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CCMPA *Updates*

ADDRESSING ISSUES AND CONCERNS OF THE
CANADIAN CONCRETE MASONRY PRODUCERS

A monthly email 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 by the 15th of every month.

What is CCMPA doing for you ?

Upcoming Meetings:

NCMA Mid-Year Meeting— August 22nd—24th, 2012—Traverse City, Michigan

Annual General Meeting & Golf 2012

The 2012 AGM & CCMPA Stoneman Classic Golf tournament will return to White Oaks Resort and Spa and Peninsula Lakes Golf Course. The tournament has been named in honour of Rob Shouldice and features the John Grimo Cup awarded to the winning foursome. The Bruce Peninsula health Services Foundation will be the charity benefiting from our annual raffle. The date for the event is Thursday, September 6th, 2012. Please save the date. The brochure has been distributed and is on the website. If you need more information please contact the CCMPA Office.

Raffle tickets have been forwarded to all. If you would like more to sell, please contact the office.

12th Canadian Masonry Symposium—June 2-5, 2013 , Vancouver BC

The 12th Canadian Masonry Symposium will be held in Vancouver, Canada, June 2-5, 2013. It will provide an opportunity for researchers, practitioners and industry to share the latest knowledge on diverse aspects of masonry, including design, manufacturing, construction and restoration.

The symposium will serve as a forum for professionals from a broad range of disciplines, including engineers, architects, contractors, and manufacturers. This conference will provide a unique environment to facilitate synergy between masonry researchers and masonry practitioners from Canada and around the world. The symposium will build on the tradition and success of past Canadian Masonry Symposia, including the last symposium held in Toronto in 2009. www.cms2013.ca

Hamilton Sustainable Victory Gardens Inc.

In April, CCMPA was approached to donate block for the Hamilton Victory Gardens project for the construction of many raised beds which were then filled with triple mix soil and plants that yields fresh produce. The food is donated to local food banks and local food programs. Over 240 raised beds were built.

Victory gardens are a form of “urban agriculture” since they exist within the confines of a city. The maintenance of the gardens is done on a volunteer basis. Gardens such as this aim to transform urban areas by cleaning up and utilizing unused lots in neighbourhoods.

As of July over 1700 pounds were already harvested and donated. CCMPA received a thank you from Bill & Judy Wilcox who manage this amazing program.



Getting the most from our Engineering Expert

Gary Sturgeon B.Eng., M.Sc., P.Eng.

Newsletter, July, 2012

The National Energy Code for Buildings, 2011...The Trade-off Compliance Path, Cont'd

Gary Sturgeon, B.Eng., M.Sc., P.Eng.

In our June, 2012 CCMPA Newsletter, we identified the *Trade-off* and *Performance* compliance paths of the NECB-11 as the two paths that must necessarily be used by a designer to facilitate the use of single wythe masonry wall systems that have cell fill insulation materials only, without internally or externally applied insulation and finishes.

To advance meaningful discussions about the *Trade-off* compliance path in future Newsletters, we identified and briefly explained the fundamentals of the *Prescriptive* compliance path upon which the *Trade-off* path is based, including the structure of the NECB, the concept of Climate Zones, requirements for minimum thermal performances for roofs, walls and fenestration in buildings, and the concept of limiting Fenestration + Door to Wall Ratio (FDWR). By assigning limiting permissible thermal resistances for all components in the building envelope, combined with limiting permissible areas of fenestration + doors, the *Prescriptive* path defines a minimum level of thermal performance for the building envelope. Under the *Trade-off* path, conductive heat transfer through the envelope of the building under design (that is, for the *proposed building*) must not exceed the heat transfer target calculated for the building using the *Prescriptive* path (the *reference building*).

The NECB identifies both a *Simple Trade-off* path, and a *Detailed Trade-off* Path. Both are intended to be “simple” to use and to provide the needed flexibility for designers where the *Prescriptive* path is too limiting. Both of these paths maintain the minimum energy performance level defined by the *Prescriptive* path. Each of the Parts of the NECB (Building Envelope, Lighting, HVAC, Service Water Heating, and Electrical Power Systems) contains its own *Trade-off* compliance path. For wall, roof and fenestration design, which includes the design of masonry wall systems, only the *Trade-off* compliance path detailed within Part 3, “Building Envelope”, can be used; the performance of building envelope components cannot be traded with the component performance of other building systems (for example, a lower performing wall system cannot be traded for an improved power system).

The fundamental behind the use of both the *Simple* and *Detailed* compliance paths is the “*Thermal Transmittance x Area*” ($U \times A$) calculation, which offers the flexibility to trade-off wall and fenestration areas with wall and fenestration thermal performance while maintaining equivalent building envelope thermal performance. With the overall envelope area of both the *reference building* and *proposed building* remaining necessarily constant, and by assuming a constant temperature differential across the building envelope components for both the *reference* and *proposed* building: component thermal transmittance (U) and component area (A) can both be adjusted for each building envelope component in the *proposed* building provided that the sum of these $U \times A$ values does not exceed the sum of the $U \times A$ values for each of the components in the *reference* building. The thermal transmittance (U) for each component in the *reference* building is the prescribed thermal transmittance tabled under the *Prescriptive* path, and the area (A) for each component is that permitted by the Fenestration + Door to Wall Ratio (FDWR) limits stated under the *Prescriptive* path.

Additional information about both the *Simple* and *Detailed Trade-offs* compliance paths, and about their application, will be provided in a subsequent CCMPA Newsletter. Bet you can't wait!

WESTERN CANADIAN MEETING —BANFF 2012, VANCOUVER 2013

The CCMPA Western Canadian Meeting took place in Banff, Alberta June 20th & 21st, at the Fairmont Banff Springs Hotel. There were 18 participants. Special presentations were made by Bob Thomas of NCMA, Mark Hagel of MCAA and Gary Sturgeon of CCMPA. All in all the members found the meetings informative and good for networking.

The 2013 Western Canadian Meeting will be held in Vancouver BC and will directly follow the 12th Canadian Masonry Symposium in order to give members a good opportunity to attend both meetings. The CCMPA meetings will take place on Thursday, June 6th and Friday, June 7th 2013. Members are encouraged to attend this meeting.

For more details about the 2013 meeting in Vancouver, BC, please contact M. de Souza

