

The Masonry Society

Sustainability E-News

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SPONSORED EDITION

From the Editor

A TMS member recently sent me a link on a new interpretation of the NY state energy code (THANK YOU!). The NY code requires continuous insulation, and according to the article, will no longer accept continuous steel shelf angles with traditional attachment directly to the slab as being in compliance. In other words, the insulation really does have to be continuous! This change will obviously have an effect on design of buildings in NY and beyond. Fortunately several anchor suppliers have already been at work developing new systems that provide for better thermal performance, allowing insulation behind the steel angle. For more information, check out the first article below. If you have news to share, please let me know.

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NOTE: Inclusion in this newsletter is not an endorsement of the products and materials featured, nor have these products been evaluated by TMS or the editor. Furthermore, the views expressed in the articles featured are those of the article authors.

CODES and RATING SYSTEMS NEWS

As the article below indicates, the use of the International Green Construction Code (IGCC) is spreading. The latest to adopt is Baltimore. LEED is still an option there, but now builders have a choice. ~Tina

NY Energy Code Clarification Will Stem Heat Loss Through Walls

URBAN GREEN COUNCIL

The New York State energy code requires that insulation be "continuous," but historically, code interpretation has allowed some metal and concrete heat-leaking components to penetrate the wall. Now things are changing. The current interpretation by the NY State Department of State, now enforced by the NYC Department of Buildings, means that for most buildings exposed slab edges and continuous shelf angles are no longer considered compliant with prescriptive code insulation requirements. See more [here](#).

Baltimore Adopts IGCC

GREEN BUILDING LAW UPDATE

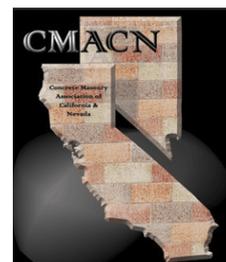
An ordinance was recently introduced in the Baltimore City Council for the purpose of adopting the International Green Construction Code. Mandatory

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[Concrete Masonry Association of](#)

green building has been and remains the law in Baltimore City. This bill makes the flavor of green more palatable. [Read more.](#)

Free Resource Outlines Energy Efficiency Standards

ANSI.ORG

With the release of the [Standardization Roadmap: Energy Efficiency in the Built Environment](#), U.S. industry, government, standards developing organizations (SDOs) and other energy efficiency stakeholders now have a national framework for action and coordination on future energy efficiency standardization. Developed by the American National Standards Institute (ANSI) Energy Efficiency Standardization Coordination Collaborative (EESCC) – a cross-sector group chaired by the U.S. Department of Energy (DOE) and Schneider Electric – the roadmap charts 125 actionable recommendations to advance energy efficiency in the built environment.

PRODUCT NEWS

This edition features some new innovations with clay masonry. Read more below. ~ Tina

For Building Blocks, a 3D Makeover

ENGINEERING.COM

An innovation in 3D printing involves making customized, prefabricated ceramic building blocks known as PolyBricks. The PolyBricks can be interlocked -- without mortar -- to create larger units. The applications are described in [an article](#) in the journal 3D Printing and Additive Manufacturing.

Dry Stack Brick Achieves Cradle to Cradle Certification

SNAP.COM

Daas Baksteen, a clay brick manufacturer in the Netherlands, has developed [ClickBrick®](#), a Cradle-to-Cradle certified, patented system for dry stack bricks for external wall cladding. Easily reusable, they are simply unstacked.

China Has Used 6.6 Gigatons of Cement in 3 Years

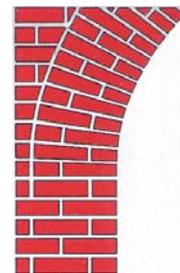
GATES NOTES

China has used 6.6 gigatons of cement in a span of three years versus the 4.5 gigatons the U.S. used in the 20th century, according to the U.S. Geological Survey. Rhett Allain tries to break down China's number into something we can see, and while he uses the terms "concrete" and "cement" interchangeably and the [time frames](#) of the U.S. and China numbers differ,

[California and Nevada](#)***



National Concrete Masonry Association
FOUNDATION



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Gold Level



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his graphics give an idea of how big and heavy a structure or land mass would be if it were made of 6.6 gigatons. [Read more.](#)

GREEN BUILDING NEWS

Construction Projects Use 3D Printing, Robotics

DAILY COMMERCIAL NEWS

Various projects are underway around the globe to demonstrate what robotics and 3D printing might mean to the building industry. Concrete mixes are being laid in "toothpaste like" layers to create precast components and wall panels and a plan is underway to use robots to pump concrete to build an entire structure. "The value of robotic and 3D printing is multifold; it allows a combination of materials beyond cement and aggregate, there's little waste and the material and the final product is much more controlled," writes Ian Harvey in [this article](#), but challenges still exist.

Climate Change: Implications for Buildings

WBCSD.ORG

The Fifth Assessment Report from the Intergovernmental Panel on Climate Change is one of a series of documents synthesizing the most pertinent findings for specific economic and business sectors. The world's buildings account for just under a third of global final energy use and about a fifth of all GHG emissions. Under business as usual projections, use of energy in buildings could globally double or even triple by 2050. Buildings offer near-term, highly cost-effective opportunities to curb energy demand growth rates. Exploiting this potential more widely requires sustained policies and actions that address all aspects of the design, construction and operation of buildings and their equipment, as well as changing user behavior and attitudes. [Read more.](#)

EDUCATIONAL OPPORTUNITIES

Call for Abstracts

International Symposium on Emerging Materials and Technologies for Sustainable Infrastructure, 7-9 January 2015, Hong Kong, China. This symposium is aimed at providing an international platform for exchanges and discussions on emerging materials, sensing and other technologies that have the potential to enhance the sustainability of urban infrastructure such as bridges, tunnels, roads and buildings. For more information, [click here](#). Interested authors are

Silver Level



Bronze Level



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invited to submit abstracts of no longer than 2 A-4 pages by 1 August 2014 via the [online system](#).

Concrete Sustainability Forum

ACI.ORG

ACI's seventh annual [Concrete Sustainability Forum](#) will take place Wednesday, Oct. 29, and provide an update on the evolving landscape of concrete sustainability, structural resilience, and increased service life. In addition to learning about examples of sustainable concrete technologies and systems from across the globe, attendees to the Forum will be provided an update on code activities from the American Concrete Institute, Federation Internationale du Beton, and other international concrete organizations.

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