

ADDRESSING ISSUES AND CONCERNS OF THE

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.

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

CMCA Annual Meeting February 20-22nd, 2013— Hyatt Regency Indian Wells, Palm Springs, CA **CCMPA Mid-Year Meeting** June 5 - 7th, 2012—Four Seasons Vancouver, Vancouver, BC **NCMA Mid-Year Convention** July 31st -August 4th 2013—Chicago, IL Annual General Meeting & Golf 2013 Thursday, September 5th, 2013, White Oaks Resort & Peninsula Lakes Golf Course

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

Dr. Yi Liu, Winner of ASTM's Alan H. Yorkdale Memorial Award

In early December, ASTM Committee C15 celebrated its 75th Anniversary with a dinner reception and awards presentation in Atlanta, GA.

At the anniversary, Dr. Yi Liu, Associate Professor at Dalhousie University, accepted the prestigious Alan H. Yorkdale Memorial Award for her research paper "Experimental Study of Concrete Masonry Infills Bounded by Steel Frames". Her paper quickly "rose to the top" of several hundred submissions due its originality, clarity, conclusions and relevancy to the masonry industry. Dr. Liu provided a brief presentation of her paper to the attendees, and thanked CCMPA for our financial support.

Her areas of research include numerical modeling and experimental investigation of the behaviour and strength of structural elements and systems. Her main research interests involve masonry, steel, and composite structures.

The Alan H. Yorkdale Memorial Award is presented annually to the author of the best paper published in the English language pertaining to clay, shale, concrete, or sand-lime masonry.

Dr. Liu...congratulations, and thank you from CCMPA !



Getting the most from our Engineering Expert



Gary Sturgeon B.Eng., MSc., P.Eng.

User's Guide for the National Energy Code for Buildings

The 2011 National Energy Code for Buildings (NECB) was published in the fall of 2011, and is now being considered for adoption by provinces and other jurisdictions in Canada. When adopted, the requirements of the energy code will become legally enforceable.

To facilitate adoption and use of the 2011 edition of the now-published NEBC, and not unlike what is available for the various Parts of the National Building Code of Canada including Part 4 (Structure) and Part 5 (Environmental Separation), the Canadian Codes Centre shortly will publish an NECB "User's Guide". It is intended to provide users with background information, and a better understanding and rationalization of the requirements of the NECB and its general principles. Like other User's Guides, it is offered for informational purposes, but it assuredly will influence the approach to design and acceptance of designs by Building Officials.

For decades, design manuals and publications by various groups have shown that both the air space and the masonry cladding in a masonry rainscreen wall will contribute to the overall thermal resistance of the wall system. Designers have "always" included their contribution.

At a recent meeting, and in the "11th hour" of development, the committee responsible for the development of the NECB User's Guide chose to exclude the contribution of the air space and the cladding materials outboard of the air space where the air space is "vented". In the illustrative masonry design examples, no thermal resistance was assigned to the masonry cladding and air space.

CCMPA vehemently opposed this sudden change to the draft, and supported its position by identifying the following technical and procedural issues:

- 1. thermal contribution by the air space and outboard claddings, and specifically assigning them a zero thermal resistance:
 - a. was not addressed by Standing Committee on Energy Efficiency in Buildings or the Building Envelope Task Group during development of the NECB-11;
 - b. was not addressed by the Part 5 Standing Committee, Environmental Separation;
- 2. the NECB-11 does not require by way of mandatory statement, or suggest by way of note, that the thermal resistance o wall air spaces and claddings outboard of air spaces be assigned a zero thermal resistance;
- 3. the User's Guide is intended to reflect the content of the NECB and the technical rationale for the content, and in light of Points 1 and 2, it does not;
- 4. the NECB-11 refers to the ASHRAE Handbook of Fundamentals for calculations carried out to ensure compliance:
 - a. The Handbook does not define the term "vented air space" used in the current draft of the User's Guide, and neither does the NECB-11, and thus, the use and application of this term by the User's Guide is without technical context;
 - b. The Handbook prescribes R-values to air spaces based upon the affects of a limited number of variables for which we currently have technical understanding, and for the air spaces shown in the User's Guide illustrations, zero R-values are not assigned by the Handbook;
 - c. The Handbook notes, "Ideal conditions of components and installations are assumed in calculating overall R-values"... this statement applies to all materials and components identified and tabled in the Handbook, and similarly would apply to all materials and components tabled in the NECB User's Guide; specifically with respect to heat flow across an air space, the Handbook states, "for computational purposes, spaces are considered airtight, with neither air leakage nor air washing along the boundary surfaces", and calculations proceed in this manner,
 - d. The Handbook does not provide design examples that show zero thermal resistance contribution by the air space and outboard cladding materials;





- 5. in light of Points 1, 2, 3, and 4, the User's Guide Task Group moved unilaterally in its conclusion to eliminate thermal resistance contribution by the air space and outboard claddings;
- 6. publications by the Canadian Codes Centre currently in the public domain, including recently published wall U-value calculation examples for 9.36 of Part 9 NBCC, show a contribution by both the air space and cladding materials outboard of the air space...the draft NECB User's Guide contradicts current CCC publications;
- the established current practice in the design community is to include the thermal resistance of the air space and materials outboard of the air space when calculating the R-value of a wall system, and thus, the draft NECB User's Guide contradicts current design norms without suitable and quantifiable rationale;
- 8. assigning a zero thermal resistance contribution to such air spaces and to cladding materials outboard of the air space in the illustrative examples in the draft User's Guide is not technically correct, offers misinformation, and is misleading; and,
- 9. as a consequence of the above, the masonry industry reiterated that the User's Guide should identify and suitably illustrate that such air spaces indeed offer thermal resistance, as do the cladding materials outboard of the airspace.

CCMPA additionally stated that should the Task Group maintain its current position, the Canadian masonry industry would insist that masonry cladding systems <u>not</u> be illustrated in the published NECB-11 User's Guide and that an alternative or generic cladding be illustrated in its stead so that the user does not visually and demonstratively associate masonry claddings with a zero thermal resistance regardless of context.

In light of CCMPA's position, the Task Group responsible for User's Guide has reconsidered its position, and is working with the CCMPA and others to develop suitable text and notes to better explain the issue technically. Resolution will be before month's end. [Update at time of publication...the draft "User's Guide" now shows air space and cladding contribution to thermal resistance...Voila!]

CCMPA's Western Canadian Meeting — Vancouver 2013

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 at the Four Seasons Hotel, Vancouver. Members are encouraged to attend this meeting.

For more details about the 2013 meeting in Vancouver, BC, please contact M. de Souza at the CCMPA Office. information@ccmpa.ca

Ontario Masonry Design Awards (OMDA)

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

CCMPA's Newest Member

CCMPA is delighted to welcome our newest Producer members, Casey Concrete Ltd. Hailing from Amherst, Nova Scotia. Casey has been in business for over 50 years, started in 1952 as E. L. Casey Construction Ltd, Casey Concrete has established a record of growth and progress that places the company as a leader in the industry.

Casey Concrete has been operating in New Brunswick and Nova Scotia as a full service ready mix provider. Although the company specializes in Ready Mix Concrete delivery, it also manufactures Concrete Products. Casey Concrete produces a full line of structural concrete construction block and architectural block among many other durable concrete products.

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