

# The Masonry Society

## *Sustainability E-News*

*Fire and Resilience*

August 31, 2020

Volume 12, Number 16

### SPONSORED EDITION

#### From The Editor

I compiled most of the articles for this edition before the fires broke out on the west coast of the U.S., so it's coincidental that several of them relate to fire and resilience, but it's also a reminder of the importance of *rebuilding better* after such disasters. It's also important to note the inherent fire-resistant nature of masonry. While the building codes recognize many types of fire-rated walls, masonry walls are one of the few that are truly non-combustible and make an excellent choice for fire-resilient designs.

Christine "Tina" Subasic, PE, LEED AP  
CSubasicPE@aol.com

*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

##### **How to aim for resilience against fire**

##### **CONSULTING-SPECIFYING ENGINEER**

Historic events, most notably the Great Chicago Fire of 1871, provide important lessons on how to achieve greater urban resilience against fire with codes and standards, writes Mackenzie Hill, a senior fire protection engineer at Arup, in [this article](#). Hill explores issues addressed by codes, how they relate to other hazards and how such factors are embraced in the new City Resilience Index.

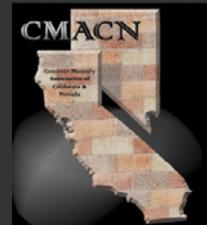
##### **California towns rebuild after wildfires with resilience in mind**

##### **ENR.COM**

Given that new wildfires are happening in the West, we are looking back at [this story](#) from last year. The story highlights efforts to rebuild following wildfires using more resilient construction. These efforts include building hardening structures to meet California's wildfire-urban interface building code, which requires fire-resistant materials and reduced landscaping in high fire hazard areas.

#### TMS's Sustainability E-Newsletter Sponsors

##### Platinum Level



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

## FEMA webinars on grant opportunities

### FEMA

Recently, FEMA announced the FY2020 [Notification of Funding Opportunity](#) for the new Building Resilient Infrastructure and Communities (BRIC) pre-disaster mitigation grant programs. BRIC provides a significant \$500M in new grant funds that are available to state, local, tribal, and territorial governments to invest in cost-effective, risk-reducing disaster mitigation and resilience projects. FEMA is offering a series of informational webinars about this opportunity. Find out more information and register [here](#).

## Naval Station Great Lakes' Barracks foundation and facade take shape with robotic help

### MASONRY MAGAZINE

The foundation and façade components of the Naval Station Great Lakes (NSGL) new barracks project were vast —approximately 166,000 square feet. The mason contractor opted to use a new oversized unit. The 8" x 8" x 32" dimensions of this new unit offered an opportunity to dramatically speed up installation by reducing the number of blocks to be installed. While fewer units were needed, the 70 pounds + CMUs would require much more strength to maneuver, which could have equated to increased labor costs and extended time. To solve this challenge, several Material Unit Lift Enhancers (MULEs) specifically designed to facilitate the manipulation of large block, were used. [Read more](#).

## CODES and STANDARDS NEWS

It's nice to see some legislation introduced that looks at rebuilding better after natural disasters. ~Tina

## Disaster Savings and Resilient Construction Act introduced

### INSIDERNJ.COM

Earlier this month, U.S. Reps. Bill Pascrell, Jr. (D-NJ-09), Tom Reed (R-NY-23), Peter DeFazio (D-OR-04), and Mario Diaz-Balart (R-FL-25) introduced the Disaster Savings and Resilient Construction Act (DCRA). This legislation will create a \$3,000 tax credit for homes and a \$25,000 tax credit for businesses to help their owners rebuild after natural disasters. This bipartisan legislation will incentivize home and business owners to build or rebuild after a natural disaster to higher standards by establishing a tax credit for resilient construction. [Read more](#).

## GREEN PRODUCT NEWS

Despite masonry units being among the oldest known building products, there's always still room for innovation. Check out the first two articles below for some of latest innovative ideas. ~Tina

## Storing energy in clay bricks

### WASHINGTON UNIVERSITY OF ST. LOUIS

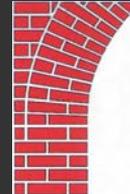
Brick has been used in walls and buildings for thousands of years, but rarely has been found fit for any other use. Now, chemists in Arts & Sciences at Washington University of St. Louis have developed a method to make or modify "smart bricks" that can store energy until required for powering devices. Julio D'Arcy, assistant professor of chemistry, and colleagues, including Washington University graduate student Hongmin Wang, first author of the new study, showed how to convert red bricks into a type of energy storage device called a supercapacitor. [Read more](#).



International Masonry  
Institute\*\*\*



Mason Contractors  
Association of America \*\*



Western  
States Clay  
Products  
Association  
\*\*\*

Gold Level



Masonry  
Institute  
of  
America

\*\*\*



Portland  
Cement Association \*\*

Silver Level



Southeast Concrete Masonry  
Association \*



Spec Mix \*\*  
Bronze Level

## North Carolina State University takes first place in National Unit Design Competition

[NCMA.ORG](http://NCMA.ORG)

Four college teams presented their unique, fresh concrete masonry unit designs at the [2020 Unit Design Competition](#) (UDC) during NCMA's virtual Midyear Event. The UDC provides the opportunity for students to create a new, innovative concrete masonry or hardscape units to meet specific needs or provide a new way to use concrete masonry. An architect, mason, structural engineer and manufacturing specialist reviewed and scored the designs and the results were announced during the first-ever virtual UDC. Each team provided a multimedia presentation about their block design. The team of Joshua Albert and Clayton Johnson from North Carolina State University took the top prize over second place Mississippi State, third place Iowa State and honorable mention Ball State.

## Thin Brick Fire Test Update

[BRICK INDUSTRY ASSOCIATION \(BIA\)](#)

BIA reported that fire testing to determine the fire resistance rating and fire propagation characteristics of a thin set thin brick veneer wall assembly that used a polymer modified mortar had been completed at Intertek Laboratories in York, Pennsylvania. The test results demonstrated that the wall assembly achieved a 1-hour fire resistance rating on both the interior and exterior sides of the wall and limited fire propagation. A Summary Fire Test Report and Engineering Analysis Report on the test is available [here](#).

## EDUCATIONAL NEWS

**Lap Splice Webinar, September 10 @ 1 pm ET**

**Register Now!**

[THE MASONRY SOCIETY](#)

Ed Huston, PE, SE, will present this informative webinar related to determining required lap splice length and how to possibly reduce those lengths by providing transverse reinforcement across the laps. He will review requirements in the 2016 TMS 402/602 and the 2018 International Building Code. For more information, or to register, [click here](#).

## 14th Canadian Masonry Symposium website live

Planning is underway for the 14th Canadian Masonry Symposium (CMS). The Symposium will be May 16-19, 2021 in Montreal, Canada. The CMS is Canada's eminent gathering for masonry related technical topics and fields of inquiry and attracts national and international experts on the design, construction, behavior and performance of all things masonry. Abstracts are due from authors by October 5, 2020. More information can be found on their newly launched [website](#).

## 2022 Masonry Symposium: Advancing Masonry Technology

[ASTM.ORG](#)

[Papers are invited](#) for the 2022 Masonry Symposium to be held on Tuesday, June 14, 2022 at the Hyatt Regency Seattle, Seattle, WA. The Symposium is co-sponsored by ASTM Committees C01 on Cement, C07 on Lime, C12 on Mortars and Grouts for Unit Masonry (Lead Committee), and C15 on Manufactured Masonry Units. The objective of the symposium is to gather and disseminate the latest information on all aspects of the innovations in masonry materials, design, specification, construction, maintenance, and rehabilitation.

To Subscribe, click [here](#).



ACME Brick \*\*\*



Cast Stone Institute \*\*\*



Nelson Testing Laboratories \*\*



Northwest Concrete Masonry Association \*



Pennsylvania Concrete Masonry Association \*\*\*



Masonry Institute of Washington

## TMS Sustainability E-Newsletter Sponsors

Click on the links above 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:

- \*\*\* Sustaining Member
- \*\* Affiliate Member
- \* Individual Member

To Sponsor, click [here](#).



Advancing the Knowledge of Masonry  
[www.masonrysociety.org](http://www.masonrysociety.org)

Please note: Your email address is from a list solely owned and maintained by The Masonry Society (TMS) for our exclusive email purposes. If you are a TMS Member, participate in a TMS Committee, or have requested TMS mailings, your email is essential to your membership, committee participation (including virtual meeting announcements and ballots), delivery of various TMS e-publications, and meeting/seminar announcements. Unsubscribing through our email sender, Constant Contact, will block all emails from TMS. If you would like to specify what type of emails you would like to receive from TMS, have questions about our email policy, or would like to subscribe to our newsletters, please contact TMS directly at [info@masonrysociety.org](mailto:info@masonrysociety.org). To view the TMS Privacy Policy, click [here](#).

Interested in becoming a  
Newsletter Sponsor?

Contact [TMS](#) for more information on becoming a Sustainability E-Newsletter Sponsor and having your organization's logo appear before thousands of subscribers.

The Masonry Society | 105 South Sunset Street, Ste. Q, Longmont, CO 80501

[Unsubscribe\\_jc@masonryinstitute.org](mailto:Unsubscribe_jc@masonryinstitute.org)

[Update Profile](#) | [About our service provider](#)

Sent by [tmsmeetings@masonrysociety.org](mailto:tmsmeetings@masonrysociety.org)