

The Masonry Society

Sustainability E-News

Low Impact Materials

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From The Editor

One of the interesting things to see as the building industry seeks to 'tread more lightly' on our environment is not just the new innovations in materials and manufacturing. Those advances are important and often create not only more sustainable products, but also more sustainable businesses (think improved economics and societal impacts). But the thing that often excites me, is to see old, even ancient, ways of doing things given another look. At times, older materials and methods of construction used less energy to create, used local materials, and used local labor - all desirable for reducing the impact of our building products. So examining these products in a new light can yield valuable insights on how to use old materials in new ways to be more sustainable. Examples include everything from work in ASTM E60 on earthen walls and [floors](#), to building [bridges with stone](#). We have much to learn from our past!

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GREEN BUILDING NEWS

New tools to help with hazard assessment and more...~Tina

New tool estimates hazard-related property damage costs

UNIVERSITY OF CENTRAL FLORIDA

A new [online tool](#) developed by a team led by researchers at the University of Central Florida allows homeowners along the Gulf of Mexico to estimate hazard-related losses and see how disaster-resilient their properties are. The HazardAware tool assigns a hazard score to specific properties and estimates the potential annual cost of damage inflicted by various weather events. [Read more.](#)

GSA tests solutions to make federal buildings green

FAST COMPANY

The General Services Administration's new Green Proving Ground has produced a list of tools and building materials that can help the

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**Concrete Masonry
Association of California &
Nevada *****

federal government reach its goal of net-zero carbon emissions from federal buildings by 2045. The program uses GSA buildings to test real-world solutions, including transparent film to boost windows' thermal efficiency and solar tracking systems. Read more [here](#).

CODES and STANDARDS NEWS

While the online tool will likely not be updated until the fall, the updating of the standard for the Health Product Declaration is complete. ~Tina

HPD Open Standard Version 2.3 released HPD COLLABORATIVE

The Health Product Declaration (HPD) Collaborative has released HPD Open Standard Version 2.3, the latest update to its industry-leading open standard for transparency and reporting for building product contents and associated health information. Full implementation is planned for Q2/Q3 2022. This is when the HPD Builder and the HPD Public Repository will be fully updated to comply with Version 2.3. This work is in the final stage of development and testing. Learn more [here](#).

GREEN PRODUCT NEWS

From using materials efficiently to innovative ideas about how to use ancient materials, this edition is full of product news! ~Tina

6-inch CMU: Masonry's weight loss plan STRUCTURE MAGAZINE

In the latest issue of STRUCTURE Magazine, Phil Ledent, executive director of the Masonry Institute of Michigan, discusses the [use of 6-inch-wide CMU in construction](#). In terms of structural concrete masonry unit (CMU) construction, the predominant unit sizes are 8-inch and 12-inch-wide units. However, with rising material costs, 6-inch-wide units are ideal for interior and exterior wall construction, depending on wall heights and design loads.

Stone age: a new architecture from an old material ARCHITECTURAL REVIEW

As we near the end of the fossil fuel era, building in stone offers a hopeful future for construction. Imagine you suddenly had to build a new house for everyone in the world. How much stone would we need? Is there enough? Actually, there's more than enough. Technological development in stone largely ceased with the advent of reinforced concrete and steel in the 19th century, but there is an opportunity, especially when considering the environmental impact of materials. Making stone has about half the carbon footprint of concrete and stone is often more than 2½ times stronger. [Read more](#).

Lava seen as natural building material FAST COMPANY

Volcanic lava would be captured in its molten state and hardened into a natural building material in plans envisioned by Icelandic architect Arnhildur Pálmadóttir. She sees three ways to harvest one of Iceland's rare natural resources and lava from hundreds of other volcanoes worldwide -- by digging trenches to capture erupting lava, by drilling into and harvesting magma, and by 3D printing bricks with molten lava. Read more [here](#).

Podcast: How concrete acts as a carbon sink FOR CONSTRUCTION PROS

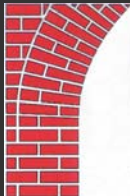
Rick Bohan, vice president of sustainability for the Portland Cement Association, discusses how concrete can be used to absorb carbon



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Southeast Concrete Masonry
Association **

Silver Level



Spec Mix

Bronze Level

dioxide in [this podcast](#). Using concrete as a carbon sink is the fifth part of the Roadmap to Carbon Neutrality released by the association.

Bio-inspiration and structural engineering

STRUCTURE MAGAZINE

Humans have been building with biology for thousands of years. Dimensional lumber and mass timber are technologies based on materials produced using biological processes. Today, there is ground for additional research and development of materials based on biological processes or biomimetic principles finding application in structural engineering. According to [this article](#), advancements in biotechnology are giving rise to new bio-materials for construction that go beyond wood, including concrete-like materials.

Reducing embodied carbon in structural concrete

STRUCTURE MAGAZINE

For centuries, concrete has been used to build infrastructure. While well regarded for its durability and strength, concrete is also known as a CO2-intensive building material. Most of the embodied CO2 in concrete originates from the hydraulic cement used in the mix. As cement and concrete producers introduce new products and technologies, structural engineers need to be aware of the latest and emerging tools that impact the industry's ability to tackle the challenges of embodied carbon. These tools will be critical to reducing the global warming potential (GWP) of projects and meeting SE 2050 and Architecture 2030 commitments. [Read more](#).

EDUCATIONAL NEWS

Lots of educational opportunities coming up. ~Tina

ASTM Masonry Symposium registration

ASTM INTERNATIONAL

Registration is open for the ASTM International [2022 Masonry Symposium: Advancing Masonry Technology](#), on **June 14** at the Hyatt Regency Seattle, WA. The event dovetails the June standards meetings of its four co-sponsors: ASTM Committees C01 on Cement, C07 on Lime, C07 on Mortars and Grouts for Unit Masonry, and C15 on Manufactured Masonry Units. Committee members aim to gather and disseminate the latest information on innovations in masonry materials, design, specification, construction, maintenance, and rehabilitation.

Masonry Educators' Workshop

THE MASONRY SOCIETY

Register now for the [Virtual Masonry Educators' Workshop \(MEW\)](#) on **June 21-23**. The workshop is targeted towards professors and educators teaching undergraduate and graduate design and construction management classes on masonry, and seeks to assist them on teaching future designers and construction professionals. Topics will include Innovative Approaches to Education, Masonry Design and Detailing, Designing for Constructability, and much more. As an added bonus, the Concrete Masonry Association of CA and NV is offering scholarships to all educators in CA and NV. [Contact TMS](#) for a coupon.

Call for Abstracts for 14th NAMC

THE MASONRY SOCIETY

Papers are invited for the [14th North American Masonry Conference \(NAMC\)](#), which will be held from June 11-14, 2023, in the heart of historic Old Market in Omaha, Nebraska. The conference is being jointly hosted by the Durham School of Architectural



ACME Brick ***



Cast Stone Institute ***



Nelson Testing Laboratories **



North Carolina Masonry Contractors Association ***



Northwest Concrete Masonry Association *



Pennsylvania Concrete Masonry Association ***



Masonry Institute of Washington*

Engineering and Construction at the University of Nebraska-Lincoln (UNL) and the Nebraska Masonry Alliance (NMA). The conference seeks to provide a forum for sharing the latest advances in masonry knowledge and applications from around the world. Abstracts are due **July 11, 2022**.

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