore plank provided exactly what the owner and designers were looking for—a floor system with excellent fire rating, low sound transmission, all weather construction and last but not least, cost effectiveness.

The three-storey residence extension has a footprint of 13,000 square feet and 1,800 square feet of exterior wall surface. The NuDura system, a second generation type of ICF was chosen for the walls of the building. This product is distributed exclusively in Atlantic Canada by Bird-Stairs Limited, which also trains builders in the application of this building technique.

In fact, the company trained Doug Forbes and the other eight men from DC Forbes Construction Ltd. of Fredericton who worked on the project. The architect had specified that the ICF system had to be installed by trained applicators and DC

Forbes was chosen for their training as well as their experience working with ICFs on other projects.

The combination of the expanded polystyrene insulation and thermal mass of the inner core of concrete make walls built with ICFs more energy efficient, durable, sound and fire resistant than conventional walls. Plus, the innovative hinged plastic web inside these second generation ICFs from NuDura also make them easier for the builders to handle. The blocks are larger than conventional ICFs and fold down flat for shipping. They can then be shipped faster and cheaper because they take up less room. At the worksite, the forms can remain neatly packaged until they are ready to use, making them less likely to blow away on windy days.

When the forms are needed, the plastic hinge inside the form swings open, expanding the form. The blocks can be inverted, so one corner block is suitable for all four corners. They are also larger than conventional ICFs, so fewer blocks are needed. This saves valuable handling time, especially on large walls. The accurate interlocking connections, snap together quickly, saving even more time.

The walls began to go up in March and are expected to be completed by mid-May. It probably would have taken about 30 per cent longer if conventional wall framing methods had been used. The entire building is expected to be finished by mid-August so it will be ready to welcome the influx of students in September.

## READY MIX BRIEFS

### • Cont'd from E3

L' Association BÈton Quebec (ABQ) on November 19, 2002.

• The Canadian Ready Mixed Concrete Association (CRMCA) held its semi-annual meeting in Regina, Saskatchewan on May 2 and 3, 2003. Much business was covered with CRMCA President Mel Fiander of Quality Concrete presiding, and several new individuals, including APRMCA President Allan Heffell of Curran & Briggs, representing their Associations. Agenda items of note included final review of a new draft **National Code of Environmental Practice for Ready Mixed Concrete Facilities**, to be submitted to Environment Canada by October 2003, and agreement to negotiate arrangements with NRMCA, Silver Spring, MD to Canadianize, promote and distribute their driver training program titled **Concrete Delivery Professional® (CDP)**. APRMCA is working to begin delivering this program to its members in 2003, with the ultimate goal to make it a mandatory requirement of producer certification and membership within five years.

• PEI members of APRMCA were very pleased with the reception given them by **Hon. Gail Shea, Deputy Minister Steve MacLean, P. Eng., and senior staff of the PEI Department of Transportation & Public Works** on February 5, 2003. All of APRMCA's PEI members met to discuss concrete related issues affecting the department and industry. The Department seems to be open to future use of concrete options and the plant certification program.

## ADMIXTURES for Concrete

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## CAC hires staff engineer for Atlantic region

By Bill Dooley, P.Eng.  
Cement Association of  
Canada

The Cement Association of Canada (CAC) is pleased to announce that Colin Dickson, P.Eng., joined the association's Atlantic operations as director of Business Development. Dickson's appointment became effective February 17, 2003.

Dickson will work out of CAC's Halifax, Nova Scotia office. His initial efforts will focus on public works and engineered structures. He will also provide technical support to CAC clients in Atlantic Canada.

Dickson gained his business development and engineering experience while employed in both the public and private sectors. His most recent position was that of director of Corporate Business Development



Colin Dickson, P.Eng., was appointed in February as director of Business Development for CAC-Atlantic.

with Vaughan Engineering and Associates Limited. Prior to that, Dickson was employed as the vice-president of Development for Fairwyn Partnership Limited, a real

estate developer based in Halifax, and as an engineer with the Department of National Defence.

Dickson's background in consulting engineering, real estate development and public sector projects will be invaluable to the Association as it continues to pursue opportunities for cement-based products in Atlantic Canada.

Dickson's enthusiasm and expertise is a strong addition to the cement industry that should be welcomed across the region.

For further information, Colin Dickson can be contacted at CAC via email (cdickson@cement.ca) or by calling 902-423-7317 (office), 902-476-5898 (cell) or 902-429-6696 (fax). Bill Dooley, P.Eng., is vice-president for the Atlantic region of the Cement Association of Canada.



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