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Say What You Believe

I usually try to avoid writing publisher letters. Sometimes there are events or announcements that make them necessary.

I am sitting in my office, Sunday morning, July 14th.

I just returned from a week long business trip and have some great news. After looking for a venue for three years, we have a location for a show in Lancaster County, Pennsylvania. The 2025 Post Frame Builder Show will be at Spooky Nook Sports in Manheim. The location is in the heart of Pennsylvania Dutch Country and within 20 miles of many manufacturers who have supported us for years.

2025 should be a great show and you can see reviews of the 2024 Post-Frame Builder show in most of our magazines.

In spite of the great news that is not the main purpose of this letter. Yesterday, a sick individual tried to assassinate President Trump. This is not an endorsement or a discussion of policy, it is a request that everyone stop taking the path of least

resistance.

My political views are obvious to those who know me. My personal social media is mostly lifting or wrestling related, bad jokes, and political content. I have had several people suggest changes to what I post and how I state my beliefs. I have had advertisers threaten to pull business and I have had subscribers threaten to cancel subscriptions. I have disregarded those threats and suggestions. I may have even responded unkindly in a few instances.

I do and say what I believe is right in the context of my beliefs. I expect you to do the same. We do not and should not agree on everything. Naturally all beliefs should have some basis in reality and disagreements should be (mostly) polite and respectful.

The point of this is to ask you to say what you believe. You can agree with me or not but please do not be silent. It is my opinion that silence is one of the reasons for the political divisions we have now.

People narrow their circles and only

hear voices that agree with them. Not hearing dissent convinces people they are correct and in the majority. They are never forced to critically evaluate their own positions. When faced with a person who believes differently, or contradictory facts they respond inappropriately. Typically this is manifests in denial or acting out. If a 3 year old gets a candy bar every day at check out in a grocery store, what happens when they do not get a candy bar?

All opinions do not have equal merit. Not all opinions deserve respect. Sometimes sharing what you believe can result in ridicule or lost business. Sometimes all of us are wrong. But silence makes things worse. Part of appropriately dealing with conflict is experience. Resolving disagreements is easier if they are dealt with small. Silence allows differences to grow unchecked. Speak and disagree about the big things and the small things. The big things may not be resolved, but maybe we can stop the small things from growing.

Gary Reichert, Publisher

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On the cover: On-site CFS truss assembly. Photo courtesy of Formtek.



Recyclable & Reusable Steel by ECOLIT

The light gauge steel frame (LGSF) industry can be a vital part of a circular economy by promoting resource efficiency and durability. By extending the lifespan of materials, it minimizes waste and environmental impact. This sustainable approach helps preserve natural resources and reduces the burden on the environment. Ecolit technology is based on these principles and makes it a crucial part of the construction process. Moreover, steel makes construction not only sustainable but also available for any projects.

Its sustainable features of the steel make the perfect choice for eco-friendly construction over any other materials. In fact, over 90% of steel can be recycled for building another project. It's the best and easiest option for embracing modern eco technologies that have a higher rate of recycling than other common building materials such as wood or bricks.

Therefore, there is no residue to contaminate nature's environment in years to come. Up to 99% has all been reused for new buildings.

Why is steel the best solution to construction in 2024?

1. Once it's produced, it can be consistently reused.

This is a major benefit of reusing steel from buildings and structures. It can be any structural pieces that can be used without any processing. Small pieces of steel can be also melted down and used again.

In fact, around 86% of structural steel is recycled as scrap charge for furnaces, while 13% is directly used for new structures. Only 1% of steel is left to landfill or rust.

Recycling steel not only decreases production expenses by reducing the need for energy, labor, and raw materials but also eliminates the expenses related to disposing of C&D waste in landfills and acquiring virgin steel for construction purposes. Additionally, it is important to highlight that recycled steel, despite being more cost-effective, maintains a high level of quality that is well-suited for construction projects.

2. Evolving the value chain.

To make circular construction principles effective, business models must evolve throughout the entire value chain. It's essential to optimize design in a circular construction approach, requiring a lot of upfront planning. Prioritizing longevity, adaptability, and the offsite approach of Design for Manufacture and Assembly is crucial. Planning for a building's "end" from the start of the design phase is vital to enhance sustainability through Design for Disassembly, Design for Reuse, and recoverability protocols.

4. A question of time.

Buildings need to be both secure and long-lasting. Steel is an excellent choice for construction because it is not only strong and durable, but also versatile and environmentally friendly. It is lightweight and cost-effective, making it an ideal option for structural framing. With its sustainable properties, steel enhances the safety and sustainability of light steel buildings.

The recycled steel utilized in building is just as sturdy and long-lasting as its virgin counterpart. It keeps its strength even after multiple recycling processes. Addi-

tionally, this material maintains its ability to bear weight, which is crucial for structural and foundational components. Recycled steel is also resistant to corrosion, making it perfect for constructing frames and flooring in hazardous environments.

The use of sustainable materials in modern construction is crucial for protecting the environment. In addition, these building materials are also budget-friendly and long-lasting. Ecolit can help you build any building using only eco-friendly materials and make your dream house a reality.

In addition, we have a patented technology for energy-efficient, fast and affordable construction – light gauge steel framing and modified foam concrete made of natural materials.

Advantages of building a house using these sustainable materials:

1. High quality.

After being recycled, steel quality is retained. It doesn't degrade the life-cycle of the building and its durability remains the same. Moreover, it also has a great quality and weight capacity.

2. Recycled steel is the same as the new steel.

It costs much less and requires minimal use of heavyweight equipment and lifts. In addition, it saves money on maintenance and repair due to its great durability and longevity.

3. Long lifespan.

Light gauge steel frame buildings can last up to 60 years, but in a “warm frame”



environment, the design life predictions for light steel exceed 250 years.

4. No limits for construction.

Ecolit's unique technology can be applied to any structures and buildings with any project complexity. The only limit to design of structures is the imagination of the architect.

5. No negative effects on people and the environment.

Improving the location, design, construction, operation, maintenance, and removal processes throughout the entire lifespan of a building can help minimize the harmful impacts on human health and the environment caused by buildings.

We produce our own house kits and lightweight concrete for construction high-quality buildings. Our high-tech equipment helps us be one of the top contractors who stick to sustainability and

puts nature's conservation as TOP priority and in first place.

The benefits of building a house with Ecolit:

- elevated fire resistance of up to 3 hours
- high wind resistance
- raised level of sound insulation
- lowest carbon effect and sustainability with up to with up to 99% recyclability
- durability and reliability
- fast construction timing

We apply the most modern solutions in the field of construction in more than 15 countries such as the United States, Germany, the UK, Estonia, UAE, Africa, Indonesia, Thailand and Philippines. There are currently two USA production facilities at the startup stage in California and New Jersey. We are also in the planning stages of launching a production site in Texas.

Due to expanding our production throughout the world our current mission is to supply our house kits to more countries, creating an exponential forward leap towards sustainable construction. We have already successfully built thousands of buildings using Ecolit technology, supplying countries globally where there is a huge demand in the housing market for over 10+ years.

If you're interested in a Joint Venture (JV) partnership with us and would like to be a part of our worldwide successful journey towards sustainable construction, you can contact us any time. We will always be happy to share the details about Ecolit technology with you and answer all your questions.

Denis Lozenko
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<https://ecolit.ae>



METALCON 2024

Presentations Focus On 'Building Performance'

For any construction project, the goal has always been using top quality building materials for the best price. It's all about "building performance."

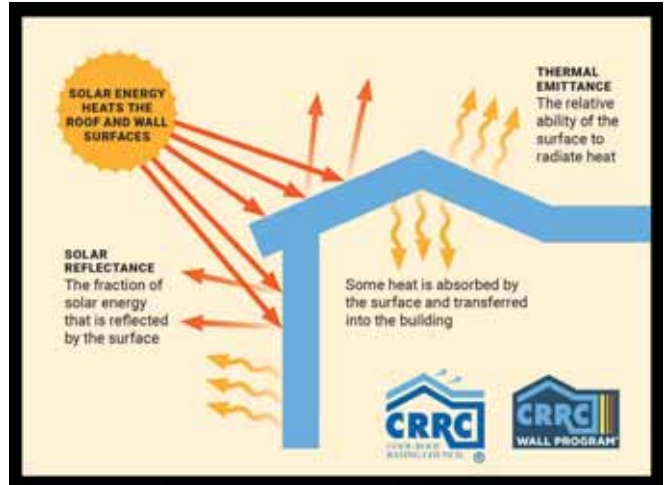
"Providing education on building performance at METALCON is essential," says Judy Geller, Vice President, METALCON. "It will help building and design professionals address performance challenges, mitigate risks and enhance resilience leading to cost savings over the lifespan of the building. Standards and codes specific to the building site provide a helpful path to improving building performance. Understanding the performance capabilities of products used in construction will certainly help building and design professionals erect higher-performing buildings."

Several upcoming METALCON presentations look at building performance, aimed at educating builders, roofers and architects on making the best decisions for their customers. METALCON is scheduled for October 30 through November 1 at the Georgia World Congress Center in Atlanta.



Total Building Performance software takes building usage into account.

"Designing for building performance is fundamental as the building industry strives to improve energy efficiency and decrease greenhouse gas emissions originating from the built environment," says Audrey McGarrell, Project Manager for the Cool Roof Rating Council. "Understandably, most conversations around building performance focus on systems within the building itself, but cool roofs and walls offer an opportunity to think about how the building impacts its surroundings, too. While cool surfaces help decrease cooling energy use and resulting greenhouse gas emissions, they also help mitigate the urban heat island effect in the larger community, a growing concern as cities across the U.S. get hotter."



The increase in insulation requirements in the IECC has made the most substantial contribution to building performance. PHOTOS COURTESY OF METALCON.

McGarrell's presentation, *Advancements in Cool Roof and Wall Evaluation and Compliance*, is scheduled for 10:15 a.m., Oct. 31 in the Building Performance Learning Center on the show floor.

"Cool surfaces are low hanging fruit when it comes to improving energy efficiency in many climates and improving resilience to extreme heat across the entire country," she says. "With heat waves growing longer, more frequent and more intense with each year, it's important to consider every tool that's available to keep buildings and their surroundings cooler. Comparing the solar reflectance and thermal emittance of different product options is easy with the CRRC's free, publicly available Rated Products Directories."

Alan Scott, Director of Sustainability Building Science Solutions Building & Construction at Intertek, is presenting *Resilient Buildings: Disaster is a Hazard You Didn't Pay For* at

10:15 a.m., Oct. 30 at the Building Performance Learning Center.

“Broadly, building performance refers to how efficiently, and most importantly, effectively a building serves its purpose and meets standards,” Scott says. “This includes reduced energy and water use, limiting greenhouse gas emissions, durability, longevity and reduced maintenance, support for human health, wellbeing and productivity (cognitive performance) and its ability to resist and recover from hazard events.”

Scott says building professionals and architects need to identify and consider current and emerging hazard risks and vulnerabilities for the building location and consider appropriate design, specification and construction options to go beyond code minimums and industry standards to create resilience and mitigate hazard vulnerabilities.

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“This could mean big design moves like the location and elevation of the building site to reduce flood risks or small installation decisions like reducing the spacing of roofing and flashing fasteners in roof areas subject to the highest wind forces,” Scott says. “Minimizing hazard risk starts with hazard and vulnerability assessment, which consider natural hazards like flooding, high winds, earthquakes, tsunamis and wildfire, as well as future hazards due to climate change, such as sea level rise, extreme heat, drought and extreme rainfall.”

Bill Beals, District Manager for Therm-All, will be presenting *IECC 2021 / ASHRAE 90.1-2019 Building Envelope Requirements* at METALCON, taking a look at the major governing councils that mandate today’s energy codes and by differentiating various metal building insulation systems that satisfy the building requirements.

“Building performance is a compliance path to the energy codes that use modeling to determine energy usage,” Beals says. “This is compared to the standard baseline of energy usage set by the ASHRAE 90.1 Standard and or International Energy Conservation Code (IECC). This path permits a tradeoff between higher performing areas of the envelope, lighting and mechanicals, to lesser performing areas. In other words, the building performance method allows the higher performing areas to ‘pick up the slack’ for the lesser performing areas of the entire building.”

Building Performance Presentations

Building Performance Learning Center,
METALCON Show Floor

October 30

10:15 a.m.: Resilient Buildings: Disaster is a Hazard You Didn't Pay For, by Alan Scott, FAIA, LEED Fellow, LEED AP BD+C, O+M, CEM WELL AP, Director of Sustainability Building Science Solutions Building & Construction, Intertek

11:45 a.m.: IECC 2021 / ASHRAE 90.1-2019 Building Envelope Requirements, by Bill Beals, District Manager, Therm-All

1:15 p.m.: How Can a Rainscreen be a High-Performance Envelope Option? by a member of RAiNA

October 31

10:15 a.m.: Advancements in Cool Roof and Wall Evaluation and Compliance, by Audrey McGarrell, Project Manager, Cool Roof Rating Council

1:15 p.m.: Introduction to ANSI/MCA FTS-1 Test Method for Windload Resistance on Flashings, by Bob Zabcik, Metal Construction Association

November 1

10:30 a.m.: Insulated Composite Backup Panels, by the MCA's IMP Alliance, Kevin Franz, Business Development Manager, Nucor Insulated Panel Group

12 p.m.: AC472 and AC479 Accreditations for Improving Quality and Success in Metal Building Design and Construction, by MBCEA and MBMA, David Musselwhite, IAS; Dan Halme, Halme Builders; and Tony Bouquot, MBMA

Beals says the simple version uses COMcheck™ as a tool for the building envelope, lighting and mechanical systems. The more complex version of Total Building Performance uses various computer software tools and includes the entire building. It takes into account building usage as well.

“Overall, the biggest improvements in energy efficiency and building performance stem from the building envelope,” Beals says. “Lighting and mechanicals have had an impact as well, but the increase in insulation requirements has made the most substantial contribution to building performance. Combined with the progression of air barrier requirements in each energy code cycle, the building envelope leads the charge in greatest energy savings in the overall performance of buildings.”

Energy code requirements have driven innovation, according to Beals, and through this, many proprietary systems have been introduced to the market. Each three-year energy code cycle has increased energy efficiency over previous versions from 2 to 10 percent overall. Obviously, it's important to do your best to stay up to date. **MB**

Thermal Runaway

Proper Handling of Overheating Lithium-Ion Batteries

The Power Tool Institute [www.powertoolinstitute.com], the leading organization for power tool safety resources, information, and education, has released a new video demonstrating how to properly handle a battery that's in thermal runaway. A lithium-ion battery that is too hot to touch, melting, smoking, or on fire may be in thermal runaway, which can be caused by misusing or abusing the battery, such as by dropping, puncturing, damaging, or exposing the battery to liquids.

Lithium-ion batteries, when purchased by an OEM for their respective tools, are safe. More and more counterfeit and knock off batteries have appeared in the market and can cause serious issues, including fires.

As detailed in the video, the quickest way to cool down and stop an overheating lithium-ion battery is to immerse the battery in a sturdy container filled with water and keep it there for 24 hours. The new video can be viewed at <https://www.takechargeofyourbattery.com/videos/safe-handling-of-overheated-lithium-ion-batteries/>.

Before immersing a battery, there are some things to keep in mind:

- Don't physically touch the battery to move it; instead, use something like a long-handled shovel.
- Wear PPE to protect eyes and skin.
- Move the battery at least 15 feet away from combustible materials.
- If the battery is connected to a tool or charger, don't try to disconnect it. It's better to sacrifice those items than risk being injured. Put them in the water as well. Be sure to first unplug the charger from the wall outlet.

It's important to leave the battery

immersed for at least 24 hours so additional cells within the battery don't re-ignite. Even if you don't see flames, the thermal runaway may not be over. While one cell is cooling down, a different cell might be heating up. Once it is safe to dispose the battery, never throw it into the trash or a municipal recycling bin. Instead,

take it to a local recycling center or place it in a receptacle specifically designed for recycling batteries.

In general, when you take care of your batteries, they will take care of you. However, it's still important to be aware of proper safety procedures in the event of an emergency like thermal runaway.



About PTI

With the vision to unify and educate others about power tools, since its founding in 1968, the Power Tool Institute (PTI) has established itself as the leading organization for building global understanding of power tools and for maintaining high standards of safety in the industry. Its members represent market-leading brands in the areas of portable and stationary power tools. PTI's members are committed to improving the industry and to being the premier resource for power tool education. **MB**



CENTRAL STATES BUILDING WORKS NAMES NEW VP OF ENGINEERING & OPERATIONS

Central States, manufacturer of metal building components, roofing, and building packages, has named Ahmed Abdelaal to the new role of Vice President of Engineering and Operations for the Central States Building Works division. Ahmed will lead the group’s technical services including engineering, drafting, and detailing and will bring his know-how in automation, software, operations, and manufacturing to the business as preparations are made for the company’s new frame plant, planned to open in Springdale, Arkansas, in the Spring of 2025.

“I’ve always believed in the power of innovation to create solutions, to overcome



Ahmed Abdelaal, Vice President of Engineering and Operations, Central States Building Works

roadblocks, and work collaboratively,” Abdelaal said.

Ahmed brings almost three decades of

industry experience working for some of the largest Pre-Engineered Metal Building (PEMB) companies in the United States and internationally. He comes to Central States after spending the initial 11 years of his career at American Buildings Company (now Nucor) and Butler Manufacturing Company (now BlueScope Steel), where he held leadership positions in engineering and project management. For the last 12 years, Ahmed has served global companies by building out factories and technical capabilities in executive operations roles.

Central States Building Works designs and delivers material-only building packages across the United States for commercial, storage, agricultural, industrial, and other applications. The business unit was established in 2003 as

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Central Storage Works and was rebranded earlier this year in recognition of its expansion to additional building types and capabilities.

On November 15, 2023, Central States broke ground on a new 105,000-square-foot plant to support the fast-growing pre-engineered metal frame business. The factory, which will open in 2025, expects to grow to 140 employee-owners over the first few years of operation.



Robert Gregory, General Manager, IMETCO

NEW GM AND ARCHITECTURAL SALES REPS JOIN IMETCO

IMETCO (Innovative Metals Company, Inc.), a manufacturer of metal products for the building envelope, has engaged Robert Gregory as general manager, a role in which he expects to introduce sophisticated manufacturing technologies while overseeing business development to ensure an excellent customer experience and improve operational efficiencies.

According to Joe Mellott, IMETCO president, “Robert [Gregory] has risen through the ranks from plant-floor machine operator through management. He knows this business inside and out, and has the communications skills necessary to motivate operational excellence and promote business development.”

The company also recently added three architectural sales reps to its team, and is

looking forward to deeper penetration in their respective markets. Sam Sloan will be responsible for sales in Colorado and Utah. Representing customers across New England will be Joel McLaughlin. Doug Matthews is the new architectural sales rep for the Deep South, including Mississippi, Arkansas, southern Alabama, northern Louisiana, and western Tennessee.



Cydney L'Hoste, Regional Director of Business Development, Atlantic Sales Territory, Elevate Structures

ELEVATE NAMES L'HOSTE AS REGIONAL DIRECTOR OF BUSINESS DEVELOPMENT

Elevate Structures’ Cydney L’Hoste, current Director of Pre-Construction and former Construction Project Manager, will take responsibility as the Regional Director of Business Development for the Atlantic Sales Territory, including Delaware, Florida, Maryland, North Carolina, New Jersey, Pennsylvania, South Carolina, Virginia, and West Virginia.

Elevate president Richard Allen states, “With a positive outlook, natural advocacy for our customers, and deep experience, we believe Cydney is uniquely positioned to support customers from concept to completion.” Cydney replaces Kevin

Neal, who has resigned to pursue other opportunities. He will stay on during a time to ensure a smooth transition.



Jason Sellers, Cold-Formed Buildings Manager, McElroy Metal

MCELROY METAL NAMES SELLERS ITS COLD-FORMED BUILDINGS MANAGER

Louisiana-based metal component manufacturer McElroy Metal has named Jason Sellers as the new Cold-Formed Buildings Manager. Sellers’ responsibilities include growing the distributor base, supporting current distributors and educating McElroy Metal retail stores while improving their sales growth. Sellers has an MBA from Washburn and years of experience in the cold-formed buildings industry.

DIVERSIFIED FALL PROTECTION APPOINTS FIRST CHIEF PEOPLE OFFICER

Diversified Fall Protection (DFP), the largest turnkey fall protection integrator in the U.S. for regulatory-driven systems and services, has named Kynan Wynne as Chief People Officer. This marks the first time in the company’s history that an executive has been appointed to this role, a reflection of the company’s commitment to the ongoing support of its employees and dedication to building an empowering

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culture.

“We fondly refer to Kynan as our culture crusader,” said Travis Nelson, CEO of DFP. “We are so fortunate to have someone with Kynan’s experience and people skills to fill this role. This is an uncommon position for a company in our industry, but our people are the most important input to our success, and we know we cannot grow without investing in them. The customer experience is a direct reflection of the employee experience.”

Wynne is an industry veteran with nearly 40 years of experience. He most recently served as Chief Sales and Marketing Officer for DFP, a position he has held since late 2021 when he formally became part of the organization as a result of DFP’s acquisition of his company, Rooftop Anchor, Inc. Wynne had founded Rooftop Anchor in 2009 and was CEO before the company became a DFP brand.

In his newly created position at DFP, Wynne will be responsible for creating the overall employee experience, guiding career growth, and building upon an existing employee-oriented culture. Wynne will report directly to the CEO with the full Human Resources team reporting to him.

“All the business success I’ve enjoyed in my life is a direct result of being surrounded by amazing people,” said Wynne. “When a company is devoted to providing a workplace culture that allows people to grow and thrive, the best version of that person appears. As an employer, it’s our duty to help that along. A Core Value of ours is ‘to take people to higher ground,’ and our goal is to do just that, starting with our own team members.”

MBMA/MBCEA NEWS:

- **2023 MBMA Safety Awards**
- **MBCEA Individual Awards**
- **MBCEA, MBI Get Pledges for Building Assembly Curriculum**

Each year the Metal Building Manufacturers Association (MBMA) honors member companies that demonstrate exceptional performance

in maintaining workplace safety. These awards are given to Building Systems members as well as Associate members for their performance during the previous calendar year. Safety awards for the 2023 year were presented during the 2024 MBMA Spring Meeting held April 24–26 in San Diego, California.

“Since 2011 the MBMA and our Safety Committee, under the direction of chair David Weatherford, has presented awards to 369 plants and facilities,” says Tony Bouquot, MBMA general manager. “Both Building Systems members and Associate members participate in the safety program, and we are proud to honor those members who have exceptional safety records.”

In 2023, Building Systems members had 46 plant facilities that participated in MBMA’s Quarterly OSHA Injury Statistics Program, logging over 15 million hours on the job. “MBMA and our member companies strive to make the industry a safe place for everyone,” adds Bouquot. “Effective safety initiatives have many benefits, including boosting employee morale, improving operations, and mitigating insurance risks and exposure to OSHA audits.”

MBMA’s awards program consists of three categories. The 2023 Superior Safety Award was presented to three plants that achieved zero recordable cases for the entire calendar year, which is a significant accomplishment. The 17 facilities that received the 2023 Safety Performance Award achieved an incident rate equal to 50% or less than the OSHA industry average. The 2023 Associate Member Superior Safety Award went to 57 facilities that achieved zero recordable cases for the year, also a major achievement.

The following is a list of 2023 MBMA safety award winners:

2023 Superior Safety Award – In recognition of Building Systems member manufacturing facilities with zero recordable incidents.

- Kirby Building Systems, a Nucor Company (Portland, TN)

- Dean Steel Buildings (Thomasville, GA)

2023 Safety Performance Award – In recognition of Building Systems member manufacturing facilities having achieved an incident rate equal to 50% or less than the industry average as reported by OSHA.

- ACI Building Systems (Batesville, MS)
- American Buildings, a Nucor Brand (El Paso, IL)

- BlueScope Buildings North America, Inc. (Annville, PA; St. Joseph, MO; Jackson, TN)

- Cornerstone Building Brands (Atwater, CA; Houston, TX; Mt. Pleasant, IA)

- Inland Buildings (Culman, AL)
- Kirby Building Systems, Inc. (Portland, TN)

- Nucor Building Systems, a Nucor Company (Brigham City, UT; La Crosse, VA; Swansea, SC)

- Red Dot Buildings (Athens, TX)
- Schulte Building Systems, Inc. (Hockley, TX; Hueytown, AL)

- Whirlwind Steel Buildings (Houston, TX)

2023 Associate Member Safety Award – In recognition of Associate member facilities with zero recordable incidents.

- Bay Insulation Systems (Baton Rouge, LA; Brooklyn Heights, OH; Coppell, TX; Eastlake, OH; Easton, PA; Fridley, MN; Green Bay, WI (2 locations); Indianapolis, IN; Kansas City, MO; London, ON; Louisville, KY; Memphis, TN; Norcross, GA; Orlando, FL; Pensacola, FL; Phoenix, AZ; Raleigh, NC; Roanoke, VA (2 locations); San Marcos, TX (2 locations); St. Louis, MO; Sumner, WA)

- Curbs Plus (El Dorado, KS; Glendale, AZ; Rossville, GA)

- Konecranes (Houston, TX)
- Metl-Span, A Nucor Company (Hamilton, ON; Lewisville, TX; Waterloo, IN; Las Vegas, NV; Sheridan, AR)

- PSI Preferred Solutions, Inc. (Cleveland, OH)

- Silvercote, A Service Partners

Company (Ashland, VA; Byram, MS; Denver, CO; Duluth, GA; Greenville, SC; Houston, TX; Huntsville, AL; Itasca, IL; Lubbock, TX; Marshfield, WI; Mooresville, NC; Pottstown, PA; Salt Lake City, UT; Scotia, NY; Spokane Valley, WA; Springfield, KY; Stockton, CA)

- Würth Construction Services (Birmingham, AL; Greensboro, NC; Hicksville, NY; Houston, TX; Orlando, FL; Tampa, FL)

Founded in 1956, MBMA serves manufacturers and suppliers that work with industry professionals, architects, building designers, educators, building code officials and others to advance the metal building systems industry.

- **MBCEA Awards**

The Metal Building Contractors and



Seth Collins, right, receives the 2024 Oil Can Award from MBCEA Executive Director Sasha Demyan.

Rectors Association (MBCEA) presented two prestigious member awards at the 55th Annual MBCEA Conference, held April 24-26 in San Diego. The Robert and Beverly Ketenbrink “Oil Can” Service

Award was given to Douglas Seth Collins for his dedication and service to the metal building industry. Additionally, four MBCEA members, Timothy Allison, Dean Davids, Rick Gallier, and Keith Wentworth, were honored as new members of the MBCEA Pioneers Club for their years of service in the industry.

The Oil Can Award is presented to an MBCEA member who has given service to both the metal building industry as well as the MBCEA and its training partner, the Metal Buildings Institute (MBI). Douglas “Seth” Collins serves as Quality Director with Dunn Building Company, LLC in Birmingham, Alabama, an AC478 accredited company. He is a current MBCEA Board Member and serves on MBCEA’s Metal Building Curriculum Committee as well as several

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Curriculum Course sub-committees and MBCEA's Technical Committee. He also participates in the Metal Building Manufacturers Association (MBMA) BIM Task Group and represented the MBCEA at the last two MBMA Research Symposiums.

The MBCEA bestows membership in the Pioneers Club to those Contractor and Erector members who have served for at least 25 consecutive years. Timothy Allison is Executive Vice President for BARNES Buildings & Management Group, Inc. in Weymouth, Massachusetts. Dean Davids is President of Commercial Metal Building Services Corp. in Ft. Lauderdale, Florida. Rick Gallier is President of Super Structures General Contractors, Inc. in Midlothian, Virginia. Keith Wentworth, a former MBCEA President, is President of Dutton & Garfield, Inc. of Hampstead, New Hampshire, and is currently President of the Metal Buildings Institute.

"Congratulations to all of these members," adds Sasha Demyan, MBCEA Executive Director. "Their dedication and years of service to the industry is admirable and each one sets a great example to follow."

• MBCEA, MBI Receive Pledges for New Metal Building Assembly Curriculum

The Metal Building Contractors and Erectors Association (MBCEA) and Metal Buildings Institute (MBI) have received pledges totaling \$462,500 for the development of a new Metal Building Assembly Curriculum. The Ketenbrink Education Foundation will match all funds raised from industry members up to \$500,000. Additionally, kickoff funds totaling \$150,000 have been provided to get the development of the 13-unit, 80-module training program started.

The Metal Building Assembly Curriculum is intended to serve as a complete metal building assembly training program, and will be offered via the NCCER learning management system. The new curriculum will qualify as a formal apprenticeship program while educating workers in the many facets of

metal building construction.

- Company and association donors:
- BlueScope Buildings North America, \$150,000
 - Span Construction & Engineering, \$75,000
 - MBCEA, \$50,000
 - Nucor Building Systems, \$50,000
 - ACI Building Systems/Alliance Steel Buildings, \$30,000
 - Chief Buildings, \$30,000
 - Bay Insulation, \$15,000
 - Kingspan, \$15,000
 - S & S Structures, \$15,000
 - S-5!, \$15,000
 - MBMA, \$5,000,
 - Mac Con Company, \$5,000
 - Fleming Steel Erectors, \$2,500
 - Rainwater Construction, \$2,500
 - J & M Steel Solutions, \$2,500.

Kickoff funds have been provided by: the Metal Buildings Institute, \$100,000; the National Center for Construction Education and Research (NCCER), \$25,000; and the Associated Builders and Contractors (ABC), \$25,000.

"I would like to thank these companies for their very generous support of our new training curriculum," says Sasha Demyan. "This program will keep the MBCEA and our members at the forefront of the industry, and these pledges will help make it possible."

"Metal buildings have some unique characteristics that require special training for building assemblers," notes Keith Wentworth, MBI President. "By offering this complete curriculum, we hope our members will have the best-trained workforce while creating a culture of craft workers in the industry."

The MBCEA was formed in 1968 to serve the needs and support the interests of metal building contractors and erectors.

HY-BRID LIFTS ANNOUNCES SALES DIRECTOR FOR SOUTH-CENTRAL UNITED STATES

Hy-Brid Lifts, a specialist in aerial lift equipment, has announced Gary Coke as director of sales covering the south-central United States. Coke's responsibilities include providing




Gary Coke, Director of Sales, South-Central U.S., Hy-Brid Lifts

customer support as well as continuing the growth and channel development of the Hy-Brid Lifts line of low-level scissor lifts.

"I am excited to join this team and look forward to the opportunity to work with past and future customers. Coming from equipment manufacturing, I understand the importance of quality equipment and customer service backed by a solid service department," said Coke. "After meeting the Hy-Brid Lifts team and seeing all of the new products in the pipeline, it's no surprise that this company is continuing to grow, and I look forward to being a part of that growth."

Coke brings 19 years of industry experience to his new role, largely derived from his time in equipment manufacturing with SkyJack. He spent a majority of his career in sales with a strong emphasis on customer relationships. **MB**

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Emerging Technologies

Understanding Thermal Barriers Compliance Methods And Emerging NFPA-275 Foam Plastic Technologies



The owner of Infinity Conversions in Briggs, Texas wanted to insulate and vapor barrier his 13,000-square-foot, multi-purpose metal building, which now houses a vehicle showroom of collectible cars and workshop area. He chose a single application, NFPA-275, IBC code-certified spray foam closed-cell insulation—a new innovative product known as Firestable® FS 2.0.

Over the past several decades, plastic has been increasingly used in the construction industry, and with more plastics in buildings, the International Building Code® (IBC) has had to update its requirements to address the flammability of these plastics.

It was at the point of the proliferation of plastics and composites that the thermal barrier section of the IBC (and chapter 26, specifically) came into usable existence. However, as “thermal barrier” is a term used specifically for the fire rating of a building element, it can easily be confused with terms such as “thermal

insulation” or “thermal bridging.” Both relate to the transference of heat or cold through building materials. However, a thermal barrier, as defined by the IBC, is very specific to heat and fire as it relates to safety.

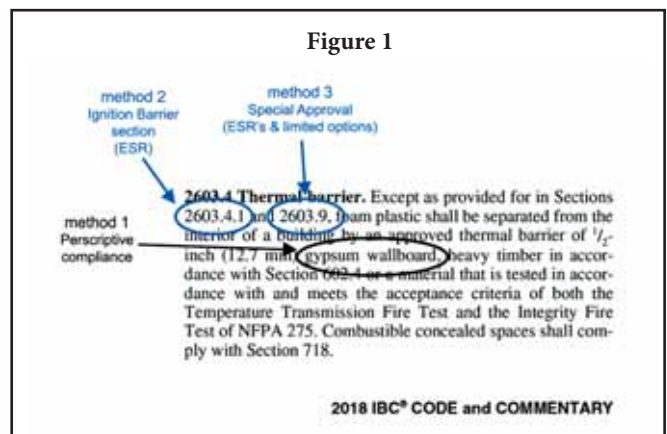
Underwriters Laboratories (UL) describes thermal barriers as “a material or product that prevents or delays the ignition of a flammable surface, such as foam plastic insulation or metal composite material, in the event of a fire.”

Now entering the marketplace is new fire barrier, foamed-in-place insulation that overcomes major fire barrier challenges, including thermal barrier code compliance while providing less risk and saving builders time and money on materials, labor and fewer installation steps. Let’s dig in.

THE WORLD OF IBC CHAPTER 26 AND THERMAL BARRIER OPTIONS

According to the Code, all plastics installed in the building envelope require an additional step for a thermal barrier. IBC Section 2603.4 defines thermal barrier and various deviations, derivatives or direct compliance approaches to allow the safe application of plastics.

Figure one illustrates three of the four methods:



There’s also a fourth ‘equivalent’ compliance method that identifies a multi-test test protocol (National Fire Protection Association – NFPA 275) for achieving an equivalent rating to gypsum (Figure 2). Any product that strives to be equivalent to 1/2” gypsum must meet this protocol.

Figure 2

2603.4 Thermal barrier. Except as provided for in Sections 2603.4.1 and 2603.9, foam plastic shall be separated from the interior of a building by an approved thermal barrier of 1/2-inch (12.7 mm) gypsum wallboard, heavy timber in accordance with Section 602.4 or a material that is tested in accordance with and meets the acceptance criteria of both the Temperature Transmission Fire Test and the Integrity Fire Test of NFPA 275. Combustible concealed spaces shall comply with Section 718.

method 4
(Direct Approval)

2018 IBC® CODE and COMMENTARY

If an insulation material that meets NFPA-275 standards can also serve as a thermal barrier, then post-added thermal barriers (for specific use and requiring multiple steps) can be eliminated.

PAST SOLUTIONS – “ADD-ON” THERMAL BARRIER PRODUCTS OVER PLASTICS

Historically, spray polyurethane foam (SPF) met code by being applied behind gypsum (method one) or covered with approved, add-on thermal barriers, i.e., cellulosic and cementitious materials. SPF could also comply with the code through “exception” methods using lower-level ignition barrier approval (method two) or special approval testing (method three).

When choosing one of these methods, the questions are...

1. Which test(s) should be used?
2. Which combination of coatings, cellulose or cementitious materials should be used?
3. Over which foams?
4. At which thickness?
5. In which densities?

Addressing all combinations of SPF/coating/cellulose/cementitious solutions and the appropriate paperwork required by building officials is a separate topic in and of itself and beyond the scope of this article.

Simplifying this confusion and expediting safety, now emerging in the marketplace are spray foam insulation products that have the NFPA 275 thermal barrier already built in. Let’s learn the benefits.

MONOLITHIC FIRE PERFORMANCE

Current post-applied “exception-based” thermal barrier solutions become daunting when trying to ensure correct, safe application; they need to be properly applied, require third-party inspection, and are utilized only in “conditioned spaces.” Also, as soon as the thermal barrier is breached, the fire protection of the flammable substrate is lost.

NFPA-275 SPF products achieve fire performance monolithically. The foam fire barrier is built into the composite and is protective throughout the complete volume of the insulation — against fires from the outside in, and inside out.

Even with thermal barrier technologies in NFPA 275 foam, the benefits of continuous insulation, air and moisture barrier, mold defense, structural rigidity and high-insulation value are maintained. Monolithic fire protection means safer solutions, fewer added steps and materials, less cost and risk, versus a post-applied thermal barrier coating, cellulose, etc.

REDUCING RISK WINDOW

NFPA-275 foam becomes an effective fire barrier as soon as the chemical reaction finishes. What benefit does this provide? Fire safety is “built-in” as soon as the foam reaction is complete, providing a “zero risk window” and is very different from traditional methods where flammable plastic insulation materials, both panels and continuous, require an additional thermal barrier post installation. That gap in time waiting for the post-applied thermal barrier poses a life-safety risk and liability.

EMBRACING THE BENEFITS

What does this mean for contractors and builders? At the end of the day, they care about better value. NFPA-275 thermal barrier high-R insulation liquids cost slightly more initially. However, the total costs, including speed of installation, overall quality and end-user impact generate significant value across the complete construction hierarchy, resulting in significant cost savings, with costs decreasing as market penetration increases.

These new technologies are improving total costs and margins in major areas of construction, such as commercial, government, union and prevailing wage projects. These benefits translate into other large fringe areas, such as agriculture, commercial cold storage facilities, grow houses, outbuildings, military and aviation hangars.

The elimination of steps translates into lower costs, more efficient installations, and most importantly, a safer building and lower risk for the loss of life and property — a true trifecta of value.

As always, remember what’s really at stake: It’s not just a code issue, it is a life safety issue. **MB**

Richard J. Barone, Jr. is co-founder and executive vice president of operations for Firestable™ Insulation Co. As an entrepreneur and inventor, he has established several fire technology companies in his 20+ years in fire protection.



Windy City Upgrade

A Rooftop Deck on Top of Chicago's Updated Building Code

Chicago resident Marie Delgavio owns an industrial-style loft in the heart of the city's West Loop neighborhood. What sets her residence apart from others on the block is its private

rooftop deck, which is a "highly sought-after home amenity for city dwellers like me," Delgavio said.

While incredible even in its bare form, Delgavio saw her rooftop deck as an

opportunity to design a functional and inviting outdoor living space where she could relax, entertain, cook and tend to her potted flower containers. "Living space is limited in residential buildings and houses in the city, so it's important to take advantage of any usable outdoor space," she added.



Chicago's Building Code Modernization Ordinance prioritizes fire-resistive building materials

To provide a foundation for her ultimate outdoor destination, Delgavio commissioned a new 1,000-square-foot rooftop deck. From the get-go, she knew that Chicago's Building Code Modernization Ordinance, which the city passed in 2019, would dictate the deck design and construction process. The first comprehensive change to the city's building code in 70 years, the landmark ordinance marked the adoption of the 2018 IBC and IEBC.

The updates to Chicago's construction codes focused on several key areas, including the prioritization of fire and life safety, the adoption of sustainable building materials and the rehabilitation of existing buildings. Most pertinent to Delgavio's rooftop deck renovation were the code revisions requiring noncombustible building materials and methods be used on all structures installed on the roof of any building exceeding 55 feet in height (Chapter 15-8, Section 510 of Chicago Building Code).

Steel deck framing is the code-compliant, lasting alternative

Needing a code-compliant alternative to lumber, Delgavio turned to Evolution steel deck framing from Fortress Building Products. The fire-smart system received a Class A fire rating through Intertek, an independent product testing, inspection and certification company, indicating

superior fire performance. Materials that receive a Class A designation are very unlikely to contribute fuel to a fire, reducing the vulnerability of a structure and the people inside of it or near it.

A noncombustible option that meets 15-8-510 of Chicago Building Code, steel deck framing provides premium weatherability and low maintenance qualities. Leveraging the proven performance of steel, the framing system can sidestep common issues that plague wood frame decks, such as deterioration after long-term exposure to moisture and warping as a result of extreme changes in temperature. In application, the steel frame profiles will remain straight and true over time. This makes for an enduring, dimensionally stable deck framing solution that keeps the surface material flat and smooth underfoot. In this instance, the project team installed a ¼" underlayment material on top of the frame and then put down contemporary stone pavers to create an "outdoor room" that blurs the line between indoor and outdoor living.

Strong, stable and resistant to the damaging effects of weathering, steel profiles are also engineered to handle the added weight of today's most in-demand outdoor amenities. For example, the project team installed a custom rooftop pergola made from the same lightweight steel profiles as the deck framing. Purposeful in application, the steel pergola makes it easy for Delgavio to break up the rooftop deck into smaller spaces or "zones," each designed to accommodate the outdoor activities she enjoys doing. To elevate the functionality of her space, Delgavio had an outdoor kitchen installed underneath the steel pergola, complete with a grill, a deep sink and a dishwasher to alleviate the chore of running dirty dishes down flights of stairs at the end of the night.

Compatible steel stairs ensure a safe, complete rooftop deck

The project team took additional measures to ensure a safe, complete deck by incorporating a compatible steel stair system from Fortress Building Products into the rooftop project. The system sidelines common safety concerns, like poor stringer-to-deck connections and inconsistent



risers and runs. These challenges are common in older wood-framed decks, since conventional stair construction requires cutting pieces of lumber by hand.

Peace of mind in the finished deck

Delgavio's rooftop deck was completed in the spring of 2022. While large in size (especially for a private outdoor space in a densely populated location), the deck feels intimate and comfortable, inviting friends

and family to enjoy an evening drink during Chicago's fairer weather months. And when the space is not in use, Delgavio can rest easy knowing that the steel frame that supports the rooftop deck will retain its strength even after long-term exposure to Chicago's notoriously harsh winters. The noncombustible framing system, which meets the city's tough fire-resistive construction requirements, is backed by a 25-year limited manufacturer warranty. **MB**