

READY MIX NEWS

A SUPPLEMENT TO THE ATLANTIC CONSTRUCTION & TRANSPORTATION JOURNAL



The Future Inns in Moncton chose the NuDura ICF Wall System, supplied by Bird-Stairs Limited, to build a four-storey hotel that opened in the spring of 2006. The project is owned by Future Inns; the architect was Anderson Architect Ltd. of Halifax; the structural engineer was Pinto Engineering Ltd. of Halifax; the project superintendent was Tri-Cor Development; the project manager was Steven Campbell; the NuDura ICF system supplier was Neil Reid of Bird Stairs Limited of Moncton; the NuDura ICF system installer was Ken Allen of Braemar Management Inc. of Salisbury; and the ready mixed concrete supplier was Casey Concrete Limited of Moncton.

APRMCA Briefs

• **CORRECTION** The Ready Mix News, Summer 2006 Edition, reported that Casey Concrete Limited purchased Metro Ready Mix in February of 2006. That report was an error. Casey Concrete Limited has not purchased Metro Ready mix. Instead, the two companies are jointly involved in the provision of ready mixed concrete services in the Halifax Regional Municipality and surrounding areas. The Atlantic Provinces Ready Mixed Concrete Association regrets its error. It also resulted to Casey Concrete Limited, Casey-Metro Ltd. or any of their principals or employees.

• APRMCA has had a net loss of one Producer member company in 2007, with the completed sale of Glenholme Ready Mix to the Nova Scotia operations of the Pennecon Group. The plant will continue to come under the watchful eye of Shawn Putnam, in consultation with Dave Bancroft, general manager for Pennecon's N.S. operations.

• Members have added several plants to the Atlantic inventory, with the new total now standing at 126 – including several dedicated to specific projects.

• APRMCA expresses its best wishes to the Cormier family, owners of A&P Concrete Products Ltd., Ste-Marie-de-Kent, N.B., who announced they would not be continuing in the ready mixed concrete business after the end of the year. They will concentrate their efforts on precast products, their prime business.

• APRMCA Associate membership climbed to 80 in 2006 with three new members joining earlier in the year. There also have been several expressions of interest from prospective Associates, who we look forward to welcoming in the coming months.

• APRMCA heartily thanks its many Producer and Associate members for their ongoing financial support and interest in the affairs of the ready mixed concrete industry.

Continued on page 6



Continued on page 2

ICFS CATCHING ON ACROSS THE REGION

By Stephen Clare

The use of ICFs in the construction of commercial and industrial complexes across the Atlantic region is growing significantly, and soon might even equal that of residential usage say many of the region's industry experts.

Insulating Concrete Forms (ICF's) are stay-in-place formwork for energy-efficient, cast-in-place reinforced-concrete walls. The forms usually take the shape of expanded or extruded polystyrene plastic blocks separated by high density polyethylene or carbon-fibre spacers which lock together somewhat like Lego bricks. They serve to create a cavity, or mould, for the structural walls of a building. Concrete is pumped into the cavity to form the structural element of the walls. Reinforcing steel is added before concrete placement to give the resulting walls flexural and structural strength, as in bridges and high-rise buildings made of concrete.

After the concrete has set, the forms are left in place permanently to serve as thermal and acoustic insulation, provide space to run electrical conduit and plumbing and/or serve as backing for gypsum boards on the interior and stucco, brick, or other siding on the exterior.

The forms are either separate panels that are connected with plastic connectors or ties, or pre-formed interlocking blocks. Different ICF systems also vary in the shape of the resulting concrete within the wall. "flat" systems (3rd Generation) form even thickness concrete

throughout the walls, like a conventionally poured wall. In high seismic and wind threat zones, flat wall systems predominate as the systems of choice. "waffle grid" systems (2nd Generation) create a waffle pattern where the concrete is thicker at some points than others. "post-and-beam" or "screen grid" systems (1st Generation) form discrete horizontal and vertical columns of concrete. The areas within the grid are solid insulation, increasing the overall R-value but offering very little overall fire resistance.

Though the usage of ICFs here in Atlantic Canada has been steady in the residential construction industry, the commercial marketplace is only now starting to catch on to the many benefits of building with the forms. There are at least ten ICF systems currently being marketed in this region.

Stephen Campbell is the President of Halifax-based SC Design Development Ltd. and was the Project Manager for the recent construction of the newest Future Inns location in Moncton. He says that he was impressed with the ICF process.

"This was my first time using these materials, though I had some experience on a few other projects where they were used.

"The benefits for this type of business are obvious. First and foremost, ICFs have a high-sound absorption, making for peace and quiet for hotel guests. As well, the product makes for pret-

ty fast construction, meaning that the builder saves on time-related costs. And, there is always the eco-friendly factor due to the use of local materials combined with little or no waste by-products.

"I think we are going to see ICFs used more and more across both the commercial and industrial marketplaces in the coming years."

The NuDura ICF wall system for the project was supplied by Bird-Stairs Limited, who has offices throughout Atlantic Canada. Casey Concrete Limited, Moncton supplied approximately 1,000-cubic metres of concrete for the project.

Jeff Appleton, on behalf of Future Inns says, "It was worth paying a bit of a premium for the long term energy efficiency, sound control and greater comfort of our guests. Every room will have individual heat control, and the sound rating for the NuDura product is excellent. We think the economics and the other benefits of ICF made this a perfect choice for Future Inns."

Tim Cook of L H Cook's Construction Ltd., Woodstock, NB was the ICF installer for general contractor Avondale Construction Ltd., Halifax during construction of the new Carleton Manor in the Woodstock area. Cook's Construction purchased and installed NuDura from Bird Stairs. They have used the product on several residential and commercial projects in recent years. They also supplied the concrete for this building.