

The Masonry Society

Sustainability E-News

October 31, 2011

Volume 3, Number 20

SPONSORED EDITION

From the Editor

An attendee at the recent TMS Sustainability and Masonry seminar held in Phoenix asked me about the use of BIM (Building Information Modeling) and sustainability. While I certainly don't know what every designer is doing, I indicated that more companies are jumping on the BIM bandwagon, but like CAD when it was first introduced, the uptake has taken some time. We discussed what his company, a brick manufacturer, was doing to help provide designers with BIM-compatible tools. According to its promoters, BIM offers numerous opportunities as a tool in sustainable design. With BIM, a line on a construction drawing *has the capability* to represent not only a wall, but a myriad of properties associated with that wall. I haven't personally heard of many tapping into those capabilities yet, but many have embraced the coordination offered by BIM's three-dimensional modeling. Do you have experience with BIM on a masonry project that you'd like to share? If so, please contact me. I'd like to feature more about this up and coming technology as it applies to masonry and sustainable design.

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GREEN BUILDING

Building information modeling, or BIM, is the newest trend in building design. Like CAD when it was first introduced, use of BIM started with the larger design firms, but is slowly expanding its reach. BIM offers many advantages for sustainable design according to its promoters. Check out the two articles below for more information. ~Tina

Autodesk: Design, Build Future Sustainable Cities Using BIM

Planners and engineers could rehabilitate existing cities and plan new ones by adopting a more practical and strategic approach to managing them, writes Adam Strafaci of Autodesk. The answer lies in applying collaborative workflow processes with advanced building information modeling. "Not only does this save time and help eliminate errors, but because it all happens in a highly visual environment, the models can be used to demonstrate the project benefits to stakeholders, including the public," Strafaci concludes in this ConstructionDigital.com article.

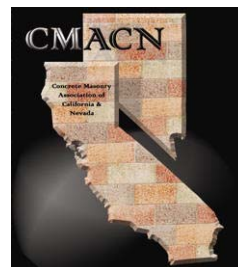
BIM: The future of Efficient, Sustainable Construction

Through the implementation and use of BIM,

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designers, architects and engineers can now create an integrated visual model of a building, which can be reviewed and coordinated before actual construction begins, writes Arup's Tristram Carfrae in this [The Guardian \(London\)](#) article. "Architects, designers and engineers are increasingly adopting the different innovative planning models to deliver sustainable buildings," he says. "It is an exciting time for the building modeling practice in terms of seeing how the design and building performance evolves in the years to come."

Data on Green Building Could Strengthen Industry

The 25,000 structures that have received LEED certification could be used to generate real-time data that measures energy efficiency, occupancy rates, sales price and worker productivity. And cities that have enacted benchmarking laws for commercial buildings could provide additional data that could be used to evaluate the value of going green. The U.S. Green Building Council is enhancing its Green Building Information Gateway database so users can share information on certified buildings and learn what works and what doesn't, according to [MatterNetwork.com](#).

New Interactive Sustainability Website For Designers

GreenHippoHut.com has launched a new, free, interactive open forum website for design and construction professionals to share experience, ideals and goals of sustainable design and construction. [Read more.](#)

Commercial Buildings the Focus of New Climate Initiative

Many cities, as well as private citizens, are making small leaps to reduce energy consumption. What many overlook, or are too under-funded to take on, are large commercial buildings. Read more in this [SmartPlanet blog](#).

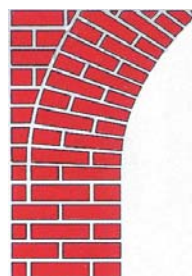
Sustainable Infrastructure Library

ASCE's Web site features a new library of project profiles that demonstrate how sustainable infrastructure contributes economic, environmental and social benefits. Featured profiles span all sectors and include projects ranging from under \$1 million to more than \$1 billion. [Browse the project profiles](#) or [submit a project profile](#). Visit ASCE's [official sustainability page](#).

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PRODUCT NEWS

Durability, Smart Use of Concrete Key to Sustainable Development

Concrete and cement have had a less than stellar reputation when it comes to sustainable building materials, but they should be seen as valuable resources because they are durable and can reduce energy and water waste when used wisely, writes Leon Kaye. "Smart use, reuse, and design, can burnish concrete's reputation as a sustainable, not polluting, material," Kaye concludes in this [The Guardian \(London\)](#) article.

Innovative Concrete Blocks Can Transmit Light

The first commercially available transparent concrete, or Light Transmitting Concrete, was developed by Aron Losonczi, a Hungarian architect. LiTraCon is a combination of concrete and optical fiber strands that comprise just 4% of the block's total volume, and "can theoretically transmit light up to a thickness of 65 feet," according to this [SmartPlanet.com](#) article.

CalStar Thru-Wall Units

CalStar Products is expanding its masonry line with a Thru-Wall unit. Measuring 8" by 4" by 16" and 12" by 4" by 16", the units are half as tall as standard concrete blocks. The Thru-Wall units employ CalStar's manufacturing technology which incorporates 40% postindustrial recycled content as the binder. [Read more.](#)

Using Hemp as a Building Material

Hempcrete is made from a mixture of the woody part of the hemp plant and lime. When used as a building material, it "has an energy saving of 67 percent over using traditional concrete." And, when it is mixed with other materials such as sand or cement, the result becomes a versatile building material that can be used to make plywood, insulation, sills, roofs, floors, wallboard, pipes and bricks. [This article](#) examines the sustainable aspect of research and development of hempcrete as a construction material not just in homes, but in larger structures as well.

Fla. Cement Plant Tests Biomass Fuel Options to Reduce Emissions

The Cemex Brooksville South Cement Plant in Florida is working to reduce its carbon dioxide emissions by testing various biofuels from peanut hulls and wood chips, as well as using tire fluff.

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These developments are partly in response to the Environmental Protection Agency's cement-plant rules. Rep. Rich Nugent, R-Fla., says that by the EPA's "own admission, there isn't a cement facility in the country that can comply with this new proposal. At least 12 facilities will close because of it, the manufacturing will move offshore, the prices will go up and we've got thousands of jobs riding on it," in this [St. Petersburg Times \(Fla.\)](#) article.

EDUCATION

TMS offers numerous opportunities for you to expand your knowledge about masonry, from Society meetings to seminars throughout the country. For more information on some upcoming events, check out the links below.~Tina

Registration Now for the TMS Annual Meeting

The Masonry Society will hold its Annual Meeting in beautiful San Antonio at the Menger Hotel, Nov.10-15. An informative and interesting program has been being planned for your professional development and enjoyment. There will be numerous opportunities to learn about historic masonry, sustainability, new masonry and masonry systems of the future. Plan to attend these significant meetings today. Learn more at the [TMS Annual Meeting](#) webpage.

CONSTRUCT Issues Call for Presentations

CSI's CONSTRUCT has opened the Call for Presentation for next year's event, September 11-14, 2012 at the Phoenix Convention Center in Phoenix, AZ. There are some changes to the submission and selection process providing more time to gather presentations while rewarding individuals who submit early. The Call for Presentations takes place in three waves. Final selections including dates and times will be made by February 17, 2012. You can read more about the [details and expectations](#) of the Call for Presentations or if you are ready to jump right in, you can [get started now](#).

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