DECEMBER 2022 • Vol. 21 • No. 7

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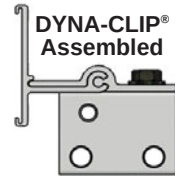

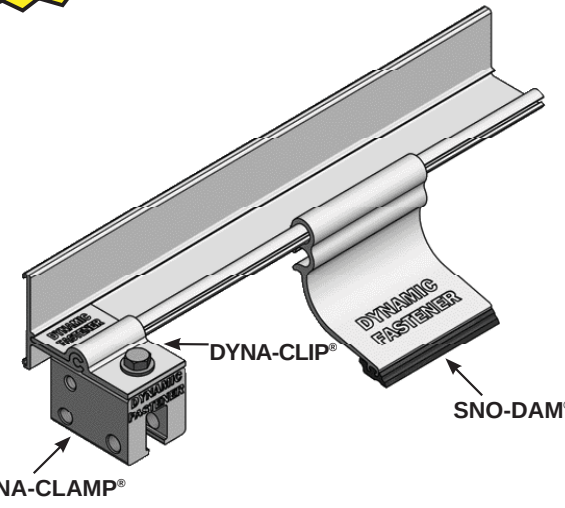

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By Gary Reichert, Publisher

Transparency in Revenue

We do trade shows as well as publish magazines. We own and promote the Garage, Shed & Carport Builder Show (Greenville, South Carolina, January 18-19, 2023) and the Construction Rollforming Show (Cincinnati, Ohio, September 27-28, 2023).

One of the dirty little secrets about trade shows is there are many hidden ways they make money. Rather than hide revenue streams, the honest thing to do to increase revenue would be increase the cost of attendance.

One thing that makes me angry is when I go to the show and the promoters are getting a commission on the hotel rooms. When you book rooms for a show (ours included) always check the room rates through independent sources like Expedia or Kayak, or call the hotel and do not reference the event.

The difference between the group rate and the common rate can be significant. Occasionally over $100 per night.

I believe all businesses should be fairly compensated for their work. Part of compensation "being fair" is the purchaser knowing what they are getting for their money. If a show has 1,000 attendees and gets a commission of $25 per room night that can easily be an additional $30,000 or more. Shows are 100% about revenue, and it is fair and good to charge what the market will allow. Jacking up the accommodation rates when your clients think they are getting "a deal" just feels wrong.

If any of our hotels show a lower rate anywhere, please bring it to my attention. We have, as part of our agreement with the hotels, that we are guaranteed the lowest available rate for the days of our events. If that is not so, please let me know so I can make the hotel abide by the terms of our agreement and be certain you are treated fairly.

Gary Reichert, Publisher
gary@shieldwallmedia.com

By Karen Knapstein, Managing Editor

Trade Shows Are Better In Person

I hope you were able to attend at least one of the Fall trade shows. You'd be hard-pressed to find anyplace else where you can find so many opportunities in a single location to make your business more successful. METALCON and the Construction Rollforming show each included educational programs with the admission to the expo floor. When you're on the trade show floor, you have the complete attention of any given material supplier or service provider. You simply can't get the kind of interaction through email or over the phone that you can get when you are speaking with someone face-to-face. In this edition, you'll find post-show coverage for both METALCON and the Construction Rollforming Show. You may get a feel for what went on, but it just doesn't compare to being there.

Also in this edition, you'll find an excellent article filled with practical information about sealing side-lap seams. Originally published in the May 2001 edition of *Metal Roofing,* author Derek Hodgin has written an introduction to put the article into historical context. (Remember: If ever you want a certain topic covered, feel free to send us an email or give us a call.)

On pages 56-57, you'll see the handiwork of Cornett Roofing Systems. As this edition's Project of the Month, you'll learn how Cornett replaced a decrepit slate roof with metal. As you can see on the cover, it looks fantastic. The homeowner now has all the benefits of a metal roof while maintaining an appropriate historic look of the hundred-year-old residence.

Since we're talking about roofing projects, I'll once again invite you to send in your metal roofing projects to be published* in the *Metal Roofing IDEA Book* or as a Project of the Month. You'll find the process to be easy and simple. You no doubt have records of the materials used ... you need only send us the details and some high resolution images and we'll take care of the rest. You'll find a convenient project form and more information about participating in the *IDEA Book* on pages 54-55.

If you want one of your metal roofs published in this very special edition, don't wait! The deadline for project submissions is February 15, and that day will be here before you know it!

Karen Knapstein, Managing Editor
karen@shieldwallmedia.com

**space permitting*

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Cornett Roofing Systems replaced a decrepit slate roof with metal shakes from Modern Metal.
PHOTO COURTESY OF CORNETT ROOFING SYSTEMS

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Gary Reichert,
Publisher, Shield Wall Media

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Metal Roofing Magazine was born as a supplement to Rural Builder magazine in 1999. A few more supplements were published in 2000. In 2001 it was elevated to a stand-alone magazine, and today it is over 20 years old.

This article was originally published in the May 2001 edition of *Metal Roofing Magazine.* The author has reviewed and revised it for publication here and now, in 2022.

Inexpensive Insurance

Sealing Metal Roof Side Lap Seams

By Derek A. Hodgin, PE, RBEC, CCCA

Originally published Metal Roofing Magazine, May 2001

Background

At the time this article was originally published, the United States was in the middle of a building code transition. Specifically, the three (3) primary building codes: 1) Uniform Building Code (UBC), 2) Standard Building Code (SBC), and 3) National Building Code (BOCA) were being combined into the International Building Code (IBC). The IBC was first published in 2000, released on a three (3) year cycle since. The most recent version of the IBC is the 2021 edition.

While the earlier codes included long-standing wisdom regarding the sealing of metal roof panels when slopes are 3:12 or less, pre-engineered metal buildings, representing a significant volume of the metal roof projects, were exempt from these requirements. This void in the building code left large metal buildings, that did not include side lap sealant, vulnerable to roof leaks when exposed to mixed precipitation events that include rain, freezing rain, snow and/or ice. The absence of sealant along the side laps of any low slope metal roof can allow water to penetrate the roof assembly via capillary action, drawing water into the building.

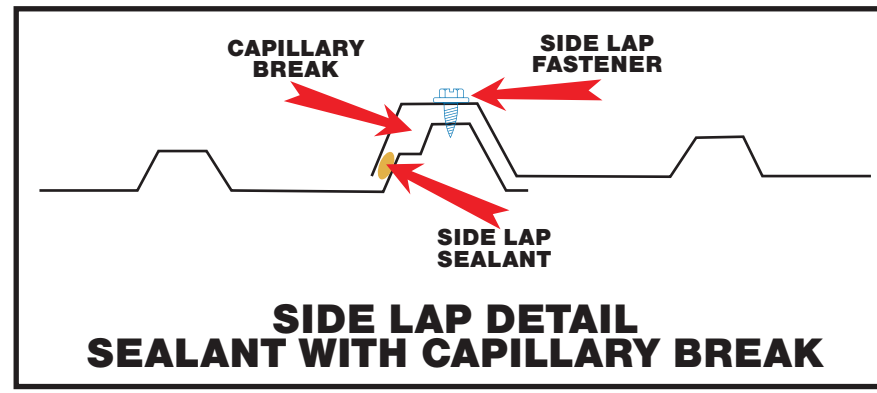
The point of this article is that, regardless of what the building codes require, it is always a good idea to incorporate "best practices" to improve overall durability and safety of the completed building. While the code portions of this article are clearly outdated, the need to construct buildings that meet (but preferably exceed) the building code, is more important than ever. This opinion is based on the overall poor performance of code-minimum construction and the lack of redundancy incorporated into building envelope design.

— Derek Hodgin

ORIGINAL ARTICLE

Metal roofs continue to gain popularity in both residential and commercial applications. Metal roofs can provide years of performance with minimal maintenance required. However, as with all roof assemblies, the overall performance is directly related to the attention to details during installation.

One detail that should be carefully

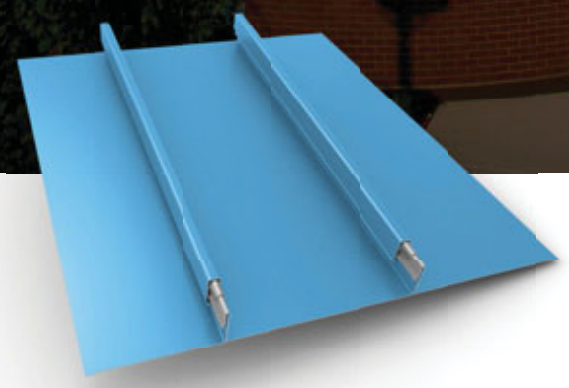


Side lap detail, showing proper placement of sealant and a capillary break (not to scale).

Whimsical Roofline

Vibrant Dynamic Blue Snap-Clad metal panels brighten the playful roof shapes and walls of two interior courtyards, invigorating this mixed-use building that houses a Chicago Public Library, childcare center and community meeting space.

Altgeld Family Resource Center, Chicago Installing contractor: Progressive Dynamics Architect: KOO LLC
Owner: Chicago Housing Authority Photo: hortonphotoinc.com



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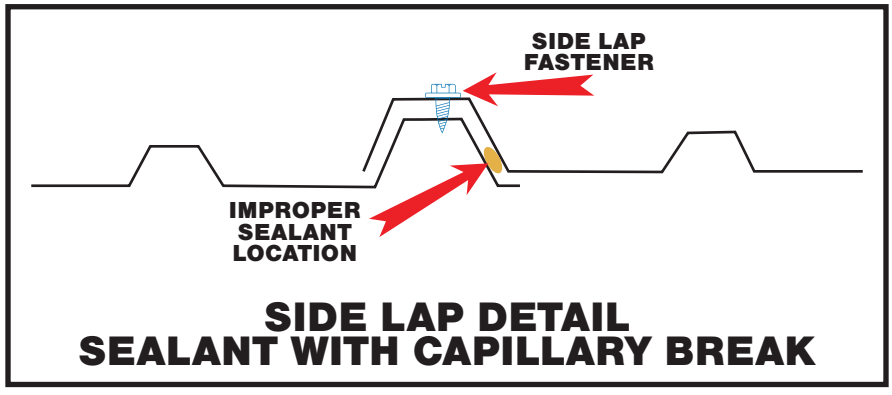
considered in the installation of metal roofs is the use of sealant at panel joints. The use of sealant at end laps is a common practice unless the roof has a steep slope. However, sealant along side laps is often omitted. The absence of side lap sealant makes some roofs vulnerable to water intrusion, which can have expensive consequences. This article discusses the importance of side lap sealant on low slope roofs; the requirements of building codes, industry standards, and manufacturers; and how to determine when it is needed.

The Importance of Side Lap Sealant

While there are numerous metal roof products currently available, the focus of this article is ribbed metal roof panels with overlapping sides. These roof panels are most common on pre-engineered metal buildings. This type of building is typically selected for commercial uses, but can also serve as a garage or workshop on residential applications. These roof panels are typically 3-feet wide and have corrugations that provide rigidity and bending strength. The length of metal roof panels vary; lengths of 24 to 40 feet are most common. In pre-engineered metal buildings, the roof panels are structural elements that are supported by metal purlins spaced approximately 5-feet on center. A layer of vinyl-faced batt insulation is often sandwiched between the purlins and the metal roof panels.



Side lap detail, showing improper placement of sealant (not to scale).

Hydrostatic Versus Hydrokinetic Roof Design

Roof configurations can be divided into one of two (2) basic classifications: hydrostatic (water barrier) or hydrokinetic (water shedding). A hydrostatic configuration anticipates that water will accumulate on top of the roof surface and must be detailed accordingly. The details must be made watertight such that water can stand on the roof for an extended period of time (up to 48 hours) without penetrating the roof assembly. The most common hydrostatic roofs are low slope (1/4:12 to ½:12) configurations covered with built-up (BUR) or single-ply membranes such as EPDM, PVC or TPO.

As the slope of a roof increases, so does its ability to shed water. Hydrokinetic roof designs depend on the slope to effectively remove the water from the surface of the roof. In the absence of standing water, the watertightness of the installation details become less important. Water simply flows over the roof surface via gravity and is not provided an opportunity to flow uphill into the seams and/or penetrations of the roof assembly.

In the case of pre-engineered metal buildings, roof slopes are often ½:12 to 2:12. It is my opinion that these roofs should primarily be designed and detailed as hydrostatic. Exceptions to

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this rule would include buildings that are located in dry and/or warm climates or buildings that function as shelter only, where limited water intrusion is of no consequence. Any building with a roof slope less than 3:12 that is subjected to moderate winds, moderate to heavy rainfall events, freezing temperatures, or snow and ice events is a good candidate for hydrostatic design details.

Capillarity

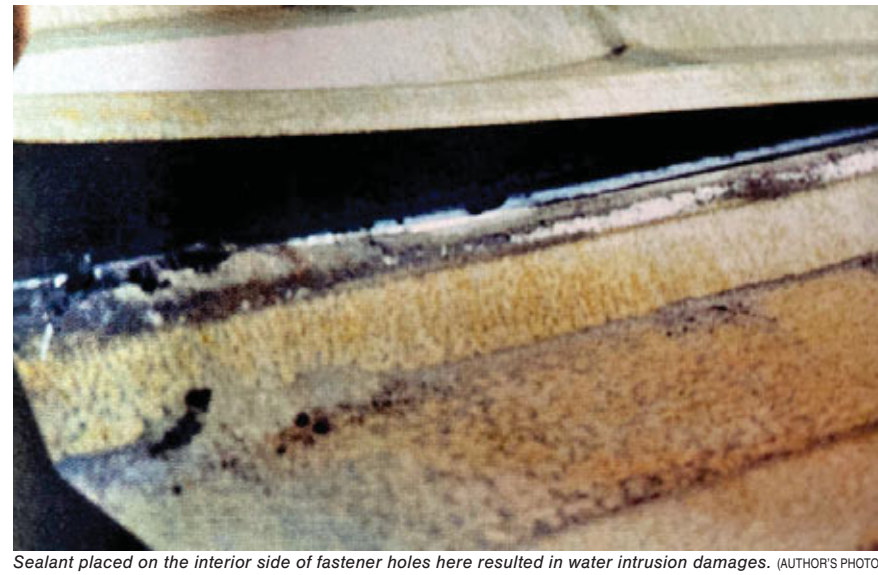
Typical installation details require that side laps of the roof panels are screwed together with sheet metal "stitching" screws. If snow, ice, or water accumulates, the only defense the lap seams have against water intrusion is the height of the seam above the roof surface. The height of the lap seam is usually 1 to 2 inches, with 1-1/2 inches being the most common.

The height of the lap seam can be an easy obstacle for water to overcome, particularly on a roof slope of 3:12 or less. To make the situation worse, contractors will often torque the stitching screws to provide a tight fit between the adjacent roof panels. This condition not only crushes the gasket or sealant, but can pull water into the lap seam due to increased capillary forces.

For this reason, some manufacturers have incorporated a dimple in the lap profile to create a capillary break. When water reaches this void, the capillary draw is eliminated. (This is also a good practice to use in flashing details.) Therefore, a capillary break should be incorporated into the side lap of the roof panels whenever possible. In the absence of a capillary break (and properly installed side lap sealant), water can easily migrate into a roof assembly and cause damage.

Building Codes

Most building codes recognize the potential for water intrusion on metal roofs. In general, building codes require side laps to be sealed (using sealant or solder) for metal roofs with slopes of 3:12 or less. It should be noted that building codes represent minimum standards. The requirements set forth by a building code generally represent accepted and tested practices that should not be violated without good reason.



Sealant placed on the interior side of fastener holes here resulted in water intrusion damages. (AUTHOR'S PHOTOS)

Unfortunately, the building codes specifically exclude pre-engineered metal buildings from the requirement described above. I do not know why this exclusion exists. Apparently, there is an expectation that the manufacturer, owner, and contractor will be able to determine the roof design that is adequate for their building. Unfortunately, this situation does not always work out, particularly when budgets are involved.

While the cost of side lap sealant applied during new construction is minimal (approximately 10 to 15 cents per sq. ft.), it is often the first item to get cut when budgets are tight. Due to the substantial benefit and low cost, this action should be strongly discouraged.

Industry Standards

Industry standards for metal roofing have been slow to develop. In the past five years, however, relevant standards have been published by the National Roofing Contractors Association (NRCA) and the Metal Building Manufacturers Association (MBMA). Both publications are considered authoritative sources of accepted practices and details for metal roof design and installation.

The NRCA added a section on metal roofing to the fourth edition of *The NRCA Roofing and Waterproofing Manual*, published in 1996. This manual is an excellent resource for reviewing typical metal roofing systems, design considerations, and recommended architectural details, among other relevant information.

Section 6.7 of the NRCA manual describes slope considerations for metal roofs as follows:

Most architectural metal roof panel systems are designed for a minimum 3:12 (25 percent) slope for the roof assembly system, except for the flat lock soldered seam system and structural standing seam system, which can be used on a low slope. As the slope of the roof decreases, the need to increase seam height with the addition of seam sealant or sealant tape (e.g., butyl) increases.

The MBMA published the first edition of *Metal Roofing Systems Design Manual* in 2000. This comprehensive manual provides a large volume of useful information. With regards to sealants, Section 7.8.5 offers the following:

Proper execution of field applied

HOW TO MAKE MORE MONEY ON EVERY METAL ROOFING JOB:

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AppliCad

Although the end lap sealant remains effective, the absence of any side lap sealant on this roof resulted in extensive interior damage.

sealants is vital to the finished weather integrity of any low slope, hydrostatic roof system. In principle, each panel is gasketed 360° around its perimeter. Along the side seams, sealant is factory applied. At all other panel termination points it is the duty of the installer to apply sealant beads that marry into and establish the continuity of this gasketed seal between factory applied sealant beads.

While I completely agree with this statement, it applies most directly to hydrostatic, standing seam metal roof assemblies where factory-applied side lap sealant is more common. For hydrostatic, lap seam roof assemblies, the installation of the side lap sealant typically rests completely with the installer.

Manufacturing Specifications

While it would be inappropriate to critique the specifications of specific

Sealants: Improving Through The Years

By Metal Roofing Staff

Twenty years ago polyurethanes and solvent-based caulks were the prevalent sealants used in construction. Both were organic, so they degraded over time. Further, polyurethanes often required a primer and over time pulled away from the substrate. The solvents in sealants tended to evaporate, leading to shrinking and cracking.

Today's sealants are more technologically advanced according to Joe Borak, Senior Vice President of Sales at Novagard. They are more durable and more environmentally friendly, which has become more and more important as homeowners and contractors attempt to build more sustainably. They are also easier to work with.

One form of sealant in use today, silicone, employs a different chemistry. These sealants are inorganic and will not degrade, shrink, or crack over time. Other benefits of these waterproof sealants are that they resist mold and mildew once they are oxime cured, meaning they cure on exposure to the moisture in room temperature air. They're non-corrosive and VOC compliant, too.

Silicones are UV neutral, so ultraviolet light does not affect them and consequently, the sealant can keep the roof sealed longer. One example of a silicone solvent is Novagard's NovaFlex product line, which is available with up to a 20-year warranty.

Of course, a sealant's durability is partially dependent on the application process. Here are a couple of tips to help you install sealant that will last:

- Consider all of the variables involved when doing a job including the kind and slope of roof, the climate, and manufacturer's directions when choosing a sealant.
- Establish before use whether the sealant meets the requirements and specifications established by the NAHB (National Association of Home Builders) Research Center to comply with the green building initiative, and the USGBC's (United States Green Building Council) LEED program guidelines.
- Try to match the sealant to the application. The manufacturer should provide enough information so you know what kinds of applications the sealant is formulated to address.
- Don't make the mistake of choosing a sealant based on price alone. A better product can save the installer from failures and callbacks.
- Prep the surface. For refurbishments, scrape off any old, chunky caulk with a putty knife. For fine remnants, use a wire brush and then blow off dust and debris.
- Lay down plenty of sealant evenly over the surface to do the job properly. ***MR***

metal building manufacturers, a brief discussion of typical requirements is necessary. I reviewed the specifications of manufacturers represented in the library of my office. I would estimate that approximately 70 percent of the largest metal building manufacturers are represented in our collection.

Most manufacturers address the potential for water intrusion by applying side lap sealant at the eave of the roof. This area of the roof is considered to be the most vulnerable to water intrusion due to the potential for ice damming and the proximity to gutters and downspouts that could clog and overflow. The sealant may extend as much as 15 to 20 ft. into the field of the roof, depending on climatic conditions and the span of the roof. Some manufacturers provide a table to determine the specific side lap sealant requirement, depending on the span of the roof. In some cases, manufacturers require side lap sealant to be installed for the full length of the roof panel when the slope is less than 1:12.

Too often, however, manufacturers tend to use generic notes that read something like "seal roof panel side laps with mastic when specified." While I found several variations of this note, they all seem to serve the same purpose — leaving the decision of using side lap sealant up to somebody else. In too many pre-engineered metal building projects, this decision is made by the contractor and/or the building owner without proper consideration of all the relevant variables presented by this article.

In terms of the sealant itself, the most common specification for side laps is non-curing tape-applied butyls. These are excellent sealants that will easily last the life of a building if applied properly. A few of the basics of proper sealant application include 1) following the manufacturer's recommendations regarding surface preparation and weather conditions required for application, 2) installing the sealant in a concealed condition where it is protected from environmental exposure, and 3) installing the sealant on the outboard side of the fastener holes (large scale damages can result from making the mistake of placing the sealant on the wrong side of the fasteners).

How to Determine When to Use Side Lap Sealant

As discussed previously, unless you have a very good reason not to use side lap sealant, I would strongly recommend its use whenever possible. The use of side lap sealant is particularly important when a low slope roof is combined with the potential of adverse weather conditions such as strong winds, heavy rain, snow, or ice. Good reasons not to use side lap

sealant are limited to warm weather climates with little chance of adverse weather conditions and/or a building occupancy where water intrusion would be of little or no consequence.

Due to sealant's relatively low cost, saving money is typically not a good reason for omitting side lap sealant from metal roof specifications. As the title of this article suggests, using side lap sealant should be considered as a low-cost insurance policy with long-term benefits that should not be ignored. ***MR***

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Christ Church Cathedral in Vancouver, British Columbia. ALL PHOTOS COURTESY OF RHEINZINK

Zinc Roofing: Historic Applications

By Rheinzink

Architectural-grade zinc products are often used for roofs on historical building projects because they offer a modern, high-performance metal material with an enduring legacy. Zinc has been used as roofing material for centuries. Contemporary roofing applications with zinc roofing materials have a lifespan of 80 years or more.

The very first known application of zinc as a roofing material is in 1811 for the Saint Barthélémey church in Liège, Belgium. However, some of the most notable influences on zinc as a building material are those from France.

In the mid-19th century, the City of Paris experienced a major growth in population. Napoleon III commissioned Georges-Eugène Haussmann to plan a large-scale renovation of Paris. Zinc was selected for the roofs of the new buildings being built and became the representative material of modern architecture for the era. Today, many mansard roofs made of zinc continue to dominate the city's skyline.

This new architectural style reached many other countries in the years that followed, including the Netherlands. Villas, hotels and public buildings are now covered with zinc roofs in many cities such as The Hague or Amsterdam.

Zinc's Place in Historic Renovations

In the U.S., a property needs to be at least 50 years old to be eligible for listing in the National Register of Historic Places. Fifty years ago, in 1972, roofs across North America were largely clad in asbestos and asphalt shingles. Metal roof coatings contained lead, such as coated copper or old terne-coated metal.

When builders renovate historic buildings, zinc is often chosen; it is known to be a dense material that is easy to form, cut and fabricate. Though pure zinc is somewhat brittle and works best as a building material when alloyed with small amounts of titanium and copper.

Zinc is also an historically accurate and natural metal; when a zinc roofing system is installed properly it resists air and water infiltration. For regions with high winds and hurricane conditions, these roofs have been tested to withstand high winds as required by codes and local jurisdictions. In environments susceptible to fires, zinc provides a non-combustible solution. The inherent metallic properties deliver low-maintenance, long-lasting roofing applications.

Architectural zinc can be shaped into a multitude of forms – geometric, organic or curves for innumerable design options. It's customizable to meet a project's individual specifications. For more budget-conscious projects, specifying standard panel sizes and shapes helps reduce manufacturing and fabrication costs, plus time and expenses associated with installation labor.

Beautiful Coloration

Most architects and specification professionals select zinc for its future patina appearance. Like copper, zinc develops its distinctive patina, or surface crust, based on the alloy composition and local environmental conditions.

This patina develops through a two-step chemical reaction. First, zinc combines with water and oxygen to form zinc hydroxide, then with carbon dioxide in free-flowing air, the zinc generates a protective, dense outer layer insoluble to water and an inner layer of alkaline zinc carbonate.

A patina's formation is a process of the gradual growing together of zinc carbonate "freckles" and the rate of its formation is related to the slope of the surface. The patination will be slower on a vertical roof surface than on a slightly sloped one. Its speed can vary between six months and five years or more, depending on climatic conditions. The more exposure to wetting and drying cycles, the quicker the patina will develop.

After the true patina has fully formed, the process will slow down but it never stops. The natural patina will form to a soft blue-grey or graphite-grey color, depending on the alloy type. To achieve this vintage look at the time of installation, some architectural zinc manufacturers can accelerate the patination process under factory-controlled conditions before the material is fabricated into roofing.

Throughout its long lifetime, the zinc material's patina is influenced by the project location's unique climate and conditions. While the basis of the patina is alkaline zinc carbonate, additional substances are incorporated from the local humidity, rainfall, snowfall and air pollution levels. Therefore, the color of the patina can vary from one place to another. The natural patina will appear lighter when used in marine locations where the air contains chlorides. When used in environments where sulfur levels are higher, the patina may appear somewhat darker.

Environmentally Friendly

Energy-efficient, low-emission production is part of what makes zinc roofing ecologically friendly. As little as one-quarter to one-third of the energy is needed to produce architectural zinc alloys in comparison to other metals such as stainless steel, copper and aluminum. This is because of zinc's low melting point and its malleability to shape. Emissions during smelting and processing can be minimized through state-of-the-art production equipment. In the highest quality manufacturing companies, pre-consumer scraps are 100% recycled. At the end of a roof's life, the zinc is 100% recyclable.

Zinc's natural abundance, resiliency, recyclability and longevity also are recognized attributes in meeting criteria of green building programs such as the U.S. Green Building Council's LEED® rating systems. Always check that a zinc material's EPDs (environmental product declaration) are third-party verified. ***MR***

Re-Roofing & Heritage Preservation

A Case Study

By Rheinzink

The re-roof project at the historic Christ Church Cathedral in Vancouver, British Columbia, marked the culmination of a massive four-phase, 22-year renovation plan. The Cathedral—built originally in 1894—was the first church in Vancouver and began with a cedar shake roof. Through the years, various additions and modifications were undertaken, but none contributed significantly to the historic structure's long-term sustainability.

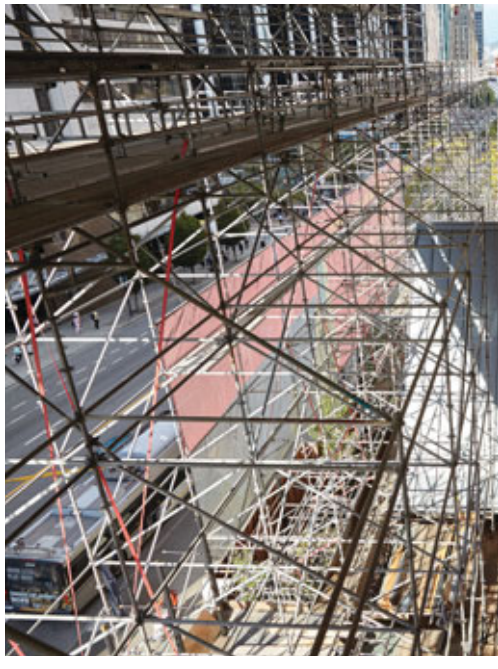
A formal plan was undertaken to make the Cathedral structurally sound and to meet seismic stabilization requirements. Aesthetic and acoustical upgrades, along with basic functional improvements, also were included in the multi-phase plan.

The final stage of the extensive renovation, the roof replacement, became somewhat of a modern marvel in Vancouver. The entire building was completely enclosed in a massive scaffold with a giant tarpaulin covering the structure to protect the church from the weather as the existing roof was removed. The scaffolding reached 100 feet high to allow the use of a traveling gantry crane for moving materials to all areas of the roof.

Approximately 12,000 square feet of RHEINZINK-prePATINA® blue-grey was installed using a traditional batten seam profile. Installation of the panels was done by TEK Roofing Ltd. of Vancouver. "I'm an old school guy and everything we do is traditional," said president Terry Kellogg. "Our panels are literally all hand formed. No machines were involved other than our breaks."

The roofing crew ranged from 10 to 20 individuals depending on the work being done. Kellogg worked alongside his crew for much of the job. "I spent nearly two months on the tools working with the boys," Kellogg said. "It was quite enjoyable." TEK Roofing specializes in the fabrication and installation of natural metals.

A major issue that had to be resolved before the new zinc roof could be installed was achieving a level and true substrate. During the many years since it was originally built, the structure had settled and shifted considerably. The



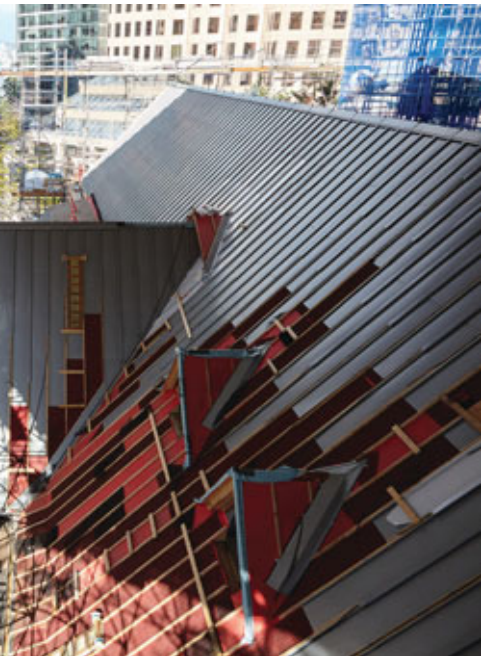
construction methods employed more than a century ago were not nearly as exact as those used today.

"We were surprised at how bad the structure was when we opened the building up," said Ian Birtwell, a parishioner and volunteer project manager who functioned as liaison with the church. "The connections to walls were very poor, basically gravity connections. That's the way they built in those days. And the roof ridgeline dipped 6 inches. We used a laser system to create a computerized 3-D model that revealed the high spots and low spots so that we could get a totally flat roof."

Kellogg was quick to give credit to another company that was involved in leveling the structure, Pacific Building Envelope Maintenance Ltd. (PBEM). "PBEM based out of Vancouver did a lot of the framing working under the supervision of our superintendent. They were very instrumental in getting us a level roof. It was a tough, tough job. They added a huge amount of structural steel. We couldn't have done it without them," Kellogg said.

Architectural design for the project was provided by Proscenium Architecture & Interiors, Inc. of Vancouver. Renovation of the historic building was deemed a Heritage project and had to meet certain guidelines for approval. "Good Heritage practice requires that the renovation be respectful of original materials," according to Proscenium's principal

Scaffolding reached 100 feet high to allow the use of a traveling gantry crane for moving materials to all areas of the roof.



A massive scaffold enclosed the building during the renovation.

and architect, Hugh Cochlin. "We gravitated to zinc pretty early in the process. We wanted a durable material that would last forever. We expect to get 100 years or more from the RHEINZINK. Plus it looks contemporary, but it is respectful of good Heritage practice. The Heritage Commission quickly approved our use of it."

Kellogg concurs regarding the lifespan of the zinc. "With the pitch of the roof, it's easily a 100-year roof," he said.

The traditional prePATINA blue-grey color was another reason for selecting these panels. "Everyone likes the way the blue-grey panels complement the natural

stone on the building," Cochlin said. "We absolutely love the product."

Another interesting attribute of zinc that influenced its selection for the project is its ability to repel moss. "The Cathedral is in somewhat of a concrete canyon with high-rises all around and thus gets very little sun," Birtwell said. "The previous roof was really moss-covered. We sometimes joked that the moss was the only thing holding the old building together."

The detailing on the job was complex with multiple interfacing. "We had complicated transitions," Kellogg said. "There was no caulking, no screws – all traditional methods. There were lots of pitch changes and elevation changes that made the installation time-intensive. It was definitely a labor of love."

According to Cochlin, all of the details were drawn by hand. "That's definitely old school," he said, "but particularly appropriate for a Heritage project. We worked closely with the installers and had many on-site meetings. There was definitely more collaboration with the installer than is the norm today."

The drainage system used traditional 6-inch half-round gutters and hangers, outlets and expansion joints. "It's a beautiful system and complements the scale of the roof," Kellogg said. On several small dormers, 5-inch gutters were used.

Another major aspect of the final-phase renovation was the addition of a highly-anticipated bell spire set atop the existing elevator core. The open glass and steel structure housing four custom-cast bronze bells was the last significant architectural addition to the project. The bells were cast in France, and the bell spire glass features a design by Canadian artist Sarah Hall.

The bells ring at the beginning and end of the workday, on Sundays, for weddings and funerals, and to mark special celebrations in Vancouver's civic, interfaith and multicultural community. "Completion of the project protects the heritage of this historic and much-loved church," said Peter Elliott, dean and rector of Christ Church Cathedral.

The project's general contractor was Scott Construction Group, Burnaby, British Columbia. The RHEINZINK distributor was Alesther Metal Distributors, Ltd., also in Burnaby. ***MR***

RHEINZINK America, Inc. led the introduction of architectural zinc in North America and continues to offer roofing, facade and wall cladding gutter, and interior applications throughout the United States, Canada and Mexico.

Opportunity From Challenge

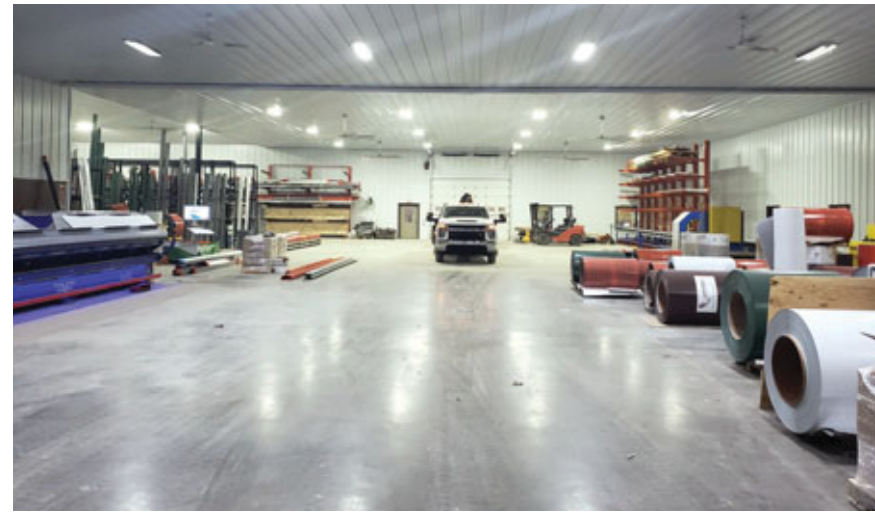
Indiana's Premier Roofing Was Established To Meet Excess Demand

Premier Roofing and Construction, Nappanee, Indiana. Having had its start in post-frame construction and roofing, the company now focuses strictly on metal roofing.
PHOTOS COURTESY OF PREMIER ROOFING AND CONSTRUCTION

By Kenneth P. Lambert, Jr.

Matt Burkholder had an idea that he knew would help his customers. He sought advice, asked around, and was told, "It's not possible!" Not to be discouraged, he pursued solutions and with the help of trusted partners, he developed an innovative approach that his peers would soon emulate. Perseverance, problem-solving, and partner relationships led to a success that would ultimately benefit his customers. These are the strengths upon which his company, Premier Roofing and Construction is built.

Matt launched Premier Roofing and Construction in 2011 after his employer decided to downsize. Anyone who has found themselves in this situation knows what a challenge it can be. Matt saw this challenge as an opportunity. "Jobs were plentiful in our area, but I wanted to stick in the industry I'd been in for ten years," says Matt. So, he started Premier Roofing and Construction, based in Nappanee, Indiana, as a post-frame builder and roofing contractor. "It was tough," explains Matt, "It was a fun experience, but those first six months, getting those first jobs lined up was pretty stressful." Prospective customers are often skeptical of new, unproven companies. Fortunately in northern Indiana, the construction industry was strong. There were many established firms who were fully booked, and the excess demand opened opportunities for Matt's company. Once his fledgling firm had a few successful jobs



In Spring 2022, Premier added 12,000 sq. ft. to their metal shop.

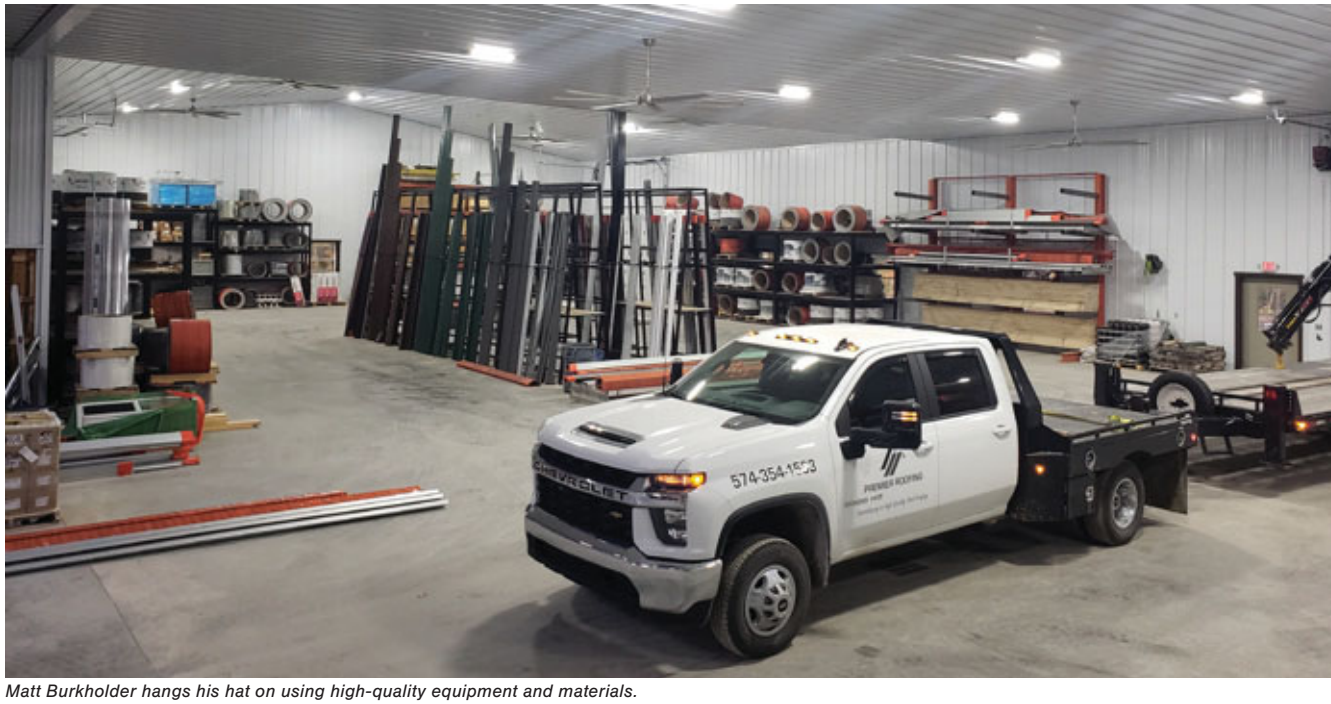
under their belts, and some positive customer relationships, it became easier to land subsequent jobs. "It was all word of mouth," says Matt.

As the company grew, they did more and more metal roofing, so Matt decided to purchase their first rollformer, a New Tech SSH. He and his team did a lot of research and concluded that New Tech Machinery provided the most user-friendly and advanced standing seam rollformers. "For a small guy it was a pretty hefty investment, but in the long run, it definitely paid off," says Matt. Making their own panels made the company more price competitive, while giving them immediate access to materials when they needed them.

These new capabilities led to an even tighter focus on metal roofing. Matt set his sights on adding more capabilities, specifically the ability to produce panels right on the job site. He had seen open-air trailer-mounted rollformers on job sites, and was aware of the drawbacks to that arrangement. The equipment was exposed to the weather. "One thing I always noticed… there was dust in the machines, so periodically you'd get scratches… you'd get flaws in the panels, you'd have to throw the panels away." He knew his customers, who were investing in his product and trusting his quality, would not stand for flawed panels. But, he saw a solution: designing an enclosed trailer for his mobile rollforming equipment.

"I spoke to several people about having an enclosed trailer and everybody said it's not possible." It was believed that side-loading heavy coils of material simply could not be done. Opening large side doors to accommodate coils that weigh two- to three-thousand pounds would destroy the structural integrity of the trailer. But Matt believed this was a challenge that could be overcome. He worked with inTech Trailers who helped him design an enclosed trailer that had the capability he needed. The first enclosed rollforming trailer rolled into service in 2012.

Matt had invested time and money, and had developed an innovative product that benefitted his customers. Premier Roofing now has four of these mobile units. In addition to supporting their own projects, they also supply roofing panels to other companies. At first, Premier brought their enclosed mobile units to job sites and would produce panels on the spot for other contractors. These days, they provide the trailer, stocked with trims and everything needed for a job, and the contractor runs their own panels at the job site. Once the job is complete, the contractor simply brings the trailer back. They also produce panels in their shop, shipping the product to job sites primarily in the Midwest, but sometimes



Matt Burkholder hangs his hat on using high-quality equipment and materials.

as far away as the West Coast.

Matt's innovative mindset also came into play as he and his team developed a user-friendly trim system. He noticed that some of his contractor customers shied away from standing seam roofing because it seemed too complicated. So, his valued long-term employees invested time in the shop and in the field experimenting with different techniques. Over time, they devised a user-friendly, easy-to-install trim system. This system not only helps their contractor customers by making their jobs easier, but also the end-users, by helping eliminate some recurring issues his team had experienced with the traditional system.

The importance of relationships, in Matt's view, is crucial not only in securing new customers and retaining skilled employees, but also in finding trusted suppliers. Premier Roofing runs 22ga, 24ga, 26ga and 28ga steel, and they purchase the majority of their steel coils from United Steel and Coated Metals Group. When Matt first started rollforming roofing panels, he tried a variety of sources. "It didn't take us long to notice the difference in steel," he says. Some steel would run better than others. Some was softer, and some would produce wavy panels. Understanding the high expectations of his customers, Matt decided to go with material that consistently yielded the highest-quality product. Matt suggests, "If you are looking to enter the rollforming business, find a long-standing reputable steel supplier. Quality materials will never disappoint."

The same goes for equipment dealers. Matt expresses his appreciation for dealers such as Guttermaster and CIDAN Machinery. In approximately eleven years of working with these partners, Matt has experienced very few issues, excellent product, and excellent service. As Matt tells it, "If we have equipment break down, we don't want to wait three days for an answer. Your equipment is only as good as your service."

Premier Roofing uses coatings by Kynar and Sherwin Williams Weather XL. They use standing seam fasteners from Direct Metals (DMI), and exposed fasteners from DMI and Atlas. These choices also are based largely upon the level of service. "There are a lot of good fastener companies out there," says Matt. They have great products, but their fast turnaround and great service made the difference. "Quality and service is the most important part of any business relationship we have."

"As we grew," says Matt, "we did more and more metal. In 2013 we added a second New Tech SSQ and a used Jorns 21' folder. In 2015 we added a third New Tech. In 2016 we moved to our current location and purchased a Hershey Variobend and a CIDAN cut-to-length slit line. Demand from contractors continued to grow and this spring we added 12,000 sq. ft to our shop and put in an MRS Titan 36" exposed fastener panel line."

Clearly, Matt is not one to shy away from a challenge. He leads Premier Roofing with the courage to try new approaches, he trusts his team, and focuses on what is best for his customers. Matt is happy with the size of his company. He currently employs eight shop and field personnel, but his extended team includes folks who work for him as subcontractors. "I like the size we are at and don't have plans for growth," he explains. Rather, he sees opportunities for greater efficiency and plans to invest in equipment that will help achieve those efficiencies.

Premier Roofing and Construction provides stocked trailers to roofing contractors.

Reflecting on recent and future challenges, Matt notes that there has been improvement in lead times for material as well as steel prices. He hopes that these trends will continue. Considering recent concerns about economic slowdown, Matt recognizes that there is a likelihood that his business will be affected, but he remains optimistic that this will not be a drastic downturn.

"Starting out, we never imagined we'd get to where we are," says Matt, "God has richly blessed us and our employees are phenomenal. They have been a huge part in making our business successful." An equal factor in Premier's success has been the company's strong customer-focused outlook. Matt emphasizes the importance of taking time with the details and focusing on the finer points that customers appreciate. This sets Premier Roofing apart from the competition, and their customers have understandably high expectations. They do not want to hire a company that will simply install a roof as quickly as possible, but rather one that approaches the project with an attention to detail.

Matt advises, "Always deal with customers with the mindset that they are right and put your best quality in the project." ***MR***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Bound for Growth

As the Inflation Reduction Act Becomes Law, Solar Deployment is Poised for Growth & Metal Roofing is Ripe for Rooftop Solar

Rob Haddock, CEO and Founder, S-5!

With recent news of the Inflation Reduction Act passing, the U.S. solar market is now poised to reach 30% of U.S. electricity generation by 2030. The new legislation includes a 10-year extension of the solar Investment Tax Credits (ITC), significant incentives to boost domestic manufacturing throughout the solar production supply chain, tax credits for energy storage, workforce development provisions and additional policies that promote a clean energy economy.

Solar projects eligible for the 30% ITC can increase their tax credit by an additional 10% (that's up to 40% in total) by purchasing domestically produced products. This should offset potential price increases, reduce shipping and import costs, and likely increase the level of support for solar photovoltaics (PV) and other renewables in the United States—triggering an avalanche of solar development throughout the country.

So, how do metal roofs play into the equation?

Metal roofing provides an ideal platform for mounting rooftop solar as it is the only roof type with a service life (in the range of 50-70 years) that actually exceeds the service life of a solar PV system (an average of 32.5 years and growing year-over-year). It is also the most sustainable roofing type and is conducive to lower solar installation costs. Most alternative roofing types will expire long before the life of the PV system, leading to costly disassembly of the PV array, re-roofing and re-assembly.

These re-roofing and re-assembly expenses erode the otherwise attractive financial metrics of roof-mounted PV. High-end tile may be the only exception to the need for re-roofing, but its price tag is the same as standing seam metal roofing. But mounting solar to tile is invasive and very tricky to do without breaking tiles, so the cost is also much higher than mounting to metal. Simply put, when all the facts are known, the standing seam metal roof is the only roof type worthy of consideration for solar PV with face-attached metal profiles at a close second place.

How do national and/or local energy policies and building/electrical codes play into the use of solar?

The role of codes and regulations is a double-edged sword. Some are very positive for solar, such as the residential solar

mandates for new buildings enacted in California two years ago, while others may increase hurdles, making it more complex and difficult to install solar. As the use of solar increases, so do the number and revisions of codes and standards. This is inevitable and the right thing to do but may inadvertently increase the hurdles to deploying solar. Some energy conservation policies are focused on energy efficiency first, which may reduce the demand for solar.

That said, various municipalities and even states have enacted regulations and building codes mandating the installation of solar PV or solar-ready design on new building construction. This is a major shift from the past when there was no consideration for accommodating solar with new construction design, and then retroactively fitting solar to the roof as well as possible. New mandates will result in the accelerated growth of rooftop solar, with the intent also to reduce costs and maximize

the energy output of solar installations – leading to higher ROIs with fewer hurdles in deploying solar PV.

The key to complying with these mandates is in the upfront planning and design of new buildings with respect to factors not traditionally considered – factors focused on the anticipation of a solar installation on a new building.

For example, according to St. Louis's solar-ready regulation passed in December 2019, the area of a new commercial building's roof, which is functional for solar must be at least 40% of the total roof area, often referred to as the "solar-ready zone." For new residential homes, the solar-ready zone must be at least 600 square feet and oriented between 110 and 270 degrees from true north to the southernmost point as possible — to produce more energy.

As more buildings are constructed with solar installed or solar-ready, the demand for better solutions will foster greater innovation of products and technology to allow a building, its roof and solar PV to work as a single system. This could be new products performing multiple functions, such as building-integrated PV (BIPV), which has been in the industry for years but is relatively unsuccessful due to economics and technical difficulty.

Return-on-Investment

Often, when the decision is made to install solar, a new roof is required. Metal roofing has become a driver for roof type selection in these cases because not only can a metal/solar roof system have lower initial cost than other roof system combinations, but it also leads to improvements in the lifetime return on investment (ROI) of the system. Therefore, the PV array and the roof should be regarded as a single asset.

When computing ROI within the solar pro forma, inverter replacement is usually factored in at about year 15 – but what about the cost of roof replacement? The solar array must be totally dismantled and then re-installed on the replacement roof. Factor in the inevitable cost

of roof replacement and the advantages of a metal roof become clearly obvious. The metal roof avoids replacement due to its long service life. The roof will still be going strong long after the service life of the solar array has expired.

The Metal Construction Association recently published a three-part white paper series on solar PV and metal roofing. Part 1 focuses on solar/roof service life comparisons. Part 2 explains the common types of mounting systems for metal roofs, associated risks and the pros/cons of each. Part 3 digs into more detail and the critical technical factors for solar PV systems specific to mounting on metal roofs.

About Rob Haddock

S-5! CEO and Founder, Rob Haddock is a former contractor, award-winning roof-forensics expert, author, lecturer and building envelope scientist who has worked in various aspects of metal roofing for five decades. Together with his son, Dustin, they co-invented, a rail-less direct-attach solar solution that provides a simple, secure method to "lay & play" PV modules with tested, engineered, cost-saving, attachment to the only roof type that outlasts the solar—the metal roof. ***MR***

The State of the Industry panel held at METALCON 2022. From left to right: Alan Scott, FAIA, LEED, Discipline Leader, Sustainability, Intertek; Chuck Howard, President, Metal Roof Consultants, Inc.; Jennifer Heimburger, President, Metal Building Contractors & Erectors Association; Tony Bouquot, General Manager, Metal Building Manufacturers Association (MBMA); Paul Deffenbaugh, Editorial Director, Metal Construction News. PHOTO BY METAL ROOFING MAGAZINE STAFF

METALCON '22 Rolls Into Indy

By Karen Knapstein

METALCON was firing on all cylinders as it opened at the Indiana Convention Center in Indianapolis. The October 12-14 event, which is produced in partnership with PSMJ Resources, Inc. and the Metal Construction Association (MCA) saw new features added for exhibitors and attendees, as well as the return of past favorites.

This is the second year the IMP Pavilion was featured at METALCON. The IMP Education Center presented Insulated Metal Panels – Installation and Handling Best Practices. During the demonstration, attendees were able to learn about best practices and common mistakes made during handling, storage, and installation of insulated metal panels.

Meet the Press

For the first time, exhibitors could meet with editors and reporters from 10 leading industry trade publications. This included representatives from Rural Builder; Metal Roofing Magazine; Rollforming Magazine; Garage, Shed & Carport Builder; and Frame Building News. Exhibitors who chose to participate spoke with media representatives about new products, newsworthy announcements, and to talk about editorial coverage. Watch the pages of your favorite trade magazines for special features and announcements.

State of the Industry

The State of the Industry panel, which was held on the expo floor so all

From left, Jim Bus of ATAS International, Inc; Heidi Ellsworth and Karen Edwards of Roofers Coffee Shop; and Dale Nelson and colleagues with Roof Hugger, LLC accept top product awards at a special ceremony on-site in Indianapolis. PHOTO COURTESY OF MCBOAT PHOTOGRAPHY

As always, the Sharkskin booth was attended by engaging staff.

could attend, was moderated by Paul Deffenbaugh, editorial director, Metal Construction News. The panel consisted of industry insiders Alan Scott, Intertek; Jennifer Heimburger, Metal Building Contractors & Erectors Association; Tony Bouquot, Metal Building Manufacturers Association; and Chuck Howard, Metal Roof Consultants, Inc.

One of the problems the panel discussed was what are the causes of supply chain problems and where do we stand now. This problem has evolved over the last couple of years; initially, the COVID shutdown caused a lack of supply. Bouquot said materials can be found now, but at higher prices. And product substitutions are sometimes necessary.

Heimburger added that, from a contractor-erector standpoint, they sometimes have to find alternate suppliers. She said it's possible this could last a couple more years.

Pricing is always a major concern. Heimburger said that while they've seen steel prices increase several times over, their customers have been able to pay anyway. But, she said, we may get to the point of a slowdown because of inflation and price increases.

But price increases aren't necessarily a deal breaker. Chuck Howard added that his company does a lot of work in the public space. Over the last two years, they "blew their budgeting." Now they budget high, adding that money is usually found to do state projects.

All on the panel agreed that sustainability is a topic that will continue to grow in importance. Alan Scott said the sustainability trend will continue. On January 1, 2023, the "carrots are getting sweeter, and the sticks are getting bigger." As part of the Inflation Reduction Act, the 179D tax deduction was increased and extended. He said building performance standards are pushing for existing building performance improvements and there will be huge opportunities in retrofitting.

Heimburger agrees there will be even more retrofit opportunities; it is less expensive to buy an existing building and retrofit with needed systems than it is to build new.

"There's more demand than there is capacity," added Chuck Howard. However, the obstacles are different. Engineering in a new building is very precise, whereas in retrofit, he said you're trying to find out how and what an existing building is made of. Figuring out how to put a new roof over an existing one is more complicated for the contractor, but "If you get into retrofit, there will always be work to do."

Exhibitor Feedback

Attendees were able to connect with almost 250 exhibitors on the trade show floor. Some of them share their METALCON experience and market predictions:

"Quality Metal Stamping has been exhibiting at METALCON for over 20 years," said Business Development Manager Colin Serling. "We think it is the premier place to connect with and learn from the top metal construction professionals in the industry. We appreciate the support and look forward to continuing our position as a valuable supplier to this industry."

Mark Gies, S-5! Director of Product Management, had this to say: "At S-5!, our message to the industry is that metal roofs are the best place to install solar panels because of their long service life. We are seeing a growing interest in solar since the announcement of the many incentives now available through the Inflation Reduction Act, and we expect to see the metal roofing sector grow as a result."

"We had a lot of great meetings with industry partners and got to meet a lot of new and existing customers," enthused Scott Tomlin of D.I. Roof Seamers. "METALCON is always a good show for us."

Direct Metals, Inc. showcased its metal roofing fasteners and accessories. "We were impressed by the quality of attendees," said David Quehl, Director of Sales & Marketing. "The majority of those who did stop at our booth are involved in standing seam metal roofing, an area DMI specializes in. Traffic was steady the first two days and although the third day was light from an attendance standpoint, we still had good substantive discussions with those that did stop. It was good to see attendees who traveled from Alaska, Washington, Montana and Central and South America. It helped expose our company to a wider audience."

Brian Esh, Eagle Business Software, said "METALCON is always a great venue at which to learn what's new in the metal roofing industry and collaborate with existing customers, new leads, and business partners at the same place."

Announced at METALCON 2022, the Metal Construction Association (MCA) Design Awards recognize member companies involved in the construction of outstanding building projects that use metal in significant and innovative ways. PHOTO CREDIT: SHIELD WALL MEDIA

Nearly 250 companies filled the exhibit hall, including Leland Industries and Direct Metals, Inc. PHOTO CREDIT: SHIELD WALL MEDIA

"METALCON was a great place to catch up with existing clients and meet some potential new ones," said Phil Costar, Managing Director, ACT Building Systems. "Within the space of two days we touched based with a number of clients that would have otherwise taken a few weeks to have called on."

"As always, METALCON proved that we are part of a vibrant and growing industry," summed up Todd E. Miller, President, Isaiah Industries, Inc. "The folks who visited our booth were very diverse which is always a nice thing. We had visitors ranging from property owners to sub-contractors to general contractors and architects.

"We had a lot of interest from attendees in our newer products," he continued. "No longer is metal unique to the building envelope. It is, for many people, almost a 'given' but what they care about are metal products that offer unique aesthetics and also greater energy benefits.

"We are looking forward to next year's show in Las Vegas. It's been a few years since METALCON has been out West. The emphasis out there on fire safety and energy efficiency is daily bringing about increased specification of metal."

Fire safety and energy efficiency will provide the basis for a great METALCON 2023. ***MR***

METALCON 2022 Takes a Victory Lap

PHOTO CREDIT: MCBOAT PHOTOGRAPHY

American IndyCar Series car driver, Josef Newgarden, speaking on day two of METALCON. PHOTO CREDIT: MCBOAT PHOTOGRAPHY

For its first time in Indianapolis, the racing capital of the world, METALCON roared across the finish line for both attendees and exhibitors. From intensive workshops to 40 free educational sessions to inspiring keynotes, attendees learned from top industry experts and earned nearly a year's worth of continuing education credits at the industry's only event dedicated exclusively to the application of metal in design and construction.

"You truly can't get this type of experience anywhere else," said show attendee Ryan Anderson of Elevated Metal Solutions in Big Sky, Montana. "There are so many tools and resources here, whether you are trying to grow your marketing, your installation knowledge or your sales. There are so many great minds coming together, so much knowledge to be shared—all in this one centralized location. It's a fantastic way to expose yourself to the industry and learn about what it takes to grow your company efficiently. This is my first METALCON; needless to say, we will definitely be back."

Kicking off day one of the show was keynote speaker, Dr. Melissa Furman of Career Potential, a consulting, training and coaching organization, who shared her thoughts on preparing for "the new era of uncertainty and constant flux" and strategies for navigating ongoing challenges.

"We have experienced more change in the last 18 months than we experienced during the entire industrial revolution, and the change is only getting faster," said Furman. She spoke about the difficulty her clients are facing with finding new hires. She said, "If you just continue to tweak old systems, old ways

of doing things to try to remain relevant, your organization may not survive. You have to rethink your organization. Nothing is off the table. You have put yourself outside of your comfort zone and be thinking about how you can build your organization—one that is relevant for today. Are your systems, protocols and infrastructures based on old rules? I ask you, are your organizations relevant? Because these younger generations whether they are your customers, consumers or employees, they want to know why."

"We will never go back to a new normal—the way things used to be," continued Furman. "As a leader you need to start thinking in this mindset of how you can manage constant change. Any time I hear the words best practice, it is like nails on a chalkboard to me because what are best practices based on? What has worked in the past. We are in a different landscape today, and most of those things that worked in the past are not going to work today or in the future."

Back by popular demand, The Architect's Experience returned to METALCON this year. Architects, specifiers and designers learned from industry experts. Show attendee and registered architect Judy Kleine said, "In just three days, I can get three quarters of my CEUs for a year, and that's important because it is hard for me to take time off. You not only have the education, which has been very good, you also get to see new products, how systems go together and how they work."

Architect's Experience speaker, Dan Brueggert, AIA LEED AP, Principal of CSO Inc., concurs. "For me, it's hard to stay abreast of what's innovative in the industry. Clients are always choosing their architect based on how innovative that architect is. We're trying to stay at the forefront of technology. We don't have time to keep up with what manufacturers are doing and what's now available that didn't used to be, so coming to a place like this and learning about what new things are coming out is invaluable to us to stay ahead of that innovation."

On day two of the show, American IndyCar Series car driver, Josef Newgarden shared stories on the inner workings of his race team and highlighted lessons learned regarding communication and teamwork on his path to the top tier of American Motorsports. He spoke about how important it is to have people in your life who support you. For him, that is his father, encouraging him every step of the way. He also spoke about the role of each individual on his team and how together, they contribute to the overall success of the team.

Also on day two, Paul Deffenbaugh, editorial director of Metal Construction News moderated a state of the industry panel with Tony Bouquot, general manager of the Metal Building Manufacturers Association; Jennifer Heimburger, president of the Metal Building Contractors & Erectors Association; Chuck Howard, long-time industry veteran and president of Metal Roof Consultants; and Alan Scott, FAIA, registered architect and sustainability practitioner with Intertek. They discussed supply chain issues, rising costs, the labor shortage and workforce development.

Bouquot said, "Manufacturers are able to find materials but are having to deal with some substitutions like components of paint supplies or specific gauges; they are turning to conventional steel as it is more readily available." On the same topic Heimburger said, "Companies are able to find alternate suppliers; wait times have varied; and businesses are turning to conventional steel." Howard contributed, "It has been difficult to get jobs done, and costs have gone up, but the demand is still there. The supply chain is constant now; things have leveled off; and they are in a more comfortable position." He also stated, "Now is a good time to step back, think long-term and make lemons out of lemonade."

Deffenbaugh asked about pricing increases and what the panel is seeing. "Nobody was talking about inflation when steel prices increased 400%," said Heimburger. "Concrete is affecting projects, fuel surcharges and fuel. The market will bear some increases." Howard said, "Over the last two years, budget planning has been difficult because of price increases, but they are leveling off, and we are catching our breath." Bouqout contributed, "The value of coming to METALCON is we can have those face-to-face conversations. We are all trying to stay ahead of the downstream prices we are seeing."

On the topic of sustainability, Scott said, "Low cost, long-term financing ITCs (international tax credits) have been extended, and building performance standards are coming into place, affecting existing building performance

METALCON Keynote Speaker, Dr. Melissa Furman of Career Potential, a consulting, training and coaching organization, speaking on the first day. PHOTO CREDIT: MCBOAT PHOTOGRAPHY

approval." Heimburger contributed, "The retrofit market is growing; it is cheaper to buy an older building and retrofit it vs. building new." Howard stated, "There is more demand than capacity to take care of the demand in retrofit. You never have to worry about feeding your family if you get into the retrofit business."

The panel also discussed the environmental benefits of using metal in construction, reducing carbon emissions by using 100% recyclable steel and changing the perception of the trades by providing tools to schools (i.e., curriculums and programs) to promote the trades as an option.

This year's show included nearly 250 leading companies exhibiting the latest metal construction industry products and technology.

"Most people at METALCON know that a lot of things happen behind the scenes, so for us it's really networking, meeting the people in our industry and planning out the future by securing purchases, materials, metals," said Jay Lara, Vice President of Sales, Carport Central.

Long time exhibitor, Bob Repovs, president and CEO of Samco Machinery, said, "We've been having a lot of great conversations with builders and engineering companies looking for what's out there with steel, whether it is roof trusses, wall panels or steel structural systems. A lot of our clients from all around the world come to METALCON. It's exploratory of information. We have our experts here, our engineers, our sales engineers—all the experts are here."

METALCON 2023 takes place in Las Vegas from October 18-20 at the Las Vegas Convention Center. ***MR***

METALCON Announces Top Three People's Choice Award Winners

Exhibitors at this year's METALCON were invited to nominate their top metal products in one of 15 product categories for the METALCON Top Products Award, and attendees were invited to vote on-site in Indianapolis for their top three choice products in the People's Choice Awards.

The 2022 METALCON People's Choice Award winners are:

First Place

Category: Walls

ATAS International, Inc. – Omawall™ PL with EVO™

Omawall™ PL with EVO™ is an architectural plate panel, manufactured in .10 thick aluminum — a great choice for high-end application, and is made fully of non-combustible materials. EVO™ is a patented panel extrusion attachment developed by Carter Architectural. Panels are prefabricated and field-cut, saving on installation time and costs by avoiding field-fabrication.

Second Place

Category: Technology

RoofersCoffeeShop® – MetalCoffeeShop

MetalCoffeeShop is an online community consisting of a progressive and informative website, podcasts, webinars, articles, classifieds and so much more that engages the metal industry. Focusing on all metal, including roofing, walls, HVAC, gutters and more, this site delivers information that builds businesses while enabling ongoing conversation.

PHOTOS BY MCBOAT PHOTOGRAPHY

Third Place

Category: Structures

Roof Hugger, LLC – Roof Hugger Retrofit Sub-Purlins

These sub-purlins represent the first structurally correct metal roof retrofit framing members specifically designed to conform with existing industry standards. They are made of the same thickness and tensile strength structural steel as the existing building, plus they have been tested as a system on typical metal building framing, providing proven performance for design and code compliance.

To be eligible, products must have been introduced to the market after Jan. 1, 2021 and its manufacturer a 2022 METALCON exhibiting company. Winners were determined by an electronic vote on-site.

"After a wonderful show in Indianapolis with so many cutting-edge technologies and solutions on the show floor, we are excited to announce our top three METALCON People's Choice Award winners," said Judy Geller, METALCON Vice President of Tradeshows. "We look forward to seeing what's in store for next year's showcase of top products and technologies in Las Vegas." ***MR***

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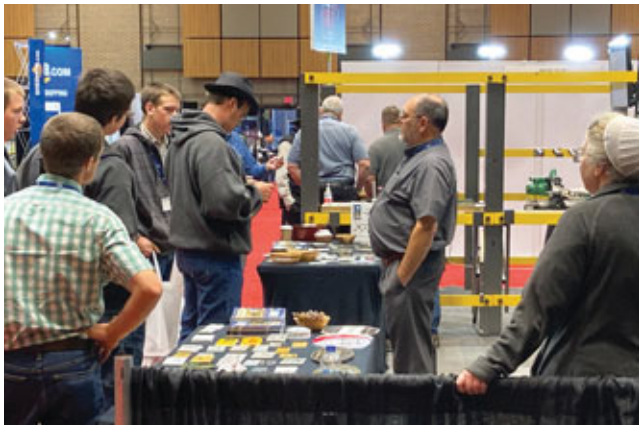

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Drexel Metals Opens Facility in New Hampshire

Drexel Metals, a full range provider of engineered metal roofing systems, equipment and custom fabrication services, announces the opening of a facility in Manchester, New Hampshire. One of four new nationwide facilities opened in the last year, the Manchester location will extend American materials to local roofing professionals—100 percent of the company's steel and more than 95 percent of its aluminum is purchased domestically. The easily accessible location and local stock means Drexel can provide material with short lead times across the New England region to meet increased customer demand for metal roofing. Further, the facility's enhanced fabrication and customer service capabilities will help local roofing professionals build and install high-caliber metal roofing systems quickly and efficiently.

"We're excited to better serve existing customers and support new ones with outstanding materials and services. At the new facility, our knowledgeable and experienced staff of full-time employees can answer questions about difficult builds and assist with in-house fabrication," says Brian Partyka, Vice President of Carlisle Architectural Metals. "Plus, by extending our reach to the Northeast corner of the country, local professionals can expect metal roofing products that are consistently durable, beautiful and delivered on time."

Not only will the new location provide increased access to high-quality metal roofing products, but it will also serve local fabricators with large manufacturing floors, storage space for works-in-progress and production services like cutting to length and coil slitting. With the ability to warehouse and distribute nine million pounds of American steel and aluminum, the company's Manchester location will also be furnished with a full range of fabrication equipment, such as portable rollforming machines, decoilers and more.

Fi-Foil Acquires Kennedy Insulation Group

Fi-Foil Company, a portfolio company of Validor Capital, and a highly-specialized manufacturer of reflective insulation and radiant barriers, has announced its acquisition of Kennedy Insulation Group, significantly expanding its reflective insulation product line.

Kennedy Insulation Group, based in Carthage, Missouri, was established in 2008 by Rick and Chris Kennedy. The company's exclusive VerSola™ brand is a multi-layer reflective bubble insulation product. Kennedy manufactures and distributes throughout the southwestern and southeastern United States. The VerSola product is especially noted for its use and performance in metal and post-frame building applications.

Bill Lippy, CEO at Fi-Foil stated, "We couldn't have found a better fit for Fi-Foil than Kennedy. Rick has built a great business that is highly complementary to the existing Fi-Foil product line. We feel the combined capabilities of the two companies and their respective teams will enable us to serve our customers more effectively with an expanded U.S. manufactured product line and geographic sales coverage."

The transaction closed on October 28, 2022. Terms of the transaction were not disclosed.

H.B. Fuller Acquires GSSI Sealants

H.B. Fuller Company, a global leader in adhesives and sealants, has acquired GSSI Sealants, Inc., which specializes in butyl sealants for the metal building industry. Headquartered in Houston, Texas, GSSI will operate within H.B. Fuller's existing Construction Adhesives business unit and is expected to expand the company's global footprint and product range.

GSSI, a profitable and well-regarded US-based manufacturer with a strong portfolio of butyl tapes, will enable growth in the metal building, wastewater, and building envelope applications. With locations in Mexico and Texas, GSSI will expand H.B. Fuller's reach in Central America and the U.S. With this acquisition, H.B. Fuller adds deep market knowledge, strong customer relationships, and a local manufacturing footprint.

Miguel Pena, president, and owner of GSSI, joins H.B. Fuller's U&I Leadership Team and will oversee the Butyl Tapes business. Miguel also is a board member for the Metal Construction Association, where he recently received the Patrick Bush Award for his service. GSSI's 60 employees will continue employment with H.B. Fuller.

Lakeside Group Acquires Ventco

Lakeside Poly Manufacturing CEO Kyle Lane has announced the acquisition of Ventco. "Today is an exciting day as our Lakeside Group of companies is once again expanding. Lakeside Poly Manufacturing, a Lakeside Group Company, has acquired Ventco, a manufacturer of commercial and residential ventilation products."

This acquisition further enhances Ventco's sales and service offering by adding additional resources and scale to expand customer reach. Ventco's management team is led by Ben Oskarsson, Vice President of Sales & Marketing, a 27-year veteran of the engineered building products manufacturing industry.

Lakeside Poly Manufacturing will continue manufacturing operations at its plant in Wrens, Georgia and all current employees have been retained.

Ventco will contribute positively to the growth strategy of Lakeside Group of Companies. "The acquisition of Ventco will strengthen our brand and will allow us to accelerate growth possibilities," said Lane. "It will allow us to expand with our existing customers as well as allow us to service new markets outside the construction industry."

PPG Chairman, CEO Michael McGarry named Industrialist of the Year

PPG has announced that Michael McGarry, PPG chairman and chief executive officer, has been named Industrialist of the Year by the Western Pennsylvania Chapter of the Society of Industrial and Office Realtors (SIOR). The award recognizes southwestern Pennsylvania business leaders for their positive contributions across their industry, their community and the region.

"I am honored by this very meaningful recognition from the SIOR Western PA Chapter," said McGarry. "Many of Pittsburgh's business and community leaders over the past decades have been recognized by the SIOR. Certainly, Pittsburgh has benefited from the work of these leaders over the years, and I am truly proud to join them as a recipient of this award."

"We are thrilled to honor Michael McGarry with the SIOR Industrialist of the Year Award. As CEO of PPG, Michael has long been a proponent of Pittsburgh, recognizing the importance of real estate and business, and along with his wife Wanda, committed to the community and giving back," said Michael Downey, Principal at Avison Young and SIOR WPA Chapter President. "Michael embodies all aspects of the Society of Industrial and Office Realtors Industrialist of the Year Award, and he is truly deserving of the honor."

McGarry became PPG chairman of the board in 2016 after first being named CEO in 2015. He joined PPG in 1981 as an engineer at the company's Lake Charles, Louisiana, chemicals complex. During his four-decade career with PPG, he progressed through various business and management assignments around the world.

SRS Distribution Acquires Metro Roofing & Metal Supply Co., Inc.

SRS Distribution Inc. ("SRS") has announced its acquisition of Metro Roofing & Metal Supply Co., Inc. ("Metro" or the "Company"), a leading distributor of commercial, residential, and metal roofing products with two locations in Tennessee. Terms of the agreement were not disclosed.

Headquartered in Nashville, Tennessee, the company was founded in 1980 by Pete Spain and his son-in-law, Robert Link, and is run today by Robert's children, Kevin Link, Karen Dickerson, and Kim Schwind. Metro operates a second location in Chattanooga, Tennessee, and currently employs a team of 30 people. Kevin, Karen, and Kim will continue to lead the company's team under the Metro banner, ensuring continuity and consistency for customers, suppliers, and employees.

"We're honored to welcome Kevin, Karen, Kim, and the rest of the Metro team to the SRS family," said Dan Tinker, President and CEO of SRS Distribution. "The Company treats its customers and employees like family while providing outstanding service and expertise, making Metro an excellent addition to SRS in a high growth state. We commend Robert and his family for building an outstanding business driven by a dedicated team, and we look forward to achieving many more successes together."

Robert Link, owner of the company, commented, "We are thrilled to officially announce our partnership with SRS. For decades, our family has taken great care to build a company that caters to our customers' needs, from single-family starter homes to premier commercial projects. We've worked hard every step of the way to expand and grow while still putting people and relationships first. We're fortunate to have found in SRS a partner who will care for our team and customers while expanding our reach in the region."

AkzoNobel Whitepaper Explores PVDF Alternatives

Coil and extruded metal manufacturers concerned about challenges in the PVDF supply chain can achieve a comparable finish and performance using non-PVDF alternatives in most applications, advises a new whitepaper from coatings and paints manufacturer AkzoNobel.

Changes in global market dynamics, including increased demand from markets such as electric vehicle batteries and solar panels, have led to volatility in the cost and supply of PVDF resin commonly used in coil coatings. This, in turn, has affected the availability of some PVDF-containing products.

But AkzoNobel's whitepaper, "Navigating the PVDF landscape: A market in transition," explains how coatings based on alternative technologies, such as silicone modified polyester (SMP), can often provide a comparable performance, without the drawbacks of PVDF coatings.

"PVDF coatings are particularly suited to environments such as those that experience saltwater spray, extreme moisture or extreme humidity," explains Brent Fletcher, Product Marketing Manager Americas, Coil and Extrusion Coatings at AkzoNobel. "However, the vast majority of the Northern Hemisphere does not have such extremes, so PVDF coatings may not be necessary. SMPs, for example, would be a good substitute for most locations in Central and Northern U.S., Canada, and North Asia."

AkzoNobel's whitepaper is part of the company's ongoing campaign to help its partners and coatings customers navigate the volatile PVDF situation and make more informed decisions about the best solutions for their specific circumstances.

Garland Co. Receives 23rd NorthCoast 99 Award

The Garland Company, a manufacturer of high-performance roofing and building envelope solutions for commercial, industrial, and institutional markets, has been named a 2022 NorthCoast 99 award winner by ERC, the Employers Resource Council. The NorthCoast 99 award honors 99 great Northeast Ohio workplaces for top talent. This is the twenty-third consecutive time that The Garland Company has received the award.

NorthCoast 99 winners participated in a rigorous application process that asked for detailed information on how their organization addresses top-performer attraction, development, and retention in the areas of organizational strategy, policies, and benefits; talent attraction, acquisition, and onboarding; employee well-being; employee engagement and talent development; total rewards; and diversity, equity, and inclusion.

"We pride ourselves on consistent excellence — we've been in Cleveland since 1895, in our current manufacturing location since 1919, and now, honored by 23 straight years of recognition as a NorthCoast 99 winner," said Matt McDermott, President of Garland's US Roofing Division. "What makes this year's NorthCoast 99 even more special is that it comes during a period of unprecedented change in the American workplace. While much is changing, we feel that a strong culture and a shared mission, reinforced by our employee ownership, are values that employees will continue to embrace, and this award reinforces that belief."

Malco Wins Three 2022 Pro Tool Innovation Awards

Malco Products, SBC, manufacturer of a variety of high-quality tools for the HVAC trade (Heating, Ventilation and Air Conditioning), has announced it has received Pro Tool Innovation Awards for its C-RHEX® Sawtooth, Eagle Grip 11 Locking C-Clamps with Swivel Pads, and Eagle Grip 10 Curved Jaw Locking Pliers with Wire Cutter.

A diverse team of judges, including contractors, construction business owners, tradesmen and media professionals recognized Malco's hand tools among the most innovative construction industry products in the world.

"We are honored to be recognized by the Pro Tool Innovation Awards," said Rich Benninghoff, Malco president and CEO. "Our products are designed to be put to the test, exceeding performance expectations under even the harshest conditions."

The company spent several years designing and developing the C-RHEX Sawtooth, which features an integrated sawtooth design that can cut through soft and hardened HVAC and roofing sealant for rapid fastener removal. By adding a heavy-duty, deep-set magnet that does not contact the screw, the fasteners spin true, and the magnet retains its strength for years to come. It received the award in the Accessories-Specialty Driver Bits category.

The company's American-made Eagle Grip line of professional-grade locking pliers and clamps won in the Locking Handle Pliers and Locking Handle Clamps categories. Eagle Grip tools deliver reliable job performance for use in sheet metal, automotive, welding and agriculture applications. These products are made with high-quality American steel, and undergo a premium heat treat process and rigorous testing.

PTIA judges selected winners based on a combination of key factors, including the ability to demonstrate innovative features, groundbreaking ergonomics, technological advancements, advancements in jobsite safety, and above-average value.

In total, 99 different manufacturers and brands submitted over 465 products in dozens of categories for a chance to take home a 2022 Pro Tool Innovation Award. ***MR***

Drone Update

Remote IDs Become the Rule in 2023

In June 2016, FAA amended its regulations to allow the operation of small, unmanned aircraft systems in the National Airspace System. The Part 107 ruling, which was published at 624 pages long [bit.ly/FAA-Drones], addresses the operation of unmanned aircraft systems and certification of their remote pilots. It is the primary regulation for flying drones weighing less than 55 pounds. Shared here are a few key points about the FAA's drone regulations.

Prospective operators must pass the Aeronautical Knowledge Test (AKT) to receive an operator's certificate/license. The test is taken in person at one of the hundreds of testing sites nationwide.

Drone pilots need to go through a knowledge training and testing process every two years to maintain their status as a commercially certificated small Unmanned Aircraft Systems (sUAS) operator. The renewal test can be taken online, whereas the original test must be taken in person.

All drones that weigh 0.55 pounds or more must be registered with the FAA, except those that are flown exclusively under the Exception for Recreational Flyers. Part 107 registration costs $5 per drone and is valid for three years.

Failure to register a drone that requires registration may result in regulatory and criminal penalties. The FAA may assess civil penalties up to $27,500. Criminal penalties include fines of up to $250,000 and/or imprisonment for up to three years.

Drone operators must have the registration certificate (either a paper copy or digital copy) in their possession when operating a drone.

The FAA requires all drones be marked with the registration number before flying. The label:

- Must be maintained in a condition that is legible.
- Must be affixed to the small, unmanned aircraft by any means necessary to ensure that it will remain affixed for the duration of each operation.
- Must be legibly displayed on an external surface of the small, unmanned aircraft.

Beginning September 16, 2023, drone operators must operate in compliance with the Remote ID ruling. Remote ID is the ability of a drone in flight to provide identification and location information that can be received by other parties. It helps the FAA, law enforcement, and other federal agencies find the control station when a drone appears to be flying in an unsafe manner or in an unauthorized area.

Drone pilots will meet the remote ID rule if:

1) remote ID capability is built into the drone (Standard Remote ID Drone)*,

2) remote ID capability is achieved through a module attached to the drone, or

3) the drone is operated within an

FAA-recognized identification area (community-based organizations and educational institutions).

Whether using a Standard Remote ID Drone or a remote ID broadcast module, nearly all the message elements are the same and they must be broadcast from take-off to shutdown.

A Standard Remote ID Drone must broadcast the following message elements:

- A unique identifier for the drone. Operators of a Standard Remote ID Drone may choose whether to use the drone's serial number or a session ID (an alternative form of identification that provides additional privacy to the operator) as the unique identifier;
- An indication of the drone's latitude, longitude, geometric altitude, and velocity;
- An indication of the control station's latitude, longitude, and geometric altitude;
- A time mark, and
- An emergency status indication.

A drone with a remote ID broadcast module must broadcast the following message elements:

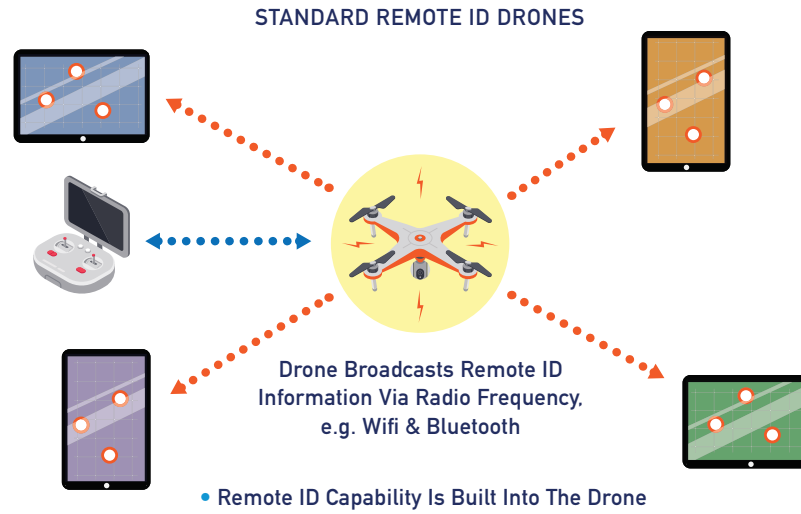
- The serial number of the broadcast module;
- An indication of the drone's latitude, longitude, geometric altitude, and velocity;
- An indication of the latitude, longitude, and geometric altitude of the drone's take-off location; and
- A time mark.

Again, the deadline for operational compliance is September 16, 2023.

Drone safety is the law. Visit https://www.faa.gov/uas for the Federal Aviation Agency's drone regulations and other information. ***MR***

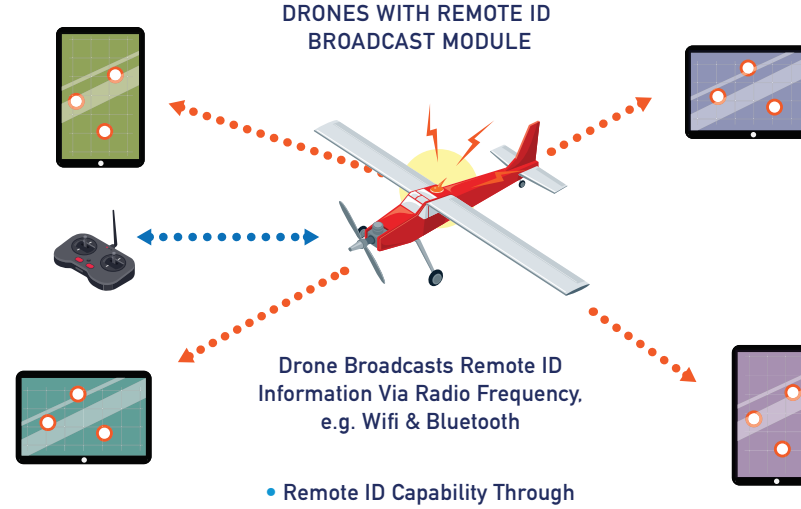
**As of September 16, 2022, drone manufacturers must comply with the final rule's requirements for them.*

DRONE REMOTE IDENTIFICATION



- Remote ID Capability Is Built Into The Drone
- From Takeoff To Shutdown, Drone Broadcasts:
  - Drone ID
  - Drone Location and Altitude
  - Drone Velocity
  - Control Station Location and Elevation
  - Time Mark
  - Emergency Status

DRONE REMOTE IDENTIFICATION



- Remote ID Capability Through Module Attached To Drone
- Limited To Visual Line Of Sight Operations
- From Takeoff To Shutdown, Drone Broadcasts:
  - Drone ID
  - Drone Location and Altitude
  - Drone Velocity
  - Takeoff Location and Elevation
  - Time Mark

CRS: All-Access

Attendees take advantage of educational opportunities in New Orleans

The third annual Construction Rollforming Show was held October 26-27 in New Orleans. The new location enticed attendees from surrounding states to come check out the only trade show dedicated to the construction roll forming industry.

Tradesmen made the trip from Mexico, Montana, Texas, Missouri, and Mississippi, and some even flew in from Canada. Attendees were able to meet with suppliers of every type of material needed, including equipment, fasteners, coil, insulation, software, and more.

At the 2022 show, for the first time, all admissions were all access. Access to classes were included with the price of admission to the expo floor. Participants were eager to take advantage of the diverse – yet relevant — learning opportunities after partaking of the complimentary breakfast served each day.

A few of the class highlights follow.

Leading off the sessions, software developer Royden Wagler and Brendon Studholme from SmartBuild performed a mock sales presentation to show how 3-D design/bid software can be adopted to evolve the sales process. Company principal Keith Dietzen was also on hand to answer questions.

CIDAN Machinery's National Sales Manager, Ryan King, lead a fast-paced, informative session about bending trim and flashing. He discussed forming options, typical shop configurations, processes to reduce waste, best practices for safely operating a folder, and more.

Freudenberg's Chris Davis gave a presentation about natural ventilation, condensation, and moisture control in metal buildings.

(TOP) CIDAN's Ryan King gives a presentation on bending trim and flashing.

(LEFT) AMS Controls' Pathfinder fold-sequencing control screen.

Randy Chaffee, from Source One Marketing, shared a wealth of sales knowledge that he's earned over his last four decades in the construction industry. Randy doubled up on his teaching duties; he addressed one group on Wednesday about the Sales Process, and another group on Thursday about Closing A Sale. "I want people to know who I am before they know they need me," he says. "Relationship-building is critical."

Beck Automation's Shawn Huffman spoke to his group about how software can be used to improve quality, have less waste (improve yields), track jobs and more. Sometimes a general business software will suffice, but programs that are specialized for metal forming will do much more than what you need to get by.

Two of the presentations were given in the demonstration area on the show floor. On Wednesday afternoon, Adam Buck, Territory Manager at 3GM Steel, gave a talk on coil gauges and specifications. He explained the gauge and dimension variances

that can occur.

On Thursday afternoon, Tom Laird, the National Sales Manager at New Tech Machinery, spoke about some of the best practices for setting up a portable roll forming trailer. New Tech had excellent representation at the show; Formwright and Karr's Building Supply & Service are both distributors.

Equipment & Software

Hershey's Metal Meister always has a commanding presence on the trade show floor. It was no exception at the 2022 Construction Rollforming Show. The Mattoon, Illinois-based company exhibited two of their folders — the Single-Fold Variobend and the Double-Fold Variobend — as well as their Slinet Slitter with coil farm.

CIDAN Machinery exhibited an FX32 Omniolder, while SWI Machinery exhibited its Marxman Plus slitter. Star-1 Products brought its Felt Applicator, which it demonstrated throughout the show.

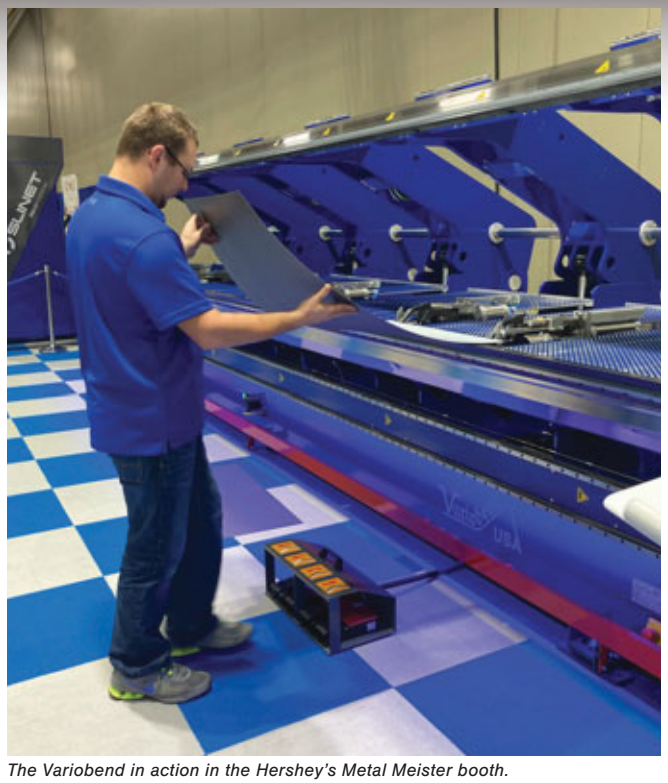
Formwright exhibited a portable New Tech machine in one if the company's enclosed trailers.

Technology solutions were abundant on the expo floor. AMS Controls, Beck Automation, Paragon Computing Solutions, SmartBuild and QB Metal Shop are among the companies that showed off how software and controls can help metal formers increase productivity and reduce waste. AMS recently introduced its HyperDrive double folder system upgrade, which speeds production on and extends the life of older machines.

Progressive Metals offers a wide variety of colors in 28-gauge coil, as well as a full line of 26- and 24-gauge slit coil.

Great Eats & Live Music

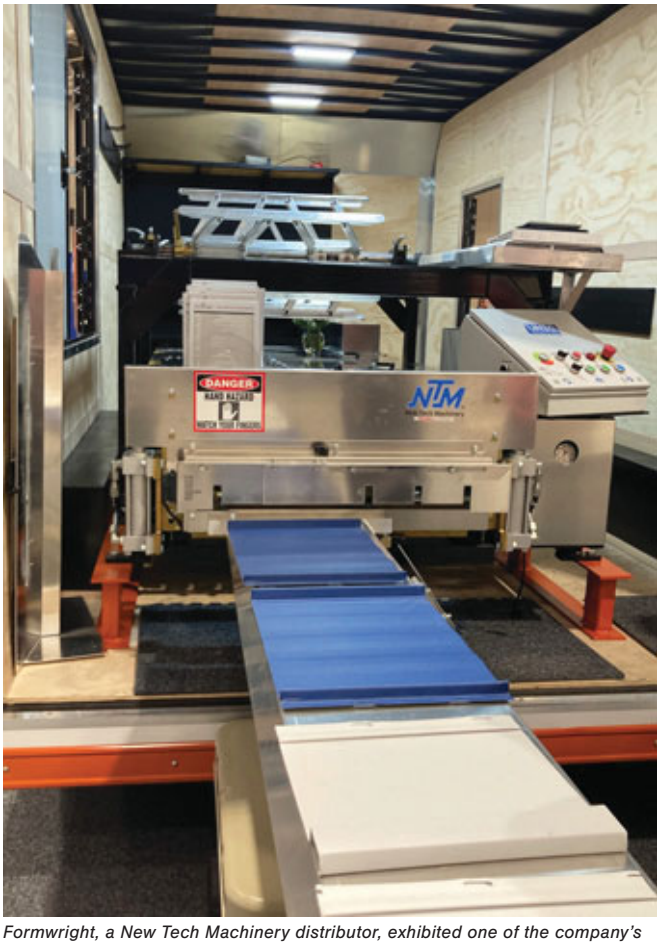
As the action on the exhibit floor wound down on Wednesday afternoon, the live music began and "dinner" and drinks were served. Everyone — attendees and exhibitors alike — enjoyed food stations serving up tasty treats unique to New Orleans. Charcuterie, crawfish etouffee, shrimp shooters, chicken and



The Variobend in action in the Hershey's Metal Meister booth.

The Metal Rollforming Systems booth.

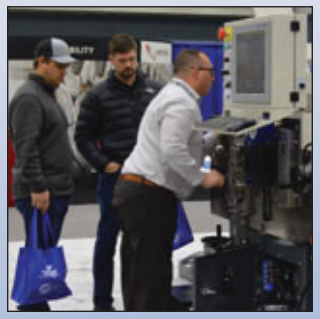
AceClamp exhibited its attachment options for metal roofs at the Construction Rollforming Show.



Formwright, a New Tech Machinery distributor, exhibited one of the company's portable rollforming machines.

4TH ANNUAL

2023 Construction Rollforming Show



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CINCINNATI, OH

SEPTEMBER 27-28, 2023

FOR MORE INFORMATION CONTACT GARY REICHERT:

gary@shieldwallmedia.com • 715-252-6360

www.rollformingmagazine.com/construction-rollforming-show-registration

SWI Machinery offers Simplex & Duplex folders, Marxman slitters, integrated cut-to-length lines, uncoilers, recoilers, multi-station uncoilers, rollformers and customized process lines.
PHOTO COURTESY OF COURTNEY CHRISTINE PHOTOGRAPHY, MILWAUKEE, WISCONSIN

Attendees and exhibitors alike enjoyed live music during the complimentary social hour.

sausage gumbo, and white chocolate bread pudding were just a few of the gourmet items on the menu.

2023 Construction Rollforming Show Returns to Ohio

On September 27-28, 2023, the Construction Rollforming Show will return to its original location — Cincinnati, Ohio. It will be held at the same venue as the first two rollforming shows: The Duke Energy Center.

Watch *Rollforming Magazine* and constructionrollformingshow.com to learn about show updates as they develop. ***MR***

Free food and drinks were served during the social hour on the first day of the show. Culinary delights were served up right in the exhibit hall.

Randy Chaffee, Source One Marketing, shares insights about how to close more sales.
PHOTO COURTESY OF COURTNEY CHRISTINE PHOTOGRAPHY, MILWAUKEE, WISCONSIN

By Renee Ramey, MRA executive director

Industry Report

Residential Metal Roofing Continues to Make Strong Gains in the U.S.

U.S. homeowners are gravitating towards better performing, more sustainable building product materials, as indicated by the results of the latest annual industry report that measures overall roofing demand and activity.

According to the Dodge Report, the share of residential metal roofing in the United States has risen from 12 percent in 2019 to 17 percent in 2021. The report shows the roofing market has grown overall, and metal is getting a bigger percentage of that share.

"The U.S. is catching up to other countries when it comes to the adoption of metal roofing. That's good news because it means homeowners are choosing more protective products that can better safeguard their homes instead of throw-away materials that wind up in the landfill after just a few short years," said Renee Ramey, executive director of the Metal Roofing Alliance (MRA).

This trend is reinforced by the report's regional data, which shows some of the largest gains in the adoption of residential metal roofing stemming from the Atlantic and Gulf Coast region, an area that has suffered from extreme storms and hurricanes, causing homeowners to seek more reliable and durable roofing materials. In the south Atlantic area, demand for metal roof has jumped by 13 percent, from 20 percent market share in 2017 to 33 percent in 2021.

Popularity for metal roofing has been boosted by insurance companies that are beginning to offer incentives for the use of more protective materials in areas affected by devastating climate events. Some local neighborhoods and towns in hurricane-prone areas have even considered ordinances that mandate the use of quality residential metal roofing to help better safeguard homes.

PHOTO COURTESY OF ISAIAH INDUSTRIES.

The Dodge Report shows that steel remains the most common type of metal roofing for re-roofing projects, due in part to its affordability and strength. Metal roofing also increases energy efficiency and can be recycled at the end of its long life, making it a sustainable and better performing choice for even the harshest climate conditions, including high winds and hail, heavy snow, and ice loads. For areas prone to wildfires, quality metal roofs protect against ignition and wayward sparks, and most carry the highest possible Class A fire rating.

While not measured by the Dodge Report, the MRA theorizes that homeowners are increasingly attracted to metal roofing's low maintenance and easy-care benefits, especially given the tight labor market and economic uncertainty they've faced over the past few years.

"A lot of homeowners know how tough it's been to get work done on their homes, and with the fluctuation in the price and availability of building products, they want something that will last, and they don't need to worry about having to repair, professionally clean or treat on an ongoing basis. We believe that also has helped drive strong interest and demand for quality metal roofs," said Ramey.

The Metal Roofing Alliance also is credited for raising significant awareness and understanding to help inform U.S. and Canada homeowners about how metal roofing compares to other types of roofing materials. The organization offers a wide variety of resources and tools for homeowners.

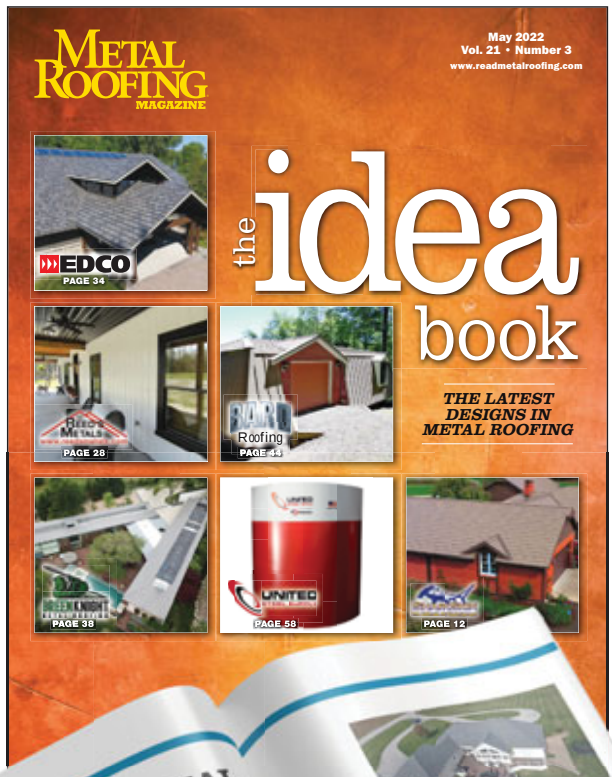
About Metal Roofing Alliance

Representing the residential metal roofing industry in the United States and Canada, the Metal Roofing Alliance (MRA) was formed to help educate consumers about the many benefits of metal roofing. The main objective of MRA is to increase awareness of the beauty, durability, and money-saving advantages of quality metal roofing among homeowners, as well as to provide support to the residential metal roofing industry. ***MR***

DO YOU HAVE A PROJECT TO SHOW OFF IN THE

2023 METAL ROOFING IDEA BOOK?

In addition to advertising opportunities, ***The Idea Book*** offers the chance to show everyone what you can do as a roofer or supplier. If you have a nice metal roofing project you'd like considered for inclusion, we're looking for finished projects, with information about the building, the roof, and the products used in its construction. If your project or product makes it into the magazine, you'll have bragging rights for all your promotional materials!



May Issue
METAL ROOFING® MAGAZINE

SEND PROJECTS TO:

karen@shieldwallmedia.com
715-513-6767

FOR ADVERTISING OPPORTUNITIES:

Contact missy@shieldwallmedia.com
920-216-3007

PROJECTS DUE FEBRUARY 15, 2023

The *Idea Book* is published by the team at *Metal Roofing Magazine* and mailed to more than 27,000 subscribers.

PHOTO COURTESY OF RED DOT

Do you have a special building project to share? Show readers what you can do!

We are on the hunt for special building projects to be considered for inclusion in our annual Idea Book.

The Idea Book is a special issue of *Metal Roofing Magazine* that features unique projects ranging from equine facilities to courthouses, schools to residential houses. The publication is sent to *Metal Roofing Magazine* subscribers, as well as distributed at industry trade shows.

The Idea Book will take into consideration: projects featuring metal as the main roofing material, to serve as inspiration for architects and builders.

What we are looking for from you is your best project, preferably one that has not already been featured in an industry trade magazine. If your project is chosen, you can use it as bragging rights to show prospective customers!

Feel free to contact us with any questions.

Thank you in advance!

PROJECTS DUE FEBRUARY 15, 2023

Please fill in all fields relevant to your project or scan QR code below to fill out electronically and send completed form to:
Karen Knapstein at karen@shieldwallmedia.com

What we need:

PHOTOS OF THE COMPLETED BUILDING
at least 3-4 photos (high resolution: 300 dpi)

For tips on great building photos read Jeff Huxmann's article: https://garageshedcarportbuilder.com/how-to-take-great-shed-photos/

ALSO NEEDED ARE THE FOLLOWING DETAILS:

Your Company Name: _____
Website: _____
Building type (home, school, etc.): _____
Roof size: _____
Location: _____
Architect: _____
Contractor(s): _____
Installer(s): _____

PRODUCTS USED

Roofing system manufacturer (if applicable):
_____
Roof panels: _____
Coating: _____
Ventilation: _____
Fasteners: _____
Snow/rain management: _____
Underlayment: _____
Insulation: _____
Other: _____
_____

GENERAL DESCRIPTION

General description of the project:
(what did the customer want; what special elements set it apart; etc.)

project of the month

Homeowner Opts for Metal Shake

Century-old Home Receives New Long-lasting, Maintenance-Free Roof

The client reached out to Cornett Roofing Systems of Franklin, Indiana, to take a look at their 100+ year multi-colored slate roof. Once the roofing company arrived, they learned the slate was beyond repair due to the brittle slates and bad underlayment. The client did not have the budget for a full slate replacement but were still in need of a permanent roof for the building.

Cornett Roofing introduced them to Modern Metal's Metal Shake Series and worked with the owners to create a two-toned pattern by using two different steel colors to try to mirror what they originally had. Cornett also added some other accents by using red and white on other areas per the client's request to keep the historical look as close as possible.

The client is beyond happy that Cornett Roofing took the time to work within the budget and still give them the look they wanted. The owners feel good about their decision to go with metal due to the longevity and maintenance-free aspect of the roof. ***MR***

Cornett Roofing Systems

https://cornettroofing.com/

Project Overview

Location: Rushville, Indiana

Roof Size: 30 Squares

Installer: Cornett Roofing Systems

Roofing System Manufacturer: Modern Metal Roofing

Roof Panel: Metal Shake Series

Coating: Kynar

Ventilation: Ridge

Fasteners: SFS INK

Underlayment: Tri-Shield Synthetic Underlayment

GET MORE INFORMATION ABOUT PRODUCTS & SERVICES SEEN IN THIS ISSUE. HERE'S HOW:

If you are looking for more information from companies featured in this issue, fill out this form.

Mail the completed form to us, and we will have those companies get in touch with you. There's no need to fill out multiple forms; we'll do the legwork for you.

Name (please print)_____

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MR DECEMBER 2022

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❑ Partner
❑ General Manager
❑ Sales Manager/Rep
❑ Engineer/Architect
❑ Vice President
❑ Foreman
❑ Installer
❑ Other_____

PLEASE CHECK THE PRIMARY CATEGORY THAT DESCRIBES YOUR BUSINESS:

❑ Builder, Dealer, Remodeler or Installer
❑ Roofing Contractor
❑ Metal Roofing Contractor
❑ Building Material Dealer/Distributor
❑ General Contractor/Remodeler
❑ Manufacturer/Rep of Manufacturer
❑ Architect/Specifier
❑ Construction Consultant/Engineer
❑ Building Owner/Developer
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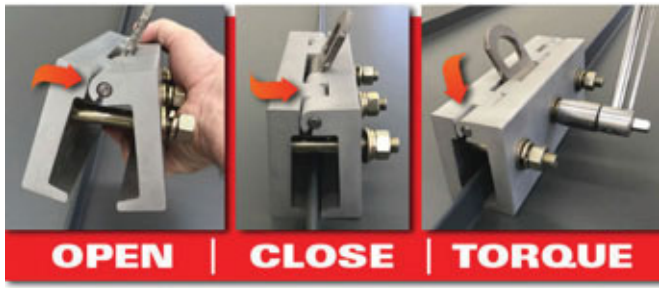


Metal Plus Universal Safety Anchor

Metal Plus LLC, Manufactures, designs and brings to market safety products for the metal roofing industry. The company has announced its latest tool: The Universal Safety Anchor.

The anchor's hinge design doesn't have set screws, which allows the installer to open, close, and torque without damaging panels or voiding warranties.

https://metalplusllc.com/

Triangle Fastener Stainless Steel Self-Drilling Screws

Triangle Fastener Corporation announces the addition of two new sizes to its line of SD300™ stainless steel bi-metal self-drilling screws. Now available in a #12 diameter in 1" and 2" lengths. They come with a pancake head and #2 square recess and can drill and tap up to .210" thick steel or aluminum. They provide exceptional corrosion resistance and ductility, minimizing the chance of screw failure caused by stress corrosion cracking or hydrogen embrittlement.

The screws are made of 304 stainless steel for optimal corrosion resistance. The low profile pancake head is aesthetically pleasing when used in exposed fastener applications. The screws are TRI-SEAL® coated which minimizes galvanic corrosion when used in aluminum applications and are well suited for attaching aluminum materials like framing and ACM panels.

www.trianglefastener.com

Progressive Materials Clear Flashing-grade Silicone

Progressive Materials, a manufacturer of silicone roof coatings, primers, and accessories, has announced its Flashing Grade Silicone is now available in clear. This heavy-duty silicone is suitable for flashing prep, seam prep, or repairing cracks on commercial roofs. The newly available clear color works in tandem with the company's translucent skylight silicone or works as a utility coating that can be used on any colored surface to preserve that appearance.

It is available in 2-gallon pails and 20-ounce sausage tubes.

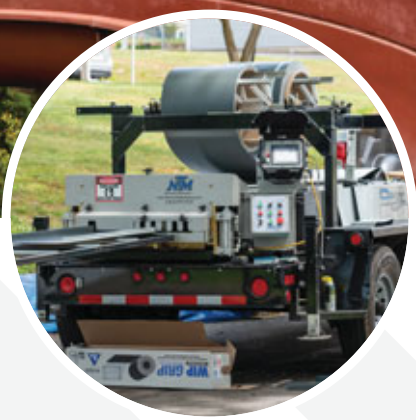
https://pmsilicone.com

Exceptional Metals High Temp Underlayment

Exceptional® Metals introduces Exceptional® HT (high-temperature) underlayment and primer. The underlayment is a self-adhesive membrane composed of SBS-modified bitumen designed to withstand service temperatures up to 240° F (116° C). EXCEPTIONAL HT can provide a durable, walkable, temporary surface for up to 90 days until a roofing system can be installed. Adhesion can be enhanced by applying EXCEPTIONAL HT Primer. These products are part of a full portfolio of products that can be ordered together.

www.exceptionalmetals.com

MR



THE DM-ARM HAS YOUR BACK!

Drexel Metals Association of Regional Manufacturers (DM-ARM) is a comprehensive portable roll former program designed to help you meet building codes and build your brand locally. The Drexel Metals DM-ARM program allows installers and regional manufacturers to grow their businesses by offering better local control, greater profits, freight savings, less scrap, and the ability to provide metal roofing on-demand.

As a DM-ARM member, Drexel Metals becomes your "back-office partner", allowing your team to spend more time in the local market!

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Become a member at www.drexmet.com.

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Exclusive to DM-ARM members, the Sherwin-Williams® Roofing Passport is a groundbreaking platform that simplifies metal roof estimation and ordering. As a fully automated program, this digital platform enables project estimation in one click. The Sherwin-Williams Roofing Passport creates a powerful link between EagleView's highly accurate roof measurements and SmartBuild's automated estimation software, creating an easy-to-use bidding platform.

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