



- ▶ WESTERN CANADIAN MEETING 1
- ▶ UPCOMING EVENTS.....1
- ▶ SPONSORSHIP OPPORTUNITIES1

- ▶ GOLF & ANNUAL GENERAL MEETING..... 2
- ▶ MASS DESIGN SOFTWARE.....2

- ▶ CCMPA/NRC PROGRAM UPDATE.....2

○ JUNE | ○ 2011



CCMPA Updates

ADDRESSING ISSUES AND CONCERNS OF THE CANADIAN CONCRETE MASONRY PRODUCERS

A monthly email will be forwarded to members to keep informed of activities and important issues that are occurring. If you have some industry information you wish to share with CCMPA members, please forward them to the CCMPA Office by the 15th of every month.

What is CCMPA doing for you ?

Upcoming Meetings

CCMPA Western Canadian Meeting—Thursday, June 23rd & Friday, June 24th—Kelowna, BC
 AGM & Golf Tournament—Thursday, September 8th— Delta Rocky Crest, Muskoka, ON

Sponsorship Opportunities Available

As in previous years, our members have generously sponsored a variety of offerings at our Annual Golf Tournament. We are asking members to once again consider supporting the Golf Tournament's fundraising for the charity by sponsoring a hole. The Golf Committee will be contacting you over the next few months to solicit your support. For additional information regarding the golf tournament please contact any member of the Golf Committee: Ernie Oliveri, Mike Hesson, Andy Lamovsek, Dave Fleming or M. de Souza.



1500 Avenue Road,
 P.O. Box 1345
 Toronto, ON M5M 3X0
 t:416-495-7497 f:416-495-8939
 www.ccmppa.ca info@ccmpa.ca



KELOWNA 2011

The CCMPA Western Canadian Meeting will be held on June 23rd and 24th, 2011, in beautiful Kelowna, BC, at the Delta Grand Okanagan Hotel.

Members interested in attending this meeting are reminded to make a room reservation as soon as possible via the link below. http://www.deltagrandokanagan.com/1106canadi_001

The tentative schedule is as follows: Thursday, June 23rd, 8 am - Meeting, Lunch & Dinner. Friday, June 24th, 8am— Meeting, Lunch and afternoon activity. We have an exciting itinerary planned and if you are intending to bring you spouse, please let us know ASAP.

We currently have over 20 members attending the meeting and we have two guest speakers, Bill McEwen will speak about LEED and Svetlana Brzev will update us on research at UBC.

Getting the most from our Engineering Expert Gary Sturgeon B.Eng., MSc., P.Eng.



CCMPA/NRC Research Programs Update

Over the past few years, CCMPA has moved to spearhead research needed to improve the application and suitability of concrete block masonry elements and structures, and to

improve CMU marketability. Continued participation and monitoring are provided by CCMPA to help ensure that the research objectives, processes and deliverables are market-driven.

CCMPA participates as a member in two consortium research projects currently being undertaken by the Institute for Research in Construction (IRC), a division of the National Research Council of Canada (NRC).

In late 2010, work began on “*Evaluation of Drainage Components and Sheathing Membranes When Subjected to Climate Loads*”. This study is intended to quantify the moisture management performance of various cladding and drainage systems. These include some innovative systems as well as wall systems that are prescribed and deemed-to-comply under Part 9 of the Building Code, including concrete masonry veneer. The test program is currently still in the planning stage, but in due course, full scale wall specimens will be subjected to wind-driven rain penetration tests and to hygrothermal simulations. The objectives are to develop an understanding and the tools to predict wall draining and drying performance when different and varied claddings or other wall components are placed in various climates and systems. The project will benchmark the “least performing” wall system prescribed under the NBCC. This will serve as the baseline against which “alternative systems” will be gauged when seeking compliance with the Building Code. This benchmark can be subsequently used by the masonry industry to understand the limiting effects of modifying its cladding materials and assemblies for compliance, including for example, the use of masonry units having greater void ratio than currently permitted.

“*Characterization of Fires in Multi-Suite Residential*

Dwellings” by the IRC Fire Research Program has been underway since late 2006. The objectives are to determine the characteristics of residential fires and typical fire loads, and to develop a computation method, suitable for use by fire safety professionals for calculating design fires. It will make use of small- and full-scale fire experiments to study fire characteristics in various rooms and venting scenarios in wood-frame multi-suite dwellings. Nearly all of the proposed 16 full-scale room fire tests have now been conducted. These rooms are realistically furnished and constructed. The consortium members are awaiting a summary of the experimental results, with some contrasts and comparisons of the various scenarios and variables being investigated. The project is scheduled for completion by mid-2012.

CCMPA recently met with the IRC Acoustics Group to begin a third IRC-based project. The CCMPA April Newsletter described how the 2015 edition of the NBCC will use ASTC (Apparent Sound Transmission Class) rather than STC (Sound Transmission Class) to measure airborne sound performance. ASTC uses a systems approach which accounts for both direct and flanking transmission. ASTC is a function of not only the masonry wall system, but also of the type and rigidity of the junction between the masonry wall system and the floor system. CCMPA discussed opportunities to develop ASTC values for ready-use by designers and Authorities Having Jurisdiction. IRC will be preparing a proposal for research that will generate ASTC for various concrete masonry wall and floor systems, as well as effectively integrate the necessary rational and empirical calculation methods within a highly-visual, user-friendly software program for use by designers. The deliverables will well-position CCMPA for the upcoming change.

AGM & GOLF TOURNAMENT



The CCMPA Golf Tournament and Annual General Meeting will take place on Thursday, September 8th 2011 at Rocky Crest in Muskoka, ON

Please contact the office to register your foursome as soon as possible, since space is disappearing.!

MASS

Masonry Analysis Structural Systems (MASS™) is a powerful software package that analyzes and designs masonry Beams, Out-of-Plane Walls and Shear Walls in accordance with the CSA Masonry Standards. This program dramatically simplifies and accelerates the masonry design process for Canadian engineers. Please go to the website for further information.
<http://www.masonryanalysisstructuralsystems.com/>

MASS™ Version 1.0 analyzes and designs masonry beams, shear walls and out-of-plane walls in accordance with the Design of Masonry Structures Standard CSA S304.1-04.

MASS™ is substantially more than a simple masonry capacity analysis tool; it is a complex design tool! Generating a design is as simple as entering a few dimensions and load values. MASS™ determines the critical load combinations for Moment, Deflection, and Shear design based on loads specified by the designer. The program then quickly cycles through thousands of possible assemblage configurations (block size, block strength, reinforcement size, configuration and spacing) to determine an effective design solution. The user then has the ability to customize this solution with a few quick clicks of the mouse to remove or add unknown parameters to the design routines. In addition, MASS™ comes with a default Masonry Unit Database, which includes common masonry units and their properties.

MASS™ not only provides an easy way to enter information, it turns those inputs into detailed and comprehensive outputs in various formats. There is a simplified format for users that just want a quick solution. MASS™ also provides scaled graphic representations of the designed assemblage for visual inspection, as well as diagrams for the loads, reactions, moment, shear, deflection, and the P-M diagram. Most unique to this program is the detailed report that provides all of the intermediate design data, equations and cross-references with the design and construction CSA Masonry Standards. The program is also structured to alert designers to possible ‘constructability concerns’; that is, to warn that certain solutions that work well on-screen may be difficult to implement on-site.

This transparency in the software allows designers to see and readily verify their work, and it provides a learning opportunity for those less experienced in masonry design. This software package is ideal for a practicing masonry design engineer, as well as students taking undergraduate and graduate level courses in masonry.