

The Masonry Society

Sustainability E-News

Green Cement and Masonry

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SPONSORED EDITION

From the Editor

As I write this I am preparing to attend the 16th International Brick and Block Masonry Conference in Padua, Italy. Reviewing the list of presentations I am encouraged by the research in the areas of masonry and sustainability. From research into new materials, to evaluations of moisture resistance and durability, to studies on energy consumption, lots of good topics are being explored. This edition includes links to research on cement production, an important ingredient in concrete masonry, grout and mortar.

As we come to the mid-point of the year, I'd also like to remind readers that it's not too late to become a *Sustainability E-News* sponsor. We are not yet fully funded for the year, so I encourage you to consider becoming a sponsor. Sponsorships begin for as little as \$100. For more information, [contact the TMS office](#).

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GREEN BUILDING NEWS

The Royal Institute of British Architects has selected 30 buildings for innovative design. A number of them are clad in masonry. ~Tina

Photos: 30 Buildings Selected for Innovative Design

GIZMAG.COM

The Royal Institute of British Architects has selected 30 buildings for their innovative design, one of which will receive the institute's new International Prize. [This article](#) offers descriptions and photos.

Three Misconceptions About Energy Modeling

ECOBUILDINGPULSE.COM

Building performance is becoming a greater priority, and the tools to predict it are becoming more accessible. So why isn't energy modeling used in every project? [Read more](#).

Easy, (Not) Breezy, Passive House

URBAN GREEN COUNCIL

Sebastian Moreno-Vacca and Julie Willem of A2M shared insights on how Passive House became the new normal in Brussels earlier this month at the Center for Architecture. Read the "three stupid things" that make Passive House deceptively simple in [this recap](#).

CODES and STANDARDS NEWS

EDGE Instruction Offered

USGBC.ORG

Previously mentioned in the last edition of Sustainability E-News, EDGE is a green building certification system focused on making new residential and commercial buildings more resource-efficient. EDGE comprises a web-based software application, a global standard and a certification system. Learn more about EDGE with [this free course](#).

Sponsors of TMS's Sustainability E-Newsletter

Click on the links below to learn more about each of these organizations who have graciously sponsored this E-Newsletter. The Sponsors designated with an Asterisk(*) are also TMS Members at the following levels:

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Platinum Level

GREEN PRODUCT NEWS

Research on reducing the environmental impact of cement continues. From use of recycled glass in the mix to a low-emissions cement plant, you can read about some of the recent efforts in the links below. ~Tina

Recycled Glass in Cement "Calms" Alkali-Silica Reaction

KELOWNANOW

Adding glass powder from recycled glass, fly ash and polymer in place of some of portland cement, a team of researchers at the University of British Columbia Okanagan campus has developed a cement that can "calm" the alkali-silica reaction in concrete. "Though further testing is needed to assess long-term stability, it now looks like we can replace up to 25% of the cement materials that had to be mined for cement production with glass," said Shahria Alam, an engineering professor. [Read more.](#)

Framework to Build Cement Paste Based on Biomaterials

MIT NEWS OFFICE

Researchers at MIT interested in creating a strong, more sustainable and longer-lasting concrete want to make a cement paste with biomaterials such as bones and sea sponges. "If we can replace cement, partially or totally, with some other materials that may be readily and amply available in nature, we can meet our objectives for sustainability," said Oral Buyukozturk in MIT's civil and environmental engineering department. [Read more.](#)

Researchers Capture CO2 to Produce Cement-Like Material

ENGINEERING.COM

CO2NCRETE is created with a 3D printer and uses smokestacks to capture carbon dioxide. The process, developed at the University of California, Los Angeles, then combines the carbon with limestone to create a cement-like material that so far has only been tested in a lab. "The big challenge we foresee with this is we're not just trying to develop a building material. We're trying to develop a process solution, an integrated technology which goes right from CO2 to a finished product," Gaurav Sant, an engineering associate professor, says in [this article](#).

Test Plant to be Built to Demonstrate Low-Emissions Cement

IMPERIAL COLLEGE LONDON

A consortium in Europe won a \$14 million grant to develop a [low-emissions cement](#). Their process separates the gases created during production from the limestone. This results in pure carbon dioxide being released, which can easily be captured. A demonstration plant will be built in Belgium.

Company Marketing Lightweight, Strong Concrete Block

DAILY COMMERCIAL NEWS

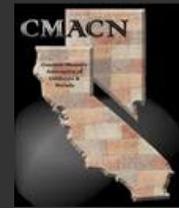
Litebuilt Concrete Canada uses a cellular concrete mix to create a lightweight but strong dry-stack concrete block whose acoustics are considered superior to other blocks. "The acoustical property on the block alone is a STC 43, whereas code is 50," says the company's Greg Baker. "With a two-by-four stud wall and half-inch drywall, the STC is 52. The same block has a five-hour fire rating. It's really two products in one when you have a sound transmission standard and fire, providing two codes in one wall you have to meet and that's a cost saving for contractors." [Read more.](#)

GREEN BUSINESS NEWS

Sustainability Initiatives can Minimize Risk

For ConstructionPros.com

Companies in the construction sector can find cost savings by adding more sustainability factors to their operations, but they often miss the chance because of a rigid mindset, Jessica Stokes writes in [this article](#). Companies that look for sustainability advantages not only have fewer legal compliance



Concrete Masonry
Association of California &
Nevada



Gold Level





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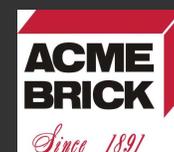


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Silver Level







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Bronze Level

issues but they can discover efficiencies and improve their brand, she says. "They can grow their revenue, save money, increase the value of their shares, engage employees and minimize risk," says Bob Willard of Sustainability Advantage.



EDUCATIONAL NEWS

Call for Abstracts for 13th Canadian Masonry Symposium

The 13th Canadian Masonry Symposium (CMS) has announced a call for abstracts. The CMS will be held June 4-7, 2017 in Halifax, Nova Scotia. For more information visit the symposium website at <http://www.13thcms.com/>. The abstract deadline is August 31, 2016.

Call for Papers for Masonry 2018 Symposium: Innovations in Collaborative Research, Development and Applications

ASTM.ORG

The objective of Masonry 2018 Symposium is to gather and disseminate the latest information on all aspects of the innovations in masonry materials, design, specification, construction, maintenance, and rehabilitation. It will emphasize the application of ASTM standards to those areas, and their coordination with building codes, project specifications, and international standards. The symposium will be held June 26, 2018 in San Diego, CA. For more information, please visit <http://www.astm.org/C07CFP062018>.

BIM Guide for Masonry Contractors

NCMA FOUNDATION

The BIM-M initiative with funding assistance from The Masonry Society, the NCMA Foundation, the International Masonry Institute, the International Union of Bricklayers and Allied Craftworkers, and the Masonry Contractors Association of America, has developed a guide

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