What is CCMPA doing for you?

Upcoming Meetings:

Wednesday, November 21st, 2012, CMDC Office — 360 Superior Blvd, Mississauga, ON
Friday, December 14th, 2012 — CCMPA Christmas Lunch — Alfredo’s Ristorante — 655 Dixon Road, Toronto, ON

ICON EXPO & NCMA Annual Convention
January 9-13th, 2013 — Indianapolis, IN

Annual General Meeting & Golf 2013
Date & Location TBA

Western Canadian Meeting
June 5th, & 6th, 2013
Four Season’s Hotel - Vancouver, BC

Awards

Columbia Machine, Inc. is celebrating its 75th year in business. CCMPA would like to thank Columbia Machine, Inc. for supporting the industry.

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](http://www.cms2013.ca)
PART 5, “Environmental Separation”, National Building Code of Canada

In 2007, the National Research Council of Canada tabled a proposed change to the airborne sound transmission requirements in the NBCC for both Part 5, “Environmental Separation” and Part 9, “Housing and Small Buildings”. The NRC proposal was to use ASTC (Apparent Sound Transmission Class) as the basis for determination and compliance, rather than STC (Sound Transmission Class) which is currently specified.

In 2011, a Joint Task Group (JTG) was struck, with members from the Part 5 and Part 9 Standing Committees, to examine the merits of the proposal, to determine if changes were appropriate, and to recommend changes. The JTG found merit to the NRC proposal, and will be recommending that ASTC be adopted as the new philosophical direction for the development of the NBCC’s sound requirements. CCMPA has representation on this JTG and is supporting this recommendation. The new ASTC requirements will appear in the 2015 edition of the NBCC.

Sound Transmission Class (STC) focuses on the laboratory rating of the separating assembly rather than the system. This is an elemental approach, which accounts only for the noise reduction of airborne sound transmission directly through the element such as a wall or floor. Use of the STC rating does not well-represent the actual sound reduction experienced in a real building, where many other sound transmission paths exist around the perimeter of the element, and which diminish the effect of elemental isolation. These are termed “flanking paths”, and are formed by the junctions between walls, floors, and roofs.

Apparent Sound Transmission Class (ASTC) is a measure of the airborne sound transmission that accounts for direct transmission and flanking transmission. It is a systems approach to noise reduction, and is a better measure of the likely in-service performance. It better replicates what an occupant of the building actually hears. Like STC, ASTC is recognized as a standardized test. Test requirements are contained in ASTM E 336-09, “Standard Test Method for Measurement of Airborne Sound Attenuation between Rooms in Buildings”.

Specific to masonry, 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. Masonry wall systems are junctioned with a variety of floor systems including wood, cast-in-place concrete, precast plank, and steel joists. The new ASTC requirements will rely heavily on European technology and an existing European ISO standard which describes and identifies the required procedures and calculations to determine ASTC from certain baseline data, including STC. The ISO standard well-predicts monolithic construction, but shows weakness and uncertainty for lightweight systems (wood and steel stud for example) and for hybrid systems (mass systems combined with lightweight systems).

As a consequence of this new direction, two necessary research programs have been initiated, one by the CCMPA, and one by industry in general which includes participation by CCMPA. In the first, CCMPA has engaged the services of the NRC acoustics group to laboratory-test masonry wall systems elementally and with various liners to re-verify STC values established in the 1990s, and following, to laboratory-test for ASTC using masonry wall systems combined with the various commonly used floor systems including wood frame, precast plank, and steel systems. The information from these series of tests will serve as base-line data for input into the ISO prediction models. In the second project, CCMPA and various other interested industry groups including the concrete, gypsum board, wood, and steel industries will be working with NRC acoustics to develop a performance guideline, intended to be used by designers as a design tool and to be referenced by the NBCC, describing the ASTC philosophy, means to calculate and predict ASTC, and providing design examples. In a third project under discussion and not yet underway, CCMPA will participate in the development of a highly-visual, user-friendly software program for use by designers. These three deliverables will well-position CCMPA for the upcoming NBCC changes.

In subsequent newsletters, we’ll provide CCMPA members with technical updates on these research and development projects.
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