# **The Masonry Society**

# Sustainability E-News

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#### From the Editor

All the heat we've been experiencing has me wishing for a solid masonry home! Not that I haven't always wanted one, but when the AC can't keep up because it's 104 °F outside, and my home is an older vinyl-clad wood framed one, the benefits of masonry become even more clear. Though I've done my part to improve the energy efficiency of my home, from replacing windows to doing a blower door test to find leaks, it's difficult to improve the walls themselves. In extreme weather, masonry buildings provide superior thermal performance beyond simple R-value, from delaying heat transfer to reducing peak heat gains – an important aspect to remember when you are looking at "green" products.

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### **GREEN RATING SYSTEMS**

LEED, as you may or may not know, isn't the only game in town. From Green Globes to new rating systems for infrastructure, the choices in evaluating what makes a project "green" continue to increase. Check out the links below for information on some new (and old) programs. ~Tina

#### **Learn More About Green Globes**

What is Green Globes? Green Globes

- Is an online software environmental survey tool followed by a third party assessment process;
- Has certified, Federal, education, corporate, multi-family housing, healthcare, and office buildings among other building types;
- Is widely recognized in policy at the state, local and federal levels:
- Is an alternative to LEED <u>Green Globes an</u> <u>Alternative to LEED- brochure</u>

To <u>learn more</u> about Green Globes check out their free webinars.

# "Envision" Sustainability Rating System Needs Input

A new system to formally evaluate sustainable infrastructure projects needs civil engineering expertise to increase its reliability and value. The Institute for Sustainable Infrastructure seeks your feedback on the version 1.0 draft of its Envision(tm) rating system. The system will evaluate and score existing infrastructure and serve as a goal for new

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and renovating projects to achieve. To read the draft and comment, visit ISI's Web site, sustainableinfrastructure.org. Comments will be accepted over the next six months, and Envision is slated for an official rollout in early 2012.

#### **Move Over LEED?**

The Society of Environmentally Responsible Facilities (SERF) certification for green buildings was designed as a less expensive and quicker alternative to LEED certification. But the U.S. Green Building Council isn't too worried. It has about 1 billion square feet of space under LEED, and SERF has a grand total of 32 buildings. Read more at MediaBistro.com.

### **Evaluating Green Products**

On Aug. 9-10, ECO-STRUCTURE, EcoHome and Remodeling magazines will co-sponsor The Green Product Selection Education Series. Speakers including Alex Wilson, founder of BuildingGreen Inc., Edward Mazria, FAIA, founder of Architecture 2030, and Bill Walsh, founder of the Healthy Building Network, will address methods for evaluating green building product performance, products' carbon footprints, and advanced attributes for green product specifications at this webinar.

## **CEMENT and CONCRETE NEWS**

As mentioned before, cement is an integral element in mortar and grout. Check out the articles below for the latest news, including a follow-up on the high-fly ash grout replacement testing program supported by the Concrete Masonry Association of California and Nevada. ~Tina

#### **Using Olive Biomass as a Cement Additive**

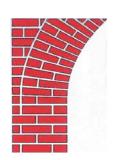
Researchers is Spain have worked with replacing a percentage of cement with olive biomass to create mortar. They've discovered that when up to 10% of the cement is replaced with the ash that remains after burning olive waste, the mortar still meets industry standards. "Olive biomass would be low cost, produce little carbon dioxide, and help olive-oil-producing countries dispose of a major waste product," said one of the researchers. Read more at Chemical & Engineering News.

# **BYU Investigates Cement Replacements in Grout**

A study about the viability of replacing Portland cement in masonry grout with high volumes of class F fly ash or ground granulated blast furnace slag is being conducted at the structures laboratory at



Masonry Institute of America



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Nelson Testing Laboratories



Brigham Young University, under the direction of Fernando Fonseca, in collaboration with Kurt Siggard, executive director of Concrete Masonry Association of California and Nevada. Professional masons from the Utah Masonry Council assembled the prisms with the help of research assistants. The use of cement replacement materials would improve the competitiveness and sustainability of concrete masonry construction. A total of 600 masonry prisms have been constructed and are being tested to determine if code required minimum masonry strength is maintained with high levels of supplemental cementitious materials. Read More.

# California Company Aims to Produce Ecofriendly Cement

California company Calera is working to engineer a cement that cuts down on carbon dioxide emissions by power plants. The process uses smokestack emissions from a nearby power plant to form a limestone precipitate that results in cement that has the same properties as Portland cement. Calera says the process will be affordable, and the company is expanding production and preparing to receive feedback from the concrete industry. Check it out at <u>Green Building Elements</u>.

# **Concrete Made from Inorganic Waste, PCB** 30

A researcher in Vietnam has developed "innovatively cheap and highly practical" concrete and bricks. They're made from nylon, gravel, rubble, and wood chip waste mixed with portland PCB 30 sand. They are lighter and more environmentally friendly than traditional brick and concrete. Read more at <a href="Saigon Giai Phong">Saigon Giai Phong</a> (Vietnam).

## Concrete JSI Industry Trends Report Available

The most recent edition of the Concrete JSI Industry Trends Report includes information on the Supreme Court dismissing climate change nuisance suit, proposal of a transportation bill, fly ash bill moving out of subcommittee, and more. You can obtain the current Reports plus past archives under "Green Resources" at http://www.concretejsi.com.

# **GREENING YOUR BUSINESS**

### How to Shrink Your Vehicle Fleet's Footprint Greening your company's vehicle fleet can be an effective way to go green while reducing fuel and



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maintenance costs, experts say. Picking the right alt-fuel for your specific applications is crucial, but it's also possible to make serious savings by opting for smaller vehicles, running trucks at belowmaximum capacity, or simply educating drivers about safe, efficient driving practices according to this **GreenBiz.com** article.

# **How 7 Companies are Creating Shared** Value and Profiting

Seven companies in Cincinnati have joined together to create the Greater Cincinnati Green Business Council. At regular meetings, council members share best-practice ideas in the areas of water use and reuse, energy-efficient lighting, and other sustainability efforts. The group focuses on environmental sustainability at work and in the community. Read more at The Oxford Press (Ohio).

#### 6 Key Sustainable Procurement Trends

Procurement is becoming an increasingly important part of many companies' CSR strategies, writes Dave Meyer at ValueStreaming blog. The use of smart, decentralized procurement systems and savvier risk-management protocols should help spur that process. "We may be at a sustainable procurement 'tipping point,'" Meyer argues.

# Unilever's Low-Carbon Strategy is Paying Off, says CEO

Unilever has slashed its carbon dioxide emissions by 40% over the past 10 years by building carbonneutral factories and eliminating emissions from entire product lines, says CEO Paul Polman. The company's low-carbon strategy has paid off in cost savings and in the loyalty it generated among consumers and workers. "Be it in cost, be it in product development, be it in employee engagement, we see benefits across the value chain," he said in this YouTube/TheCarbonTrust video.

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