The Masonry Society

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SPONSORED EDITION

From the Editor

Using their recently developed methodology, the EPA has declared that using fly ash in concrete and concrete products is a beneficial use of coal ash. This is good news as the use of fly ash in place of portland cement offers many benefits. This is just one of the articles featured below that relate to concrete. One might ask why articles on concrete are included in a newsletter on masonry. The answer is easy! Concrete shares many of the same raw materials as products essential to masonry construction including grout, mortar, and of course, concrete masonry units! So while concrete and masonry products are not the same, much can be learned and applied to masonry. Of course, new developments should always be tested and verified before adopting into full use.

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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.

GREEN BUILDING NEWS

Is the EPA the next to come out with more green "standards"? Check out the link below to learn more. ~Tina

EPA Eyes Energy Star Processes for Other Areas in Sustainability

REIT.COM

The Environmental Protection Agency could play a major role in other areas of sustainability besides energy efficiency, says Cindy Jacobs, senior advisor at the Environmental Protection Agency's Energy Star Program, citing water and waste efficiency as examples. "We're looking to bring more of the kinds of things we've been able to bring with Energy Star to the market to help with the tracking, the measurement and generally sustainability writ large in terms of environment." Read more.

What LEED v4 Will Mean for Green Building in Canada

DAILY COMMERCIAL NEWS

The introduction of LEED v4 in Canada represents "the next generation of building rating systems with increased emphasis on energy efficiency and reducing carbon emissions, building performance and material life cycle assessment," according to Thomas Mueller,

Sponsors of TMS's Sustainability E-Newsletter

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Platinum Level



Concrete Masonry Association of

president and CEO of the Canada Green Building Council in this piece. The council will certify LEED v4 projects and is working on Alternative Compliance Paths that will offer a streamlined method for demonstrating compliance.

Get Involved with the 2015 NGBS Update ECOBUILDING PULSE

Preparations are under way for the 2015 update of the National Green Building Standard (NGBS). Now is your chance to propose changes. Read more.

Study: Green Building Work Increases Among Homebuilders

SOURCEABLE.NET

Construction of sustainable homes has been increasing among homebuilders as clients agree to pay more for energy-efficient features, according to a Green Home Builders and Remodelers study. The study found that 68% of builders say clients will pay extra for energy-efficient houses, up from 61% in 2011. The demand for green building in residential construction is expected to grow as consumers become educated, with the market increasing by tens of billions of dollars between 2013 and 2016, according to this article.

PRODUCT NEWS

This edition includes several developments related to concrete, most of which can be extrapolated for use with concrete masonry. ~Tina

EPA Says Coal Ash is Fine to Use in Lieu of Cement

COURIER-JOURNAL (LOUISVILLE, KY)

The Environmental Protection Agency has determined the use of coal ash in concrete is OK because it is encapsulated. "The protective reuse of coal ash advances sustainability by saving valuable resources, reducing costs, and lessening environmental impacts, including reducing greenhouse gas emissions," said Mathy Stanislaus, an assistant administrator at the EPA, according to this article. To read the press release click here.

Athena Institute Includes LCA for Portland-Limestone Cement Concrete

Athena Institute has released a technical brief on the environmental benefits of Portland-Limestone cement-based concrete. This technical brief investigates not only the potential CO2 savings of Portland-Limestone Cement (PLC), but also a larger set of potential environmental impacts, using life cycle assessment

California and Nevada***







Gold Level



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(LCA) to better understand the merits of incorporating PLC relative to using Ordinary Portland Cement (OPC) in common concrete mix designs. Results of the study indicate that, relative to OPC, PLC shows a 10% to 12% improvement in environmental performance across similar concrete mix designs. For more information and to read the technical brief, click here.

New Environmental Reporting Standards for Concrete

ASTM

A new version of the Product Category Rules (PCR) for document used concrete. the for developing Environmental Product Declarations (EPDs) for concrete, was published this month by the Carbon Leadership Forum (CLF). The new PCR, Version 1.1, takes the original PCR published in November 2012 and makes improvements to the document based on input from key experts in the field of Life Cycle Assessment (LCA) and experience gained during the yearlong period during which the original version was implemented. Both ASTM International and the National Ready Mixed Concrete Association (NRMCA) have adopted the PCR for use in their respective EPD programs. Read the full story.

3D Printing Duplicates Material Strength, Lightness of Bone

LA TIMES

A new 3D printing technique developed by German scientists holds the promise of much lighter materials of high strength based on the particular arrangement of lightening air pockets as seen in bone and wood, according to this article. This eliminates the extra weight of solid materials such as steel, and overcomes the strength issues associated with porous materials whose air pockets are randomly arranged.

TIPS for "GREENING" YOUR BUSINESS

A couple of interesting articles on how some companies are adapting their business model to benefit both the environment and their bottom line. ~Tina

CEO: Philips' Sustainability Efforts Drive Profit Margins

MCKINSEY QUARTERLY

Lighting and health care manufacturer Philips is lowering costs for consumers by using environmentally responsible practices, such as selling refurbished products, and installing and maintaining light-emitting diode lighting systems. "Designing products and services for a circular economy can also bring savings to a company," says CEO Frans van Houten in this







Bronze Level



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<u>article</u>. "The first impression people always have is that it adds costs, but that's not true. We find that it drives breakthrough thinking and can generate superior margins."

Whole-Company Approach Helps Owens Corning Go Green GREENBIZ.COM

As chief sustainability officer at Owens Corning, Frank O'Brien-Bernini runs a team of 60 people dedicated to making the company, its customers and the built environment greener. A holistic approach is needed for CSR efforts to be effective, he says in this interview. "For us to achieve sustainability at a global scale, we need to integrate it into everything we do," he adds.

EDUCATIONAL OPPORTUNITIES

Though I am not familiar with the specific content of the webinar featured below, the topic is certainly one that should be of interest, and the provider, ASTM, is a credible resource. But act fast – it is this Wednesday! ~Tina

Free Webinar: Chemical Alternatives Assessments - The Science Behind Safer Substitutes

Join ASTM on Wednesday February 19, 2014, at 1:00pm ET, for a 1-hour webinar that will give you an overview of the purpose and framework of Chemical Alternatives Assessments, and review the methods and tools used in the Chemical Hazard Assessment process.

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