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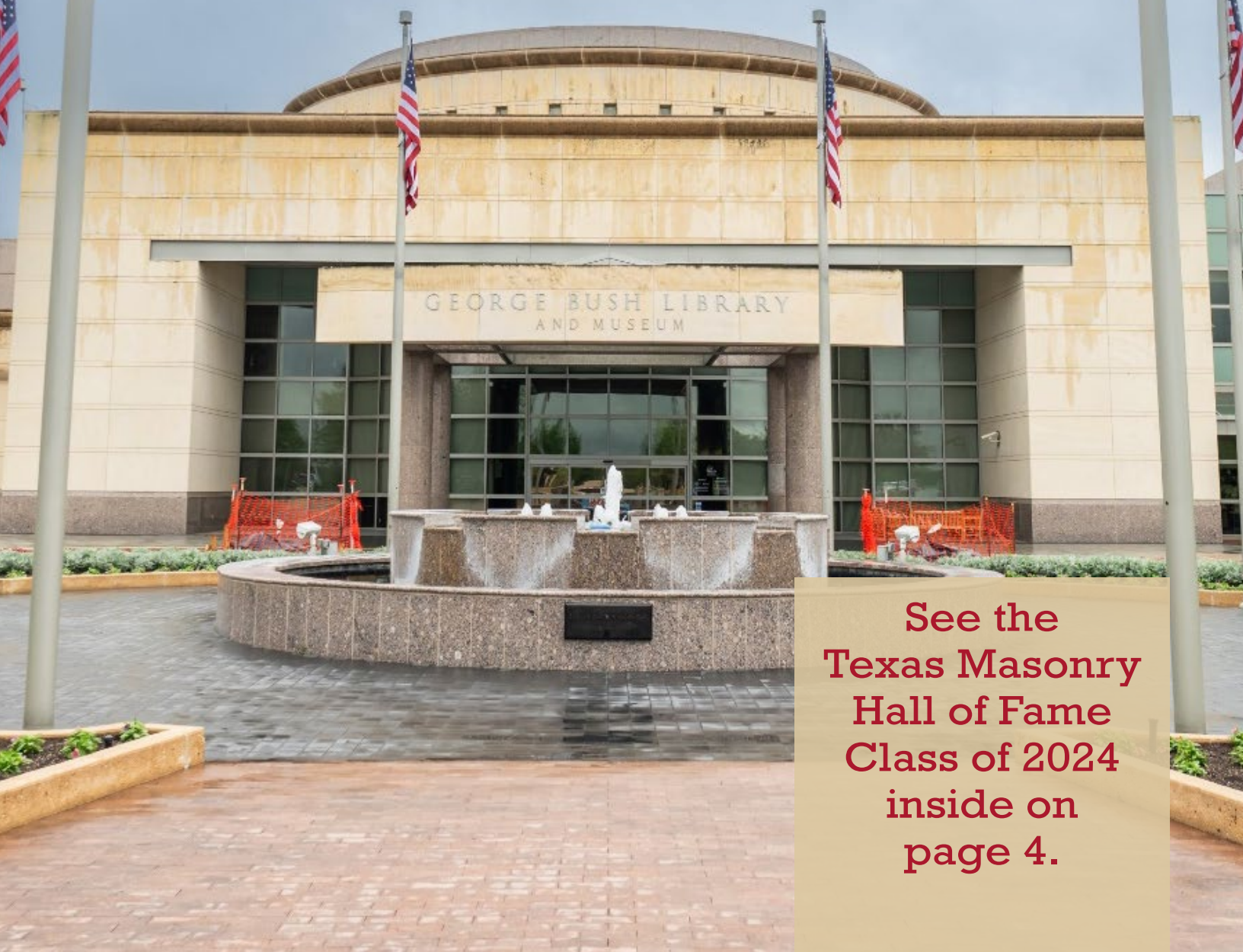
The Masonry Magazine of Texas

Volume 28, No. 2

Spring 2024

George H.W. Bush Presidential Library and Museum, College Station, Texas

Site of the Texas Masonry Hall of Fame held March 21, 2024

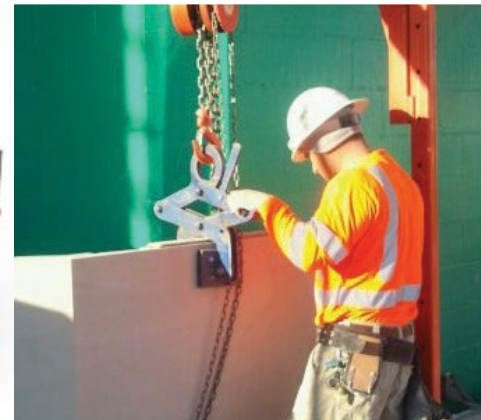


See the
Texas Masonry
Hall of Fame
Class of 2024
inside on
page 4.

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In This Issue:

2024 Texas Masonry Hall of Fame Inductees	4
Retirement Announcements	9
Understanding Environmental and Health Product Labels for Natural Stone	10
TMC New Members	12
Acme Brick Company Celebrated its 133rd Birthday	13
BioLime bridges Antiquity and Modernity with Roman plasters expertise	15
American Treasure: Mission Concepción	17
Masons First with Lightweight Concrete Masonry Units	18
Construction Law	20

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The Texas Masonry Hall of Fame

A Note From The Texas Masonry Staff and Board of Directors:

The Texas Masonry team was delighted to host our inaugural Hall of Fame dinner and induction ceremony to celebrate the rich heritage of masonry in Texas and honor those who helped shape it.

As we honored the five inductees, all of us took a moment to recall others who also made a lasting impact in and on the industry. Our inductees and many others helped lay the foundation for regional and state success in our current initiatives, have developed a legacy of paying it forward with the companies helping our organization today, and have significantly impacted us personally.

The Texas Masonry Hall of Fame 2024 Inductees have inspired change, taken action, influenced the industry, and served as mentors to those who followed them. We congratulate them on their achievements.



Paul Odom

Artistic Visionary and Advocate

Inaugural Inductee into the Texas Masonry Hall of Fame

Known affectionately as the "artistic manipulator of the burnt clay product," Paul has elevated the craft of masonry to an art form, sharing his profound passion and innate skill with countless individuals throughout his illustrious career.

Paul's journey in the world of masonry is marked by a deep-seated commitment to nurturing the trade. Recognizing the critical importance of association work in furthering the industry, Paul has been at the forefront of legislative and workforce initiatives, ensuring the voice of masonry is heard and its value recognized. His presence was a familiar and respected sight, whether he was traversing the halls of the capitol or providing hands-on guidance at Masonry Day events. His dedication to advocating for the next generation has ensured that the timeless art of masonry remains vibrant and evolving; his passion for the craft became the very essence of his legacy.

In his roles as President of both the Central Texas Mason Contractors Association and the Texas Masonry Council, Paul has exemplified what it means to lead with integrity, foresight, and a collaborative spirit. His tenure as Chairman of the Mason Contractors Association of America further solidified his reputation as a transformative figure in the industry. Notably, Paul's instrumental efforts in the establishment of the Concrete Masonry Checkoff Program have marked a significant milestone in the advancement of the trade, fostering innovation and growth across the masonry sector.

Inducting Paul Odom into the Texas Masonry Hall of Fame is not only a celebration of his exceptional service, artistic mastery, and robust advocacy but also a recognition of his profound influence on the industry. His legacy is etched in the very structures that stand as monuments to his skill and in the hearts of those he has mentored and inspired.



Paul L. Yeatts

Craftsmanship – Mentorship – Fairness

Inaugural Inductee into the Texas Masonry Hall of Fame.

Revered for his unwavering commitment and fairness, Paul's influence spans the greater Houston area and beyond, casting a long shadow of excellence and respect in the masonry community.

His unparalleled dedication to the craft of masonry was not only recognized by his peers, but also celebrated when he was bestowed with the prestigious Apex Award for Outstanding Craftsmanship by the American Institute of Architects (AIA). This accolade stands as a testament to the exceptional skill, meticulous attention to detail, and artistic finesse that Paul brought to every project he touched.

Paul's legacy extends far beyond the accolades and the magnificent structures he helped create. His true passion lay in nurturing the flame of craftsmanship in others. Through apprenticeship programs and his influence in Local No. 7 of The Bricklayers and Allied Craftsmen, Paul became a mentor and a guiding light to the next generation of masons. His wisdom, experience, and encouragement have been the cornerstone of many burgeoning careers, ensuring the art and science of masonry flourish well into the future.

In his leadership positions as President of the Associated Masonry Contractors of Houston and of The Associated Masonry Contractors of Texas, Paul exemplified what it means to lead with integrity. His guidance and inclusive approach significantly enriched the masonry trade, fostering a spirit of collaboration and mutual respect that has elevated the entire industry.

As we honor Paul, we celebrate not just a career marked by achievements and artistry, but a life dedicated to craftsmanship, mentorship, and fairness. Paul's imprint on masonry will forever be cherished and revered, inspiring generations of masons to uphold the standards of excellence and integrity he embodied.



Robert V. 'Buddie' Barnes, Jr.

A Legacy Carved in Stone

Inaugural Inductee into the Texas Masonry Hall of Fame

Buddie's induction into the Texas Masonry Hall of Fame is a tribute to his monumental contributions and unwavering dedication to the art and science of masonry. With a career that spans decades, Buddie's influence resonates through every corner of the industry, marking him as a true pioneer and guardian of our craft.

His passionate commitment is evident in every layer of his work. From authoring comprehensive manuals that serve as the cornerstone for his company's operations to serving on numerous industry technical committees, Buddie has been a bedrock of innovation and excellence in masonry construction.

Buddie's tenure on the board of the Associated Mason Contractors of Texas, including his presidencies in 1983 and 1993, is marked by visionary leadership and an unwavering commitment to the advancement of the industry. His guidance during these years has sculpted the landscape of the industry, fostering a community of excellence, integrity, and innovation.

Buddie's involvement in the industry reaches far and wide serving on the Mason Contractors Association of Dallas, Associated Mason Contractors of Houston, and has been active with the Mason Contractor Association of America since 1977, ultimately receiving MCAA's "Leadman Award" in 2012 and being inducted into the MCAA "Hall of Fame" in 2016.

As we enshrine Buddie into the Texas Masonry Hall of Fame, we celebrate not just the milestones of his career but the enduring impact of his work. His legacy is not just in the structures that stand testament to his skill but in the unbreakable bond he has forged within the masonry community. Buddie's name is synonymous with excellence, leadership, and an undying passion for masonry construction, making him a true luminary in our Hall of Fame.



Lynn & Rickey Skinner

Pioneers of Masonry Excellence

Inaugural Inductee into the Texas Masonry Hall of Fame

The Masonry Hall of Fame proudly welcomes Lynn & Rickey Skinner as esteemed inductees, honoring their monumental contributions to the masonry trade in the Dallas-Fort Worth region and beyond. The Skinner duo has not only laid a foundation of excellence but has also been pivotal in ensuring the trade's thriving continuance and prosperity.

Lynn & Rickey Skinner have been unwavering in their commitment to fostering growth and enlightenment within the masonry community. Recognizing the paramount importance of education and mentorship, they have dedicated themselves to nurturing the next generation of masons. Their visionary approach has been instrumental in shaping adept professionals, ready to carry forward the rich legacy of the craft.

Their inclusive philosophy has been the bedrock of their success, creating an environment where every company, regardless of its size, feels welcomed and valued. This approach has not only fortified the masonry community but has also been crucial in establishing a robust and competitive market in the region.

The legacy of Lynn & Rickey Skinner transcends the bounds of professional mentorship; it is a testament to their ability to connect, guide, and inspire individuals across the spectrum—from seasoned professionals to budding apprentices.

As we immortalize Lynn & Rickey Skinner in the Texas Masonry Hall of Fame, we celebrate their unparalleled dedication, their visionary leadership, and their profound impact on the masonry trade. Their names will forever be synonymous with excellence, unity, and the relentless pursuit of elevating the craft to new heights.

Acme Brick Company Retirement Announcements



Mark Burden began his career at Acme Brick in 1985 as a sales trainee in Acme's Lubbock Sales office, where he mastered his sales skills until 1991. He was then promoted to Branch Sales Manager in Midland, Texas, and served this market until 2001. Mark was promoted again to District Sales Manager of Temple/Waco Sales. In 2005, Mark became the Commercial Sales Manager of the important Dallas/Fort Worth office.

Mark's friendly demeanor and commitment to customer care and service over his 33-year career have served Acme Brick well in every market where he has represented Acme.

Acme Brick Company is the nation's largest American-owned brickmaker. Acme owns 15 brick plants and has over 50 company-owned sales offices across 13 states, plus a nationwide network of independent distributors. The company has been in business since 1891.

Acme has been a wholly owned subsidiary of Berkshire Hathaway, Inc. since 2000. For more information, visit www.brick.com.

For more PRESS information, contact Ron Taylor (817) 874-8206 or ashleytaylorpr@gmail.com.

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Understanding Environmental and Health Product Labels for Natural Stone

Natural stone has a great reputation for environmentally friendly qualities such as its durability, low embodied energy, no volatile organic compounds (VOCs), and being a nearly complete material in its natural state. Mother Nature does most of the work, making natural stone a single ingredient material suitable for many interior and exterior applications that perform impeccably over time. Most other building materials require additional ingredients and a more complex manufacturing process. Because these added materials and processes can have a negative impact on our health and the environment, they should be considered when selecting a material for a project.

Different manufacturing processes and impacts of building materials are being documented in product labels including Environmental Product Declarations (EPDs) and Health Product Declarations (HPDs). These labels are intended to demonstrate that the health and environmental claims are transparent, accurate, and meet defined standards. These labels can then be used to select and specify building products like natural stone to ensure the well-being of a project's occupants and the planet.

The terms “natural” and “environmentally sustainable” do not mean the same thing. These product labels are significant for the stone industry. They provide independent data to show how using natural stone in projects can support lower embodied carbon goals, providing specifiers with the information needed to make more effective material decisions. These labels also reinforce the important work the natural stone industry has been doing for many years to improve the processes of quarrying, fabricating, transporting, and installing natural stone, which are assessed through the Natural Stone Sustainability Standard.

EXPLAINING PRODUCT DECLARATIONS FOR NATURAL STONE

EPDs and HPDs were developed in response to the growing green building movement and requirements that a product's life cycle impacts are defined and transparent. Just like nutrition labels make it easy to compare ingredients, calories, preservatives, and other information about food products, EPDs and HPDs simplify the process of comparing building materials. The labels themselves do not necessarily tell you if a product is more environmentally friendly than another on their own— rather, they allow you to compare materials using the information provided in the labels to get a more complete understanding of their sustainability claims. To understand this better, let's discuss these labels in more detail and consider how to use them in your next building or remodeling project.

EPDS

An EPD is a registered document that quantifies environmental information on the life cycle of a product to enable comparisons between products fulfilling the same function. EPDs define the environmental impacts throughout the product's life cycle. Impacts that are recorded and provided in an EPD include: a product's global warming potential, eutrophication, acidification, ozone layer depletion, whether the product contains carcinogens, and many others. An EPD may be used for many different applications, including green building design. For example, within LEED, BREEAM, and other green building rating systems, EPDs are used to encourage the purchasing of low carbon products with life-cycle information. Industry-wide natural stone EPDs are available for cladding, flooring/paving, and countertops, making it possible to meet health and environmental goals for any type of project with ease. The natural stone EPDs consider impacts that occur during the quarrying, fabrication, installation, care and maintenance, and disposal of the stone.

HPDS

HPDs offer greater transparency of material ingredients and their potential human health impacts. HPDs provide a full disclosure of the potential chemicals of concern in products by comparing product ingredients to a wide variety of “hazard” lists published by government authorities and scientific associations. The HPD should provide 100% disclosure of known ingredients and/or 100% disclosure of known hazards down to 1,000 ppm. All versions of the HPD are recognized within LEED v4 Material Ingredient credits. Within the LEED v4.1 Materials and Resources credit: Building Product Disclosure and Optimization: Material Ingredients, HPDs can also contribute to earning points. Through a special exception for geological materials, HPDs representing dimension stone materials worldwide were developed by the Natural Stone Institute. The HPDs are for common natural stone types used in the dimension stone industry including granite, limestone, marble, quartzite, onyx, sandstone, slate, travertine, and more. There are now 13 HPDs for natural stone that can be found in 15 different MasterFormat classifications, a trusted source for designers. Companies and design teams throughout the industry can take advantage of these industry-wide disclosures.

NATURAL STONE VS. OTHER MATERIALS*

Let’s compare natural stone to a few other building materials to understand how stone stacks up within these product labels. For example, natural stone countertops were determined to have a global warming potential (GWP) of 46.8kg of CO₂e/m² (weight of carbon dioxide equivalent emitted per square meter) versus engineered quartz, which has a GWP of 102.6kg of CO₂e/m². The EPD demonstrates that natural stone can result in a 54% reduction of embodied carbon.

If you are considering natural stone for the exterior of a project, knowing that its GWP is only 21.4kg of CO₂e/m², versus precast concrete cladding which has a GWP of 62.3kg of CO₂e/m², makes the decision much easier. Choosing natural stone means that your project can have up to 66% less of an impact on the Earth.

While terrazzo is a popular flooring material, it has been shown to have a GWP of 82.2kg of CO₂e/m² versus natural stone which has only 22kg of CO₂e/m². Using natural stone for this same application can support a 37% embodied carbon reduction.

The HPD for marble demonstrates that only marble is present in the material. If you compare that to an HPD for a wood laminate, there are additional ingredients present such as phenol formaldehyde and formaldehyde resin. Exposure to these products is known to irritate the skin, throat, lungs, and eyes. Repeated exposure to formaldehyde can possibly lead to cancer.

HOW TO USE EPDS AND HPDS

To begin, make it a priority to select materials that will have a measurable positive difference on your health and the environment such as natural stone. Explore the EPD and HPD labels and familiarize yourself with the terms to effectively make comparisons across different materials. Spend time discussing the various material impacts and options with your designer, material supplier, and installer to optimize the features of the material while also ensuring its long-term use and care. Knowing that you have chosen an environmentally sustainable material will keep you and the planet healthy while also contributing to your peace of mind.

Natural stone has been used throughout history in iconic structures that symbolize beauty, strength, durability, and permanence. Other materials may strive to mimic these characteristics, but genuine natural materials connect us with the planet and its future in a unique and undeniable way. EPDs and HPDs will only serve to further the thoughtful use of natural stone in environmentally friendly, low carbon building designs for many years to come.

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Note From TMC Membership Coordinator, Cori:

Our membership process has moved online!

To make joining and renewing the most convenient for all we have transferred our membership form to our website and can be found at <https://texasmasonrycouncil.org/membership-signup/>

With any questions on joining or TMC you can reach us at info@texasmasonrycouncil.org

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Acme Brick Company Celebrated its 133rd Birthday on April 17th

Acme Brick Company celebrated its 133rd year in business on April 17, 2024, only three days after National Brick Day on April 14th.

Acme had its humble beginnings on April 17, 1891, on the banks of Rock Creek, near the town of Millsap, about 40 miles west of Fort Worth, Texas. The company has grown to become the largest U.S.-owned brick manufacturer in the world.



Acme's new President and CEO, Ed Watson, said, "We are so thankful for our great customers who continue to see the value of building with brick and the other materials that we manufacture and distribute. A company can achieve such a milestone only because of our customers and the generations of dedicated Acme associates who have believed in their company and its products."

In honor of Acme's 133rd birthday, all associates received a BBQ set consisting of an apron and spatula bearing the Acme logo. Birthday gifts were



presented at all Acme plants, offices, and showrooms during birthday celebrations.

Acme residential and commercial masonry products are available throughout the United States and southern Canada. During its history, the company has produced brick for well over three million homes and many thousands of commercial, civic, and educational buildings. Today, Acme showrooms offer many other home-related building products.

Acme remains the only brick manufacturer that stamps its logo on residential brick products and guarantees them for 100 years.

Today, Acme operates 15 brick plants across the Southwest and Southeast United States, as well as three concrete-block plants operating under the name Featherlite. These and other products are sold through over 50 company-owned sales offices/showrooms across 13 states, plus a nationwide network of independent distributors. Acme Brick Company has been a wholly-owned subsidiary of Berkshire Hathaway, Inc. since 2000. For more information, visit www.brick.com.

Follow Acme Brick on Facebook and Instagram to stay updated with our latest products, insights, and company news:

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BioLime bridges Antiquity and Modernity with Roman plasters expertise

From Rome's Colosseum to the pyramids of the Mayans, ancient architecture has not only withstood the test of time but also provided invaluable lessons in durability and sustainability.

Far from being mere ruins or tourist attractions, these structures, which have stood for millennia, are testaments to advanced construction techniques that modern construction is now keen to integrate.



The Roman Connection: A Testament to Durability and Innovation

The impressiveness of Roman architecture – epitomized by historical buildings like the Colosseum, Pantheon, and the ruins of Pompeii – is not merely a function of aesthetic design but also of advanced construction techniques.

“The Romans offer an extraordinary lesson in the longevity of construction materials. Their structures have survived for centuries, not merely as ruins but often as functional buildings”, says MIT professor Admir Masic. In particular, Roman concrete has fascinated scientists for its remarkable ‘self-healing’ abilities.

The Romans devised a unique formula for their concrete called “pozzolana.” The concoction consisted of a blend of lime, water, and volcanic ash, primarily sourced from the region around the Bay of Naples. Thanks to its composition, the material had a unique ability to ‘self-heal’, which could interact with the natural environment to form additional cementing compounds.

In essence, the material would repair itself, sealing small cracks and imperfections that could otherwise compromise the integrity of the structure. This self-healing capacity contributes significantly to the long-standing durability of Roman structures like the Colosseum, aqueducts, and ancient basilicas.

The ingenuity didn't stop at self-healing properties. As they did in most of their endeavours, Roman engineers dug deeper, realizing the importance of using different grades of concrete for different architectural elements. For instance, the Romans used a unique blend that made them remarkably resilient against erosion. Harbour structures, aqueducts, and cisterns were constructed using this hydraulic lime blend.

Their advanced understanding of materials science enabled them to create monumental buildings that have not just survived but often thrived for centuries.

The Mayan Revelation

On another continent, separated by both time and ocean, the Mayans were accomplishing equally fascinating feats in engineering. Though less famed for megastructures like the Colosseum, the Mayans created intricate pyramids, plazas, and palaces that have withstood Central America's hot and humid climate for centuries.

Scientists from the University of Granada in Spain found the secret ingredient of Mayan plaster: tree sap. It created “insoluble crystalline structures well-suited to surviving central America's hot and humid climate.” The remarkable longevity of Mayan architecture proves their mastery.

“It is important to understand why these ancient Mayan lime-based materials are so durable,” say the authors of the study, “not only to disclose the ancient Mayan masons' technological achievements but also to design, using a reverse engineering approach, new lime-based plasters and mortars for their use in architectural heritage conservation and modern, sustainable construction.”

This ingenious blending of botanical and geological resources allowed the Mayans to build structures that could endure the severe weather conditions typical of tropical rain-forests. Their pyramids, temples, and palaces were not merely ornate; they were made to last.



Uniting Past and Present

In today's era, marred by environmental degradation and the urgent need for sustainable solutions, modern construction techniques are drawing inspiration from these ancient marvels. BioLime, a company known for its expertise in Roman cement lime plasters, represents one such initiative.

"Our products are not mere replications; they are tributes to ancient engineers who paved the way for modern construction. They are as durable as they are environmentally harmonious," says Brian Coia, owner of BioLime. "The durability of ancient materials offers insights into sustainable modern construction. Our company aims to bridge this historical gap."

While modern construction grapples with challenges like climate change, energy efficiency, and sustainability, it's illuminating to realize that some of the solutions lie in the wisdom of the ancients.



In synthesizing the past and present, we don't just preserve history; we create a future that honours the ingenuity of our ancestors. Modern companies like BioLime symbolize this harmonious convergence, promising a revolution in construction materials and a sustainable path forward for the industry.



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American Treasure: Mission Concepción

Words by: Chantelle Ruidant-Hansen,
Park Ranger at San Antonio Missions
National Historical Park

Photos by: Andrew Shirey/NPS



Mission Concepción (Mission Nuestra Señora de la Purísima Concepción de Acuña) was initially established in East Texas as “Nuestra Señora de la Purísima Concepción de los Hainais” in 1716 and moved the mission community to its present site in 1731. The mission was built on the ancestral lands of the Hainai Indigenous group, one of the leading Caddoan groups collectively called the Tejas by the Spaniards.

On March 5, 1731, Mission Concepción was re-founded on the east bank of the San Antonio River, about halfway between the existing missions of San Antonio de Valero (the Alamo) to the north and Mission San José to the south. Indigenous groups from various, primarily Coahuiltecan bands, were brought into the new Queretaran mission. Construction started with temporary adobe-style buildings, and digging of the irrigation ditches or “acequias” was the priority. The adobe buildings were gradually replaced by stone structures from limestone quarried right in front of the mission. This limestone quarry is visible today.

The mission church, built in 1755 and dedicated in 1755, took about 15 years to complete. It appears very much as it did over two centuries ago. Because it was built directly on bedrock, it never lost its roof or integrity. It remains the least restored of the colonial structures within the park and is considered to be the oldest unrestored church in the United States.

Mission Community



The mission is a community and more than a church. During the colonial era, stone perimeter walls fortified the mission. Workshops for

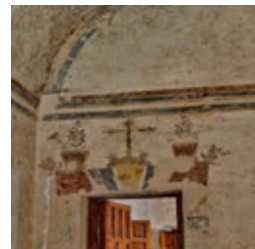
blacksmiths, carpenters, and weavers were busy with activity, and adobe structures lined the walls for the 200 or so Indigenous mission residents. Each mission also had a ranch and farm outside the mission’s limestone walls. The ranch was about 30 miles away and well-stocked with sheep, goats, cattle, and horses. The

mission farmlands were irrigated by miles of ditches, hand-dug by the Indigenous mission residents. The mission’s location off the San Antonio River was vital for survival as the river was the source of irrigation.

Building Materials

Limestone quarried from the banks of the San Antonio River and in front of Mission Concepción was the primary material used to construct the church, perimeter walls, granary, and Convento structure. The Convento is the housing, offices, and library for the Franciscan priests and friars that ran the mission community. Lime kilns heat the limestone to produce plaster and mortar for the mission buildings.

Original Art



Part of its original design, colorful yellow, red, and blue geometric designs covered the church facade over its white lime plaster. The patterns have long since faded or been worn away, but small details are still visible. Original

frescos are still visible inside the church and inside the Convento structure. These bright fresco designs blend Indigenous and Spanish cultures with images of Christian iconography and more native figures, such as the sun.

The five San Antonio Missions, associated irrigation, agricultural features, and Mission Espada’s Spanish-colonial ranch were designated a UNESCO World Heritage site in 2015. This rare honor has been bestowed upon only 24 sites in the United States. The mission is the first and only World Heritage Site in Texas. The church structures within San Antonio Missions National Historical Park are still active Catholic parishes owned and operated by the San Antonio Archdiocese.

For more information, see American Treasure: Mission Concepción – Masonry Magazine

Land and Water Acknowledgement – San Antonio Missions National Historical Park (U.S. National Park Service) (nps.gov)

Masons First with Lightweight Concrete Masonry Units

Words: Kevin Cavanaugh, Expanded Shales, Clay and Slate Institute (ESCSI)

As you all know, the work masons and mason tenders do is physically very demanding. The repetitive lifting and placing of big and heavy natural stones, heavy precast concrete units or heavy concrete masonry units (CMU) is not only physically demanding but will often cause or exacerbate existing injuries. Put simply, masonry is hard work.

Making a mason's task easier seems like an obvious thing to do. Some simple ways to achieve this include using exoskeletons, lifting assistance robots or equipment and lighter and easier-to-manuever CMU. All three of these options come with cost implications that, at first glance, may seem unattractive to mason contractors. However, if the cost to use them is recouped in increased productivity, quicker job completion, fewer lost-time injuries, and reduced workers' compensation claims, why would you not use them?

This article shares some insights into how mason contractors that are using lighter and easier-to-manuever units are also becoming more profitable and improving the morale, safety and health of their employees.

How “Light” are Lightweight Concrete Masonry Units? (Answer – Up to 46% Lighter)

In a typical day, a mason will lift and place concrete block that, in total, weigh about 3.8 tons, or the equivalent of two small SUVs. In a week, this tallies up to roughly seven Ford F350 trucks or 19 tons, and over a year equals two Airbus A380 jumbo jets that can carry 850 passengers and weigh 950 tons! These numbers are based on laying 150 normal weight, 3-web, 12” CMU that typically weigh about 50 lbs., which is an industry norm.

In most parts of the country, this same normal weight block that weighs about 50 lbs. can be made with expanded shale, clay or slate (ESCS) lightweight aggregate and will weigh only 27 lbs. This is an amazing 46% reduction. In terms of lay rates or productivity, this reduction easily allows a mason to lay an extra three block an hour, or about 25 extra block a day, which is a 17% increase in productivity. Plus, there is more good news—the total weight lifted, even though more block are installed, is also 46% lighter.

Conclusion, using lightweight block is a ‘no-brainer’, right? Or, as one of my industry colleagues often said, “Find me a mason that really wants to lay a heavier block.”

While this initial example may make using lightweight block seem like a ‘no-brainer’, there are several roadblocks that stand in the way—the biggest being the perception that lightweight block cost too much. This is not always true. In fact, most of the time, lightweight block ‘walls’, which is what the owner is buying, are less expensive.

Making More Profit Using More Expensive Lightweight Concrete Masonry Units?

Taking a deeper look at a typical masonry contractor's costs and profits reveals that using lightweight block makes a lot of sense. Let's look at a 10,000-block job and a mason contractor in the Great Lakes area that charges \$12.50 a block to install them. The owner or GC's cost is \$125,000 ($12.50 \times 10,000$). The mason contractor is using heavy ‘normal’ weight block. Let's further assume that the mason contractor has a 5/3 crew (5 masons and 3 tenders or laborers) with each mason installing 15 block an hour or 120 block per day and that the crew's fixed cost is \$115/hr per man or \$920/hr for the entire crew. In this example, the crew's cost covers everything the contractor has to pay for including equipment rental, coffee, office space, insurance, wages, etc.

This means the daily cost for this crew is \$920/hr for 8 hours a day or \$7360 per day. Recall, each mason is installing 120 block, or 600 for the entire crew. Based on these numbers, this job should take 16.7 days to complete (10,000 block divided by 600 block per day).

Now, let's see the numbers when mason contractors switch to lightweight block. Each mason installs three more block an hour, going from 15 to 18. The daily total per man is now 144 block, or a crew total of 720 per day. This 10,000-block job should now take only 13.9 days, which is 2.8 fewer days than using the heavier, 'normal' block.

Where's the extra profit? Assume that the lightweight block cost premium is \$1.00, or \$10,000 for the entire job. This extra cost is easily recovered because the initial bid was based on using heavy block and having to cover the crews' fixed cost for 2.8 extra days, which equals \$20,608 (2.8 days times \$7360/day). Deducting the extra cost for the lightweight block from this \$20,608 savings yields an extra profit of \$10,608. The lightweight block cost premium could actually double to \$2.00 per block and the contractor would break even.

The crew gets the job done quicker, all while lifting less and moves on to other jobs and bills other customers—seems like a win-win.

Improved Safety – Lifting Injuries

According to the non-profit Center for Construction Research and Training (CPWR), "Bricklayers (masons and helpers) have the highest rate of back injuries with lost workdays among construction workers." The reasons why are probably not a surprise to any mason contractor. The CPWR identifies four key reasons why:

- Block (or masonry unit) weight
- Frequency of lifting materials and twisting
- Height of work and materials; and
- Distance of work from workers.

Using 46% lighter lightweight block clearly alleviate the first item. Using easier-to-manuever 'next generation block' with fewer and/or thinner webs addresses the second item. Typical next generation block on the market today include two-web CMU that is open on one or both ends.

These are sometimes referred to as 'H-Block' or 'A-Block'. Units with two webs are also lighter. A 12" block with two webs is about 25% lighter than the same unit with three webs. Similarly, a two-web 8" block weighs about 10% less than a three-web 8" unit. These next generation blocks further reduce the weight masons have to lift. Again, I am reminded of what my colleague said, "Find me a mason that really wants to lay a heavier block." Masons do not want to lift heavier units.

Reduced Silicosis Risk

Another not so obvious benefit of using lightweight CMU made with ESCS lightweight aggregates is the reduced exposure to air-borne crystalline silica. ESCS aggregates are made in a rotary kiln where temperature approaches 2000 °F. In this heated environment, the crystalline silica present in the raw shale, clay or slate is converted to an 'amorphous' type of silica that does not cause silicosis. Studies conducted by the Expanded, Shale Clay and Slate Institute (ESCSI) indicate that when lightweight block made with ESCS aggregates are saw-cut, airborne crystalline silica is reduced by up to 83% and are below OSHA's Action Limit. This should come as good news to mason contractors and their employees.

Other Benefits – Architects Like to Specify Lightweight Block, Manufacturers Like to Make Them

Architects like to specify lightweight block because they have better fire resistance ratings, higher R-values (2-3 times higher), excellent acoustical properties and improved seismic performance. They can offer their clients a better wall for little or no extra cost.

Block manufacturers like to make lightweight block because they are easier on their equipment and pallets, and they can deliver more units per truckload, which reduces fossil fuel use. More mason contractors are using lightweight block because they are better for their crews' morale, health and safety, and because using them makes their businesses more profitable.

Construction Law



A COUPLE OF LAWS – AND A TOAST!

Spike Cutler

Attorney Spike Cutler, and the firm of Cutler-Smith, P.C., are staunch advocates for the rights and interests of construction trade contractors. Cutler provides legal counsel to a number of trade organizations, including the Independent Electrical Contractors (IEC) of Texas, IEC- Dallas, IEC – Fort Worth, the Subcontractors Association of the Metroplex ("SAM"), the Texas Masonry Council, the United Masonry Contractors Association of DFW, and the North Texas Stone Fabricators Association. He is also a member of the Attorneys Council of the National Subcontractors Alliance.

Today, I would like to visit with you about a couple of pieces of legislation from the 2023 legislative session that are now in effect and may help you going forward.

CHANGE ORDER HELL

Anyone who's been practicing commercial construction has had that uncomfortable experience of being loaded down with change directives, new work demanded by the general contractor, without the timely issuance of actual Change Orders. We all know it: there's nothing more important to the general contractor than the additional work they want to be performed right now, and nothing less important than issuing a Change Order for that same work – after it's done! A cynic would say the general contractor wants the work for free or to delay payment as long as possible; an optimist might attribute the delay and difficulty in issuance of additive Change Orders to bureaucratic ineptness at the general contractor's office (or "they're all really busy"). The truth usually lands somewhere between these two, but no matter the reason for the delay or reticence in the issuance of Change Orders, they always cost masonry contractors real money to perform – and it hurts.

And let's be honest: who among us hasn't heard the time-worn phrase, "You're holding the job hostage!" in response to a demand for a change order before work is performed? So, you're supposed to trade "hostage work for hostage money?"

The 2023 legislature (before it became "Special Session Hell,") passed House Bill 3485, authored by Representative Keith Bell of Kaufman County, adding very useful language in Subchapter D of Chapter 2251, Texas Government Code. This new "golden nugget" of law provides that if the aggregate actual or anticipated value of additional work plus any additional governmental entity-directed work amounts to 10% of a subcontractor's subcontract amount, and the Subcontractor has not received a valid Change Order for such work, the subcontractor can elect not to proceed with the additive work, and cannot be held liable for damages to the general contractor as a consequence of opting not to proceed.

The bottom line is that if you are receiving a flurry of change directives but no valid Change Orders, you can decline to perform those directives until proper change orders are issued.

This important new law applies to projects beginning on or after September 1, 2023, and to public works projects only. Still, in this author's experience, many of the largest projects and projects with the most change directives are public works projects anyway. So, if you find yourself being "directed" to death, figure out the value of the directives without change orders and be prepared to throw the flag if they add up to 10% more than your contract value as amended by properly issued change orders.

GOVERNMENT WORK DEFECTS AND THE RIGHT TO INSPECT AND CURE

The 2019 legislature crafted a very nice piece of legislation applicable to public works projects, providing that claims of construction defects on public works projects are subject to significant procedural rights before a suit could be brought against the construction team.

Importantly, Chapter 2272 of the Government Code provides that, before bringing an action asserting a claim for construction defects, the governmental entity is required to provide the construction team with a written report detailing the specific construction defects being claimed, describing the present physical condition of the "defective" structure and describing any modification, maintenance or repairs to the "defective" structure since it was completed. The general contractor is required to provide a copy of this report to all of the affected subcontractors within five days of their receipt.

That report triggers the construction team's right to conduct a proper inspection within 30 days, with an additional 120 days thereafter to either correct the defects or enter into corrective agreements.

Given the epidemic of "construction defect" claims being brought by public entity project owners against contractors (and driven predominantly by ethically suspect teams of lawyers and "experts"), this legislation creates an important barrier to the unlimited use of litigation to shake down contractors and subcontractors. Unfortunately, as soon as the legislation was passed, some public owners and general contractors immediately added language to their contracts obligating contractors and subcontractors to waive the provisions of Chapter 2272 as a condition of

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performing the project. Such waivers render the legislation meaningless and principally serve the purpose of unlimited exposure to unscrupulous claimants and their legal teams.

So, the 2023 legislature passed an amendment to Chapter 2272, providing simply, “This chapter may not be waived. A purported waiver of this chapter in violation of the section is void.” Hence, the law’s common sense and equitable provisions have been preserved and protected.

There will undoubtedly be “hired gun” experts willing to write almost anything in an initial report to support a crooked claim of construction defects. However, the law does provide a solid basis for reducing the exposure of good-faith construction teams to abusive claims of “defects.”

TMC HALL OF FAME WELL-DESERVED RECOGNITION

As I write this, I am basking in the glow of the recently completed inaugural Hall Of Fame induction conducted by the Texas Masonry Council in College Station, Texas (See article on page 4).

Most of you will not be surprised to hear that I am a staunch advocate for the masonry industry and the standards of excellence the Texas masonry industry demonstrates every day.

It is my observation that perhaps here, more than anywhere else, masonry contractors represent all that is best within the construction industry—beautiful and enduring structures expertly and artfully constructed by people of remarkable skill in an industry that supports not only project owners and contractors but also all the people who perform the work and, importantly, all of the masonry contractors’ colleagues in the industry. There is an amazing and laudable air of mutual respect among Texas masonry contractors.

The Texas masonry industry would not be the robust and enviable institution it is without the

vision and leadership of its pioneers and risk-takers.

To this inaugural presentation’s honorees, Paul Odom, Paul L. Yeatts, Buddie Barnes, and Lynn & Ricky Skinner, I raise a metaphorical glass in a toast to excellence. Each of these honorees has made a genuine and positive impact on the industry, and because of their work, the Texas masonry industry is thriving. There is no doubt in my mind that, among the enthusiastic crowd in attendance at the ceremony, there are others who will be worthy of this honor in the future. It is a privilege to represent this industry and its many members.

Congratulations to the honorees, their families, colleagues, and the industry they have built. I offer a hearty thanks to the Texas Masonry Council for initiating this much-needed honor.

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