### **The Masonry Society**

## Sustainability E-News

Green Building Trends

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### From The Editor

An often-quoted statistic in sustainability that you've probably heard more than once is in the U.S., buildings account for 40% of all carbon emissions. Well, according to the first article below, the latest data shows that number has actually dropped to 35% in 2019. That's good news and reflects changes in energy sources and the improvements being made in new building construction. However, about half of all commercial buildings were built before 1980, leaving lots of room for retrofit and upgrade improvements. And while upgrading existing buildings is certainly more challenging than new construction, it also offers some of the biggest payback opportunities.

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### **GREEN BUILDING NEWS**

The news in this section all points to continued progress in new building construction. Whether in the residential or commercial markets, new buildings are embracing strategies that are resulting in more energy-efficient and sustainable buildings. ~Tina

# Adapting buildings for greater resilience and lower carbon

#### **BUILDING ENCLOSURE ONLINE**

According to the <u>latest annual figures from the U.S Energy Information Administration (EIA)</u>, the residential and commercial sectors—or buildings sector—accounted for 35 percent of total U.S. energy-related carbon dioxide (CO $_2$ ) emissions in 2019. (No longer 40 percent as commonly reported.) In fact, due to the aggregate effect of a variety of factors, the total annual energy-related CO $_2$  emissions in the U.S. dropped across all sectors to the effect of 151 million metric tons of carbon (or 3 percent). Read more.

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### Top Green Building Trends and Features in Homes

Energy efficiency is a primary driver in home buyer preferences, according to research from the National Association of Home Builders (NAHB). NAHB surveyed more than 3,000 home buyers, both recent and prospective, on the types of features they prefer to have in their home, including eco-friendly components and designs. "There are a wide range of green features that buyers feel are desirable," noted Paul Emrath, Ph.D., VP of surveys and housing policy research at NAHB. "Energy efficiency, though, tops the list of what they most want." The majority of buyers prefer to go green when provided the option, including incorporating passive solar design (60%) and durable materials (66%) into their homes. Read more.

### Top 10 states for LEED in 2020

**USGBC** 

The U.S. Green Building Council (USGBC) released its annual list of the Top 10 States for LEED green building with Massachusetts leading the country in 2020 with the most certified square feet per capita. Across the top states, more than 60% of certifications were office, healthcare, higher education and K-12 projects. This year, USGBC also released a ranking of states with the most LEED professionals with California taking the top spot. Collectively, the 2020 rankings represent 1,171 certified LEED buildings and spaces, and more than 100,000 green building workers.

#### **CODES and STANDARDS NEWS**

The efforts in California to look at measures to improve existing homes against threats from wildfires is a needed step. Adoption, enforcement, and voluntary use of the International Urban Wildland Interface Code (IUWIC) is another key element in protecting people and property. Several western states have not adopted these requirements. ~Tina

# Calif. crafting standards to harden homes against wildfire

#### **ASSOCIATED PRESS**

California Gov. Gavin Newsom and the state Department of Insurance said they will develop standards and incentives for retrofits that harden existing homes against wildfires. This article indicates further research is necessary because of the complexity of wildfire mitigation.

### Group releases code to help achieve net-zero buildings CONCRETE PRODUCTS

The New Buildings Institute (NBI) has released a Building Decarbonization Code to guide construction of net-zero buildings. "Many jurisdictions have aggressive climate-related goals, and over 200 cities have made pledges to achieve 100 percent clean energy or 'net zero' emissions," says Kim Cheslak, director of codes for the NBI in this article. This overlay code is designed to work with the 2021 International Energy Conservation Code (IECC) and focuses on electrification technologies, rather than energy efficiency.

#### NIBS seeks US standard for BIM

#### **CONSTRUCTION DIVE**

The National Institute of Building Sciences (NIBS) has a volunteer standard for building information modeling but aims to firm this up with a US standard, similar to one in the UK. Forty participants, including representatives of Autodesk and Bentley, recently joined a NIBS roundtable to discuss the issue. Read more.



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# **CSI, ASTM** integrate standards in platform **PAINT SQUARE**

The Construction Specifications Institute (CSI) and ASTM International have finalized an agreement to link CSI's Uniformat standards and ASTM's E1557 standards within Crosswalk, a web service of the CSI-owned Construction Information Network, LLC, and a platform that integrates CSI classifications into construction technology. Read more <a href="here">here</a>.

### **GREEN PRODUCT NEWS**

The Brick Industry Association shares recent research that quantifies the energy-savings benefits of brick veneer in the first article below. The second article features a less common masonry unit (AAC) that provides great fire-resistance and insulating properties. ~Tina

# Energy savings of up to 50% from brick wall system demonstrated by research

#### **GOBRICK.COM**

Use of traditional clay brick as a wall cladding results in energy savings of up to 50% according to a groundbreaking study by NBRC. The study showed that, in evaluating the dynamic thermal performance of brick in a typical wall assembly, brick outperformed other wall systems in real-life performance. The result was a saving of up to 50% in energy usage. Information is available for <u>residential construction</u> and <u>commercial construction</u>.

# Habitat for Humanity to build fire resistant homes in Calif.

#### **KRCR-TV**

Habitat for Humanity plans to build three concrete homes in Paradise, Calif., designed for fire resistance after several homes were destroyed by fire in 2018. Construction of the 900-square-foot homes will rely on insulated autoclaved aerated concrete (AAC) blocks. This video shows the homes under construction.

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