

Association News

■ **Brampton Brick** is pleased to announce the Vivace by Stoneworks. This beautiful stone offers the natural look and comforting aesthetics of traditional stone, with the strength and creative possibilities of a masonry veneer system. The Vivace's coloration is carried out throughout each piece and is available in four attractive color blends. The Vivace series is yet another testament to Brampton Brick's commitment of providing fully integrated masonry solutions to communities across North America. For more information, visit www.bramptonbrick.com.



Vivace



■ **Arriscraft** is pleased to announce the appointment of Mr. Rui Carvalho to the position of Sales Representative for the Milton to Fort Erie Market Area.



*Rui Carvalho,
Sales Representative*

Rui comes to us with several years of sales experience with the last 11 being in the Greater Hamilton Burlington market area servicing the construction industry where he worked with both commercial and residential accounts.

Rui has been married to his wife Maria for 11 years; they have a child Matthew and reside in the Hamilton area.

Please join us in welcoming Rui to Arriscraft.



2010 Membership

Gold Members



Canadian Concrete Masonry Producers Association



Masonry Contractors' Association of Toronto

Silver Members



Richvale York Block Inc.



Universal Workers Union Local 183

Bronze Members

Atlas Block Co.
BLAIR Building Materials Inc.
Boehmers Block Division
Bradstone (Division of Wintergreen Ltd)
Don & Son Building Supplies Ltd

Essroc Italcementi Group
Ferrell Building Supply Ltd.
Holcim Canada
JAZBRICK
JV Building Supply
Lafarge Canada Inc

Masons Masonry Supply Ltd.
Permacon Group
Royal Building Supplies
St. Marys Cement Group

QUESTIONS? COMMENTS? SUGGESTIONS?

We are always looking for readers' input on newsletter content and we are actively looking for individuals interested in writing or submitting articles for the newsletters. Please contact us at info@masonryworx.com with your questions, comments and suggestions. You may also visit us on-line at: www.masonryworx.com



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Environmental Benefits: An advantage of building with masonry A message from the board

Welcome to the second edition of the MasonryWorx Newsletter for 2010. Summer is upon us, marking a very busy season for our industry.

We continue to see the province and country moving towards greener building policies and practices and masonry is undeniably a key component of this trend. In this issue we will examine the many environmental advantages of building with masonry materials.

Our first feature article examines the role of LEED in sustainable construction and the second examines the infrastructure investment surrounding the upcoming Pan American Games in Toronto.

In other news, MasonryWorx is pleased to announce the appointment of Sally Moore as Executive Officer.

Sally has a background in marketing with over 25 years experience in business. She has earned a Diploma with Distinction in Commercial Communications, an Executive Education Certificate from Schulich School of Business, and Certificates of Achievement from Humber School for Writers. Sally worked in an executive capacity for the Cement Association of Canada for nine years and as a director in high tech for seven years. She has served on a number of industry boards, including the Concrete Pipe Association Marketing Board, Advisory Panel for Ontario Centres of Excellence, Energy Star Housing Marketing Board, ICFO/RMCAO Member for Environmental Housing, Canadian Brownfield Network Executive Board, and the Canadian Film Centre Board of Directors. She has a published paper in Sustainable Cities, published by Wessex Institute, on the role of the trades in sustainability, *Life Cycle Guarantors of Sustainability*. Sally brings many years experience of successful program management, business strategy and planning to her new role at MasonryWorx.

As always, we thank you for taking the time to review this issue and invite you to visit our website www.masonryworx.com for all the latest information about the benefits of masonry. Our next issue is the Special Edition Newsletter, due to be published in Fall 2010. An invaluable resource for industry contacts, this issue will be in an upgraded format for continuing reference for 2011/12. Our members will not want to miss being included in this edition. Please contact us if you wish to confirm your participation by becoming a member. Ad space is limited, so please reserve your space now. **MW**

Dante Di Giovanni
President, MasonryWorx



Looking beyond LEED

While LEED is largely responsible for catalyzing green efforts in the building industry, many professionals recognize that responsible, sustainable construction is as much about durability and lifespan as it is about earning LEED credits.

By Paul Hargest

There was a time when the term ‘LEED’—short for ‘Leadership in Energy and Environmental Design’—was reserved almost solely for construction-related manuals and trade publications. Not so anymore. Take the example of a February 2009 Toronto Star headline, *LEED-ing the way*, for a story about Canada’s first residential development built entirely to LEED Platinum specifications. The story and headline underscore the fact that despite the relative newness of this green rating system in Canada, it has become widely recognized among Canadians whose awareness of all things green continues to grow.

While there’s no doubt LEED ratings have established important benchmarks for smarter, more environmentally-friendly construction, many will agree that quantifying green value can be challenging within the confines of LEED. To accurately measure environmental impact, it’s necessary to look closely at a building’s sustainability and ongoing lifecycle assessment.

“LEED is a fairly primitive and not a very flexible tool for green measurement,” says Bill McEwen, Executive Director of the Masonry Institute of British Columbia. “The goal now is to look at lifecycle assessment—an overall view of environmental impacts, including the long-term maintenance and cost associated with a building.”

Speaking about concrete masonry specifically, concrete block, McEwen notes that block earns high marks in two key areas of LEED measurement: regional material and recycled content. ‘Regional material’ refers to material sourced within 800 kilometres of the building site. ‘Recycled content’ refers, in the case of block, to the replacement of some of the cement and aggregate (sand and gravel) in a block mixture. About 20 to 25 per cent of the cement content can be replaced with supplementary cementing materials. Aggregates can also be replaced with various recycled materials. There is now lightweight block produced in Ontario that in some cases is credited as having 100 per cent recycled content.

All of which can contribute significantly to a building’s overall LEED rating. Ratings are calculated not by the greenness of individual materials alone, but on their contribution pro-rated by dollar value relative to the cost of all the building materials.

This raises the question: what if one green material is less expensive than another?

“It’s perhaps a back-handed compliment,” says Bill McEwen, “that concrete block is a low-cost material relative to the performance and durability it delivers.”

Durability is one area in which concrete block outperforms most other building materials. However, in comparison to categories like energy, which can earn a potential 10 points out of a total of 70, durability receives only one point under LEED Canada specifications. (Under the U.S. LEED rating system, it receives no recognition at all.)

“A building that lasts a hundred years makes more sense environmentally than a building that lasts 50 years and has to be replaced,” says Bill McEwen. He points out related advantages like minimal maintenance and how block doesn’t require interior finishes or exterior cladding—benefits that translate to lower costs and fewer materials/resources required for upkeep.

These are important considerations in assessing a building’s sustainability not recognized under LEED.


There are other characteristics of block that, while having low or no profile under LEED, add green value and/or increase the sustainability of a structure. For example:

- **Thermal mass:** Concrete block helps maintain indoor temperatures by moderating the temperature swings that cause furnaces and air conditioners to kick in.
- **No VOCs:** Concrete block contains no volatile organic compounds (VOCs—potentially harmful gases that contribute to smog and can cause respiratory problems). Ironically, concrete block and floors earn no LEED points for indoor environmental quality and would need to be covered by a low-VOC material to qualify.
- **Fire safety:** Concrete block doesn’t burn and saves lives when used as a firewall, so it can be re-used when flames are finally extinguished.

Block surpasses other materials when compared as a sound barrier. Bill McEwen notes that this quality has made concrete block a favoured material of large-scale residential and hotel property developers.

“You have to look at the big picture and weigh all the benefits of a building material,” says McEwen, adding that calculating those benefits is not as straightforward as it might seem. Steel, for instance, can incorporate recycled material, yet be shipped from China, leaving behind a sizeable carbon footprint.

While McEwen doesn’t discount the importance of LEED in promoting green construction, he does note that there is sometimes a tendency toward “chasing LEED points” and thinking short-term.

He adds, “The farther down the road you look, the more sense masonry makes.” 

Paul Hargest owns Kitchener-based Boehmer’s/Hargest Block Ltd., is President of the Canadian Concrete Masonry Producers Association (CCMPA), Vice President of MasonryWorx, Chair, A165-04 Block Standard (CSA), Board Member, Canadian Masonry Contractors Association, Board Member, Ontario Masonry Contractors Association, and Executive Committee Board Member, National Concrete Masonry Association.



Ready, set, build

Toronto prepares for the 2015 Pan American and Parapan American Games with development of waterfront village.

For the City of Toronto, the waterfront is its front porch to the world. In 2015, the world will be coming to that porch as the City of Toronto hosts the Pan American and Parapan American Games, the world’s third-largest multi-sport event between competitors from all nations in the Americas, held every four years in the year before the summer Olympic Games.

With such a monumental sporting event that will host 48 sports and 8,500 athletes and officials, Toronto is undergoing major developments to prepare. The development will be an 80-acre site in the West Don Lands that runs between Bayview Avenue and Cherry Street and north of Front Street to the rail corridor.


Toronto 2015, the organizing committee responsible for the Games, has committed to creating designs, policies and practices that respect all residents. To achieve this, a panel of leading Canadian architects, landscape designers, engineers and academics have selected those responsible for planning the waterfront development.

The Pan American Village will meet or exceed all of the International Olympic Committee’s technical requirements for Olympic villages. Amongst that list is a commitment that all buildings in the Village will achieve LEED Gold certification. The buildings will ensure efficient energy delivery by using a district heating and cooling system. This design will become a candidate for the U.S. Green Building Council LEED ND (Neighbourhood Design) program, which looks beyond energy-efficient buildings and takes community scale into account.

The Village will aim to showcase a modern community where design excellence, sustainability and technology come together.

It will include approximately 2,100 housing units, sports and recreation facilities, six major new venues, retail space, banks and restaurants, a medical centre, office space, entertainment areas and a religious centre.

The Village will be open at least 10 days before the first day of the Games and remain open for at least three days after the closing ceremonies. It will be repurposed for the community once the Games are over and transformed into an energetic mixed-use neighbourhood that offers a variety of structures for people at all stages of life and income levels.

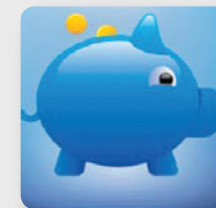
With design, construction and planning approvals already underway, this addition to Toronto’s waterfront community will remain a source of pride long after the games have ended. 

(Information was received from Waterfront Toronto and Toronto 2015)



Environmental Benefits

Masonry has high thermal mass



Masonry absorbs heat, stores it, and then gradually releases it. Because masonry remains warm or cool long after the heat or air-conditioning has shut off, it reduces heating and cooling loads and energy consumption.

A recent building simulation compared a high mass building (having high thermal mass, typical of masonry) with a low mass version of the same building in five cities across Canada. The results showed that 8-13 per cent heating energy savings, as well as lower peak equipment loads, could be achieved by high mass construction (Guide To Sustainable Design With Concrete, Cement Association of Canada, March 2006). Because operating costs account for most building costs over the life cycle, the benefits of masonry go straight to the bottom line.

A computer simulation study compared equivalently sized and shaped masonry and timber-frame buildings (with a 30 per cent higher insulation R-value). The overall seasonal heating loads for the heavy building were 12.3 per cent less and the seasonal cooling loads were 17.4 per cent less than the better insulated frame comparator (The Energy Performance of Log Homes: Documented Energy-Efficiency and Thermal Mass Benefits, National Association of Home Builders, 2003).

Thermal mass can shift energy demand to off-peak periods when it costs less. As jurisdictions adopt off-peak pricing to reduce peak energy demand, masonry’s ability to shift energy demand to off-peak times will be of growing importance. 