NEWS ON THE BLOCK

January 2019

CCMPA soldiers on in Windsor, Ontario

CCMPA recently donated $8,500 to the Spiritual Soldiers in Windsor, Ontario. The Spiritual Soldiers are a group of recovered alcoholics and addicts who have created a haven for people in recovery. CCMPA Executive Director Marina de Souza and Joe Santarossa of Santerra Stonecraft were on-hand to present the cheque. While there, Marina was interviewed by CBC Windsor about the gift to this very worthy cause.

A thank-you message from the Spiritual Soldiers:

On behalf of the Spiritual Soldiers team, we would like to say thank you for considering the Spiritual Soldiers Coffee Compound as a place to donate to. Without the donations we have received from the community none of this would have been possible. We are filled with gratitude for the people in the community helping us help others. We at Spiritual Soldiers are a group of recovered alcoholic/addicts that created a safe space for people in recovery to hangout and see that it is possible to live happy joyous and free. The Compound is also a place for anyone who knows someone who has been affected by addiction where we can offer support by sharing our experience, strength and hope to help better understand the alcoholic/addict in their lives. It is all about integration not isolation. The Spiritual Soldiers Coffee Compound allows people to open up, ask for help and be part of something positive. Without members of the community like yourselves helping us with your gracious donations, this would not be possible. You are making a difference in our community!

To learn more about Spiritual Soldiers, visit them online at http://www.spiritualsoldiers.ca/

Have a comment? Question? Story idea? We welcome your input.
info@ccmpa.ca

NEWS ON THE BLOCK

January 2019

BUILDING CLIMATE RESILIENCE: THE LATEST CCMPA ADVERTORIAL

SPONSORED CONTENT

A concrete approach to climate resilience | by Paul Hargest

As we near the end of the 2018 hurricane season — after months of severe storm warnings down south and episodes of extreme flooding here at home — Canadians as a whole are probably more 'climate-sensitive' than they've ever been.

Ipsos research from 2016 shows that 63% of us are "desperately concerned" that if drastic action is not taken now, the "world may not last much longer than another couple of generations". More recently, a 2018 report from the UN's Intergovernmental Panel on Climate Change (IPCC) reveals that the effects of climate change could become irreversible as soon as 2030 if significant action isn't taken to reduce our CO2 output.

The construction industry is working on ways to help do this. New methods of concrete production, for instance, are being developed that allow CO2 to be captured within the concrete. The process actually makes the concrete stronger.

There is an innovative technology for reducing CO2 emissions specifically from concrete block. Through this process developed by some concrete block manufacturers, half a pound of CO2 is sequestered in every block made.

At the same time, while our industry works to shrink its carbon footprint, we are heavily involved in the other 'half' of climate change: resilience. How do we adapt to increasingly severe flooding, high winds, fires, snow loads — conditions that are all happening now with mounting frequency and force?

There is no doubt that we are experiencing a 'new normal' in our weather, and it's prompting us to think not only about the root of the problem, but also the daily reality of it. Concrete will play an important role in adapting to this new reality.

"Concrete is a desirable material for building climate-resilient infrastructure," says Blair Feltmate, a professor at the University of Waterloo's School of Environment, Enterprise and Development. He also heads up the Intact Centre on Climate Adaptation, and is working closely with various members of the construction industry and government to "de-risk Canada relative to the impacts of climate change and extreme weather events."

In addition to the ability to capture CO2 in concrete, Feltmate points out other benefits related to resilience. Concrete can be made permeable, allowing water to seep through it. It offers greater reflectivity, relative to asphalt, that helps limit "heat islands". In the context of wildfires, concrete offers greater protection than materials such as PVC and wood. "Fire can melt PVC conduit piping," he says, "while a cement culvert shows no impact."

He also notes the role of concrete in lessening the effects of erosion. "In northern regions, we'll see more value in concrete where permafrost is collapsing." Runways, for instance, that have been built on permafrost and are caving in will need concrete reinforcement.

So how are these conditions and needs translating to changes in our building codes?

In 2016, Infrastructure Canada launched a five-year research initiative, giving the National Research Council (NRC) $42.5 million to "integrate climate resiliency into building and infrastructure design guides and codes".

The research covers various aspects of infrastructure, from the impact of flooding and fires to repairing bridges and designing stronger buildings. The latter involves efforts such as examining hygrothermal performance of wall assemblies, developing guidelines for retrofitting existing building envelopes, and certifying roof resiliency to withstand stronger winds and more snow.

NRC entities like the Construction Research Centre are looking at innovations such as high-performance concrete — concrete that surpasses normal compressive strength of 20 - 40 megapascals (MPa) to reach levels as high as 200 MPa.

This research will feed into development of Canada's National Building Code (NBC). While the 2020 code will be too soon to realize the full benefits of the work around resiliency and adaptation, the 2025 code will no doubt reflect a larger proportion of the research outcomes.

The changes can't come soon enough. Because while we are starting to mobilize more effectively in our efforts to address climate change, we are not keeping up with Mother Nature.

"We're moving in the right direction," says the University of Waterloo's Blair Feltmate. "We're just not moving fast enough." Our biggest problem, he says, is still complacency. Perhaps more findings like those of the IPCC will catalyze our efforts.

"We can see temperature-change trends, we can see higher wind-load trends," says NRC program director Philip Rizcallah in a 2017 Global News report. "We can see evidence of wildfires for example in Fort Mac or Kelowna ... in Calgary where we've had these flood situations where they've knocked out entire cities ... the codes need to start adapting."

As we're all aware, climate change and increasingly severe weather are becoming more and more common. CCMPA believes that one of our key benefits with regard to climate resilience is the strength block gives building structures. You'll be seeing this advertorial in the near future.

EVENTS

Canadian Concrete Expo / Fastest Trowel Competition
February 6 – 7, 2019 *(competition Feb 7)*
Toronto, ON

National Concrete Masonry Association & ICON Xchange
February 12 – 16, 2019
Orlando, FL
See event details on following page.

Canadian Masonry Contractors Association Annual Meeting
May 31 – April 2, 2019
New Orleans, LA

CCMPA – Mid-Year Meeting
June 2019 *(dates TBA)*
Montreal, QC

CCMPA Annual General Meeting & Golf Tournament
September 12, 2019
Niagara-on-the -Lake, ON

NEWS ON THE BLOCK

January 2019

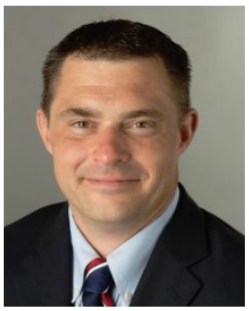
SUPPORT OUR CANADIAN MASONS AT THE CANADIAN CONCRETE EXPO!

The Canadian Concrete Expo takes place February 6 – 7 in Toronto, and CCMPA is partnering with Spec Mix to present the Fastest Trowel Competition February 7 at 10am. CCMPA is also donating the prize. There are currently 11 confirmed teams competing. The winner will compete in the World of Concrete 2020 Fastest Trowel Competition in Las Vegas. Members, please attend and help give our Canadian masons all the support they deserve. Register here.

THE NCMA ANNUAL CONFERENCE Feb 12 - 16, 2019 in Orlando

The NCMA Annual Conference is fast approaching, and it promises once again to be an activity-packed event. Get a taste of the conference line-up below, and then be sure to register. See you in Orlando!

ICON-Xchange 2019 B2B Kickoff Breakfast



Join B2B Exchange participants for a welcome breakfast to kickoff ICON-Xchange 2019. Highlighting the breakfast on Friday, February 15 at 7:30 AM will be speaker Dr. Adam Rapp, Professor of Marketing at Ohio University and Executive Director of the Schey Sales Centre. Dr. Rapp will discuss the importance of practicing effective time management skills which helps managers establish better resource allocation processes and cultivate strong overarching goals.

This session will specifically spotlight internal factors, rather than external factors like technology, time inhibitors and interruptions. External factors are outside forces that we don't have control over, while internal factors are things that we can control. We choose how we perform in each of these areas. It's up to us to change our behavior to move forward and become better time managers. Rather than point fingers at those around us, this session will highlight what we can do with the things that are in our control.

Make your plans to join us and register today! Visit www.iconxhange.org for all the details – hotel information, event highlights and more!

National Concrete Masonry Association | 13750 Sunrise Valley Drive Herndon, VA 20171-4662 USA
703.713.1900 | Fax: 703.713.1910 | www.ncma.org
Click here to manage your preferences.

Canadian Concrete Masonry Producers Association
Region 6 of the National Concrete Masonry Association
CCMPA Building Strength

NEWS ON THE BLOCK

January 2019

THE NEW FRONTIER IN BUILDING CODES IN CANADA: WILDLAND-URBAN INTERFACES

BY STEPHEN V. SKALKO, P.E. & ASSOCIATES, LLC

Among hot topics today is climate change and the impact these changes and weather events are having on the built environment. One of the more significant of such impacts is an increase in wildfires, especially in the areas between buildings and forests, commonly referred to as the wildland-urban interface. Recent incidents in Canada have borne out the significance of this growing problem of wildfires in the wildland-urban interface (WUI). The effect on the local populations, the required response from emergency responders and the economic impact of just three recent events is substantial. See blue table below.

SIGNIFICANT WILDFIRES IN CANADA					
EVENT	YEAR	AREA BURNED (hectares)	RESIDENTS EVACUATED	STRUCTURES DESTROYED	COST
Kelowna, BC	2003	25,912	27,000	239	$700 M
Slave Lake, AB	2011	4,700	7,000	433	$710 M
Fort McMurray, AB	2016	589,552	88,000	3,244	$9.9 B

To address this issue, Canada's National Research Council and Infrastructure Canada launched a five-year initiative called the Climate-Resilient Buildings and Core Public Infrastructure (CRB&CPI) Project[1]. The stated purpose of this project is to "integrate climate resiliency into building and infrastructure design, guides and codes". The project is to be accomplished over a 24-month period through a technical committee comprised of representatives from regulatory authorities/governments, industry and associations, and general interests reflecting a broad spectrum of the built community in Canada. Staff from the National Research Council serve as ex-officio members.

The formal name of the newly appointed technical committee is the Technical Committee (TC) on the Development of a Guide/Code for Wildland-Urban Interface (WUI) Fires. Their formative meeting was held in May of 2018 in Ottawa[2]. Their listed objective is to "develop a National guide/code for addressing the hazards and risks of wildfires at the wildland-urban interface (WUI)".

1 https://www.nrc-cnrc.gc.ca/eng/news/releases/2018/index.html

2 The TC-WUI held its second meeting in Ottawa on November 27-28, 2018.

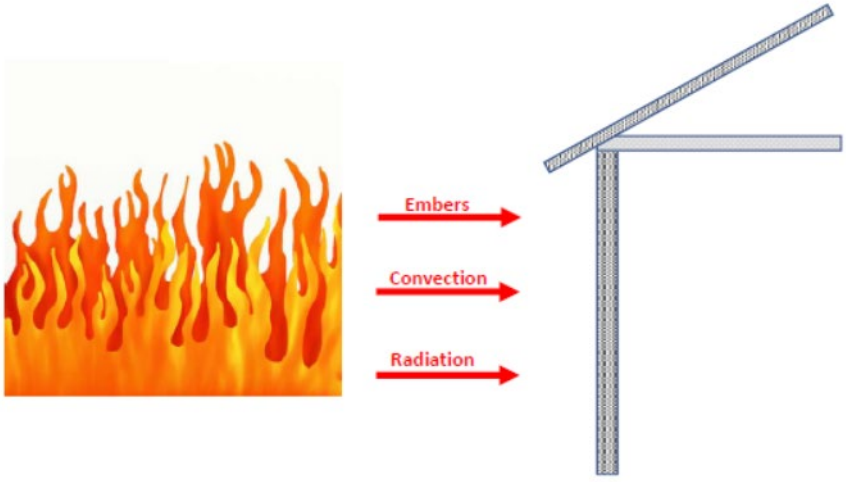
THE NEW FRONTIER IN BUILDING CODES IN CANADA (CONT)

The National WUI Guide could eventually be integrated into the national building codes of Canada.

Resources the TC-WUI will be considering in the formulation of the Canadian WUI Guide/Code include but are not limited to the following[3]:

- FireSmart, a Canadian community-based program to encourage fire-safe environments in WIU
- areas.
- Wildland-Urban Interface Code developed by the International Code Council (US)
- California Fire Code (Chapter 49) – Wildland-Urban Interface areas (US)
- National Fire Protection Association (NFPA) standards
- Australian Codes and Guidelines
- New Zealand Codes
- Europe – Council Regulation (EEC) No. 2158/92 – Protection of Community Forests Against Fires.

For the masonry industry, the area of most interest in any wildfire guideline or code will be the requirements for the exterior of buildings to resist the effects wildfire events can have on the structure. Past experience shows the three predominant means that wildfires can impact buildings is through the spread of fire by blowing embers, convective heat, and radiant heat igniting combustible materials on the exterior of the buildings. (See figure below).



3 CRBCPI – WUI Presentation - Wildland Urban Interface Fires: Regulations and Guidelines, May 28-29, 2018, M. Adelzadeh, N. Benichou, A. Bwalya, I. Gomaa, A. Gaur, S. Gwynne, J. Singh and M. Sultan

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THE NEW FRONTIER IN BUILDING CODES IN CANADA (CONT)

The future regulations need to consider specifying ignition resistant materials for the exteriors of buildings that are placed in wildland urban interface areas. Masonry, being a noncombustible material, provides an excellent exterior material that is resistant to all three forms of fire spread from wildfires. To that end, CCMPA is taking an active part in this new endeavor of NRC & IC by attending the TC-WUI meetings and participating on working groups assigned the task of formulating any of the requirements related to the exterior of buildings and their resistance to ignition from wildfires. Masonry can serve well the purpose of integrating climate resiliency into building design in this new frontier of codes.

Steve Skalko consults for architectural and engineering firms, contractors and building owners, drawing from longtime expertise including application of codes, standards and regulatory requirements to buildings, evaluation for conformance to requirements, special inspections of buildings, and preparation of written reviews, reports or studies for documentation.

Have a comment? Question? Story idea?
We welcome your input.
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