Region 6 of the National Concrete Masonry Association





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Updates

ADDRESSING ISSUES AND CONCERNS OF THE CANADIAN CONCRETE MASONRY PRODUCERS ASSOCIATION

Several emails will be forwarded to keep members informed of activities and important issues that are occurring. If you have some industry information you wish to share with CCMPA members, please forward it to the CCMPA Office ...

What is CCMPA doing for you ? **Upcoming Meetings:**

CCMPA Meeting June 11th 2014 9:30am - CMDC Office-360 Superior Blvd, Mississauga, ON **CCMPA Mid-Year** June 19-20th 2014—Murray Premises Hotel - St. John's, NFLD NCMA Mid-Year July 29th-August 1st 2014—Park City, Utah, USA Annual General Meeting & Golf 2014 Thursday, September 4th, 2014, White Oaks Resort & Peninsula Lakes Golf Course– Niagara-on-the-Lake, ON **Ontario Masonry Design Awards** Saturday, November 15th 2014 - Allstream Centre, Toronto, ON

Environmental Product Declarations (EPD's)

The next steps on the PCR/EPD front:

The draft Product Category Rule (PCR) being developed through ASTM is currently out for public comment. (This essentially allows anyone in the world to weigh in on the content of the draft PCR.) As a side note, the scope of the draft PCR includes most manufactured concrete products (CMU, SRW, manufactured stone, ACBs). It does NOT include pavers as ICPI is wanting to develop their own PCR.

Depending upon how many public comments are received the PCR could be finalized and on the street in as quickly as 2 months or so...longer if there are a large number of complex or substantive comments (which is not being anticipated). A final, published PCR should be presented at the NCMA Midyear meetings in late July.

NCMA is currently developing a 'whitepaper checklist' of information producers will need to track and document based on the current draft of the PCR so that they can in turn develop an EPD...essentially a roadmap for producers to understand what and how they need to do to develop an EPD. NCMA should have a draft of this roadmap out within a month so producers can start to plan accordingly...but obviously NCMA won't be able to finalize it until the PCR is finalized.

If all goes according to plan the PCR and roadmap will be completed by the NCMA Midyear

In the interim, producers should start tracking everything (aggregate, gas, electric, water, cement, waster, etc.) that goes in or comes out of their plant if they plan to do an EPD as this is about 95% of the data needed. The devil in the details is if producers want to have different EPDs for different product lines, then they will need to track and allocate resources separately.

2014: Model Codes and CSA Standards Update

Gary Sturgeon, B.Eng., MSc., P.Eng. (Guest Writer)

Model Codes:

In the fall of 2013, Public Review of proposed changes to the model Codes was completed, including those for the National Building Code and National Energy Code for Buildings. The outcomes will form the basis of the 2015 National Model Construction Codes. The various Standing Committees have already met, or will meet very shortly, to discuss and resolve all comments received.

Very briefly, the principal changes most likely to affect the masonry industry include:

- 1. <u>National Building Code (NBCC)</u>:
- a. In Part 9, *Housing and Small Buildings*, EIFS will be recognized.

b. In Part 5, *Environmental Separation*, the Apparent Sound Transmission Class (ASTC) will be used as the means for compliance for noise reduction (rather than STC which is currently used).

c. In Part 3, *Fire Protection*, the construction of 5 and 6 storey wood frame buildings will be permitted (the NBCC currently limits wood frame to 4 storeys).

- d. National Energy Code (NECB):
- e. A User's Guide has been developed and published.

f. The concept of Energy Use Intensities (EUI) will be introduced for 10 building types, including warehousing. This new compliance path assigns a maximum energy intensity target for each of these building types, and must be used by the designer in lieu of the current Performance Path.

g. Prescriptive requirements for semi-heated buildings (warehousing with a set point temperature less than 15°C) will be introduced.

h. The Detailed Building Envelope Trade-off Path will be eliminated.

As a philosophical direction (approved by the Canadian Commission on Building and Fire Codes), energy use reductions will be included in the NECB with each successive edition, with the goal to have a 50% improvement over the NECB 2011 by 2030.

CSA Masonry Standards:

All CSA Masonry Standards, intended to be referenced by the 2015 of the National Building Code and the Provincial Building Codes, have undergone Public Review with the exception of CSA S304 (Masonry Design Standard). Additionally, the final Letter Ballot process has been completed or nearly completed for the other 5 (five) masonry standards. The following is a brief update for each:

- 1. A165, Concrete Masonry Units:
 - a. Letter Ballot recently completed;
 - b. very minor technical and editorial issues are in the process of being resolved before publication;
- 2. <u>A179, Mortar and Grout for Unit Masonry:</u>
 - a. Letter Ballot recently completed;
 - b. Very minor editorial issues, including harmonization with S₃₀₄, are in the process of being resolved before publication;
- 3. A370, Masonry Connectors
 - a. Letter Ballot completed in the fall of 2013;
 - b. all Letter Ballot comments and issues resolved;
 - c. ready for publication;
- 4. A371, Masonry Construction

a. Letter Ballot recently completed;

many editorial and technical issues identified at Letter Ballot yet must be resolved, none of which are considered to be "show stoppers" or to delay publication.

All CSA masonry standards will be completed in 2014, and in due course, will be referenced as the 2014 editions by the NBCC, the Provincial Building Codes, project specifications, and all construction documents.

Canadian Concrete Masonry Producers Association Region 6 of the National Concrete Masonry Association

CCMPA Mid-Year Meeting St. John's NFLD



Thursday, June 19 th 2014 Meeting 8:30am—4:00pm Lunch Dinner at 7:00pm-Friday, June 20th 2014 Meeting 8:30am—12pm Lunch

Please start planning your itineraries. Our guest room block guarantees rates three days pre and post \$249.00Double and suites available at the Murray Premise Hotel in St. John's.

To make a reservation please call the hotel directly at Murray Premises Hotel 1-866-738-7773 www.murraypremiseshotel.com

Email: npoole@murraypremiseshotel.com

CCMI

Please advise M. de Souza info@ccmpa.ca of your attendance as well.

Canadian Concrete Masonry Producers Association

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http://www.newfoundlandlabrador.com/PlanYourTrip/TravelBrochures? gclid=CMeD5KqPhrwCFe5aMgod-k8ATg

There will be two days of meetings along with a tour of CP Masonry 's plant and a view of masonry architecture in St. John's . There will also be presentations by supplier members. Most importantly we will have a chance to meet the Eastern members and understand what the marketplace is about in Eastern Canada.



Ontario Masonry Design Awards (OMDA)



Masonry in Ontario has a long history and a bright future. It has a presence in our memories and our hopes, as well as being a tangible part of our everyday lives. Masonry provides the means to create architecture that is innovative, sustainable and secure. Vision, beauty and strength: these are characteristics that radiate from the finest masonry structures. It takes talented minds and hands working in harmony to bring great buildings to life. We believe that such excellence in design and workmanship deserves to be honoured. The Ontario Masonry Design Awards have been created in recognition of the amazing work we do in this industry.

Please join us for an evening of celebration.

The second Ontario Masonry Design Awards will be held on Saturday, November 15th, 2014 at the Allstream Centre in Toronto, ON. The new website has been launched. http://www.ontariomasonrydesignaward.com This event is sponsored by Ontario Masonry Contractors Association (OMCA) and Masonry Contractors of Ontario (MCAT). The lead sponsor of the event is CCMPA.



DR. WAEL EL-DAKHAKHNI, MCMASTER UNIVERSITY

Written by CMDC Staff: David Stubbs, B.Eng, P.Eng, Bennett Banting, B.Eng&Scty., Ph.D., E.I.T.

The Canadian Masonry Research Council, a partnership between the Canadian Concrete Ma-

sonry Producers Association (CCMPA) and the Canada Masonry Design Centre (CMDC), has provided financial sponsorship and in-kind contributions for numerous masonry research programs across Canada. This series of articles highlights the research programs that have been initiated across Canada. Today we look to Dr. Weal El-Dakhakhni, an Associate Professor in the Department of Civil Engineering at McMaster University.

Dr. El-Dakhakhni holds the Martini, Mascarin and George Masonry Chair at McMaster University funded through the Ontario Masonry Contractors' Association (OMCA). In preparation for the development of the 2014 CSA S304 Design of Masonry Structures Standard, Dr. El-Dakhakhni's main area of research was focused on the experimental study of the behaviour of concrete block walls and buildings responding to earthquake forces. Using McMaster's block machine, donated by CCMPA in 2008, much of his seismic masonry research has utilized ¹/₂-scale and ¹/₃-scale concrete block units, many of which are manufactured by students at McMaster. Beyond McMaster University, the produced scaled blocks have been utilized by other academic institutions throughout Canada. Dr. El-Dakhakhni's reduced-scale concrete block research has expanded the scope of masonry research from small test specimens, such as a single storey shear walls to much larger test specimens such as 3-stories shear walls and full buildings of up to 2-stories in height, tested within some of the most modern testing equipment and highest capacities. These larger test specimens have provided Dr. El-Dakhakhni and his students the opportunity to showcase inherent strengths of masonry structural systems.

Dr. El-Dakhakhni has been an integral part of the efforts put forth on behalf of the Seismic Design Work Group of the CSA S₃₀₄ Masonry Structures Design Standard towards updating the seismic categories for masonry shear walls for its upcoming 2014 edition. As the chair acting on behalf of the seismic working group, Dr. El-Dakhakhni completed several reports and presentations to the Standing Committee for Earthquake Design (SC-ED) of the National Building Code of Canada (NBCC). As a direct result of these efforts, major changes are expected to be adopted in the final edition of the CSA S₃₀₄, which is due for final balloting in the coming weeks. Some key aspects of the proposed changes include requirements for moderately ductile partially-grouted and conventionally reinforced masonry as well as the introduction of a new category of "*ductile*" masonry shear wall. The concrete block masonry industry stands to benefit from these changes in two significant ways:

Firstly, since 2005 the requirement of the NBCC has required that "**post-disaster buildings**", such as pumping and electrical transformer stations, etc., be constructed to possess a relatively high level of ductility (the ability to dissipate energy), exceeding that which was previously allocated by code for conventionally reinforced masonry construction. This meant that a lot of structures that had been historically constructed with concrete block, had to either adopt significantly more stringent and restrictive detailing (e.g. very large amounts of rebar), or would be changed to a different material. Through extensive research and testing since 2005, it has been shown that lower ductility values recognized by the NBCC were unduly restrictive. The next edition of the CSA S₃₀₄ will ensure that adequate safety is maintained for these post-disaster buildings while also ensuring walls are designed in an economical and constructible way by introducing the new requirements for moderate-ly ductile partially-grouted and conventionally reinforced masonry.

Secondly, a new category of "ductile" masonry shear walls open the doors to more cost effective multi-storey construction. Concrete block has for a long time suffered from reduced market share in mid-rise construction. Based on published experimental and analytical research carried out by Dr. El-Dakhakhni over the last 8 years, it has been shown that it is possible to design and construct concrete block masonry buildings in the most active seismic regions in Canada to heights in excess of 14 stories without prohibitive details or excessive amounts of reinforcement. This can be achieved with masonry walls employing "boundary elements" at their ends, containing reinforcement cages traditionally used in reinforced concrete construction.

With the conclusion of the latest edition of the CSA S304 standards, Dr. El-Dakhakhni is currently being funded by CCMPA in the areas of blast resistant masonry design. The growing concerns of deliberate and accidental explosion risk has resulted in most government and public building regulators requiring some level of blast protection and analysis. Dr. El-Dakhakhni has continued the long and storied positive relationship fostered between both the contractors and manufacturers in Ontario and McMaster University. This is evidenced by the size of the final year masonry focused design course (60-100 students per year over the last 4 years) as well as the number of graduate students involved in masonry research (20+ graduates over the last 4 years).

CCMPA Annual General Meeting & Classic Golf Tournament



Canadian Concrete Masonry Producers' Association proudly presents The Classic Golf Tournament presenting the John Grimo Cup

Thursday, September 4th 2014

Peninsula Lakes Golf Course

Golf format - best ball.

Your green fee includes:

- Golf
- Longest Drive & Closest to the Pin Competitions
- Driving Range
- •Putting Green
- Halfway House beverages
- •Dinner at the Resort

SCHEDULE

Breakfast Meeting Bus Transfer Golf Start Cocktail Reception Dinner 8:00AM 8:30 AM 12:00PM 1:00PM

6:00PM

7:00PM

P

PEDINSULA Peninsula Lakes Golf Course



4 1/2 Star Rating - Golf Digest

Designed by renowned architect Rene Muylaert, Peninsula Lakes was developed under a multi-stage plan. What was once the site of a large sand and gravel quarry, soon became one of the premier golf courses in Niagara, now boasting 27 championship holes.

Located in the heart of the Niagara Peninsula atop the escarpment, you will find impeccably groomed fairways and greens and sparkling lakes. Peninsula Lakes is a must play when visiting the Niagara region, just 40 minutes from Mississauga. This championship course is a treat for golfers of all levels, with 27 holes consisting of 3 distinct 9's (Quarry, Hillside and Orchard).



Individual Golfers:

One-night stay, Golf & Dinner: \$600 (+ HST) Golf & Dinner only: \$350.00 (+ HST) Dinner only: \$100.00 (+ HST) Please sign up by August 4th 2014 otherwise the prices increase by \$50.00