Atlantic Concrete Association • Association béton Atlantique



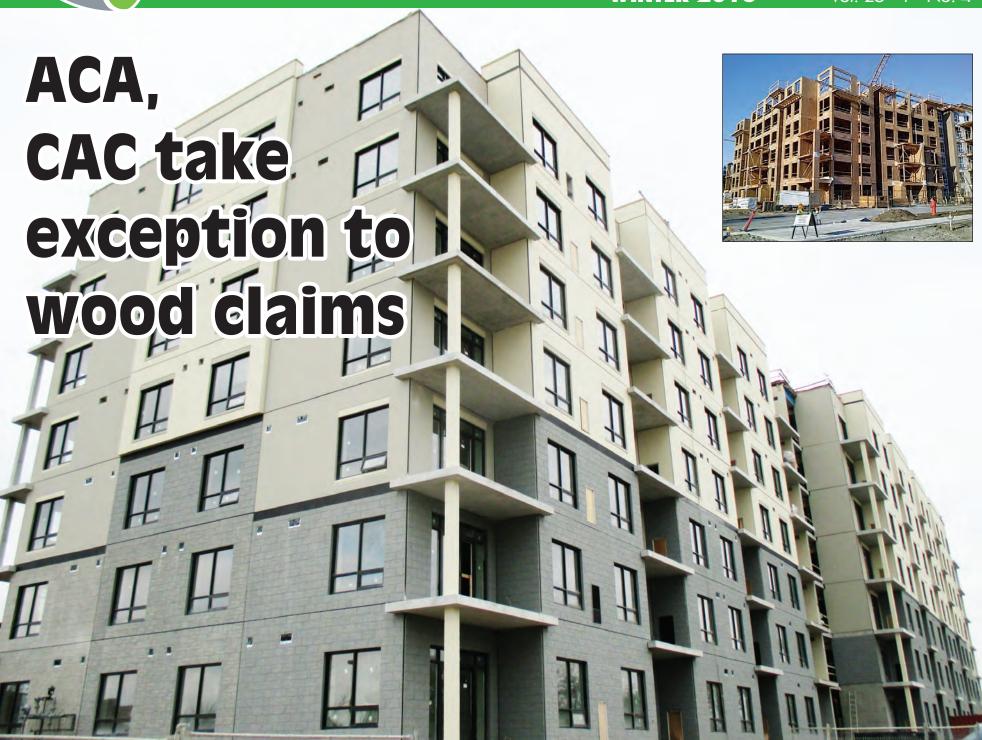


concrete



WINTER 2016

Vol. 25



By Kathy Johnson

With construction slated to start in downtown Dartmouth of Atlantic Canada's first six-storey wood frame building, the Atlantic Concrete Association (ACA) and the Cement Association of Canada (CAC) are expressing concern and taking exception to claims that mid-rise

wood constructed buildings offer lower project costs, shorter construction timelines and increased sustainability than other building materials, including concrete.

"This innovative, mixed occupancy building will be Atlantic Canada's first modern six-storey wood building. In recent years, mid-rise wood construction has been embraced by jurisdictions across Canada for the many

advantages it delivers, including lower project costs, shorter construction timelines and increased sustainability," says Atlantic Wood Works project coordinator Patrick Crabbe in an early September press release announcing the project.

Continued on page 3



Association béton

Tel: (902) 443-4456 Fax: 902-404-8074 Web site: www.atlanticconcrete.ca Email: info@atlanticconcrete.ca

Publication Mail Agreement #40064799

Atlantic Concrete Association (ACA) Association béton Atlantique (AbA)

Produced for ACA/AbA by Advocate Media Inc. (Formerly Atlantic Provinces Ready Mixed Concrete Association) Return undeliverable Canadian addresses to: below return address 301-3845 Joseph Howe Dr., Halifax, NS B3L 4H9

AFFIX MAIL LABEL HERE

President's Letter

ACA moving forward on priority issues

By Scott Flemming

2016 was a year of positive transition for the Atlantic Concrete Association. For more than 50 years, ACA has promoted the use of ready mix concrete in our region and continues to be a strong voice for our industry. Our dedicated board and staff work hard to develop and implement new objectives moving into 2017

Marketing being at the top of our priority list, I'm excited to announce that beginning in the new year ACA will be launching a new, informative website along with targeted promotional material demonstrating the wide-ranging benefits of concrete. Our new marketing strategy will target members and stakeholders alike, striving to make concrete the material of choice in a crowded marketplace.

Being your president, I have the opportunity to represent Atlantic Canada on a national level. Our executive director, Pam Woodman, and I work closely with the Cement Association of Canada, the Canadian Ready Mix Concrete Association and the Concrete Council of Canada to collaborate and exchange information to better serve our region.

Over the past year we have attended industry meetings in Calgary, Toronto and Montreal, as well as participated in numerous conference calls on issues of national and regional importance.

Have you noticed a change in this edition of our Ready Mix News? Another one of our marketing priorities was to 'refresh' our flagship newsprint publication and our various electronic communications. We hope you enjoy the new look!

I would be remiss if I didn't mention ACA's wonderful events from this past summer. Our Family Board Meeting at Oak Island and annual golf tournament in Moncton were hugely successful and I encourage members to attend all upcoming events in 2017.

Our next event to kick-off the New Year

will be our ConAtlantic Conference and annual general meeting, which is happening in Saint John, N.B. on Feb. 23 to 26. Registration will be opening in November so be sure not to miss out. It's a great opportunity to learn and network with the industry.

I've been fortunate to work with a talented board and committee members that truly care about our sector and have a real enthusiasm for growing our industry. I'm proud of all we've accomplished together and look forward to what the future will bring for this vibrant association. I look forward to seeing everyone at our DecementFest Holiday Reception on Dec. 5 in Halifax

Arrow Construction captures ACA Golf Tournament



The Royal Oaks Golf Club in Moncton, New Brunswick was the site of this year's ACA Golf Tournament on Sept. 15. The tournament was followed by a dinner at the club house and then a reception at Casino NB. Arrow's winning team included Mike Appleyard, Garrett Cameron, Adrian Thompson and Sylvain LeBlanc. ACA extends its congratulations to the winning team and also to our golf committee and sponsors, whose hard work made it all possible. Members of the committee include: David Kline, Steven Peters, Doug Brophy, Shane MacDow and Michelle MacMullin.

The insurance factor

Insurance costs higher for wood versus concrete when lifecycle costs included

By Kathy Johnson

Mid-rise wood construction structures are not necessarily a budget breaker when insurance is factored into the equation says Rick McGrath, director of codes and standards for the Concrete Council of Canada.

A "Study of Insurance Costs for Mid-Rise Wood Frame and Concrete Residential Buildings," commissioned by the Concrete Council of Canada and conducted last year by Globe Advisors, analysed property insurance costs for both "the construction phase, where insurance is purchased by developers and contractors, and the operational phase, where insurance is purchased by strata managers and condo owners. Each of these two phases involves an analysis of different risk factors," states the executive summary.

"Consultations with brokers, underwriters and property managers confirm a substantial differential in the costs to insure wood-frame buildings compared to comparable buildings constructed primarily of non-combustible materials. Interviews with three underwriters and data from the Canadian Wood Council (CWC) show that builders' risk insurance rates per \$100 monthly for comparable wood and concrete buildings to be on average \$0.008 for concrete and \$0.053 for wood. When excluding the rate provided by the CWC for woodframe insurance, which was significantly lower than the rates provided by the underwriters, the average rate for wood buildings rises to \$0.06, a factor 7.5 times greater than that for concrete buildings.

As for the operational phase, the difference in risk factors such as fire and water damage for wood-frame buildings compared to concrete buildings are not only higher, resulting in higher insurance costs, but also harder to obtain.

"One significant finding of the study is the difficulty in obtaining insurance for wood-frame structures. Many insurance companies are starting to limit their exposure to these buildings, while others will not underwrite wood-frame buildings at all. Insurers in this market are also reluctant to be the sole underwriter, therefore coverage must often be spread among a pool of insurers, increasing costs and complicating claims," states the report.

"Given we can expect the construction of more mid-rise, wood-frame structures in cities across Canada due to the allowances permitted in the building codes, it's important to know today the ramifications of this trend in terms of public safety, municipal budgets, homeowner risk exposure and contractors' liabilities, so that all affected parties can plan accordingly.

"Due to the enormous costs that developers, contractors and builders face when constructing mid-rise residential structures, and the costs that strata managers and condo owners face over the building's lifetime, a concerted effort must be made to engage the major players and build better awareness of the factors that influence insurance rates and how rate differentials between different classes of buildings can be lessened through best practices during and after construction."

The study also identifies a "need for a definitive comparative assessment of total life costs of wood frame and concrete structures, taking into consideration not only changing technologies and related costs of building products, but also the longer term costs of building operation, maintenance and decommissioning."

ACA's Ready Mix News | WINTER 2016

ACA, CAC take exception to wood claims

Continued from page 1

Not the case, says the ACA. When it comes to sustainability, "It takes less energy to produce concrete than it does to produce steel or wood according to a study conducted by the National Ready-Mixed Concrete Association and reported by the World Business Council for Sustainable Development," states the ACA's position paper, Response to the Wood Industry.

"The production of cement — the primary ingredient of concrete — is responsible for 1.5 per cent of Canada's CO2 emissions, compared with three percent for the forest industry," the report says. "Given the costs and challenges of shipping concrete, most concrete is produced very close to where it will be used. This reduces the need for fuel for transportation.

"Concrete is highly reflective. A high percentage of the light that hits concrete roads and walls is reflected, thereby helping to keep cities cooler and reduce the need for air conditioning. Heat moves very slowly through concrete walls and floors, thereby reducing swing in indoor temperatures.

"The industry increasingly uses waste products to the replace some of the conventional cement required in the production of concrete. The concrete industry has made important progress in its use of alternative fuels. The longevity and stability of concrete means it requires less maintenance and it's rarely replaced."

The benefits of building with concrete outlined in the response paper by the ACA include: the lowest carbon footprint for a structure or pavement over its lifecycle; unparalleled strength, durability, longevity and resilience; maximized energy efficiency via thermal mass; durability in any environment; a building material that doesn't burn, rust or rot; safety and security; versatility (it can be moulded into any shape, colour or pattern imaginable); no off-gas; excellent vibration and sound insulating; low maintenance costs; and 100 per cent recyclability.

"Plus the materials needed to make concrete are abundant in just about every locale on the planet. It's quite simply the most versatile building material on earth," the report says.

For the CAC, "One of issues that irks us," about

For the CAC, "One of issues that irks us," about mid-rise wood construction is "many are being built as sacrificial buildings," says Rick McGrath, CAC's director of codes and standards. "The only rationale that applies is, in the event of a fire, everyone can get out safely. The only design requirement is get everybody out safely before it burns. Our rationale has been to build for the long run and stand the test of time. We should be building stronger and longer, not weaker and cheaper."

As it is, the mid-rise wood buildings being constructed are "best described as hybrid buildings," says CAC's Adam Auer, noting although there may be more wood used than in a traditional wood build, concrete is still playing a foundational and structural role.

Auer says in Europe, the building codes and standards for mid-rise wood structures are much more stringent than the requirements in Canada. For example, in Europe all exposed wood must be protected from the elements, so that adds quite a bit to the cost.

"I expect as people become more aware of this type construction, there will be a call for better regulations," Auer says.

Concrete safer, greener for multi-storey construction

By Chris Conway

In the recent article, "Why Canada's Cement Industry is Crumbling", the writer Mr. Taylor doesn't let the facts get in the way of a good story.

The article claims that cement, and therefore concrete, is GHG intensive. Taylor instead supports wood as an alternative building material choice. There are a number of problems with his analysis.

The carbon footprint of wood is actually quite poorly understood as accounting for the carbon lost from soils, waste wood, habitat fragmentation from logging roads and the transition from natural to managed forest ecosystems is still challenging. However, it's most certainly far more complicated than "wood sequesters carbon." Deforestation has significant ecological impacts Taylor conveniently ignores.

What we do know is the forest and wood products industry overall has significantly larger carbon emissions that concrete. Even with the improved efficiency of the wood industry, the waste left in the forest after harvesting is substantial (e.g. branches, roots, bark). These unused parts are either burned, producing CO2, or left to rot, releasing methane that has far higher GHG emissions than CO2.

Statistics Canada tracks forestry and logging separately from wood product manufacturing. When combined, the total GHG emissions for wood far exceed cement and concrete manufacturing. According to Statistics Canada, wood generated nearly 16,500 kilo-tonnes of GHG emissions in 2013 versus only about 10,000 kilo-tonnes for concrete and cement, or 6,500 kilo-tonnes less. The higher emissions by the forestry and wood products industry relative to those from the cement and concrete industry are equivalent to the average annual emissions of 1.38 million cars.

The reference to the grey unseen infrastructure doesn't take into

Continued on page 8



We make your life easier by providing the products and services your business needs to put its best face forward.



TOLL FREE: 1-800-236-9526

PICTOU: 902-485-1990 | DARTMOUTH: 902-457-7468 | HALIFAX: 902-455-2870 | BRIDGEWATER: 902-543-2457 | DIEPPE: 506-857-8790 | SAINT JOHN: 506-654-1303 | ST. STEPHEN: 506-466-3220 | ST. JOHN'S: 709-597-2599

120758

Ready Mix Briefs

• The 2016 winners of the scholarships established in memory of Keith White. past president of the Atlantic Concrete Association, and Don Kellar of Lafarge Canada were recently announced. Samuel Dykeman of Ecole acadienne de Truro is studying at Dalhousie Agricultural College in Truro. He wrote an insightful essay on what he's learned from his father about concrete and how he used that knowledge on a recent trip to a third world countrv. He is the son



Caitriona MacMullin



Samuel Dykeman

of Dawn and Phillip Dykeman of Casey Concrete, Caitriona MacMullin of Halifax West High School is now studying at George Brown College in Toronto to pursue acting. She wrote a wellresearched essay on sustainable concrete. She is the daughter of Craig and Michelle MacMullin of ACA.

• The ACA extends a heart-felt welcome to our new associate members Soprema, with offices in Dieppe, N.B., and Universal Truck and Trailer, also of Dieppe. Other new members include Taiga and Bernard Pennecon.

- Wedding congratulations go out to Jessica Waite and Jonathan Higgins on their August nuptuials, and to Travis Smith and Christie MacPhee on their wedding in July.
- Congrats to Peter Casey and his wife Emily on the birth of their daughter Joni Mae on Aug. 15. Charlotte and Eli are very excited older siblings.
- Welcome to Shaw Resources' new sales representative. Travis Richard.
- Changes to CSA Standards A23.1 and A23.2 in 2014 included additional reporting requirements on the batch ticket. Information regarding the additional reporting requirements has been communicated to producer members. The revised audit program will be delayed until January 2017 to allow producer members the opportunity to affect the necessary changes. Clause 5.2.5.5 has been changed to include additional records on batch delivery tickets, the new clause reads

5.2.5.5.1: Before unloading each truck at the site, the supplier of the concrete shall furnish the purchaser, or the purchaser's representative, with a delivery ticket on which is printed, stamped or written the following information:

- (a) name and location of the batch plant:
- (b) date and serial number of the ticket;
 - (c) name of the contractor:
 - (d) identification of the truck driver;
- (e) specific designation of the job (name and location):
- (f) specific class of exposure and mix identification of the concrete;
- (g) amount of concrete in cubic metres:
- (h) truck number, cumulative total, and/or load number:
- (i) time stamped when loaded or time of first mixing of the cement and aggregate;
- (j) ordered slump or slump flow and air content.
- 5.2.5.5.2: The following shall be written on the deliver ticket after concrete discharge:
- (a) time the load arrived on the proiect:
- (b) time the discharge of load was started:

- (c) time the discharge of load was completed;
- (d) amount of water added after batching and units used (see Clause 5.2.5.3.2); and
- (e) amount of admixture added after batching.
- Note: The following information should be provided, if available:
- (a) time when field testing commenced:
- (b) name of testing and inspection company and on-site personnel performing the inspection;
 - (c) location of test: and
- (d) slump or slump flow and air content test results.

Producer members are encouraged to make changes to their delivery slips as soon as possible to include for the additional required information. The audit checklist will be revised to include these items for the 2017 season.

UPCOMING EVENTS

Dec. 5: Decementfest, Garrison Brewery Halifax

January 2017: Board Meeting

Feb. 23 to 26: ConAtlantic 17, Hilton Hotel, Saint John, N.B.

Please watch our website for upcoming courses and event registra-

HOW MANY NEW COMPANIES BOAST 38 YEARS OF EXPERIENCE?

- Metal fabrication: CNC cutting, CNC punching, shearing, rolling, braking, welding, painting: steel, stainless & aluminium
- Production assembly, pack & ship, warehousing, logistics
- ISO 9001:2008, ASME, CSA
- OEM Manufacturing
- Support for product inventors: design, manufacture, test & sell



· · · · · LET US PUT OUR EXPERIENCE TO WORK FOR YOU

sales@newportmetalfab.com | newportmetalfab.com



Debert, Nova Scotia 902-662-2220



Atlantic Concrete Association accepts **CANS Bowman Award**

Pam Woodman, executive director of the Atlantic Concrete Association, accepts a Bowman Award during ceremonies on Oct. 1 in Digby. Nova Scotia. The award is presented each year by the Constriction Association of Nova Scotia (CANS) to recognize companies that have held continuous membership for more than 25 years. The award is named after Earle Bowman of Fundy Construction, a past president and honourary life member. To honour the efforts and grand achievements of this prolific mover and shaker in the construction industry. companies are awarded for their years of membership and displaying a degree of dedication that would make Earl Bowman proud.



ACA's Ready Mix News | WINTER 2016

|||| 5

Concrete House Museum celebrates life, work of Charles Macdonald

By Cassandra Bernard

Near Kentville, Nova Scotia, is a lovely landmark of the province's cultural landscape. Locals know this unique property as the "house with the deer in the yard."

Almost 20 years ago a group of citizens in Nova Scotia pooled resources to form the Charles Macdonald Concrete House Museum of Centreville Society to showcase the life works of seaman, labourer, artist and manufacturer Charles William Macdonald and his wife Mabel.

Their first order of business was to purchase the former factory-turned-home to prevent it from being demolished. The group turned it into the museum it is today.

The museum and gallery operates during the summer months with student guides who tell Macdonald's story. Known as Nova Scotia's 'Uncommon Common Man', Macdonald's work is celebrated through tours of exhibits featuring his concrete statuary, watercolours, sketches and oil paintings. The grounds also feature five of his original seven concrete statues, including a deer, crouching lion and a concrete doghouse.

Fred MacDonald, the museum's director, says Macdonald spent years at sea as a ship's carpenter and in the mountains of British Columbia before returning home to Nova Scotia. He had been introduced to concrete during his travels and his work. He became interested in the adaptability of the product as a building material. So

upon returning home he started a concrete brick factory in a one-room building.

Macdonald lived in a tent on the roof of the building and worked making concrete to manufacture pipe, culverts and bricks used for the North Mountain Railroad.

The enterprise eventually outgrew the facility in Centreville, so Macdonald moved the operation to Meadowview, near North Kentville, and turned the original building into a home for himself and his wife where they lived for over 40 years. The interior of the home is as it was originally, with each room featuring surfaces fashioned from concrete and painted finishings.

Fascinated with art and the use of concrete in his work, Macdonald learned through read-

ing articles that figurines and lawn statues were becoming more and more popular. He and his wife decorated their yard and home with concrete statues and garden pieces of all kinds.

With no engineering training of any

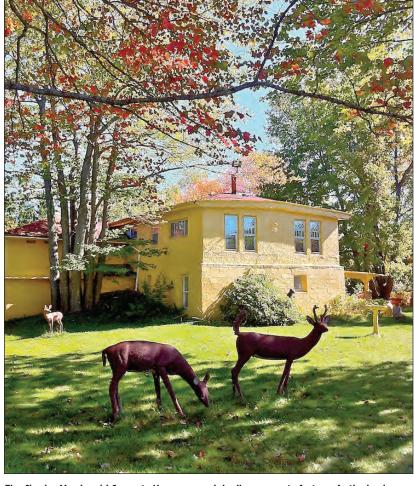
With no engineering training of any kind, Macdonald experimented with concrete and, based on structures and colour schemes he had seen on his travels, was able to build cottages that are said to resemble fairy tale architecture.

"When business slowed during the depression, he took his men to the shore

and built a community of five cottages made with logs, stone, concrete and bricks," MacDonald explains.

Today, four of the cottages remain standing at Huntington Point on the Bay of Fundy. One, the so-called Blue Cottage, is even used today for fundraising by accommodating guests on summer holidays.

Macdonald's home, paintings and sculptures, along with hooked rugs made by his wife, showcase what rural life was like during the middle part of the last century. Macdonald sold or gave away many of his pieces. However, the museum received a number of return donations of his works and paintings and thus is able to protect the legacy of the 'Uncommon Common Man'.



The Charles Macdonald Concrete House was originally a concrete factory. As the business expanded, a second story was added and it became a home. Today it operates as a gallery/museum in the summer months.



The Blue Cottage is one of five concrete structures built in the 1930s by Charles William Macdonald on Nova Scotia's Bay of Fundy. Today there are four and the Blue Cottage is used for summer holidays by member and guests of The Charles Macdonald House of Centreville Society.

Fast, Dependable Solutions For all your Ready-Mix Needs

Featuring the LARGEST PUMPS in the region!



NEW BRUNSWICK

 Strescon Ready-Mix - Saint John
 506-633-8877

 Strescon Ready-Mix - Moncton
 506-858-7110

PRINCE EDWARD ISLAND

FRINCE LOWARD ISLAND
Schurman Concrete - Summerside 902-888-4331
Schurman Concrete - Charlottetown 902-628-0127
MacLean's Ready-Mix - Montague 902-838-2925
MacLean's Ready-Mix - Souris 902-838-2925

NOVA SCOTIA

www.oscoconcrete.com

12005



This photo, taken in May 2016, shows work ongoing at the Botsford Wharf in Murray Corner, N.B. With the exception of completion of re-surfacing to the deck, refurbishments at this wharf have been completed.



Engineer Jean Deprès surveys an H-pile steel beam at the Petit Cap, N.B. commercial fishing wharf. Work on refurbishments to the facility are expected to begin shortly. Joan LeBlanc photos

Insurance is our profession.

Construction is our passion.

Construction is not just another target market at Stanhope Simpson. It's what we do best. We insure and bond more ready mix than any other broker in the Maritimes.

Schedule a consultation today with our President, Victoria Stanhope, MBA and her team of dedicated construction insurance & surety bonding specialists and experience the Stanhope Simpson difference.

Stanhope Simpson

Independent. Local. Professional

902.454.8641



Reconstruction work on the wharf at Cape Tormentine began in late 2015 and continued into the spring of 2016, as shown in this photo. Renovations were completed in midsummer.

Saltwater construction has its challenges

Marine wharf refurbishments underway in Southeast New Brunswick

By Joan LeBlanc

Concrete refurbishment to commercial fishing wharves in southeast New Brunswick is currently underway, with two of three facilities completed to date. One of a number of challenges within the projects is the laying of pre-cast concrete foundations that will withstand the corrosive properties of saltwater.

Over the past year Landco Construction Ltd. of Cap Pelé, N.B. has won three successive Government of Canada tenders to complete renovations to wharves in Murray Corner, Cape Tormentine and Petit Cap. Since that time the company has been working on the refurbishments. Each project will cost in excess of \$1 million.

Jean Deprés, Landco's engineer overseeing the laying of concrete foundation walls and surface at the three wharves, says although the jobs aren't without their challenges, the completed renovations will ensure that the facilities remain safe for many more years.

All three wharves required the use of a burlin wall inset with pre-cast concrete wall panels fabricated by Maritime Precast Concrete Products.

"Because the concrete will be used to hold back saltwater, for the panels they use a special mix, C1 exposure with silica fume. It's a 5,000 PSI mix; you can see the difference when it is still soft, it has more of a sticky consistency to it; it's a high-strength concrete. And the re-bar that's used has a three inch cover, so that gives a good protection from the elements, particularly salt water," Deprés says.

Working outside of the various commercial fishing seasons and dealing with the constant rise and fall of the tides, the Landco work crew begins by driving a 34-inch diameter steel pipe about 12 inches into the rock bed under the sea floor. The

sea water is then pumped out and, using an overhead crane, an H-pile steel beam is set into place (steel H-piles have been tested to hold more than 1,000 tons and have been used for both deep foundations and marine structures for more than 100 years).

Crews then check the elevation, a steel panel clip welded onto it and more concrete is poured; and then the steel casing is removed.

"The steel casing is the form for the concrete; we do this over again every eight feet along the section that is being replaced. In Petit Cap that's 24 times," Deprés says.

Once completed, the 8' x 12' pre-cast concrete wall panels, each weighing between seven and eight tons, are lowered into place, forming the retaining wall for the new section of wharf.

Steel brackets are then welded onto each H-pile and tie rods attached to these, which serve to anchor the entire concrete wall, preventing it from moving outwards into the water. Tie-rods are also stretched outwards from the sides and about 25 feet toward the earth where they are attached to concrete anchor blocks. The resulting area is filled with several levels of crushed stone, beginning with R5 rip-rap, then 0-3", 0-1 1/4 " and finally a layer of concrete will be applied to form the deck surface of the refurbished wharf area.

Deprés estimates each project will require about 150 cubic metres of concrete, each with a 12-inch deck.

The Cape Tormentine wharf was completed earlier in the summer. Refurbishments at the Botsford wharf at Murray Corner have also been completed. However, due to financial considerations occurring due to an original change in design, a resurfacing of the decking has yet to be completed. Work at Petit Cap is expected to begin shortly with a projected completion date of late spring 2017.



|||| 7

ICF increasing in popularity across Newfoundland

By Cassandra Bernard

When building a residential home or a commercial business, the question always remains: How can we go greener?

The most important economic and environmental impacts of building are cooling and heating the structure. Insulated Concrete Forms (ICF) provide savings in energy costs required by green-building plans and these products are becoming more and more popular in Atlantic Canada.

Newfoundland Styro, in Bishop Falls, manufactures ICF. It's the company's biggest business and it supplies product all over Newfoundland and Labrador. Jeremy Canning, the technical sales representative, says the company makes a variety of products including sheet insulation, ICF and roof insulation.

Canning says ICF differs from other building materials because of the five-steps-in-one aspect.

"When you set up an ICF foundation, not only do you have a concrete foundation once it's poured, you also have your insulation, studs, weather barrier and vapour barrier," he says.

There are a variety of advantages to using ICF for a residential home. According to Canning, ICF provides a high R-value so it cuts down on those pesky heating and cooling costs, making the building that much more energy efficient. ICF can cut your heating and cooling costs by 50 to 80 per cent.

The material also provides sound proofing, fire retardants and can withstand winds up to 322 kilometres per hour.

"So it's kind of stormproof as well," Canning says. "Plus everything we make is environmentally friendly." Newfoundland Styro works mostly on foundations, but



Newfoundland Styro uses this Kurtzs ICF machine to manufacture its insulated concrete forms

the company also does 15 full-height homes each year throughout the province.

"This year we supplied block for the Sandman Hotel in St. John's, which is six stories high. It seems to get more popular every year as people are now doing research on the best ways to build," Canning says.

ICF is becoming more known in Newfoundland because it is more readily available.

"Meaning we make it here and distribute through the building supply stores, so the contractors can get it when needed," Canning says.

The product is also suitable for the ever-changing climates in the Atlantic region where people tend to be more concerned about their heating costs than cooling



A look at all the insulated concrete forms in stock at Newfoundland Styro.

costs. Not only is this type of building material economically and environmentally friendly, but it's also affordable

"If you're just doing your foundation, it's no more expensive than doing it the traditional way. If you build right to the rafters, you're looking at an extra 10 to 15 per cent, but because it's energy efficient you'll recoup your money within five to seven years," Canning says.

Newfoundland Styro is also proud of the fact its products are expanded with steam in the manufacturing process, which makes them more environmentally friendly.

"There are no (harmful gasses, such as) HCFCs or CFCs emitted during manufacturing, so we boast about that," he says.



Atlantic Stormwater Initiative seeking concrete suppliers, installers

By Joan LeBlanc

Clean NS Foundations' Atlantic Stormwater Initiative has run into a snag.

"The problem right now is in finding suppliers who will place the concrete... this is all-new and it's not placed or finished the same as normal concrete... it's just put into place and rolled," says Jamie McCamon, project coordinator for the initiative.

The project comprises the planning and installation of three stormwater low impact development demonstrations sites in Moncton, New Brunswick, Sydney, Nova Scotia and Charlottetown, Prince Edward Island. The sites will demonstrate options for hard surfaces — including permeable asphalt and concrete, permeable pavers and grass and gravel pavers — designed specifically to demonstrate how infiltration methods work.

Upon completion the sites will display signage to explain how they work, why they are needed and what companies and individuals took part in the project.

McCamon says the sites will be highly visible in each location and it's expected each one will attract many visitors.

"This is the way of the future. Municipalities are promoting the use of infiltration instead of run-off due to the strain on existing stormwater infrastructure. Most are in the process of separating the

stormwater and sewer run-off. It's going to take time, but with the lower impact methods you can reduce or eliminate more additions to existing infrastructure." McCamon says.

The hold-up with the initiative lies in the need for the proper mixed design, McCamon says.

"It would be good to have the suppliers work with installers to get the project going, but the problem is we can't seem to find a professional installer who is willing to try it... but this is the way of the future. Porous concrete is so much easier to install than regular concrete."

Although it would likely be possible to contact a supplier/installer outside of the Atlantic region, McCamon says the initiative is hesitant to do so, preferring to keep everything local.

"We're in need of a supplier of porous concrete willing to supply or sell the concrete needed for each site. The local supplier should be able to get the mixed design for it, it's just a matter of moving ahead with something new and finding someone to install it. I'm really hoping to be able to find someone soon so we can move ahead with these projects," he says.

For more information contact Atlantic Stormwater Initiative, Clean NS Foundation at atlanticstormwater@clean.ns.ca or telephone 902-240-8609.

Concrete safer, greener for multi-storey construction

Continued from page 3

account the beauty of many modern concrete designs. Many of today's shiny glass towers are supported by a concrete structure and floors. Please see the Ontario Concrete Awards website http://ontarioconcreteawards.ca/ for examples. Indeed, other sectors of the concrete industry, such as the masonry industry and architectural precast industry, tout award winning projects from coast to coast.

The concrete industry is environmentally conscious and has pursued options to be more sustainable. For example, in Ontario 96 per cent of concrete plants bear an industry developed ECO certification. We were recently given a national award for mandating this designation as a condition of membership. Another example is the Canadian precast concrete industry, which was the first construction sector in Canada to launch a sustainable plant program that actually calculates a plant's environmental impact from cradle to grave using a unique and firstof-its-kind software designed by the Athena Sustainable Materials Institute.

The cast-in-place concrete sector has been conducting an industry-wide environmental product declaration (EPD) for LEED that would allow concrete mix designs to qualify for points in the LEED process. The precast concrete sector recently launched its North American EPDs in collaboration with U.S. partners and ASTM.

The reference to the powerful and aggressive lobby by the concrete and cement industries is astounding. Wood is a far more powerful and well-funded lobby and is often ranked as among the most powerful in Canada in the Parliament Hill newspaper, the Hill Times.

The recently completed insurance sector study on wood-frame construction shows the insurance costs are so high that wood has no cost advantage when fire and other risks are factored into construction. As well, a wood-frame structure built in a rainy environment requires tenting to avoid moisture entrapment and mold, particularly on flooring, something unseen in the Canadian wood construction sector.

Fire resistance and safety are no small matter. In contrast, concrete is extremely fire resistant, is non-combustible and maintains load during a fire.

I would encourage anyone interested in a serious discussion about building material choices to look at our Concrete Council of Canada website and see clips of our presentation www. rediscoverconcrete.ca/research.

Chris Conway is chair of the Concrete Council of Canada.

