## THE FUTURE OF METAL IN RESIDENTIAL

**RURAL BUILDER MAGAZINE SPECIAL SECTION** 

# SHOW PREVIEWS

## METALCON

CONSTRUCTION ROLLFORMING SHOW







## SmartBuild for All Metal Buildings

## Cuts bid time to 15 minutes and increases sales by up to §0%!

SmartBuild Systems is the construction industry's only complete design system for all-metal buildings. Simple enough for anyone to use, this web-based software quickly generates a 3D model, material lists, pricing, proposals, and construction documents for almost any steel structure.



The gold-standard software for Post Frame now designs buildings using steel framing and metal panels for roofs and walls.

- USE SMARTBUILD TO QUOTE BARNDOMINIUMS
- USE AS A 3D CONFIGURATOR ON YOUR WEBSITE
- Unlimited attached buildings in line or perpendicular
- Unlimited lean-to's, sheds, porches, and wrap-arounds
- Interior walls
- Insets
- Any type and number of windows and doors

Adding to our standard automation, SmartBuild for All Metal Buildings selects from any number of steel member types:

- Steel I beams
- Galvanized steel tubes any size
- Cee section members
- Zee section members
- User selected color scheme for any members

## SmartBuild for All Metal Buildings is for:

## Contractors

- Increase sales through live design sessions with clients
- Deliver instant proposal: increase close ratio

## Suppliers

- License the software to contractors in exchange for purchasing commitments
- Save hours of manpower with automatic takeoffs and push-button ordering

## PEMB

- Use to capture complete architecture and geometry
- Capable of interfacing with engineering programs

## Get Your Free Trial of SmartBuild for All Metal Buildings Today!

SmartBuildSystems.com • 303-579-6277 • kdietzen@keymark.com

editor's page

# Robins Joins SWM Team

I have been fulfilling editorial duties at Frame Building News, Rural Builder, and Garage Shed Carport Builder.

I have experience in writing about construction, especially metal, having worked up to last April as an editor at Modern Trade Communications and then Kenilworth Media. As an editor, I've been involved in technical publishing for over 25 years and have bylined more than 300 full-length feature articles, most dealing with technical, manufacturing and construction developments.

My duties now include writing full-length feature articles columns, departments and special reports, prospecting editorial content, helping to produce our magazines and keeping an eye on industry happenings.

Are there some article topics you'd like our team to address? Email me at mark@shieldwallmedia.com and let me know how we can help solve your biggest challenges.

As I grow and develop in this new position, I look forward to partnering and helping to further develop relationships with you, our Shield Wall Media readership. I look forward to seeing you at industry events and trade shows like our Construction Rollforming Show and METALCON.



— Mark Robins



# Contents

## **Show Previews:**

METALCON
PAGE 4

## METALCON Exhibitor Directory PAGE 12

Construction Rollforming Show **PAGE 20** 

## **Printing on Steel:**

Steel Dynamics Raises the Bar **PAGE 24** 



## Metal in Residential:

Trends Point to Opportunities **PAGE 26** 

News & New Products: PAGE 30

On the cover: Photo by PSMJ/McBoat Photography

## METALCON : PREVIEW

# METALCON Highlights & Educational Programming

ETALCON announces its program lineup for this year's annual conference and tradeshow scheduled from Wednesday, Oct. 18 to Friday, Oct. 20 at the Las Vegas Convention Center.

From intensive pre-show workshops beginning on Tuesday, Oct. 16 to 35+ free educational sessions conveniently located inside the exhibit hall to inspiring keynotes, top industry experts will share their knowledge with attendees who are eligible to earn nearly a year's worth of continuing education credits (CEUs), in-

cluding AIA learning units among others.

The only global event dedicated exclusively to the application of metal in design and construction is brought to you by 2023 sponsors: Mill Steel Company (premier level), CIDAN Machinery Inc., (platinum level), US Steel (diamond level) and others, along with long-time partner, the Metal Construction Association (MCA).

Keynote speakers for this year's show include contractor and Denver business owner Rico León, HGTV host of "Rico

to the Rescue," presenting "HGTV's Rico to the Rescue: Real Life Scenarios — From Nightmares to Dreams Come True" on-Wednesday, October 18 at 10:00 a.m. He will share some of his most unforgettable experiences and lessons learned from residential construction projects gone wrong and then turned around.

Then, on the following day at the same time, Ken Simonson, chief economist of the Associated General Contractors (AGC) of America, with 40+ years of experience analyzing, advocating and communicating about economic and tax issues, will explore the current state and outlook for construction in his keynote, "Construction Outlook for 2024: Forbidding or Reason for Cheer?"

#### A variety of special focus areas are planned, including:

#### THE ARCHITECT'S EXPERIENCE

Back for a third consecutive year and brought to you by PPG Industries, this "show-within-a-show" over two days is focused on the use of metal as a design and construction component, specifically to help architects, designers, specifiers and engineers solve tough architectural, structural, environmental and building performance challenges.

experts architectural specifications and industrial coatings of PPG to present "Designing for Las Vegas: A Full House of Finishes for Us), in- Allegiant Stadium to Enhance, Protect & Cool." Sotiropulos will

Offering exclusive education sessions specific to design pro-

fessionals, attendees will hear from respected thought leaders,

award-winning architects and industry experts, including fea-

tured keynote morning kick-off sessions. On Wednesday, Oc-

tober 18 beginning at 8:30 a.m., Christopher Sotiropulos, vice

president of stadium operations joins Gary Edgar, manager of



METALCON returns to the Las Vegas Convention Center in October. PHOTO BY MCBOAT PHOTOGRAPHY

share what it took to build — and maintain — this \$1.9 billion stadium as well as its ongoing sustainability initiatives.

Then, the next day at the same time, architect and author Stefan Al will delve into the world of architectural innovation and its profound impact on skylines worldwide in his keynote, "Steel and Skylines." Drawing from his acclaimed book "Supertall," Al will share insights from the realm of skyscrapers, shedding light on the emergence of a new generation of towering structures that defy conventional limits in terms of height and design. Additionally, he will highlight the unceasing evolution of Las Vegas Boulevard as he explores the developments of resort design contributing to the city's distinctive character. Based on his book "The Strip: Las Vegas and the Architecture of the American Dream," he uncovers the dynamic changes that have shaped this iconic destination while contemplating the importance of sustainability in its everevolving architectural landscape. Registrants of the Architect's Experience can stop by the pavilion lounge area.

#### METALCON TRAINING ZONE

#### (BOOTH #6071)

New this year and sponsored by Sherwin-Williams, the

METALCON Training Zone provides a hands-on demonstration and training area for contractors, remodelers and others who want to sharpen their skills and deliver their best, most efficient and cleanest work when installing various metal roof offerings and systems. Featuring a variety of mock-ups and materials including aluminum, copper, painted steel zinc and even some exotic materials, training will focus on proper detailing and utilization of the right tools (offered in both English and Spanish). See page 6 for more on the METALCON Training Zone.

#### WOMEN OF METAL CONSTRUCTION!

Also new this year, women of metal construction are welcome to join their peers before the show kicks off on Wednesday for a morning filled with the perfect blend of breakfast, networking and discussion at the ENVY at the Renaissance Hotel. Gather alongside fellow inspiring women and listen and learn from peers who are shaping the industry. "Metal and Mimosas" is sponsored by ATAS International, CIDAN Machinery, MetalCoffeeShop, the MRA (Metal Roofing Alliance) and METALCON.

#### **METL-SPAN LAS VEGAS PLANT TOUR**

Metl-Span, a Nucor<sup>®</sup> company, invites general contractors, installers and architects to an exclusive plant tour at its Las Vegas facility. Learn from this leading North American manufacturer of insulated metal panels (IMP)s just how they are made on Thursday, October 19 from 8:00-10:30 a.m. (transportation provided). This exclusive experience includes breakfast, networking, a plant tour and an education session "Designing with Commercial/Industrial Insulated Metal Wall Panels" presented by industry expert Kira Rogatnik (earn 1 AIA HSW credit). Learn more at metalcon.com/exclusive-plant-tour.

#### THE IMP ALLIANCE EDUCATION CENTER

(BOOTH #1115)

The MCA IMP Alliance (leading manufacturers, material suppliers, and resellers) presents a special seminar, "Insulated Metal Panels – Installation and Handling Best Practices," on best practices and common mistakes made during the unloading, staging and storage of bundles.

#### NRCA PROCERTIFICATION® DEMO

#### (BOOTH #7077)

NRCA's engaging demo will introduce what metal panel and metal shingle roof system hands-on assessments look like in its NRCA's national certification initiative, which certifies experienced installers in specific roof system installations. Learn more at nrca.net/procertification/mc.

#### LEARNING CENTERS

Check out METALCON's FREE education sessions! These 60-minute sessions from 11:15 a.m. to 5:00 p.m. on Wednes-

## METALCON

#### Wednesday, Oct. 18 to Friday, Oct. 20 Las Vegas Convention Center • metalcon.com

METALCON is the largest international event in the metal construction and design industry. Established in 1991, it's the only annual tradeshow and conference devoted exclusively to the application of metal in design and construction. Each year, contractors, architects, developers, owners, installers, fabricators, manufacturers and suppliers from more than 50 countries attend and 200+ leading companies exhibit. Produced by PSMJ Resources, Inc., in partnership with the Metal Construction Association.

day and Thursday are organized into three centers on the show floor: Best Practices, Technical Know-How and Sustainability. Attendees can earn up to 12 hours of CEUs. Additionally, METALCON continues to offer in-depth workshops this year on the Tuesday, Wednesday and Thursday of the show to provide cutting-edge education and training, which cannot be found elsewhere. For a small fee, attendees will be armed with new information, fresh ideas and strategic direction to address some of the major issues facing the construction industry today, including:

- Metal Roof Installation Training Certificate Program
- Rollforming for the Metal Construction Industry
- Metal Roofing from A (Aluminum) to Z (Zinc)
- Low Slope Detailing Workshop Certificate Course
- Mergers & Acquisitions Essentials Workshop
- RaiNA Installer Training for Rainscreen Assemblies

And in the Best Practices Learning Center, a special "State of the Industry" panel presentation led by members of the MCA will take place on Wednesday, October 19 at 3:45 p.m. to discuss current and future opportunities and challenges facing the metal construction industry.

#### **GIVING BACK**

Each year, METALCON gives back to the local community where the show takes place. This year, METALCON is partnering with America's Fund, a non-profit organization dedicated to helping veterans in all branches of the military. The program was created to direct urgently needed resources and financial support to injured and critically ill members of the U.S. Armed Forces along with their families and is a self-funded program of the Semper Fi Fund (metalcon.com/giving-back).

"We look forward to returning to Las Vegas, a great destination for METALCON. We have a lot of hands-on training opportunities, new educational programming and fabulous keynote speakers," said Judy Geller, METALCON Show Director. "Make sure to stop by The Deck, conveniently located near registration, to meet show management, network or take a break." **MB** 

## METALCON : PREVIEW

# Introducing the METALCON Training Zone

Sherwin-Williams, Sheridan Tools sponsoring opportunity for contractors to get hands-on experience



Working out details in paper at a bilingual VM ProZinc training in Mesa, Arizona.

In an effort to continue metal's decade-long trend of gaining roofing market share, METALCON is doing its part to develop more qualified metal roofing installers. The 2023 METALC-ON tradeshow floor will include a METALCON Training Zone, offering a hands-on learning opportunity for roofing contractors with any or no level of experience working with metal.

The 2023 show is scheduled for October 18-20 at the Las Vegas Convention Center. Show staff recently announced that booth space is being added again and attendee registration is more than double what it was last year.

"With exhibit and attendee numbers on the rise, this show provides us with a great opportunity to offer installation training to metal roofing installers," says Judy Geller, Vice President of Trade Shows/METALCON. "Even more importantly, this training will be available to those with no experience with metal but are interested in adding metal roofing to their product line."

The METALCON Training Zone will feature demonstrations and education using a variety of mock-ups and materials including painted steel, aluminum, zinc, copper and other natural metals. Training will focus on proper detailing and utilization of the right tools to enhance skills of contractors and remodelers, en-



Individual advanced 24-gauge painted steel detail training in Reading, Pennsylvania. PHOTOS COURTESY OF JOHN SHERIDAN, SHERIDAN TOOLS.

abling them to deliver their best, most efficient and cleanest work when installing various metal roofing systems.

"We're working out the schedule, but we're planning on having continuous training all three days of the convention," says John Sheridan, owner of Sheridan Tools and organizer of the MET-ALCON Training Zone. "We'll have mock-ups with several various details to work on and there will be training in English as well as Spanish. Roofing materials are coming from several generous manufacturers and Sheridan Tools will be providing tools for the METALCON Training Zone."

Among the manufacturers donating metal roofing materials for use in the METALCON Training Zone are Drexel Metals, McElroy Metal, and VMZinc.





Copper advanced detail training in Burlington, North Carolina.

The METALCON Training Zone is sponsored by Sherwin-Williams, which recently introduce its MetalVue program. The coating manufacturer has invested years in the development of MetalVue, a program that has evolved into an in-depth and comprehensive tool kit for contractors.

"We're working on finding ways to help contractors grow their business by getting into metal," says Mark MacDonald, with Sherwin-Williams. "Research shows there is a real opportunity to create a significant share shift from asphalt shingles into metal roofing. MetalVue offers business process change, services and software to help contractors make that transition. It provides the framework for their business to be successful."

Part of that success is being able to install a watertight metal roofing system, so training is a significant step for contractors. MetalVue is sponsoring the METALCON Training Zone. The mockups will provide some basic details involved in the installation of a watertight metal roofing system. Almost all metal roofing manufacturers offer training specific to their products.

Jim Bush is the Vice President of Sales and Marketing at ATAS International, a leading metal roofing and wall panel manufacturer, located in Allenton, Pennsylvania. Bush has overseen numerous training sessions at METALCON and at various ATAS locations.

"First and foremost is safety," Bush says. "One should always follow the current OSHA safety practices when installing metal. Following safety, my best advice is to always follow the manufacturer's standard details. While there are often five right ways to treat individual details, there certainly are details used that may not be appropriate for the system or geographical location of the building. If a contractor deviates from the manufacturer's recommendations, it is often a reduced level of liability for the manufacturer in the event a problem does occur in the future.

"As the attention to detail is the greatest challenge when getting involved in any new materials, understanding the basics of the materials and proper tools to be used with the systems is a must. Also, while materials are highly aesthetic in nature, in many cases the functionality of the system is hidden from view. As metal provides some of the longest service life expectations of any roofing material, the proper installation is key to the long-germ performance. While not overly complicated to install, they are not easily corrected if something is done improperly."

#### ABOUT SHERWIN-WILLIAMS' METALVUE PROGRAM

The MetalVue program was developed to help metal roofing manufacturers and contractors sell more residential and commercial metal roofs. As an industry leader in metal roof coatings, Sherwin-Williams is dedicated to growing the metal roofing industry and the share of business for its partners faster than the current rate of growth. To achieve this, Sherwin-Williams has designed and developed a suite of services that can be marketed through the customer/value chain, including distributors, contractors and installers.

#### **ABOUT SHERIDAN METAL RESOURCES**

Sheridan Metal Resources is more than tools for sale — it's training. With the right tools and the proper knowledge about how to use them, metal roofing professionals can improve skill sets and perform more efficiently and effectively. Sheridan training programs are designed with practical applications in mind and cover all necessary skills for metal roofing and cladding. **MB** 

7

## METALCON : PREVIEW

## MCA, METALCON Offer Opportunities for Next Generation

ny industry is only as good as its people. Sustaining success requires experienced industry veterans as well as the ability to attract, educate and develop a younger and more diverse workforce to eventually move into leadership roles within their companies and industry.

Like a lot of industries, the metal construction industry is facing the challenge of retiring leaders with not enough replacements waiting in line to fill that void. Innovative ideas from future leaders have to be a valuable asset when making a difference in the continuing growth of the metal construction industry. That's why the Metal Construction Association (MCA) and METALCON (produced by PSMJ Resources) have launched the Future Leaders Program to attract, educate, connect and develop those eventual industry leaders.



Mark Carlisle, Industry Marketing Manager – Construction at United States Steel Corp.

"The opportunity to leverage METALCON brings great value to the program," says Jeff Henry, MCA Executive Director. "Our objective is to increase the technical and business acumen of those new to the metal construction industry."



Participants in the Future Leaders Program.

8



Bridget Jammoul, Market Manager at Therm-All

Henry anticipates the partnership with METALCON will eventually develop into a broad curriculum available to educate industry newcomers about the nuances of doing business in the industry, as well as the use of metal in construction. The METALCON team has hand-picked a selection of education sessions that will be beneficial to future leaders attending METALCON in October. MCA, working with METALCON, offers additional future leaders sessions virtually through METALCONLive! and dedicates webinars several times a year.

"Attracting a diverse variety of people to foster community and open their network will be the key to the success of the Future Leaders Program," says Bridget Jammoul, Market Manager at Therm-All. "Not only folks from all areas, functions and levels within the industry, but people from all walks of life, too."

There are opportunities to learn and grow with the industry by being an active association member. Members that

## ATH ANNUAL Construction Iforming Show

## September 27-28, 2023

## Duke Energy Convention Center, 525 Elm Street, Cincinnati, OH





THE HILTON CINCINNATI NETHERLAND PLAZA IS THE OFFICIAL HEADQUARTER HOTEL FOR THE 2023 CONSTRUCTION ROLLFORMING SHOW.

> FOR RESERVATIONS: Call 1-888-225-9664

(Reference SWM Rollforming Trade Show for discount)

FOR MORE INFORMATION CONTACT MISSY BEYER:

missy@shieldwallmedia.com 920-216-3007



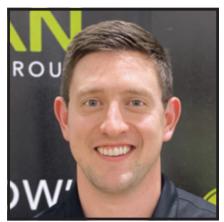
**REGISTER BELOW OR ONLINE: www.constructionrollformingshow.com** 

## **4TH ANNUAL CONSTRUCTION ROLLFORMING SHOW**

Please fill out and mail with payment by September 6th to: CRS Registration, P.O. Box 255, Iola, WI 54945. (Please Print)

Name:	ADMISSION FEE:
Company:	
Address:	
City/State/Zip:	Quantity:
Phone (required):	
Email:	Total Enclosed:

## METALCON : EXHIBITORS



Ryan King, National Sales Manager at CIDAN Machinery

continue to learn more about the metal construction industry are more valuable to their own companies.

"What we need, more than anything else, is to get people new to the industry involved," says Mark Carlisle, Industry Marketing Manager – Construction, U.S. Steel. "This isn't an age-discrimination thing. It's good for anyone new to the industry to become engaged with other member companies. It doesn't matter if they are early in their careers or the middle of their careers.

"Company leaders need to bring these people to meetings and trade shows, put them to work learning the industry. The more they know, the more they can help their company and the industry. The goal should be to get these people engaged to keep the MCA relevant."

The mission of the MCA is to promote the use of metal in the building envelope through marketing, education and action on public policies that affect metal's use. The success of one member becomes the success of all.

PSMJ, the producers of METALCON, partnered with MCA to launch the Future Leaders Program. Online and in-person events are continuing opportunities for metal construction professionals who have the desire to develop skills needed to advance. (More can be learned at www. metalconstruction.org.)

## Future Leaders Program Education Sessions At METALCON 2023

Below is a list of METALCON education sessions relevant for Future Leaders. Future Leaders (under 40 years of age) can save \$50 on any METALCON registration package with the code FLMC when they register. (All sessions are one hour in length unless otherwise noted.)

- Metal Roof Installation Training Certificate Program (1/2-day workshop)
- Rollforming for the Metal Construction Industry (1/2-day workshop)
- RAiNA Installer Training for Rainscreen Assemblies (1/2-day workshop)
- Metal Roofing from A (Aluminum) to Z (Zinc) (1/2-day workshop)
- KEYNOTE: Construction Outlook for '24: Forbidding or Reason for Cheer?
- Better Together: Creating Connectivity in a Divided World
- Understanding the Customer Experience & Digital Transformation
- · Accounting Doesn't Have to Suck!
- · Winners and Losers: Those Who Control Their Metal Prices Versus Those Who Don't
- Assuring the Successful Continuation of Your Company
- Buying MCM: What the Industry Has In Store For You
- · Low Slope Metal Roofing Best Practices
- Resilience Buildings, Disaster is a Hazard You Didn't Prepare For
- · Sealant and Adhesive Technology for Metal Applications
- AC472 & AC478 Accreditation for the Metal Building Industry

construction, may not be as appealing as industries like tech," says Ryan King, National Sales Manager at CIDAN Machinery. "I think this program attracts new, younger talent into our industry through education, mentoring, networking and more. It will also get those younger people already in our industry to think about their career and company's future.

"Like most industries, our current leaders are baby boomers and Gen X. Boomers are mostly near or already retired. Gen X are mostly our leaders now, but millennials are already stepping into leadership roles. Gen Zs are now 11-26 years old and they, too, are part of, or soon entering the workforce. I believe this program will help shape the leaders of the future and bring new blood into our industry."

Jammoul believes it's an easy decision to become involved.

"To me, a future leader has nothing

to do with age," she says. "It's a moniker that says, 'I'm passionate about this, I'm invested in this and I'm here to stay.' A collective group with that mindset is sure to add value to the metal construction industry. Small ways, such as reversementoring senior leadership members on a topic like the use of AI to increase sales team efficiencies, to potentially larger ways, such as cross-collaborating on product or service offerings. I think the sky's the limit here."

Jammoul says she wants to connect with people who are excited about the present and future landscape and who are in it for the long haul.

"We live in a fast-paced world," King says. "I think more MCA members need to encourage their hungry and driven people to get more involved. We also need to offer workshops and networking for future members to learn from the boomers and Gen X and other speakers." **MB** 

"Metal construction, or really all

REGISTER TODAY! OCTOBER 18-20, 2023

# METALCON

LAS VEGAS CONVENTION CENTER



THE ONLY GLOBAL EVENT DEDICATED TO THE APPLICATION OF METAL IN CONSTRUCTION AND DESIGN LEARN MORE AT METALCON.COM

# **PLAN YOUR VISIT**

Be sure to visit these exhibitors at METALCON, October 18-20, 2023



## AceClamp by PMC Industries BOOTH #2102

87 Spring Lane Plainville, CT 06062 www.aceclamp.com info@aceclamp.com 860-351-0686 860-351-0689 (fax)

AceClamp\* is a market-leading manufacturer of non-penetrating clamps for rooftop snow retention and solar mounting systems for SSMR. Our patented, non-penetrating sliding-pin clamp design secures to the seam without traditional set screws and does not penetrate the panel. The AceClamp comes fully assembled and it installs faster than the traditional set-screw clamps saving on labor costs. We offer snow retention solutions for metal, membrane, slate and asphalt roofing.



1313 Windsor Ave. Columbus, OH 43211 www.coilcoatings.akzonobel.com/us 614-294-3361

Beyond Performance. It is what makes us different. Built on over 200 years of

experience. Whatever we do, we achieve the highest standards. Creating products of tested, proven and enduring quality. Working in partnership to best serve our customers. Delivering genuine added value. Protecting reputations as much as surfaces. Simply being trusted to do all this, and more, like nobody else can. Quality, Service, Trusted Partner. AkzoNobel Coil and Extrusion Coatings.



#### AMS Controls BOOTH #2027

12180 Prichard Farm Rd Maryland Heights, MO 63043 www.amscontrols.com sales@amscontrols.com 314-344-3144 314-344-9996 (fax)

AMS Controls develops advanced hardware and software technologies for production management and controls that increase profitability and productivity for the metal forming industry. AMS Controls' customers include some of the largest metal processing operations including those producing metal buildings, metal roofing, light gauge framing, fenestration, custom roll formed parts, HVAC ductwork, and more. With over 14,000 installations at more than 4,500 locations worldwide, AMS Controls sets the standard for operational efficiency in the metal forming industry.



## GROUP

## Bradbury Group BOOTH #4093

1200 E Cole Moundridge, KS 67107 www.bradburygroup.com bradbury@bradburygroup.com 620-345-6394

The Bradbury Group offers top-notch metal processing equipment to global customers across various industries. Our advanced designs are instrumental in driving the metal construction market. Within our Group, we specialize in roll forming equipment, cut-to-length lines, slitting lines, levelers, automated production systems, insulated metal panel equipment, metal tile roofing systems, trim shop equipment, and controls. We work with start-up companies, mid-level, and advanced manufacturers.





#### Direct Metals, Inc. BOOTH #2022

1719 Baseline Court Fort Myers, FL 33905 www.directmetalsinc.com dave@directmetalsinc.com 855-800-8878 239-599-8545

DIRECT METALS INC (DMI) supplies long life fasteners for exposed fastener and standing seam metal roofs. The #12 diameter SCAMP 304 SS cap self-drill or Type 17 point carry a 40-year warranty to match metal roof panel warranties and are available with powder coat paint for color match. PANCLIP Pancake & Wafer head screws and panel clips for standing seam metal roofs are available in a variety of profiles. Accessories include metal roof pipe flashings, sealants, butyl mastic, solid and vented foam closures, and polycarbonate panels.

## DR!PSTOP

## Freudenberg Performance Materials LP

3500 Industrial Dr. Durham, NC 27704 www.dripstop.net Orion@dripstop.com 503-871-5806

For over 25 years, Dripstop<sup>®</sup> has been the absolute best way of dealing with condensation on non-insulated metal roofs. It has been tried and tested in every climate condition across the globe and has proven to be a simpler and more economical way. The membrane will absorb the water caused by condensation, thus preventing dripping from the roof. Dripstop<sup>®</sup> serves as an added layer of protection for the metal in corrosive environments while also improving inside and outside acoustic properties.

## CONTRACTORS...

now you can perforate your AG Panels AND FLAT STOCK with the <u>AG PANEL PERFORATOR!</u>





Call us today at 215-997-2511 www.rollformerllc.com



## METALCON : EXHIBITORS

# ●UPONT> Tedlar® BOOTH #6001

200 Powdermill Road Wilmington, DE 19803 tedlar.com ec-tedlar@dupont.com

DuPont<sup>™</sup> Tedlar<sup>®</sup> PVF film has been proven effective in protecting a variety of surfaces for over 60 years, including metal in highly corrosive and demanding exterior applications around the world. When laminated to metal coil, Tedlar<sup>®</sup> provides superior performance to other premium industrial coatings. Tedlar<sup>®</sup> is extremely resistant to chemicals and is highly flexible, and chosen for projects requiring very high UV and corrosion resistance, enabling 50 year warranties for structures built within 1500 ft of the ocean.

## DYNAMIC FASTENER

## Dynamic Fastener BOOTH #5019

9911 East 53rd Street Raytown, MO 64133 www.dynamicfastener.com 800-821-5448

Dynamic Fastener offers same-day shipping of screws, painted rivets, anchors, flashings, safety equipment, hand tools and power tools. In-house custom painting of screws and rivets, with one or two-day lead time. Dyna-Guard snow retention system for metal roofs. Dyna-Clamps are available to accommodate many different profiles of standing seam roofs. The company's free, 140 page, full color, tool and fastener handguide provides engineering data, details product offering and pricing. Locations: Kansas City, MO (Main office), Chicago, Houston, Las Vegas, Memphis, St. Louis, St. Paul.



#### EDCO Products Inc. BOOTH #3076 8700 Excelsior Blvd.

Hopkins, MN 55343 edcoproducts.com sales@edcoproducts.com 800-593-2680

EDCO Products is a national manufacturer of metal exterior building products. For over 77 years, our metal siding and roofing products continue to deliver exceptional value to our customers because of the products exceptional durability and beauty that will withstand the test of time. Visit our booth during MetalCon to see our new siding and roofing colors, as well as learn more about why EDCO's exterior building products are the choice material by many contractors and homeowners alike.

## FABRAL

A FLACK GLOBAL METALS COMPANY Fabral BOOTH #6079 300 Railhead Road Fort Worth, TX 76106 Fabral.com info@fabral.com 800-432-2725

Fabral is the premier supplier of metal building envelope solutions for multiple end markets including residential, commercial, education and post frame/agricultural. Fabral's durable panels give customers the finest choice of materials on the market today. With diverse product and complete accessory offerings, Fabral's roof and wall systems are available in a wide variety of substrates, unpainted or finished with high-performance coatings.



Flack Global Metals BOOTH #6015

16435 N Scottsdale Rd. #200 Scottsdale, AZ 85254 www.flackglobalmetals.com questions@flackglobalmetals.com 480-575-3221

In 2010, Flack Global Metals (FGM) was founded with the mission to reinvent how metal is bought and sold. Over 13 years later, the company has evolved into a hybrid organization combining an innovative domestic flat-rolled metals distributor and supply chain manager, a hedging and risk management group supported by the most sophisticated ferrous trading desk in the industry known as Flack Metal Bank (FMB), and an investment platform focused on steel-consuming OEMs called Flack Manufacturing Investments (FMI). Together, these entities deliver certainty and provide optionality to control commodity price risk in the volatile steel industry.



Howick Limited

## BOOTH #2097

117 Vincent Street Auckland 2014 New Zealand www.howickltd.com sales@howickltd.com +6495345569

Howick are innovators of light steel roll-forming technology. Our machines

produce cold formed steel framing components for walls, floors and truss for faster builds, precision, & waste reduction in residential, low-rise commercial, retrofit, & modular construction.



#### Kirsch BP / Sharkskin Roof Underlayments BOOTH #5104

1464 Madera Road #N, Ste 387 Simi Valley, CA 93065 www.sharkskinroof.com info@sharkskinroof.com 877-742-7507

Kirsch Building Products is focused on developing and marketing premium "building envelope" products that provide engineered long term performance value, energy savings, and reduce labor costs. The Sharkskin\* line of premium roof underlayments are designed primarily for all pitched roof installations of concrete/ clay, slate, metal, and asphalt composition shingles, etc. providing "Industry Leading" High-Temp, 12-month UV and High Wind Uplift Resistance. Sharkskin Ultra SA<sup>\*</sup> is an air and vapor barrier used in wall and deck assemblies. Sharkskin "The Ultimate Underlayment".



#### Levi's Building Components BOOTH #2076

400 Burkholder Drive Ephrata, PA 17522 www.levisbuildingcomponents.com info@levisbuildingcomponents.com 877-897-7020 717-656-2558 (fax)

Levi's Building Components is your one-stop shop for fasteners, snow guards, closures, venting, underlayment, roof boots, sealants, tin snips, gloves, metal wrap, blue film, and other roofing components. Check out our broad selection of fasteners, including FastGrip<sup>™</sup>, Metalgrip<sup>™</sup>, EZGrip<sup>™</sup>, ProZ<sup>™</sup>, ProCap<sup>™</sup>, and Pancake Head. To finish your project, we also supply premium structural and deck screws. For quality, value, and service, turn to Levi's for your metal roofing accessories.



Mac-Tech BOOTH #2033 3073 S Chase Avenue Milwaukee, WI 53207 www.mac-tech.com win@mac-tech.com 414-486-9700

For over 40 years, Mac-Tech has stood as the premier destination for top-notch metal fabricating equipment. With our unrelentless obsession to serve our customers, we specialize in cutting-edge metal folding machines sourced from industry leaders like Erbend and Stefa-Sucorema. Our wide array of offerings includes folders, long folders, slitters, cut-to-length machines, shears, and downspout forming machines, catering to diverse fabrication needs. With a rich legacy of trust, Mac-Tech remains the go-to partner for those seeking reliable solutions, underscored by our commitment to quality and innovation in the ever-evolving metalworking landscape.



ATLASFASTENERS.COM

USA MANUFACTURING & DISTRIBUTION TO SUPPORT YOUR BUILDING PRODUCT NEEDS

15

## METALCON : EXHIBITORS



**Roofing Ventilation & Accessories** 

## Marco Industries BOOTH #2056

4150 S 100th E Ave., Ste. 301 Tulsa, OK 74146 https://marcoindustries.com info@marcoindustries.com 800-800-8590 918-622-4536

If It's Not Proven, It's Not Marco. We make the best roofing ventilation and accessories—period. With the most tested and certified products on the market, you can trust our solutions to perform in even the harshest conditions, protecting your roof and everything underneath.



## Marion Manufacturing, Inc. BOOTH #1023

201 S. Coble Marion, KS 66861 www.marionmanufacturing.com sales@marionmanufacturing.com 620-382-3751 620-382-2322 (fax)

Form your future with a machine from Marion Manufacturing, Inc. Trim Machines, Panel Machines, Shears, Decoilers, Hemmers, Rebar Hot Heading Lines, Flashing lines and more. Let us help you add the value to the metal!



## Metal Rollforming Systems BOOTH #5057

4511 N. Freya Street Spokane, WA 99217 www.mrsrollform.com info@mrsrollform.com 888-284-6794 509-467-5631 (fax)

Metal Rollforming Systems designs and manufactures industry leading rollforming equipment and accessories. Our complete in-house design and manufacturing facility allows us to price our equipment at a very competitive price, making us a leader in rollforming equipment manufacturing. MRS' product lines consist of single and double deck rollformers, single and multi-trim rollformers, slitters, sheet stackers and much more. We take great pride in our customer support both before and after the sale.



100 International Dr. Peachtree City, GA 30269 www.metalforming-usa.com info@metalforming-usa.net 678-325-2313 770-631-7776 (fax) MetalForming is the leader in metal building and architectural sheet metal technology. With 25 years of selling and servicing high quality metal folders, shears, roll formers, slitters and curvers from the most respected manufacturers across the globe. We have the largest service and parts organization in the business. Schlebach Quadro is the number one bestselling portable roll-forming system in the world offering 11 profiles with instant change over.



## BUILDING PRODUCTS CORP. MFM Building Products Corp. BOOTH #3069

525 Orange St. Coshocton, OH 43812 MFM Building Products Corp. info@mfmbp.com 800-882-7663 740-622-6161

MFM Building Products manufactures a complete line of self-adhering waterproofing products for metal roofing applications. These products include steep-slope roofing underlayments rated to 250°F, and specialty flashing tapes engineered to seal metal roof seams and exterior penetrations. These membranes can also be used under vertical applications such as metal wall panels and parapet walls. MFM manufactures all of our products in the USA with a focus on product quality and value. Stop by the MFM booth for more information.



## Mill Steel Company BOOTH #4009

2905 Lucerne Dr. SE Grand Rapids, MI 49546 www.millsteel.com info@millsteel.com 800-247-6455 616-977-9411 (fax)

Founded in 1959, Mill Steel Co. is one of North America's largest steel and aluminum distributors. Headquartered in Grand Rapids, MI, with six Regional Processing & Distribution Centers, Mill Steel excels at serving some of the world's most demanding industries through dedication to superior quality, delivery, and performance. Mill Steel offers a knowledgeable staff with decades of experience in building products, top-ofthe-line coating systems, and easy online ordering. Contact Mill Steel today for your full 24, 26, and 29-gauge SMP and paint to order material and acrylic needs. Sherwin-Williams WeatherXL, AkzoNobel, commodity polyesters, and custom color codes are all available.



Novagard BOOTH #7006 5109 Hamilton Ave Cleveland, OH 44114

OLD KEY WINNER

#### novagard.com products@novagard.com 216-881-8111

Novagard is a Woman Owned innovator of silicone sealants for construction, electronics, and industrial applications. We manufacture NovaFlex, a line of color-matched silicones that are used in the construction industry on metal siding, roofs, panels, and gutters. We also have a translucent metal roof mastic for penetrations, flashings, and repairs that was named a 2022 METALCON Top Products Award winner. All NovaFlex products are low odor, solvent free, and VOC compliant in all 50 states. Stop by booth #7006 to discover how you can eliminate callbacks with our contractor friendly silicones.



Give us a call for all your coil and building accessory needs!

BeckryTech H.D.P.E paint system.

## Master Flash® **RESIDENTIAL APPLICATIONS**

Sealing pipes, cables, conduit, wire, solar, refrigeration lines, venting. Etc.,. **ROOFING • PLUMBING • ELECTRICAL • HV/AC • SOLAR** 



METALCON : EXHIBITORS



#### **PAC-CLAD** | Petersen **BOOTH #3091**

1005 Tonne Road Elk Grove Village, IL 60007 pac-clad.com info@pac-clad.com 800-PAC-CLAD

Petersen, a Carlisle company, manufactures PAC-CLAD architectural metal cladding systems in multiple gauges of steel and aluminum. PAC-CLAD products include multiple wall panels, standing seam roof panels, soffit panels, perforated metal, coil and flat sheet. All are available in a Kynar-based 70% PVDF Fluropon coating in 46 standard colors.

# Paragon

#### **Paragon Computing Solutions LLC BOOTH #2060**

20 S Reamstown Rd Stevens, PA 17578 www.goparagon.com sales@goparagon.com 866-971-0940

The Paradigm family of software solutions from Paragon Computing Solutions allows you to seamlessly manage Inventory, Manufacturing, Delivery, and Accounting for your Rollforming Business.





## **Roll Former LLC BOOTH #4067**

140 Independence Lane Chalfont, PA 18914 www.rollformerlic.com info@rollformerllc.com 215-997-2511 215-997-5544 (fax)

Roll Former LLC, leading the industry since the 1970s, specializes in the development of high-quality roll forming machinery. Our extensive product range includes Roof Panel Machines, Cap/ Curver Machines, Wall/Soffit Machines, Coil Processing Machines, Perforators, Decoilers, Trim Machines, and Power Seamers, alongside custom machinery.

## ROPER WHITNEY.

#### **Roper Whitney BOOTH #4067**

2833 Huffman Blvd Rockford, IL 61103 www.roperwhitney.com info@roperwhitney.com 815-962-3011 815-962-2227 (fax)

Roper Whitney, leveraging over a century of expertise, offers a diverse range of high-quality, American-made sheet metal fabrication equipment. To enhance our portfolio, we also provide Eckold Products and Evobend Up/Down Folders. Our own offerings, including the renowned AutoBrake<sup>®</sup> and powered long folders, alongside advanced tools for bending, folding, notching, punching, and shearing, are complemented by the innovative SYNERGY control system. Our commitment is to streamline the sheet metal fabrication process, delivering efficiency and precision to various industries.



### **SmartBuild Systems BOOTH #1070**

PO Box 20627 Boulder, CO 80308 https://smartbuildsystems.com kdietzen@kevmark.com 303-443-8033 303-443-8033 (fax)

SmartBuild Systems is the construction industry's only complete design system for all-metal buildings. Simple enough for anyone to use, this web-based software quickly generates a 3D model, material lists, pricing, proposals, and construction documents for almost any steel structure. SmartBuild is the gold-standard software for Post Frame that designs buildings using steel framing and metal panels for roofs and walls.

- USE SMARTBUILD TO QUOTE BARNDOMINIUMS
- USE AS A 3D CONFIGURATOR ON YOUR WEBSITE
- Unlimited attached buildings in line or perpendicular
- Unlimited lean-to's, sheds, porches, and wrap-arounds
- Interior walls
- Insets
- Any type and number of windows and doors





#### ST Fastening Systems BOOTH #3016

6357 Reynolds Road Tyler, TX 75708 stfasteningsystems.com 800-352-4864 800-352-3940 (fax)

ST Fastening Systems manufactures steel-frame, and post-frame fasteners for use in agricultural, industrial, commercial and residential metal roof and sidewall applications. Products have unique engineered design innovations and are enhanced with a superior proprietary powder coating paint system.



## SWI Machinery, Inc. BOOTH #3097

85 Howell Ave Fairburn, GA 30213 www.swimachinery.com info@swimachinery.com 770-766-0880

SWI is an established international leader in sheet metal machinery. Our state-of-the-art machines provide superior, dependable solutions for both large and small organizations throughout the industry, including some of the world's largest roofing companies along with hundreds of family-owned enterprises around the globe. Our range includes Simplex and Duplex folders, Marxman manual and automatic slitters, uncoilers, recoilers, multi-station uncoilers, and complete customized process lines. These machines are fast, flexible, and easy to operate, while advanced features maximize production. Effective, reliable mechanical designs make SWI a number one choice for advanced sheet metal machinery.

Tennsmith BOOTH #4067 6926 Smithville Hwy McMinnville, TN 37110 www.tennsmith.com info@tennsmith.com

931-934-2211 931-934-2220 (fax)

Tennsmith, with decades of excellence, is a global leader in manufacturing American-made sheet metal fabricating machinery, and the proud owner of Roper Whitney and Roll Former LLC. Our diverse product line, which includes Automatic Folders, Hand Brakes, Shears, Slip Rolls, Cleat Benders, Notchers, and Rotary Machines, offers comprehensive, high-quality solutions for sheet metal fabrication. Demonstrating commitment to innovation, precision, and efficiency, Tennsmith streamlines fabrication processes across a wide range of industries.



## Triangle Fastener Corporation BOOTH #5077

1925 Preble Ave. Pittsburgh, PA 15233 www.trianglefastener.com 800-486-1832 412-321-7838 (fax)

TFC offers a full line of fasteners, sealants, and power tools for the metal

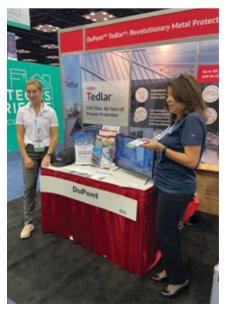
roofing industry. We specialize in supplying rare fasteners and accessories used in a wide range of applications and job-site support, 27 stocking locations and nine paint facilities. Technical support, inventory management, and delivery programs are available.

## Van Mark The Mark of Quality

## Van Mark Products Inc BOOTH #4061

24145 Industrial Park Dr. Farmington Hills, MI 48335 www.van-mark.com sales@van-mark.com 248-478-1200

Van Mark Products manufactures portable metal bending and forming tools for use in the siding and metal roofing industries. Offering a wide range of metal brakes, slitters, cutters, and other tools capable of manipulating up to 24 gauge painted steel on the jobsite. All products are designed, manufactured, and assembled in the USA and have been since 1964. **MB** 



# Rollforming Show Returns to Cincinnati

Get the Metal-Forming Information You Need September 27-28

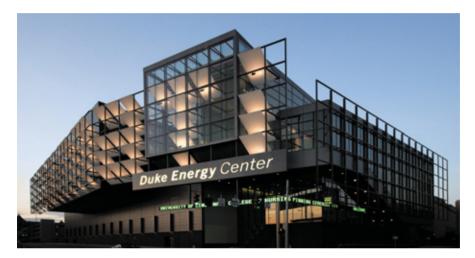
he fourth installment of the Construction Rollforming Show is heading back to Cincinnati in September. Slated for Wednesday and Thursday, September 27-28, at the Duke Energy Convention Center, the event will once again provide attendees with opportunities to speak directly with the suppliers and manufacturers that help roll formers not only get the job done, but help make their businesses more profitable and more successful.

The Construction Rollforming Show isn't a show for contractors; there won't be any "cash and carry" bargains. Show developer Gary Reichert explains, "The Construction Rollforming Show is designed for small roll formers — not small contractors. If you need to learn about metal forming or speak directly with manufacturers who sell in pallet, container or truck-load lots, this show is for you."

It is also the perfect opportunity for anyone who is considering making the transition to manufacturing their own metal trims, gutters, roof and wall panels — perhaps in order to create their own post-frame building kits. Attendees can learn what it takes to get started and how you can be competitive and successful in this essential industry.

The CRS is an event that was developed specifically for construction metal formers. Attendee registration includes allaccess to educational sessions, exhibits, a complimentary social hour, and one-onone conversations with industry insiders.

Educational sessions will be held both days of the show. For example, Rob Bowlin, AmeriPak, will lead a session on



## Rollforming Show 2023

preparing metal panels so they won't be damaged during shipping, while Frank Schiene of Metal Rollforming Systems will teach about roll-forming machine maintenance.

The educational sessions also include general business topics. Randy Chaffee, Source One Marketing, who has more than four decades of successful sales experience, will be leading sessions each day of the show; he will present "Working a Show on Both Sides of the Aisle" and "Hybrid Selling." Chaffee will also be recording his popular "Building Wins" podcast at the show.

Other Education Session Topics:

• Which Panel Rollformer Meets Your Needs?

- Digital World: Podcasts, Social Media
- Coil Basics
- Hybrid Selling
- Trim Brakes and Folders
- Coatings and Warranties

• Automated vs. Manual Material Take-Offs

- State of the Industry
- The Importance of Associations

All sessions are allotted enough time for question and answer sessions following the presentations.

In addition to educational sessions, as of this early writing, more than 50 suppliers and manufacturers are confirmed to exhibit, and the show expects to sell out floor space before the end of June. Attendees can speak one-on-one with coil and fastener suppliers, equipment manufacturers, component manufacturers, and more, which means you'll get all the information you need to make informed decisions.

Metal-forming machines will be on dis-

play on the expo floor; some will even be demonstrating operation. Hershey's Metal Meister, SWI Machinery, and Formwright (New Tech Machinery) will all have equipment set up for up-close inspection. Star 1 Products will also be performing demonstrations of its felt applicator.

If you form light gauge metal used in post-frame construction, metal buildings, carports, metal roofs or gutters — or you are looking to get into metal forming — you can't afford to miss the 2023 Construction Rollforming Show.

Learn more and watch for updates at the website constructionrollformingshow.com.

#### **SHOW HOURS & LOCATION**

The Construction Rollforming Show expo floor will be open from 12:30-5:30 p.m. Wednesday, September 27 and 8:30 a.m.-12:30 p.m. Thursday,

September 28. Educational sessions will be held from 9 a.m.-4 p.m. Wednesday and 9-11 a.m. Thursday. The schedule will allow attendees to get the most out of your attendance.

Attendee preregistration costs just \$50 and covers everything the show has to offer, including access to the expo floor and entry to all educational sessions. (The cost at the door is \$75, but still includes access to all show features.) To preregister: rollforming magazine.com/construction-rollforming-show-registration, or see the QR code on page 23.



Questions about exhibiting at the Construction Rollforming Show can be directed to Missy Beyer, Shield Wall Media Director of Shows. She can be reached at missy@shieldwallmedia.com or 920-216-3007. The official Construction Rollforming Show host hotel is once again the Hilton Cincinnati Netherland Plaza (35 W Fifth St., Cincinnati), which is conveniently located across the street from the Duke Energy Convention Center. The street address of the Duke Energy Convention Center is 525 Elm St., Cincinnati, OH 45202. **MB** 

# Check Out Our Digital Magazine Websites

www.ruralbuildermagazine.com www.framebuildingnews.com www.readmetalroofing.com www.rollformingmagazine.com www.garageshedcarportbuilder.com www.roofingelementsmagazine.com

## construction rollforming show



# TOP 10 REASONS TO ATTEND THE 2023 CONSTRUCTION ROLLFORMING SHOW



he 2023 Construction Rollforming Show provides a oneof-a-kind opportunity for business owners and employees to gain knowledge specifically designed for the roll-forming industry. The following are the Top 10 reasons why business owners, managers, and key team members should attend the 2023 Construction Rollforming Show in Cincinnati September 27-28.

Gain knowledge of industry trends and forecasts. Trade show attendees learn from experts and peers about what is happening in their industry and what is expected to happen in the next 12-24 months.

**2** Gain knowledge of new products and services. Manufacturers are constantly developing new products and features that help their customers improve productivity and efficiency. Trade show attendees learn about the latest products and features that can give them a competitive advantage.

3 Learn about legal, regulatory, and compliance changes. What new laws and regulations have been implemented over the past year? How will these changes affect your business and what steps can businesses take to succeed?

Gain knowledge of how other businesses operate. Trade show attendees meet their colleagues and discuss how their businesses operate and what challenges they are facing. By doing so, attendees learn how other businesses improved efficiency and solved problems. Attendees can use this information to improve their own efficiency and solve their own problems.

**5** Gain knowledge about your competition. The roll-forming industry is constantly changing. Attendees can learn what their competition is doing. Who bought new equipment? Who opened a new location? Who went out of business?

**6** Build relationships with key vendors and even order products from them, face-to-face. Vendors can be invaluable partners. Trade show attendees get face-to-face time with multiple key vendors — in a single location — and establish relationships that will help their business succeed. You can even create an order with a real, live person.

Z Build relationships with colleagues in the industry. Getting to know colleagues in the roll-forming industry is a great reason to attend this trade show. Attendees can meet colleagues from other regions and have a resource to "bounce ideas off of" in the future. For example, if a business owner is considering investing in new equipment, that owner can contact another business owner they met at a trade show to get input on the pros and cons of specific types or pieces of equipment.



Build relationships with your team. Many businesses send their key employees to trade shows. This is a great opportunity for key team members to get involved in the industry, learn about new products and practices, and meet key vendors. It also provides an opportunity for those team members to feel like an important part of the business and to build relationships with other team members away from the office.

9 It's time to be inspired. Trade shows provide a great reason to get out of the office for a few days. When an owner or manager is in the office, most of their time is spent dealing with immediate issues. Trade shows provide an opportunity to step away from daily responsibilities and focus on the big picture and future goals and strategic plans for the business.

**1 O** Visit the Queen City. Cincinnati is where "Midwest friendliness meets Southern charm." The free Connector Streetcar travels a 3.6-mile loop through the heart of the city. There are 18 stops located along the first phase of the route, which are one to two blocks from downtown hotels and three blocks from the Duke Energy Convention Center.

Trade shows provide a unique opportunity to gain targeted industry knowledge and to meet colleagues in the roll-forming industry. It only happens once per year – so don't miss it! **MB** 



# Convincing the Eye

## Steel Dynamics debuts new digitally printed steel

Printed steel to feign the look of wood or camo is certainly not a new concept, but now Steel Dynamics (SDI) has entered the market with a game-changing new generation of technology. The steelmaker's Butler, Indiana, team spent 2-1/2 years developing the digital designed product, Tru>Steel HD. It entered the market last September 2022, and has been making its way around the trade show circuit to expanding audience appeal.

Don Switzer, Manager of Sales, Steel Dynamics Flat Roll Group, explained that Tru>Steel HD was originally targeted to the garage door market. It has, however, caught the eye of rollformers and building contractors who see the emerging market for wall panel, both interior and exterior, an ideal fit for the specialty coil.

One customer is using it to create a log cabin effect using steel, working with SDI



**400 DPI scans create realistic images of wood that can be manipulated to add additional elements prior to being transferred to metal.** SDIPHOTO

to incorporate a realistic look of chinking.

Graber Post Buildings assisted SDI with selecting images that would be most receptive to the board and batten niche. "Graber Post did a fantastic job," Switzer said. "They were actually our first Galvalume customer, and also our first painted Galvalume customer, and now they were our first digital print customer."

It is too soon to show off a board and batten building that incorporates the new wall product, but Trent Wagler at Graber Post noted that a display of Tru>Steel HD drew strong interest among visitors to their booth at the Frame Building Expo in February. With the popularity of board and batten spreading rapidly, he thinks Tru>Steel HD will follow. "We had a small sample of cedar gray on our table, and it caught quite a few eyes. We had a lot of good feedback. We had a lot of people stop in, pick it up, feeling it and asking questions about it. I do think it was a hit."

He said the company ordered a small quantity of Tru>Steel HD initially to gauge its reception. It sold out prior to the Expo, prompting them to reorder.

The product is also available through United Steel Supply that services the construction market. They are stocking four to six colors to start and have already sold out their first orders and have reordered.



Graber Post Buildings was consulted to help develop digital prints that would appeal to the growing popularity of board and batten siding. Graber installed some of the wood, rough sawn cedar in gray, for an office conference room shown here. GRABER POST PHOTO

## What's different about Tru>Steel HD

Switzer explained that the historical system for making designer steel used rotogravure, common in the newspaper and magazine world. Manufacturers essentially take a photo and create a pattern of art that is transferred to the steel on etched rollers. "Depending on the diameter of the roll, that pattern repeats every 29 to 31 inches," he said, adding: "When you want to design in the true character of wood, you're somewhat limited. If you would want to put a knot or a mark in the wood, it would repeat every 29 to 31 inches."

Some customers wanted SDI to enter that market, but SDI saw too many disadvantages and realized that a new frontier in digital printing was evolving.

"Four or five years ago we began studying digital printing," Switzer said. "We waited for the technology to advance before moving ahead."

Instead of starting with a photograph, SDI's system — which the company's own team of experts developed — uses high tech 3-D scanners and real wood for its wood-grain designs. "It takes hours and hours to take the scan and develop that image," he described. "Then we transfer that image and work it with our creative team, and basically form that image into a pattern our customers are looking for."

The image can be quickly adjusted to add or delete elements of design or to adjust colors. It can run on a size range of coil from  $.015-.030 \ge 36^{\circ}-60^{\circ}$  wide. One of its best assets is that the image is repeatable over and over again without image degradation.

Unlike the rotogravure system that requires the coil to go through the process twice when color is added, the digital system allows for the change to be integrated immediately into the digital design. This also allows a single coil to accommodate multiple images.

"We thought that would provide customers a better look, that custom look they were looking for. And the [repeating pattern] would be significantly longer," Switzer continued. "The advantage of our system is that we have up to a 32-foot re-



Close-up of Tru>Steel HD in Natural Hickory. SDI PHOTO

peat. That allows you to put in knots and grain and images that make the product look so much more realistic, with more depth of image ... we can put knots in, we can take knots out, we can do things that really make the product very, very unique. When you etch a roll in the historical system, you're stuck with what's on that roll."

To withstand the elements for exterior use, Tru>Steel HD is finished with an electron beam clear coat barrier protection. The paint system carries a 20-year limited warranty at this time.

SDI has developed more than a dozen stock images of wood and camouflage, including but not limited to rough sawn cedar in natural, weathered, and distressed, oak, walnut, hickory, and pecky cyprus. In the pipeline is weathered barn siding and more. product made by a steel mill in North America. Forerunners have all been thirdparty. Switzer said it is a premium product but is competitive with printed steel elsewhere in the marketplace.

The current products are focused on vertical application, but SDI anticipates that roofing will follow.

Part of the charm of the new steel is that consumers can have the look of wood without some of its adverse properties, and it also ticks all the boxes for "green." SDI makes all its steel in electric arc furnaces using at least 80% recycled steel, "so we are replacing wood, which is not recyclable, and we're replacing it with a product that can be recycled at end of life," he said.

In addition, the electron beam coating and curing systems developed for the process have no VOCs and related adverse environmental issues. **MB** 

Tru>Steel HD is the first print-designed



## building with metal

PHOTOS COURTESY OF HOWICK LTD



## Living With Metal Residential Opportunities Abound as New Technology and Labor Shortages Converge

eccessity appears to be once again mothering invention. And invention deserved better because it has been doing amazing things.

Improvements in both light-gauge steel (LGS, also known as cold-formed steel) and its engineering, plus fantastic new software that helps LGS manufacturing machines create ready-made metal walls and panels, have given builders and contractors the ability to erect an affordable residential building in half the time of a stick-built home.

The reasons why the US hasn't moved in this direction are part cost, part practicality and part stubbornness. But as the labor market continues to weigh heavily on building timeframes, and as labor costs start to outweigh materials, faster solutions like metal-framed homes are starting to become a more serious option for builders and home buyers.

## The Digital Future

Thomas Reed is a regional manager for

Howick Ltd, which manufacturers machines that create metal framing, or in its own words from its website, "Precision light steel roll-forming technology framing modern construction."

There is a learning curve that we won't detail here, but a builder or contractor does need to first consider the investment into software and people who can run it. "A lot of my clients are using Revit through Autodesk, and use different software programs that have applications that sit inside of Revit," Reed said.



That investment will be supported by Howick and the other machine manufacturers and we won't detail its costs and timeframe in this article. But once a company starts utilizing this kind of product, and starts sending finished framing to its builders, the benefits are significant.

It can involve complex computer programming, obviously, but the benefits aren't complicated: The machine creates exactly the metal parts that the software asks for, and the software also tells everybody working on the job exactly what their job is and how it's done, down to tiny fractions of an inch.

In the past and even sometimes today, the contractors and tradespeople don't know what each other are doing, or they're relying on a GC who better have incredible communication skills. "This type of software forces that discussion," Reed said, because the plans everyone receives are going to incorporate the necessary and proper measurements.

"If you have an HVAC contractor that has to run through a particular part of the building, these software applications can create that access way, and show how it could be framed," he said. "In contrast to somebody building a house out of stick, when they have an electrical contractor come in, the software can show where all service holes are to be, and the electrical contractor can even have input on the front end as needed so that the machine provides all those service holes for wire pulls on the front end. This saves time and money and is applicable to all the trades."

With software and programs like this, "All of the stakeholders — your owner and all your general contractors and your subcontractors — can come together and understand the design and learn what they own, in real time. And if changes are made, everybody is aware. That's the biggest thing that modeling and automation are helping to change the way business is done. You don't have a ton of change orders."

## The Production Process

So what does the machine do, exactly, and where does the metal framed panel get created and assembled? If you own a Howick machine, that machine helps create the panels (you might call them frames) at the factory or in the warehouse, and those panels are then shipped for assembly on-site.

"The most efficient way is to create your panels — whether it's a wall panel, a roof



A warehouse assembly like this photo taken from a Howick video would be perfect for a Lunch & Learn.

truss, or an open web floor joist —in the factory," Reed said. "Those will get labeled according to the job and they come out with shop drawings, and it comes out as a totally assembled panel. I have some clients who install their windows, doors and sheathing on the panel and deliver it that way to site.

"Most of the time the insulation is happening on-site; some of our contractors actually just spray foam right on-site.

"I would imagine someday getting a true SIP panel done, where it's completely done with your electrical and everything done inside, and (in the future) some people will start insulating or spray foaming in the factory, as well."

## Cost of Metal vs. Wood

Keith Dietzen, the founder, CEO, and owner of software company SmartBuild Systems, remembers the 1990s when Hurricane Andrew caused a near-doubling of wood prices. "There was a movement toward metal, but it didn't stick," he said.

As commodity prices and scarcity problems have wreaked havoc in the recent past, Dietzen has seen some builders attempting to move toward all-metal buildings in residential construction, but it's not a huge shift at this point. "Light-gauge framing is still largely commercial and isn't yet creating an impact in residential or high-end garages or sheds," he said.

Conditions are ripe for a change, though. We know a metal building will be

worth more because it's going to be stronger and last longer. We also know that it will cost more, at least in terms of materials.

So how much more does this new way of building homes cost versus stick-built? In raw materials, 10% to 15% more than stick-built is Reed's estimate, though with raw materials fluctuating so much in recent years, that's hard to assess.

Central Steel Group creates metal buildings of all kinds and is moving more and more into residential. As opposed to a builder or contractor that uses a Howick (or similar) machine to create a custom building, Central Steel Group is headed toward mass-producing metal homes. COO Jay Lara said that in their calculations, with the processes they're developing, the all-metal buildings they can produce ¬will be less expensive in cost per square foot than typical wood-framed construction, in large part because the production labor is so significantly reduced.

## Labor Challenges

Builders and contractors who have a long history and expertise in stick-built construction have not moved toward all-metal buildings in part because their crews have little to no experience in those areas. "The biggest problem that everybody has in post-frame, and in all-metal buildings, is getting help," Dietzen said. "They can't expand their crews."

That's where speed and ease of assembly come in. Reed said he has clients who

can be ready for drywall in 10 days. Lara said "our house packages can be installed in under one week on a level concrete slab. Shorter construction time frames and erection time mean substantial labor cost savings to the homeowner."

And even when the commodity markets settle to normalcy, that labor shortage won't be solved, and it is increasingly going to affect home prices. Said a Central Steel Group flyer created for people considering an all-metal residence, "We are selling a solution to a problem and the problem is that housing is not affordable for a large contingent of the population."

## Storms and Wood vs. Metal

Another reason that metal may have a strong future in residential and highend outbuildings is its ability to be more stormproof than wood. The big bad wolf apparently taught us little. In many areas of the country, we built with wood, and it blew down. And we rebuilt with wood, and it blew down again. And we rebuilt with wood ... you get the picture.

So regions like Florida, some of which are literally disaster areas because of hurricanes, have a strong future in stronger structures, whether that be metal, or SCIPS (Structural Concrete Insulated Panels), or something to be invented yet. Central Steel Group says its state-of-theart steel tubular engineering allows them to offer Risk Category II buildings.

Reed knows of one company that's about to assemble literally hundreds of metal homes for a subdivision in Florida — and their construction is expected to take only a few months. They'll sell for a relatively affordable price of \$300k or so, and he fairly observed that you couldn't build 2-by-4 stick homes in that quantity in that amount of time, and even if you could, they wouldn't be storm-resistant.

## Does This Technology Eliminate Jobs?

Reed made an interesting point about the future of tradespeople and where the



labor shortages are headed. Do these machines and their automation and prebuiltframing capabilities replace workers? Is this technology forcing people out of work?

Perhaps on the surface that seems logical, but in actuality, those workers aren't there to be replaced. They have been leaving of their own accord, and their children aren't going into the trades.

What these new systems and these machines do is enable forward-thinking builders and contractors who want to be great at the next big thing to take a leap forward. "We take this skilled labor that's out there today that is committed in their trade, and we enable them to look at projects in a much different way," Reed said. "And we're taking previously non-skilled labor and enabling them to adapt so quickly to digital fabrication. People are finding their way of erecting a building or home much quicker, and so there's much more satisfaction in the end product."

## Lunch & Learn

So how does the industry proceed to show builders and contractors this new way of doing things? "The best thing you can ever do is Lunch & Learns," Reed said. "Bring in the local code enforcers, general contractors, and subcontractors and walk them through a sub-assembly. I have one client that actually built a completely framed house in a factory and brought in the subs to show them."

Reed said the first step is to demonstrate the software and how it interacts with the machine, then take them to a warehouse build, where they can see how their jobs will be easier with metal framing and the software that goes with it, and the code officials can see first-hand why these are obviously ready for approvals.

"I have one client down in South Carolina called Synergy Steel and they started out with residential," Reed said. "Now they're doing multifamily, hotels, and a variety of other buildings. They have eight of our machines. Lunch & Learn is how they did it. They brought in architects, engineers, code authorities, contractors, and general contractors, and educated them.

"The other thing they did, which was very important on their part and not everybody's going to do this at first, but they created their own internal university, where they not only train their employees how to erect the house right at their factory location, they would also bring all those other stakeholders and show them how it's done."

For some companies, the future is now. **MB** 

For more titles, check out Shield Wall Media online: www.shieldwallmedia.com

## Light Gauge vs. Structural Steel Construction

#### By Brett McCutcheon Beck America & ET&F\* Fastening Systems

Steel has an outstanding strength-toweight ratio and flexes with force, which is why it's commonly used for large construction projects. Steel is the ideal material for high rise buildings because it can withstand high winds, earthquakes and other stressors. Due to its strength, steel frames require fewer vertical supports, which in turn makes them more cost effective. Steel is also considered an eco-friendly material because all steel products contain recycled steel, and in framing, they typically contain a minimum of 25%.

There are two options when it comes to steel framing: light gauge and structural steel.

[Ed. Note: Since most of our Metal Builder audience would only use lightgauge steel, we'll only include that section of this article here.]

#### Light-Gauge Steel

This steel is cold formed, which creates long, thin sheets that are then shaped into guided "C" or "Z" patterns capable of holding heavy loads. Light gauge supports come in a galvanized finish of zinc, aluminum or a combination of the two. For this construction process, a load-bearing wall is constructed first, then interior partitions and exterior cladding follow.

Light gauge is most commonly used in residential or light commercial construction as an alternative to wood framing. It's similar to wood in that little cutting and sizing is required on the job site because the studs are manufactured to precise lengths. However, light gauge steel won't rot, warp, burn or harbor insects like wooden frames. Due to their strength, light gauge steel frames also require less studs because they can be placed further apart. In general, light gauge will produce less waste, which is more environmentally friendly and more cost effective than alternatives like wood. Its main disadvantage is in case of fire, rather than burning, the steel structure will lose some of its stability and there is potential for collapse.

29



#### HOWICK EVENT BRINGS TOGETHER CONSTRUCTION LEADERS

Howick Ltd, the manufacturer of light steel roll-forming technology, brought its STEEL HORIZONS construction industry showcase to Boston in June. More than 100 of construction industry leaders gathered at the Autodesk Technology Center for speakers and presentations about the future of construction along with a tour of the Autodesk facility.

As a long-term collaboration partner with Autodesk, Howick hosted a live demonstration of the Howick X-TENDATM 3600, now resident at the Technology Center. This system manufactures game-changing telescopic light steel framing components for interiors that are extendable in any direction, dramatically cutting the time it takes to install internal walls and ceiling frames. Speakers at the event included:

• Allison Scott, Autodesk: Design and tech innovation.

• Dave Cooper, Cooper Metal Works: Industrialized construction.

• Brandon Ionata, StrucSoft: BIM.

• Magdalena Kowalczyk, Autodesk: Future of construction tech.

• Amy Marks, Queen of Prefab: Rethinking building products and sustainability.

• Scott Mitchell, STUD-IO: "AI as Client" installation.

• Amr Raafat (Windover Construction) & Hamish Coubray (Howick): Tech and teamwork.

• Jim Stoddart, Autodesk: Generative workflows.

• And Russell Wills, MODLOGIQ: Offsite manufacturing.

Learn more about the Howick event on the website found at steelhorizons.com.

## HOWICK SURVEY REVEALS OPPORTUNITIES FOR CONSTRUCTION SOFTWARE DEVELOPERS

Howick Ltd recently undertook a global Construction Software Survey, providing valuable insights into the brands of software in use, how those tools are being used, and how they might be improved for the benefit of users.

The survey was completed by 242 leaders in the construction industry. It explored the overall usage of construction technologies like framing automation and CNC-driven technology. It looked at how the take-up of software changed by sector. Then it delved into specific categories, including architectural design, MEP design, framing detailing, engineering analysis, cloudbased BIM, and the usage of 2D and 3D technology.

The survey findings provide significant insights to benefit users and software developers. While the use of technology in the industry is increasing, the results revealed limitations and many challenges to be addressed, as well as opportunities for future development to encourage further adoption.

There were several common themes highlighted in the overall responses relating to desired features and functionality:

1. The desire for improved integration and collaboration between different tools to enable seamless integration, so users can collaborate and share information easily.

2. Streamlined workflows and the automation of repetitive tasks such as structural calculations and design, as well as the use of AI and cloud services to speed up the design process, saving time and increasing efficiency.

3. Improved user interfaces and design capabilities so the software is easier to use and more intuitive.

4. There is a desire for software to integrate better with Building Information Modelling (BIM) tools, and to work with a wider range of file types and other software.

Learn more including what software developers need to improve upon on the website at www.howickltd.com/stories/ construction-software-survey-insights.

#### MBCEA HONORS MEMBERS, NAMES BUILDINGS OF THE YEAR

The Metal Building Contractors and Erectors Association (MBCEA) presented two member awards at its 54th Annual MBCEA Conference, held in May in Nashville.

The Robert and Beverly Ketenbrink "Oil Can" Service Award was given to Keith Wentworth for his dedication and service to the metal building industry. Greg St. Clair was honored as a new member of the MBCEA Pioneers Club for his 33 years of service in the industry.

The MBCEA also announced its 2023 Building of the Year winners. The overall winner was the Terminal F roof retrofit project at the Port of Miami, undertaken by Lemartec Builders of Coconut Grove, Florida. It included a metal building and roof from Varco Pruden Buildings of Memphis.

Among the other winners was a renovation and reroof in Pennsauken, N.J., that featured buildings, metal roof, and metal wall panels by Metal Sales Corporation and American Buildings. **MB**