

THE DECISION OF THE YEAR

OCTOBER 2024/\$10

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WHEN IT MATTERS®





FOCUS

Don't sit on your blisters

Encourage employees to register to vote *and* cast ballots

by Ambika Puniani Reid

he 1996 presidential election was the first I was old enough to vote in—and it was an absentee ballot at that. I had recently begun my freshman year at the University of Missouri, and I was excited to partake in what I still believe is an important civic duty. I vote in all local, county and state elections and have tried to stress the importance of voting to my children (the oldest of whom is about 2¹/₂ years away from eligibility).

But not everyone has a crazy mama at home telling them why they shouldn't take this right for granted, and not everyone paid attention during the civics portion of their U.S. history classes. But many adults of voting age have jobs, and it is important employers encourage employees to register to vote and cast a ballot. Incidentally, many states require employers to provide employees time off to vote.



For links to voter resources from CNN or NBC News, visit professionalroofing.net. But before anyone votes, they should become educated about the issues. There are many factors at stake in the upcoming election that could affect you and your employees professionally and personally.

In "The decision of the year," page 26, NRCA Vice President of Government Relations Duane Musser provides a fair, nonpartisan assessment of the most pressing election issues that will affect the roofing industry.

In addition, CNN and NBC News have handy online voter resources that detail voter registration deadlines and procedures. You also can find voter resources on your state's government website.

Elections are important and affect many

aspects of our lives. Helping employees better understand this and supporting their involvement in the political process results in more engaged citizens, which is good for us all.

As Abraham Lincoln said: "Elections belong to the people. It's their decision. If they decide to turn their back on the fire and burn their behinds, then they will just have to sit on their blisters."

mbik

AMBIKA PUNIANI REID is editor of *Professional Roofing* and NRCA's vice president of communications.





CLOSE-UP

S-55[°] Colorado Springs, Colo., recently sponsored a Let's Build Construction Camp for Girls in Canfield, Ohio. The five-day summer camp is designed for girls ages 12-17 to explore the world of construction and learn a variety of career pathways within the skilled trades.

The camp partners with unions and trade associations and is operated through the generosity of volunteers, mentors and sponsors, allowing participants to attend the camp for free. As a premier sponsor, S-5! helped cover essential operating costs and donated its PVKIT direct-attach railless mounting system for the rooftop solar installation workshop.

The sponsorship is part of S-5!'s ongoing commitment to giving back to the community.



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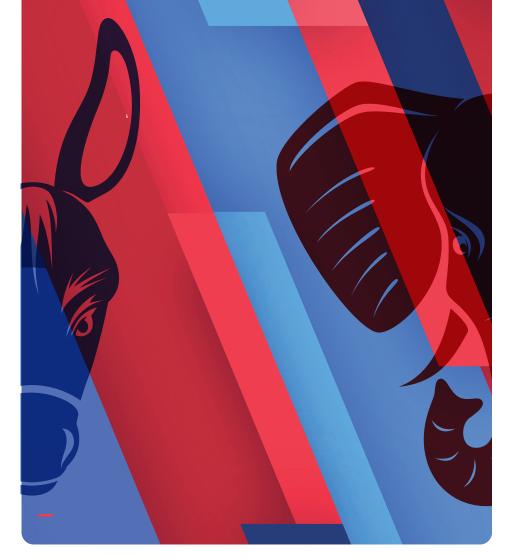
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NEW IDEAS

Cap and base sheets are durable

IKO has introduced its redesigned Roof-Fast[™] Cap and Base for low-slope roof systems.

The Roof-Fast Cap is a self-adhering, polymer-modified bitumen cap sheet constructed of a reinforcing mat of nonwoven glass fibers that are coated and permeated before mineral surface application. The Roof-Fast Base is made of a durable, reinforcing mat of nonwoven glass fibers coated and permeated with polymer-modified asphalt.

Available in full squares to align with how roofing workers measure and estimate materials, the Roof-Fast Cap and Base create a robust, multilayer roof system that reportedly allows for leak protection and durability.

The products come wrapped in a band to reduce package waste and simplify handling. Additionally, new product instructions include six languages: Chinese, English, French, Polish, Punjabi and Spanish.

iko.com

Insulation panels are rigid

Drexel Metals has made available three rigid roof insulation panels: the Defend-R, Defend-R Coated Glass and Defend-R Nail Base.

Compatible with all major roof

systems and approved for direct application to steel decks, the Defend-R is composed of a polyisocyanurate foam core manufactured on-line to fiber-reinforced facers on each side.

Defend-R Coated Glass is composed of polyisocyanurate foam manufactured on-line to a coated glass facer on both sides. It reportedly offers installation

flexibility with options for white or dark facers to control flash-off times in fully adhered applications.

The Defend-R Nail Base is composed of polyisocyanurate foam

core manufactured on-line to a fiber-reinforced facer on one side and oriented strand board or plywood fastening substrate on the other side. It provides a solid surface to attach standing-seam metal panels, shingles or slate tiles, as well as single-ply roof systems.

drexmet.com

Shim provides ventilation

ATAS International Inc.

has introduced the ATAS Above Sheathing Ventilation/Thermal Break shim. The shim aims to act as a thermal barrier and enhance the energy efficiency of a roof system.



ATAS ASV/TB reportedly ventilates the air space between the roof cladding material and the subassembly and roof deck to allow fo

material and the subassembly and roof deck to allow for the temperature of the roof cladding to be closer to the outdoor ambient temperature. It is said to reduce heat gain passing through a roof assembly during summer, add insulation value during winter and minimize the effect on condensation between the roof layers and wall assemblies.

atas.com

NEW IDEAS

Color options are updated

Petersen has updated its color palette and gauge availability for its PAC-CLAD architec-



tural metal cladding systems, coil and flat sheets. The new color options include Antique Bronze, Buckskin, Classic Bronze, Inkwell, Iron Ore, Regal White and Traditional Black and are available in 24-gauge steel.

Vent boot increases efficiency

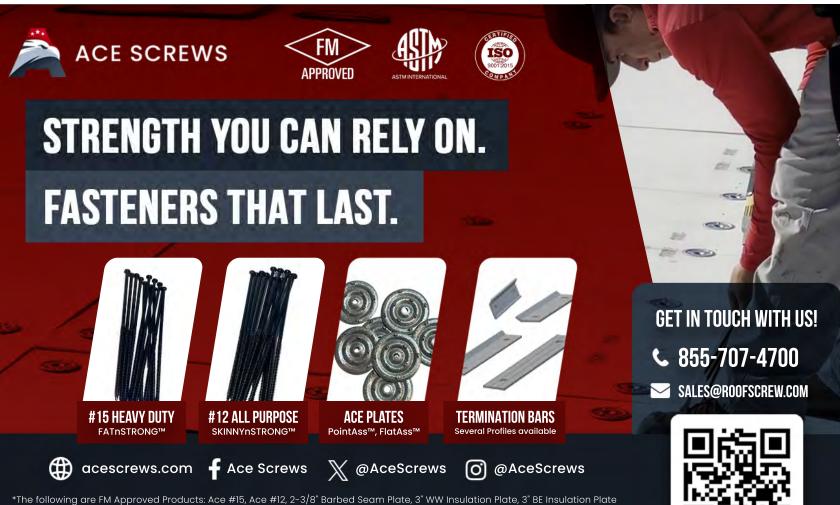
GAF has made available the GAF EverGuard[®] Self-Adhered TPO Vent Boot. Manufactured from GAF's durable EverGuard TPO single-ply membrane, the vent boot intends to increase efficiency and reduce the level of experience and time users need to install it.



In addition, GAF has added new features to

its Timberline HDZ[®] Reflector Series shingles. The shingles now include enhanced EcoDark[®] Granule technology, allowing for darker colors, and time-release, algae-fighting technology, which protects against bluegreen algae discoloration. **gaf.com**

pac-clad.com



*The following are FM Approved Products: Ace #15, Ace #12, 2-3/8" Barbed Seam Plate, 3" WW Insulation Plate, 3" BE Insulation Plate **Private Labeling with FM Logo must go through the proper FM PLA Process



Singing the same song

We all will face adversity, but how we approach it is important

by McKay Daniels

hen walking with my 12-year-old past his school recently, he gestured to the top of the two-story building and said: "You would not believe how much stuff is on that roof!"

"Really?" I asked. "Like what?"

"Everything. Kids try and throw things up there all the time. The empty water bottles never make it, but bottles with something in them get up there with no problem."

This led to a longer discussion not only about roof system maintenance and that kids are luddite savages, but also the more philosophical gist that resistance and adversity can take you farther. The lightest of items won't go anywhere, but bulk it up a bit so it's heavier and, ironically, you now can move the item farther.

Imagine an Olympic discus thrower spinning and spinning to toss a single sheet of paper. Now, put a full ream of paper in his or her hand and it will travel pretty far, like an elementary kid chucking a partially filled water bottle onto a roof.

This is true in our daily lives, as well. I'm not aware of a way to get bigger, faster and stronger if there's no resistance pushing back on you. Adversity (and overcoming it) is good for us.

We easily recognize the notion of "resistance being good" in a physical sense. Nobody ever got buff lifting 1-pound weights, but it's harder to appreciate "resistance being good" on an emotional level when things don't go our way. Someone proactively goes to the gym to have adversity thrown their way and welcomes it! But we don't like adversity so much in our businesses or personal lives let alone proactively seek it out.

But adversity comes to us all in ways that have to be carried or overcome. And how we handle those roadblocks and challenges can make us stronger for the next setback or challenge.

Of course, there are limits to this concept: Set foot in a gym for the first time in years and overdo it and you're pulling a muscle or far worse. Lasting harm can come if the challenge is truly too great and you have no business attempting it. A company can go bankrupt; a job can go irrevocably south; employees can quit; you can burn out, etc.

All the more reason to train, practice and increase your personal and institutional resilience. Building up mental, emotional, organizational muscles can help you handle more weight if it comes.

Roger Federer, winner of 20 Grand Slam tennis titles, more than 100 career titles and more than \$130 million in prize money, spoke this summer in Hanover, N.H., to Dartmouth College's graduating class. The speech has since been viewed more than 2 million times online.

He said he trained intensely and his

wins often appeared effortless. He discussed how the term "effortless," though meant as a compliment, initially bothered him because he put in so much work to get better. He eventually came to terms with the notion that "winning effortlessly is the ultimate achievement."

Being able to handle most anything that comes your way because you put in the time, work and effort to prepare and build up to the challenge is the hallmark of winning.

Federer stated: "When your game is clicking ... winning is easy—relatively. Then, there are days when you just feel broken. Your back hurts, your knee hurts. Maybe you're a little sick ... or scared. But you still find a way to win. And those are the victories we can be most proud of because they prove you can win not just when you are at your best but especially when you aren't. Talent has a broad definition. Most of the time, it's not about having a gift. It's about having grit."

He then talked about how, despite winning 80% of his matches during his career, he only won 54% of the points.

"Even top-ranked tennis players win barely more than half the points they play," he noted.

He concluded: "The best in the world are not the best because they win every point. It's because they know they will lose again and again and have learned how to deal with it."

We're all going to lose, but we can minimize losing by building up our capabilities. And we can weather the losses by building up our resilience so we can move onto the next opportunity.

Federer wasn't the only one to touch on this theme. Think about all the hit songs out there, and you will find the idea of adversity is somewhat common. Here are lyrics from 14 songs to keep you focused on the next hurdle you might stumble over on your way to the next opportunity:

"Some'll win, some will lose/Some are born to sing the blues ... Don't stop believin'"

"That that that that don't kill me can only make me stronger"

"A hundred bad days made a hundred good stories/A hundred good stories makes me interesting at parties"

"You can stand me up at the gates of hell, but I won't back down"

"I'm not gonna give up, I'm not gonna stop/I'm gonna work harder, I'm a survivor"

"If you're lost and alone or you're sinking like a stone ... carry on"

"I'm just gonna shake, shake, shake, shake, shake/I shake it off, I shake it off"

"If you're going through hell, keep on going; don't slow down if you're scared don't show it ... you might get out before the devil even knows you're there"

"Let the storm rage on ... The cold never bothered me anyway"

"It's the eye of the tiger/It's the thrill of the fight/Rising up to the challenge of our rival"

"What doesn't kill you makes a fighter/Footsteps even lighter"

"Sometimes I get nervous when I see an open door/Close your eyes, clear your heart ... cut the cord"

"Say 'Geronimo'!"

"Pain!/You break me down, you build me up/Believer, believer"

MCKAY DANIELS is NRCA's CEO. MDANIELS@NRCA.NET

How to improve communication in Latino workforce training

When training Latino workers, addressing language barriers and communication challenges is crucial. The following strategies from WorkTango and Betterworks can improve communications skills in training programs to ensure all team members bring their best to the workplace.

- Strengthen the language bridge. One of the main challenges faced by Latino workers in training is the language barrier. Effective training programs must recognize and bridge this gap by incorporating language support. This could involve providing bilingual training materials, offering language classes or using interpreters during training sessions. In this way, companies can empower workers to grasp concepts more effectively and participate fully in discussions.
- **Consider cultural sensitivity training.** Beyond language, cultural nuances play an important role in effective communication. Training programs should integrate cultural sensitivity

components, educating all team members about the diverse backgrounds of the workforce. Understanding cultural context allows for better communication and ensures interactions are respectful and inclusive.

- Have interactive learning approaches. Interactive, handson learning approaches—such as role-playing exercises or group discussions—can provide a more engaging way for Latino workers to grasp and apply new concepts. These activities improve communication skills and create a collaborative learning environment.
- Use audiovisual elements. Incorporating visual aids and multimedia elements can be instrumental to overcoming language barriers. Using graphics, videos and other visual tools makes training programs more accessible to speakers of different languages. This approach facilitates better understanding and caters to different learning styles, ensuring all participants can benefit from the training.



• Seek continuous feedback. Communication is a two-way street, and establishing a continuous feedback loop is essential. Encourage Latino workers to share their views regarding the training process. By actively seeking feedback, companies can refine their training programs, tailoring them to the specific needs of their workforces. Feedback could be gathered via regular check-in sessions, surveys, or online platforms or forums where participants can provide continuous feedback. Ensure feedback is acknowledged and integrated into future training when applicable to help reinforce a culture of continuous learning within your company.

How to improve mental health at work

Headspace's 2024 Workplace State of Mind study shows work stress has negatively affected physical health for 77% of employees and negatively affected relationships outside of work for 71% of employees.

Harvard Business Review shares the following strategies from workplace mental health consultant and author Morra Aarons-Mele to help improve mental health in the workplace.

• **Start with the work.** Improving workplace mental health involves tackling how, why and where we work. Get specific and focus on the work product you need

and how you can better support the employees involved. For example, mental health considerations for emergency room clinicians will be different from those of billing department employees. Blanket policies for employee mental health rarely succeed and are not realistic. It is important to tailor solutions to the specific problems different people are experiencing.

• **Do not rely on outsiders to drive behavior change.** Companies often rely on outside experts and designated well-being consultants. However, it is crucial to also engage internal mental health advocates who are managers and leaders. Recruit well-respected, successful insiders who are willing to take the lead and potentially share their own stories.

- **Consider different generations and genders.** All generations at work struggle with mental health though the view often is only young people want to talk about their feelings. Also, men who want to share their emotions at work might feel more stigma than women. Increasing mental health literacy within the company can help create a shared language and baseline of knowledge; invest in training for everyone to learn the mental health basics and diminish biases.
- Be patient and prepare to invest in what matters. Becoming a mentally healthy company is a commitment to changing the fundamentals—it starts with leadership nd takes time. Recognize technology will not fix mental

health issues; Aarons-Mele says the outsized role technology plays in the workplace potentially can damage mental health. Employers also should invest time and focus on thoughtful strategies as they develop mental health programs so employees believe they are heard and feel connected.

• Walk the talk. Buy-in from everyone is needed to protect mental health in the workplace. If you are passionate and persistent about mental health, others will be willing to recognize its importance. Leaders carry the power to destigmatize mental health conversations by sharing what they are doing to preserve their mental health and how those actions affect them.

NRCA's mental health resources are available at nrca.net/ resources/safety/mentalhealth.

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OCTOBER 2024

Students receive Melvin Kruger Endowed Scholarships

The Roofing Alliance has announced the recipients of its Melvin Kruger Endowed Scholarship for the 2024-25 academic year.

Armstrong

Lemmon

This year's new scholarship recipients are:

- Jack Armstrong, building science student at Auburn University, Auburn, Ala.
- Cole Celano, building construction student at University of North Florida, Jacksonville
- Phillip Hirte, construction management student at Dunwoody College of Technology, Minneapolis
- Kennedy Jones, construction management student at North Carolina Agricultural and Technical State University, Greensboro
- Hallie Lemmon, daughter of Chris Lemmon, operations manager for Kalkreuth Roofing and Sheet Metal, West Virginia University, Morgantown
- Gaabriel Lovaas, construction management student at Dunwoody College of Technology, Minneapolis

Mary Madalyn Massengale, building science

- student at Auburn University, Auburn
 Madeline Meuwissen, construction project
- management student at Dunwoody College of Technology, Minneapolis
- Melina Risi, construction science and management student at Clemson University, Clemson, S.C.
- Arjun Varadhan, building science student at Auburn University, Auburn
- Erin Williams, employed at Recovery Roofing Inc., University of North Florida, Jacksonville

The Roofing Alliance Melvin Kruger Endowed Scholarship Program offers three scholarship opportunities. All categories are open to employees of roofing industry companies, their spouses and their dependent children, as well as construction management students enrolled in undergraduate level or students enrolled in CTE programs or schools. In addition, the Roofing Alliance renewed 12 Melvin Kruger Endowed Scholarships for the 2024-25 academic year. The recipients include:

- Caylin Angel, who is attending Washington & Jefferson College, Washington, Pa.
- Cole Beyer, who is attending University of Minnesota: Twin Cities, Minneapolis
- Aidan Carpenter, who is attending North Carolina State University, Raleigh
- Zackary Cekalla, who is attending University of Minnesota Duluth
- Cade Edwards, who is attending Boyce College, Louisville, Ky.
- Cecelia Krumholz, who is attending University of Minnesota: Twin Cities, Minneapolis
- Piper Lewis, who is attending Boston College
- Brayden Morford, who is attending Carnegie Mellon University, Pittsburgh
- Michael Nwaigbo, who is attending University of Illinois at Chicago
- Alexis Petty, who is attending Rose-Hulman Institute of Technology, Terre Haute, Ind.
- Hannah Redding, who is attending Penn State University, University Park, Pa.
- Kennedy Stockton, who is attending University of Arkansas at Little Rock

The Roofing Alliance awarded \$60,000 for scholarship renewals and \$43,000 for new scholarships for a total of \$103,000 for the 2024-25 school year. To date, 166 students have received \$1.178 million in scholarship awards.

For more information about the Melvin Kruger Endowed Scholarship Program, go to roofingalliance.net/educationresearch/scholarship or contact Alison L. LaValley, CAE, the Roofing Alliance's executive director, at alavalley@nrca.net.



Meuwisser

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Leading the Way with Innovative Solutions

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Carlisle SynTec Systems is dedicated to leading the industry by developing and manufacturing the most progressive and innovative roofing materials on the market. Every Carlisle product is designed to enhance building performance and contractor efficiency. Carlisle has pioneered productivity-boosting products such as SeamShield[™] Technology, Self-Adhering Technology (SAT[™]), APEEL[™] Protective Film, FleeceBACK[®] RapidLock (RL[™]) Roofing Systems, and many others.



For more information on Carlisle's productivity boosting products scan here

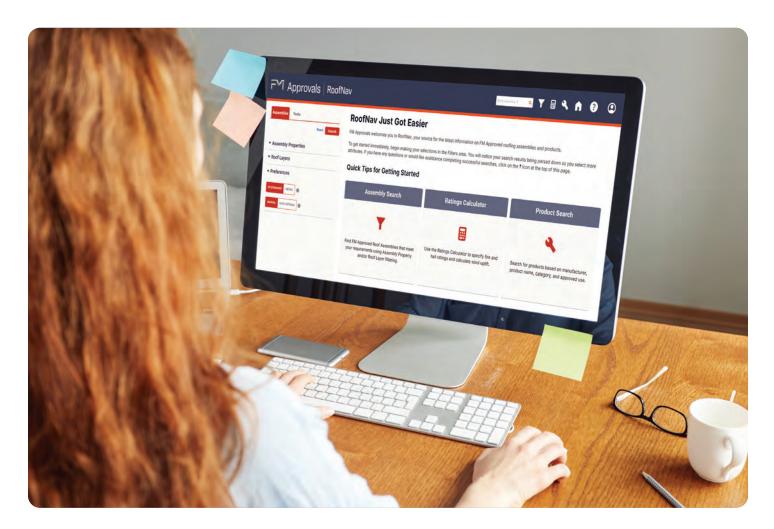
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RESEARCH + TECH



An updated FM

The insurance conglomerate has rebranded itself and implemented some changes

by Mark S. Graham

M (previously FM Global) and its code-approved testing and certification business unit, FM Approvals, have undergone rebranding and implemented several updates to their services and guidelines. Because the two entities are sometimes referenced in roofing projects' construction documents, these changes could affect you.

Rebranding

On July 17, FM announced an update to its brand, including a new name; logo; tagline, "Protect Your Purpose"; and website, fm.com.

FM is the parent brand for its flagship mutual commercial property insurance company and FM Affiliated, FM Approvals, FM Boiler Re, FM Cargo and FM Renewable Energy.

FM Approvals' brand and logo also have been updated, but its FM name and certification mark are not changing. FM Approvals indicates the brand evolution has no effect on its certification mark, existing tested or certified products, or FM Global and FM Approvals have undergone rebranding and updates

products that successfully complete testing and certification in the future. No action is required on users' part.

Updated RoofNav

On May 6, FM Approvals launched an updated version of its online RoofNav application. This is the first major overhaul since RoofNav was released in 2001.

Most notably, RoofNav has a different appearance from the previous version. Icons are provided on the top right-hand side of the home screen for RoofNav number access, assembly search, ratings calculator, product search, help and reference documents and save functions. Also, RoofNav's assembly search capability is substantially improved and includes progressive filtering functionality.

RoofNav is accessible at roofnav.com.

Interior debris protection

In July 2022, FM Approvals published a new standard specific to interior debris barrier systems, FM 4652, "Examination Standard for Debris Barriers." The standard provides criteria for interior fire-exposure testing and evaluating melt-out or drop-out properties of debris barriers around fire sprinklers. Criteria also are provided for manufacturing, installation, maintenance and repair instructions of debris barrier systems; demonstrating quality control programs; and surveillance audits.

To date, two companies and three products have been approved by FM Approvals based on FM 4652. Reportedly, several other manufacturers or suppliers are in the process of obtaining approvals.

The approvals of debris barrier systems are listed in FM Approvals' online approval guide, accessible at approval guide.com. Approved debris barrier systems are best found by typing "FM 4652-Debris Barriers" in the website's search function. Debris barrier systems are not included in RoofNav.

FM 4652 is not referenced in any model fire or building codes. Reference to FM 4652 has been added to the latest edition of FM's Loss Prevention Data Sheet 1-0, "Safeguards During Construction, Alteration, and Demolition."

FM recommends debris barrier systems be included during construction of FM-insured, highly protected risk, limited combustible loading, HC-1 and HC-2 occupancies. Additional information about FM's building, loading and occupancy categories is included in FM Loss Prevention Data Sheet 3-26, "Fire Protection for Nonstorage Occupancies."

FM Loss Prevention Data Sheets are available at fmglobaldatasheets .com. **G**

MARK S. GRAHAM is NRCA's vice president of technical services.

ARMA releases 2024 edition of modified bitumen guide

The Asphalt Roofing Manufacturers Association has released the 2024 edition of its *Modified Bitumen Design Guide for Building Owners*. The guide provides an overview of the materials used in polymer-modified bitumen roof systems and serves as a resource for roofing professionals involved in the installation and maintenance of asphalt roof systems.

The guide addresses relevant aspects, issues and concerns of polymermodified bitumen roof systems, including associated components, substrates, construction techniques and innovative uses. It also emphasizes the importance of adhering to local building codes and manufacturer specifications to ensure correct installation and usage.

The manual is available at asphaltroofing.org/arma-publications.



Modified Bitumen Design Guide for Building Owners

Why cybersecurity awareness is crucial

Verizon's 2023 Data Breach Investigations Report shows 74% of data breaches were caused by human error, including social engineering attacks, errors and misuse by employees, according to Total IT, a

> Dallas-based company providing IT solutions and services. An employee's lack of cybersecurity awareness can lead to significant financial and reputational damage for a company, so it is vital to educate employees regarding the importance of cybersecurity and their role in protecting company information.

Total IT shares the following reasons to prioritize cybersecurity awareness among your employees.

- **Protection against phishing attacks and insider threats.** Phishing scams are a common form of cyberattack where attackers trick employees into sharing sensitive information, such as login credentials or financial data. Educating your employees regarding how to identify and report phishing attempts can help prevent these attacks from succeeding.
- **Safeguarding sensitive data.** Employees often handle sensitive data such as customer information and financial records, so you can prevent accidental exposure by educating them regarding proper data handling.
- **Ensuring regulatory compliance.** Regulatory bodies require organizations to implement proper security measures to protect sensitive data. When employees are educated regarding compliance, you can avoid costly penalties and maintain your customers' trust.
- **Encouraging a culture of security.** By promoting cyber security awareness among employees and creating a culture of security within your company, you give employees a sense of responsibility and accountability and help prevent cyberattacks.
- **Reducing security incidents and downtime.** A successful cyberattack can cause significant downtime for your business, so having employees who will not fall prey to scams reduces the likelihood of potential downtime and its effects.

As you consider how to raise cybersecurity awareness among your employees, be sure you conduct regular training sessions; provide simulated phishing attacks; create a security policy; encourage reporting of suspicious activity; and lead by example to ensure you and upper management also are educated regarding cybersecurity protocols.

NRCA has partnered with BPM Insurance Services and Acrisure to create NRCA's Cyber Liability Insurance Program. More information is available at nrca.net/insurance/nrca-endorsed-insurance/ nrca-cyber-security.

Virginia Tech study will rate construction helmets

Blackburn, Va.-based Virginia Tech's Helmet Lab has been studying and providing safety ratings for athletic helmets for nearly two decades and now will begin developing a grading system for construction helmets, according to Construction Dive.

The 18-month study aims to better understand the types of head impacts workers experience on job sites and which helmets best protect them.

Researchers will record information about head trauma on job sites from injury reports and studies from groups such as the Centers for Disease Control and Prevention. Then, they will attempt to recreate those collisions in the lab before analyzing which helmets best protect against the most common types of head injury.

Barry Miller, director of outreach and business development for the Helmet Lab, says data collected by researchers from sensors in Virginia Tech athletes have helped the lab understand how they hit their heads and develop ratings for which helmets best protect athletes from those collisions.

The Virginia Tech research is concerned with the head trauma someone can encounter daily and the best ways to protect a worker from multiple types of

To learn about the Occupational Safety and Health Administration's selection criteria for head protection, go to professionalroofing.net

head injuries. Miller says the lab is working to collect data about head collisions on the job, but the type of information—or lack thereof—in the available data can be a challenge.

"Injury reports say: 'I fell and hit my head.' Well, where? How hard? Did you hit your back first?" Miller says.

Miller adds the best type of information the lab can use to recreate head injuries is video. Contractors can help by supplying visual aids to indicate how workers fell and hit their heads, which can inform researchers regarding how to better test helmets in the lab.



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A balance in power

Overturning the Chevron doctrine could affect the roofing industry

by Duane L. Musser

n June, the Supreme Court issued a decision in the case of *Loper Bright Enterprises v. Raimondo* that overturned the long-standing Chevron deference doctrine. The judicial doctrine arose from a 1984 decision in which the high court had ruled, in the case of *Chevron U.S.A. Inc. v. National Resources Defense Council Inc.*, that courts should defer to federal agencies in legal challenges to regulatory decisions in situations where the governing statute is ambiguous and the agency's action is reasonable.

The basic reasoning in the Chevron case was administrative agencies possess more expertise in the subject matter being regulated compared with the judges who rule on legal challenges to regulations. During the past 40 years, courts have generally followed this directive and deferred to agency determinations in regulatory matters unless it was clear legal authority had been exceeded.

In the Loper Bright Enterprises case, a 6-3 majority of the

Supreme Court ruled courts have an equal role in resolving disputes regarding regulatory matters when ambiguities in the law are present.

"The Framers anticipated that courts would often confront statutory ambiguities and expected courts would resolve them by exercising independent legal judgment," Chief Justice John Roberts wrote in the decision. "Chevron gravely erred in concluding that the inquiry is fundamentally different just because an administrative interpretation is in play."

This ruling shifts considerable power from the executive branch to the judicial branch of the federal government.

With the Loper Bright Enterprises ruling in place, courts no longer will be required to defer to administrative agencies when considering legal challenges to agency regulatory actions. Judges will have the discretion to exercise independent judgement on individual cases. This could greatly increase the chances of success when private sector entities, such as businesses or trade associations, challenge regulations in court.

The decision could affect a wide array of regulatory activity. Labor and employment law is one area expected to be affected and the Department of Labor may alter how it develops and enforces regulations in the future.

Moreover, the dismissal of Chevron deference could directly affect existing legal challenges to recent DOL regulations, including the agency's independent contractor rule issued in 2023 and its rule modifying how employees are subject to overtime compensation requirements under the Fair Labor Standards Act. Also, the ruling is expected to significantly affect environmental and climate-related regulations issued by the Environmental Protection Agency.

One example of particular interest to NRCA members is a regulation issued by the Occupational Safety and Health Administration modifying the procedures under which workplace inspections are performed, which took effect in May. When OSHA originally proposed the rule, NRCA and allied construction associations filed comments outlining concerns on behalf of their members, but OSHA failed to make any accommodations before issuing its final rule. A lawsuit has been filed by a coalition of business groups challenging the rule on the grounds the agency exceeded its authority under the Occupational Safety and Health Act of 1970 when issuing the regulation. The chances for a favorable ruling for the plaintiffs on this lawsuit may have improved with the overturning of Chevron deference.

With more legal scrutiny of regulations from the courts, another potential implication of the Loper Bright Enterprises decision is agency officials may come under pressure to refrain from exceeding their legal authority when developing regulations. NRCA hopes removing the Chevron deference provides greater incentives for agency officials to work cooperatively with stakeholders to issue balanced regulations that are less burdensome rather than proceeding despite objections and then fighting in court.

The Loper Bright Enterprises decision has implications for the legislative branch, as well. It may put more responsibility on Congress to be more precise when drafting, enacting and amending laws that provide the authority for agencies to issue regulations. The The Supreme Court issued a decision in the case of Loper Bright Enterprises v. Raimondo that overturned the Chevron deference doctrine

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tendency of Congress to delegate authority to administrative agencies through ambiguous laws has been a decades-long phenomenon that has diminished the power of the legislative branch while increasing the power of the executive branch. Congress can seize back the power it has ceded, but the Loper Bright Enterprises decision may provide increased opportunities for congressional action. Republicans in Congress are looking at how the ruling can help them advance a more deregulatory agenda.

It will be interesting to see how much of an effect the Supreme Court's landmark decision has on regulatory policy in the near future. NRCA will be monitoring this issue closely as we continue fighting for more sensible, less burdensome regulations on behalf of our members.

DUANE L. MUSSER is NRCA's vice president of government relations.

EPA announces labels for green construction materials

On Aug. 7, the Environmental Protection Agency announced its plan to implement a new label program to help customers identify climate-friendly construction materials for federal building, highway and infrastructure projects, according to an EPA press release.

The program will prioritize asphalt, concrete, glass and steel, and offer a tiered rating system, taking into account the life cycle emissions associated with construction material production. Materials that earn the label will be listed in a public registry.

The agency anticipates labeling requirements for each product type will be periodically reviewed and updated every two to four years to respond to market shifts and help users meet sustainability objectives.



improvement activities.

The documents are available at epa.gov.

Data bulletin shows increase in construction fatalities

A recent data bulletin published by CPWR-The Center for Construction Research and Training shows 1,092 construction workers died in 2022, which is up 7.6% from 1,015 fatalities in 2021, according to *Safety+Health* magazine.

> This also marks the seventh consecutive year the construction industry experienced more than 1,000 fatalities.

Roofing worker fatalities per 100,000 full-time workers in 2022

57.5

The fatality rate was 9.3 per 100,000 full-time equivalent workers in 2022-an increase from 9.1 per 100,000 full-time equivalent workers in 2021 but lower than a high of 9.8 per 100,000 fulltime equivalent workers in 2012.

CPWR also reported Latino workers accounted for 37.4% of fatalities in 2022, and workers 55 and older accounted for 31.1% of fatalities. Additionally, falls to a lower level caused 36.4% of fatalities in 2022, and vehicular incidents on roadways caused nearly 14% of fatalities. Roofing workers had the high-

est fatality rate among construction workers at 57.5 per 100,000 fulltime equivalent workers, followed by "helpers, construction trade" at 38.5 per 100,000 full-time equivalent workers.

Falls are the leading cause of death in the construction industry. NRCA's classes, webinars and products offer information to ensure you properly train your employees and can keep them safe. Visit shop.nrca.net for more information.

Contractor faces \$161,323 in proposed penalties

Occupational Safety and Health Administration inspectors have cited **Carpenter Contractors**



of America Inc., Winter Haven, Fla., for again allowing employees to perform roofing work without adequate protection, according to OSHA. The company is not an NRCA member.

OSHA's inspection at a residential job site in January in Ave Maria, Fla., found Carpenter Contractors of America willfully exposed employees to a 32-foot fall hazard because the company did not require fallprotection equipment for workers securing trusses and roof fascia. The agency has proposed \$161,323 in penalties.



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The roofing industry will be affected by the next president and congressional elections by Duane L. Musser

ith the 2024 elections rapidly approaching, roofing professionals should make sure they are well-informed about federal issues of importance to the industry. The new occupant of the White House, as well as which party controls Congress, will have significant implications for entrepreneurs who wish to sustain and grow their businesses in the years ahead.

On Nov. 5, Americans will have the opportunity to decide whether to entrust the next four years of the presidency to Vice President Kamala Harris or turn once again to former President Donald Trump. The candidates have differing positions on key policy issues NRCA members should consider when deciding which candidate to support. In addition, voters in battleground states and congressional districts will elect lawmakers for the 119th Congress, which will convene in January 2025.

As the fall campaign unfolds, the presidential contest and the battle for control of Congress are competitive. Before President Biden's departure from the presidential race, Trump had built a modest but stable lead in the polls. YEAR

THE

DECISION

But with Biden stepping aside and the rapid consolidation of Democrats around the Harris candidacy, the race has narrowed.

At press time, Harris held a 1.4 point lead (48.1 to 46.7) in the RealClearPolitics national polling average and she led by 0.1 points (47.8 to 47.7) in the RCP average from battleground states. It should come as no surprise the election will be close given the razor-thin margins that decided the 2016 and 2020 presidential elections. Moreover, the RCP generic ballot test for voter preference for control of Congress currently gives Democrats a slim 1.2 point edge.

Both candidates' running mates, Sen. J.D. Vance (R-Ohio) and Minnesota Gov. Tim Walz (D), were selected, in part, because of their aligning philosophies and policies instead of an ability to pull in a different portion of the electorate.

Some commentators are calling the 2024 contest the "vibes election" with the implication that policy issues don't really matter to voters. This isn't new; it's a different way of saying many voters support the candidate they would rather have a beer with. Nevertheless, the policies of the winner will be



critical to future legislative battles, and roofing industry professionals should look carefully at the records of candidates when determining who deserves their support.

TAXES AND TARIFFS

Federal tax relief that provides the roofing industry with maximum opportunities to reinvest and grow their businesses remains a top priority. Each party has different tax philosophies that will be influenced by the growing national debt, which will become unsustainable at some point. NRCA remains committed to advocacy within Congress and any administration on the economic value and revenue potential of pro-growth tax policy.

In 2025, the stage is set for the most consequential tax policy debate since 2017 when Congress passed the Tax Cut and Jobs Act. The act lowered rates for nearly all taxpayers while eliminating many credits and deductions. The law reduced the corporate rate from 35% to 21% and lowered individual rates, as well, with the top rate falling from 39.6% to 37%. Critically, it provided Section 199A, a 20% deduction in qualified business income for entities organized as pass-through businesses, which includes most NRCA member companies.

Also, the estate tax exemption was doubled to \$11.18 million, which is important for family-owned businesses. NRCA was especially pleased the law permanently included nonresidential roofing as qualifying property under Section 179 of the tax code, which allows small and midsized businesses to fully expense roof system repairs and replacements rather than depreciating the asset, helping sustain strong demand in the nonresidential market.

The Tax Cuts and Jobs Act was approved by a Republican Congress using budget reconciliation rules that have unique spending constraints. As such, some provisions in the law are scheduled to expire at the end of 2025, including the individual tax rates, the larger estate tax exemption and the Section 199A deduction for pass-through businesses. Absent congressional action, the expiration of these provisions on Jan. 1, 2026, will result in a significant tax increase for many businesses. As the corporate rate of 21% is permanent, this also will disadvantage one type of business over another.

NRCA continues to make progress on these tax relief provisions, including through its support of the Main Street Tax Certainty Act, which would make Section 199A permanent, and the Death Tax Repeal Act. Because of budgetary constraints, the Tax Cuts and Jobs Act scheduled a switch in the tax treatment of businesses' research and development expenditures from immediate deductions in the year of the investment (full expensing) to spreading the deductions over five years (amortization), effective in tax year 2022. Earlier this year, the House passed a bill that included the restoration of full expensing for research and development expenditures, but the bill failed to garner 60 votes to pass in the Senate.

Trump plans to keep the 2017 law largely intact, which comes as no surprise as it was his primary legislative achievement. He supports making permanent the current individual rates and the 199A deduction and proposes lowering the corporate rate from 21% to as low as 15%. He also supports a full repeal of the estate tax for family-owned businesses and would likely support the restoration of full expensing for research and development. By maintaining most tax rates from the 2017 law, Trump's policy would help sustain economic growth but could increase budget deficits if not accompanied by spending cuts.

Another area to watch is the future of renewable energy tax credits approved by a Democratcontrolled Congress under Biden through the Inflation Reduction Act. Under a Trump presidency and Republican-controlled Congress, many of these credits could be repealed or modified.

Harris' tax policy agenda is somewhat less welldefined. However, she does have a distinct track record from being a vice president, senator and 2020 presidential candidate.

During her 2020 presidential campaign, Harris proposed tax policies that were similar to those of the Biden-Harris administration but sometimes contained more aggressive tax increases. Her campaign proposals included increasing the corporate rate to 35%, increasing the top individual rate to 39.6%, raising capital gains tax rates for some taxpayers, expanding the estate tax and creating a 4% "income-based premium" on households making more than \$100,000 annually to pay for her version of "Medicare for All." She also proposed a \$3,000 refundable tax credit (\$6,000 for married couples filing jointly) to provide tax relief directed at lowand middle-income taxpayers.

Harris has indicated her tax proposals are similar to those of the Biden-Harris administration. This includes a pledge to not support any tax increases on households making less than \$400,000 per year. It also includes raising the corporate rate to 28%, increasing the top individual marginal rate to 39.6% and other tax increases on individuals earning more than \$400,000. On renewable-energy-related tax credits and deductions, Harris' record indicates she would maintain these and other climate-focused provisions enacted in 2022. Overall, based on Harris' record, the chances for tax increases on individuals (particularly high earners) and businesses are much greater if she were elected.

Tariffs on imported goods also have significant implications for the roofing industry and the broader U.S. economy.

Trump has indicated he will consider imposing a 10% or higher universal baseline tariff on all imports, increase current tariffs on China to at least 60% and other potential tariff increases. These proposals could be problematic for the U.S. economy as they would raise the cost of products for consumers and will likely invite retaliation on U.S. exports. The Tax Foundation estimates Trump's tariff proposals, if fully implemented and met with in-kind retaliation from U.S. trading partners, would "more than offset the entire benefit of the major tax cuts" he has proposed.

The Biden-Harris administration has retained most of the tariffs of the Trump administration while reducing some and increasing others. Harris has claimed she is "not a protectionist Democrat," but if she is elected there will be much pressure on her to retain existing tariffs from labor unions and other constituencies.

WORKFORCE POLICY

Nearly all NRCA members indicate workforce development challenges make it increasingly difficult to sustain and grow their businesses. NRCA continues to develop and support innovative solutions to the industry's workforce needs through funding for Perkins Basic State Grants, reform of the Workforce Innovation and Opportunity Act, and immigration policy that meets the industry's needs. These workforce solutions, along with progrowth tax policy, are frequent talking points during the industry's annual advocacy day, Roofing Day in D.C., which will next be held April 8-9, 2025.

In 2018, NRCA successfully advocated Congress to approve legislation to reform and expand Perkins Basic State Grants that fund career and technical education programs at state and local levels. Since then, NRCA has fought for increased funding for Perkins Basic State Grants, with Congress steadily increasing funding to more than \$1.4 billion. Although Perkins Basic State Grants have bipartisan support,

government deficits will make further funding boosts more difficult.

Another critical initiative is reform of the Workforce Innovation and Opportunity Act, which provides funding for workforce training programs. Reform of these programs to make them more accessible to NRCA members is a top priority. NRCA was pleased with the approval of A Stronger Workforce for America Act by the House in April with strong bipartisan support. This legislation contains strategies to provide new opportunities for employers to address workforce development.

The outcome of the 2024 elections will significantly affect the roofing industry. Through NRCA's political action committee, ROOFPAC, the association is supporting candidates who support its legislative and regulatory objectives. To learn more about exclusive ROOFPAC donor clubs and benefits or to donate, visit **nrca.net/roofpac.**



The Senate is considering similar legislation but, unfortunately, negotiations have stalled. If Congress does not finalize a bill this year, there will be renewed effort in 2025, and either presidential candidate would likely support a bipartisan bill that emerges from Congress.

Immigration reform is another major component of workforce policy. Because of an aging workforce and other demographic trends, future demand for employees cannot be met by nativeborn workers alone. NRCA has made support for immigration reform that addresses security, economic and workforce needs a major priority for many years. Regrettably, lawmakers in Congress remain at an impasse on immigration and border security despite numerous attempts to strike bipartisan deals under presidents of both parties.

Immigration likely will be a top priority for either presidential administration. Early in his presidency, Trump supported an immigration plan designed to reform the system and combat illegal immigration. NRCA opposed this plan because it would have reduced legal immigration and lacked visa reform needed to address workforce needs, and the bill failed in Congress. On the regulatory side, the Trump administration granted some additional H-2B seasonal visas to meet demand, but, generally, the administration was opposed to increased legal immigration to address workforce shortages. According to one estimate, legal immigration under Trump was down 49% by the end of his term.

Trump also rescinded the Executive Order that created the Deferred Action for Childhood Arrivals program, which provides temporary legal status for undocumented immigrants who entered the U.S. as minor children. He also terminated Temporary Protected Status for those seeking refuge as a result of natural disasters or civil strife in their native countries. A federal court has since found DACA unconstitutional, with the case now before the Supreme Court, and courts blocked the Temporary Protected Status termination. Trump attempted to work out a deal with Congress to address DACA in exchange for tougher border security, but Congress ultimately rejected the deal. The fate of the individuals involved in the DACA and Temporary Protected Status programs, who could become subject to deportation, will be determined by the next president unless Congress passes legislation to address these matters.

During the 2024 campaign, Trump has doubled down on his hardline stance on border security and immigration, including a promise to implement the "largest deportation program in American history." If reelected, Trump may again try to reach a deal on immigration with Congress, especially because there is broad agreement among economists that more immigration is vital to boosting economic growth. On occasion, Trump has commented he recognizes the need for legal immigration to address workforce shortages, but the broader trend from his first term record and current campaign rhetoric indicates a second term would likely be reminiscent of the first.

Harris' position on immigration is not as wellestablished but may follow the Biden-Harris administration. Biden proposed a comprehensive immigration plan early in his first year that had many positive components but failed to include a visa program needed to meet workforce needs, presumably because labor unions were skeptical. Pending the legal challenge before the Supreme Court, Biden has maintained DACA, restored Temporary Protected Status and supported legislation to grant such individuals the opportunity to obtain permanent legal status, which NRCA supports. The Biden-Harris administration's record on border security, at least until the recent executive action to tighten asylum rules, has created a political liability for Harris given her prominent role in border security and immigration policy. Also, she endorsed a bipartisan border security bill released in early 2024 that could be the basis for future negotiations on a broader immigration deal in Congress next year.

Given the hyperpolarization of immigration and border security issues, it will be an enormous challenge for either candidate to provide the leadership necessary to guide Congress toward bipartisan solutions that have eluded lawmakers for more than two decades.

REGULATORY POLICY

NRCA has long been focused on federal regulatory policy as members indicate navigating regulations continues to have major implications for their businesses. Regulation is an executive branch authority, and the president will substantially affect regulatory policy for the next four years.

Given the inherent safety risks in the roofing industry, Occupational Safety and Health Administration regulations are critical. Under the Biden-Harris administration, OSHA has pursued several new regulations that will significantly affect NRCA members, most notably a recently proposed heat illness standard.

NRCA has been proactive in helping members protect employees from heat illness and arranged for contractor members to participate in a Small Business Review Panel to provide detailed information to agency officials related to developing this regulation. Although OSHA adopted some recommendations, the proposed rule remains a significant concern. NRCA will file comments with OSHA to improve the final rule, but it is unclear how responsive the agency will be.

Additionally, NRCA has opposed an OSHA regulation that modified the rules governing workplace inspections. The regulation could be problematic for employers because it is costly and confusing and lacks a rationale for advancing workplace safety. The regulation became effective in May, and NRCA is monitoring its implementation and pending legal challenges.

NRCA also is closely monitoring regulation of PVC under the Environmental Protection Agency. EPA recently denied a petition requesting that discarded PVC be classified as hazardous waste. However, the agency is still in the process of a risk evaluation of vinyl chloride, which is used to make PVC under the Toxic Substances Control Act. This evaluation is part of the Biden-Harris administration's Cancer Moonshot mission, a series of initiatives to accelerate the fight against cancer. NRCA continues to provide guidance during this process through coalition partners.

The Department of Labor under the Biden-Harris administration has been aggressive in moving forward with other new regulations, such as a rule regarding payment of overtime compensation to employees, which NRCA opposed because it was overly broad and ambitious in scope.

Also, DOL issued a final rule on National Apprenticeship System Enhancements, which is intended to strengthen labor standards, promote apprenticeship and improve accountability measures within the system. NRCA recommended the agency provide more flexibility and streamlining, but the rule remains problematic by making it more costly for employers, especially small businesses, to pursue apprenticeship strategies.

Given the record of the Biden-Harris administration, it should be expected federal agencies generally will continue with a hardline regulatory approach under Harris if she is elected. With respect to OSHA, a Harris administration would certainly finalize the OSHA heat standard largely in proposed form and potentially encourage the EPA to find PVC as a high-risk material.

If Trump is elected, it is likely his second administration would pursue deregulatory policies at most federal agencies. During his first term, agencies repealed or made substantial modifications to many regulations issued during the Obama administration, and it is likely there will be similar efforts to repeal or modify many of Biden's regulations. However, it should be noted the first Trump administration also sided with labor unions in favor of some regulations during his first term, and that pattern could continue in a second administration.

CONGRESSIONAL SEATS

Control of the 119th Congress will be just as important as who controls the White House because any split in party control of either chamber will affect the ability to pass legislation.



Democrats currently control the Senate by a narrow 51-49 majority (all independents currently caucus with Democrats), but several Senators in states Trump won in 2020 are up for reelection. West Virginia Gov. Jim Justice (R) is the strong favorite in that state's open seat, which would result in an evenly split Senate. Three Democrat incumbents, Sens. Sherrod Brown (D-Ohio), Jon Tester (D-Mont.) and Jackie Rosen (D-Nev.), face strong Republican challengers in races rated as

> toss-ups, and the race to replace retiring Sen. Debbie Stabenow (D-Mich.) also is close.

> > In addition, Demo-

crats are favored but

Want more insight and a chance to ask NRCA's government relations team questions post-election? Register for NRCA's webinar "The 2024 Election and 2025 Legislative and Political Outlook," Nov. 19 at noon CDT at **nrca.net/events**.

Republicans are within striking distance in contests in Arizona, Maryland, Pennsylvania and Wisconsin. Overall, Republicans have a good chance of five seats. For Democrats

winning at least two to five seats. For Democrats to retain control, they can only lose one seat while holding the presidency as the vice president provides tie-breaking votes in the Senate.

With the Senate favored to flip to Republican control next year, all eyes are on the battle for the House. Republicans currently have a slim majority, and Democrats need to win a net four seats to take control in 2025. According to Cook Political Report, 22 House races are rated toss-ups, evenly split between seats held by Democrats and Republicans. Cook Political Report also rates another 28 Democrat seats and 19 Republican seats as moderately or potentially competitive depending on how the political environment evolves.

Given recent developments in redistricting, Republicans probably have a slight advantage in maintaining their majority. But unless there is a dramatic shift in the political environment, the contest should be close and could be determined by a handful of races in New York and California in the days or weeks after election day. Presidential election performance can significantly affect Senate and House races and, ultimately, which party controls Congress. However, most legislation still will require bipartisan support unless either party decides to overturn Senate precedent and remove the rule requiring 60 votes in the Senate for approval.

If either party controls the White House and Congress, you can anticipate high-priority tax legislation coming up under complicated rules that only require a simple majority to pass but must also follow narrow budgetary requirements. Republicans used this process to pass the Tax Cuts and Jobs Act in 2017, and Democrats used it to pass the Inflation Adjustment Act in 2022. Additionally, every four years, Congress can repeal certain regulations of the previous administration under the Congressional Review Act with simple majorities in the House and Senate. If Harris wins but Republicans control the Senate, there will be legislative gridlock unless there is a willingness from both parties to work together.

THE LONG GAME

NRCA is a full-time advocate for the roofing industry in Washington, D.C., fighting for marketoriented policies that enable members to build prosperous businesses and provide rewarding careers for hard-working individuals. It's important for members to be well-informed and engaged in the political process, so take the time to educate yourself and be sure to vote. NRCA looks forward to working with the new president and lawmakers in Congress on a bipartisan basis to advance the industry in 2025 and beyond. \mathfrak{Sos}

DUANE L. MUSSER is NRCA's vice president of government relations.

Disclaimer: ROOFPAC is the federally registered political action committee of NRCA, and contributions will be used for political purposes. Contributions to ROOFPAC are not tax deductible and the name, address, occupation and employer's name of individuals whose contributions exceed \$200 during a calendar year will be reported to the Federal Election Commission. Contributions are voluntary, and you have the right to refuse to contribute without any reprisal.

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The 2024 IECC addresses energy efficiency in commercial roof systems

by Glen Clapper, AIA, LEED AP

he International Code Council® updates the International Energy Conservation Code,® along with 11 other I-Codes, every three years. Near the end of 2023 and early 2024, ICC released the 2024 editions and updates to most of the I-Codes. However, publication of the 2024 IECC was delayed (see "Why the delay," page 37) and became available in August.

The IECC provides minimum requirements for the efficient use of energy in buildings using prescriptive and performance-based provisions. Following is an overview of the more significant roofingrelated updates for commercial buildings.

Format

The IECC is divided into sections for commercial and residential buildings (one- and two-family dwellings, townhouses, and residential buildings three stories or less).

Similar to other 2024 I-Codes, the IECC has a revised format. The printed and PDF versions include single-column text, new font styles and groupings of associated content—tables now will follow directly after the sections that reference them. Some sections have been renumbered within chapters.

In addition, QR codes now appear at the beginning of each section that contains a revision to allow users to scan the QR code with a smart device to see the revision. If there is no QR code at the beginning of a section, there was not a change in the section.

Commercial provisions

There are two primary sections for commercial provisions located in Chapter 4–Commercial Energy Efficiency and Chapter 5–Existing Buildings that apply to roofing. Section C402-Building Thermal Envelope Requirements and Section C503–Alterations provide requirements for roofing work. However, changes in other chapters also may apply.

In Chapter 1–Scope and Administration, the scope has been simplified to state commercial provisions apply to the design and construction of buildings not covered by the IECC Residential Provisions. Of note, both the commercial and residential provisions no longer include a building's site.

A new subsection, C101.2.1–Appendices, has been added to the scope section to clarify or codify an IECC appendix does not apply to the code unless that specific appendix has been adopted by a local jurisdiction. In previous versions, similar information was included but not in the body of the code. The appendix applicable to roofing is Appendix CB–Solar-Ready Zone–Commercial.

Section C101.3–Intent was expanded to include information such as requirements that provide maximum energy efficiency that is safe, technologically feasible and life cycle cost-effective to potentially provide cost savings to consumers and building owners. In addition, the code provides optional requirements to achieve zero-energy buildings and greenhouse gas reduction.

Section C105.2–Information on Construction Documents requires roof insulation material and its R-value to be stated in construction documents. New for 2024 is an air barrier, its location and sealing details, and any thermal bridges in the building envelope identified in Section C402.6–Air Leakage–Building Thermal Envelope must be shown in construction documents. The 2024 IECC excludes mechanical roof fasteners as thermal bridges.

New in Section C106–Fees is C106.3–Valuation of Work requiring a permit applicant to provide an estimated value of the work for which the permit is being obtained; the valuation must include labor and materials. This new section also states the final valuation must be approved by the code official. The purpose of this requirement allows the code official or authority having jurisdiction to establish permit fees based upon the value of the work to be completed.

In Subsection C107.2.2–Building Thermal Envelope, which falls under Section C107.2–Required Inspections, an inspection must verify the type of roof insulation; its R-value; location (above deck, integral to the deck or below deck); thermal bridge mitigation (new) if required; and installing required air-leakage controls—air-leakage controls include sealing of air-barrier penetrations or terminations. The inspection may be conducted by a code official, designated agent or approved agency.

The 2024 IECC added several new definitions to the code. Those applicable to roofing include: air leakage; approved source; construction documents; emittance; low slope (changed from "lowsloped roof" and states 17% slope as applicable to roofs); owner; Psi and Chi factors (used for thermal bridges); roof replacement; substantial improvement; and thermal bridge.

Of note is a new definition for roof replacement that differs from the same term in the 2024 IBC. It now reads: "An alteration that includes the removal of all existing layers of roof assembly materials down to the roof deck and the installation of replacement materials above the existing roof deck."

Also of note is the new definition of approved source, which now reads: "An independent person, firm or corporation approved by the code official, who is competent and experienced in the application of engineering principles to materials, methods or systems analyses." Additionally, the terms or references to "thermal envelope" and "building envelope" have been changed to "building thermal envelope" throughout the code.

Section C303.1.2–Insulation Mark Installation requires insulation be installed so the manufacturer's R-value mark is easily visible for inspection. New for 2024 is an exception that states "For roof insulation installed above the deck, the R-value

WHY THE DELAY

The International Code Council® typically publishes an update to an I-Code during the fourth quarter of the previous year of the code update—meaning the 2024 version of the International Energy Conservation Code® would have been published in late 2023 or early 2024.

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However, ICC changed the IECC code update process to a standards development process. This change resulted in the final revisions to the code taking longer than originally projected. In addition, similar to the ICC codes development process, ICC has an appeals process to allow third parties to notify ICC when they believe a committee decision is in error. During the 2024 IECC process, nine appeals were filed by five groups. Hearings were held in February and March, and the final decision was announced March 18. After a final decision was reached, ICC proceeded with publishing the 2024 IECC.

shall be labeled as specified by the material standards in Table 1508.2 of the International Building Code." Table 1508.2–Material Standards for Roof Insulation in the IBC provides the applicable ASTM International standard for a particular insulation material.

New construction

Section 402–Building Thermal Envelope Requirements has been reorganized so performance and installation requirements are grouped together.

Subsection C402.1.2.1.1–Tapered, Above-deck Insulation Based on Thickness has been revised to state area-weighted U-factors for nonuniform insulation must be determined by an approved method. A new exception has been added that allows an area-weighted U-factor using the inverse R-value (1/R) as calculated in the exception for Section C402.1.3.2–Area-weighted averaging of R-values. This exception in the 2021 IECC was formerly contained within C402.1.4.1.1–Tapered, Above-deck Insulation based upon thickness.

New for the 2024 IECC is Section C402.1.3.2-

Area-weighted Averaging of R-values. This is where the previously mentioned exception that permits the averaging of R-values for above-deck roof insulation by multiplying the average thickness of the roof insulation by the insulation's R-value per inch thickness is now located. The exception includes the method to be used to determine average abovedeck insulation thickness. Average thickness shall be determined by dividing the volume of roof insulation by the area of the roof.

Section C402.2.1–Roof Assembly has been retitled Roof-ceiling Construction and expanded to include the installation of insulation below and within a roof deck or any approved combination, which also includes above deck. Previously, this section limited insulation installation to between roof framing or continuously above the roof assembly.

The requirement for roof insulation boards to have staggered joints has been more clearly defined in Section C402.2.1.1–Joints Staggered to state "above-deck" insulation boards shall be installed in two layers with the edge joints staggered between layers.

The limitation for 1-inch minimum thickness of above-deck insulation at its lowest point has been relocated to Section C402.2.1.3–Minimum Thickness of Tapered Insulation.

Another new section is C402.6.1.1–Air Barrier Design and Documentation Requirements. This subject was discussed extensively during the IECC 2024 update process and its role regarding potential energy savings; these requirements likely will become more stringent in future IECC updates, particularly as air barriers relate to air leakage requirements. This section requires a continuous air barrier to be identified as to its position within the building thermal envelope. It also requires joints and penetrations in the air barrier be detailed regarding the sealing of these interfaces, including between walls and roofs, parapets, copings and similar intersections.

Air barriers also must be tested for air leakage in accordance with Section C402.6.2–Air Leakage Compliance. Of note is the air leakage maximum for the building thermal envelope has been reduced from 0.40 cubic feet per minute per square foot to 0.35 cubic feet per minute per square foot.

The 2024 IECC still includes roofing materials that can serve as air barriers: 3/8-inch or greater plywood and oriented strand board; extruded polystyrene insulation board greater than 1/2 of an inch thick; foil-backed polyisocyanurate insulation board greater than 1/2 of an inch thick; closed-cell spray foam with a density greater than 1.5 pcf and thickness greater than 11/2 inches; open-cell spray foam with a density of 0.4 to 1.5 pcf and thickness greater than $4\frac{1}{2}$ inches; exterior gypsum board greater than 1/2 of an inch thick; BUR; polymermodified bitumen roof membranes; and single-ply roof membranes.

Newly included for 2024 is Section C402.7-Thermal Bridges in Above-grade Walls. Subsection C402.7.3-Structural Beams and Columns requires structural steel or concrete beams and columns that penetrate through the building thermal envelope to be covered with at least R-5 insulation for a minimum distance of 2 feet beyond the insulation layer in the building thermal envelope. Although it is not specifically clear, this likely will mean columns projecting above roof decks that support mechanical equipment such as cooling towers and chillers will need to be wrapped with insulation before roof membrane flashing is installed.

In addition, a new Subsection C402.7.5-Parapets requires parapets, where the above-grade wall is insulated on the exterior side of the wall, to have continuous insulation extend up both sides of the parapet for a minimum distance of 2 feet above the roof covering or the height of the parapet,



WANT TO LEARN MORE?

Join Glen Clapper, an NRCA director of technical services. Oct. 24 at noon CDT for a free webinar. Clapper will address new energy codes and review existing energy codes relevant to roofing. To register, go to nrca.net/events and select Education Classes.

whichever is less. There is an exception that excludes blocking, copings, flashings and similar materials for attachment of roof coverings from the insulation requirements.

Another new section, C403.14.3-Roof and Gutter Deicing Controls, requires roof and gutter deicing control systems to automatically turn off when the outdoor temperature is above 40 F and must include moisture and daylight sensors or other means to turn the system off between sunset and sunrise.

Section C406-Additional Efficiency, Renewable and Load Management Requirements has been revised. Depending on a building's conditioned floor area, compliance with additional energyefficiency requirements must be met to achieve a set number of base credits based on climate zone and building occupancy type. The number of required base credits is contained in Table C406.1.1(1)-Energy Credit Requirements by Building Occupancy Group and ranges from 30 to 90. The use of additional roof insulation can contribute 1 to 30 base credits toward the total required credits. The credit values are shown in Tables C406.2(1) through C406.2(9). The insulation requirement to achieve the credits in the tables is within Section C406.2.1.4 E04-Added Roof Insulation, which states all roof areas must have an additional R-10 of continuous insulation in the roof assembly. For attics, uninterrupted fill or batt insulation of R-10 is required and if interrupted by ceiling or roof joists, R-13 insulation is required.

When using Section C407-Simulated Building Performance compliance path in the code, the standard reference design criteria for roofs has been modified in Table C407.4.1(1)-Specifications for the Standard Reference and Proposed Designs. Previously, the only criteria were a solar absorptance of 0.75 and an emittance of 0.90. For 2024, solar absorptance has been changed to solar reflectance of 0.25 except as specified in Section C402.4-Roof Solar Reflectance and Thermal Emittance and Table C402.4-Minimum Roof Reflectance and Emittance Options for Climate Zones 0-3, which requires a three-year aged solar reflectance of 0.55 and three-year aged emittance of 0.75.

Existing buildings

As discussed earlier, a roof system replacement is considered an alteration in the 2024 IECC. Alterations are a section within Chapter 5–Existing Buildings. Section C503–Alterations contains the requirements for a roof system replacement. Subsection C503.2.1–Roof, Ceiling and Attic Alterations was renamed and includes new provisions in the language beyond roof system replacements.

As with previous editions of the IECC, insulation for a roof system replacement must meet the requirements for a new roof system. However, new language has been added for roof system replacements where existing rooftop conditions, such as through-wall flashing and parapet heights, door thresholds, windowsills and similar conditions, limit compliance with specified insulation requirements.

Now, an approved design that minimizes deviation from the insulation requirements is permitted for a roof system replacement. The approved design must include a report by a registered design professional or an approved source that documents the details of the limiting conditions and construction documents that minimize deviation from the insulation requirements.

Another new subsection, C503.2.7–Air Barrier, requires altered building thermal envelope assemblies to have air barriers, but air barriers are not required to be continuous with unaltered portions of the building thermal envelopes nor is air leakage testing of air barriers required.

This would seem to require the incorporation of an air barrier with a roof system replacement; either the roof covering or above-deck roof insulation could fulfill the requirement if installed per manufacturer's instructions as an air barrier. However, Subsection C503.2.7 appears to conflict with Exception 5 in Subsection C503.1–General, which states: "Air barriers shall not be required for roof re-cover and roof replacement where the alterations or renovations to the building do not include alterations, renovations or repairs to the remainder of the building thermal envelope." Also new is Subsection C503.3.6–Replacement or Added Roof-mounted Mechanical Equipment. This subsection was added to future-proof a roof system replacement where the existing curb heights would limit added insulation thickness required to comply with increased insulation R-values when a roof system replacement occurred. Table C503.3.6–Roof-mounted Mechanical Equipment Curb Heights (see figure) provides curb height requirements based on climate zone when new mechanical equipment is installed or existing mechanical equipment is replaced.

Climate zone	Minimum curb height		
0-3	16 inches		
4-6	17 inches		
7, 8	18 inches		

Table C503.3.6-Roof-Mounted Mechanical Equipment Curb Heights

Although a roof system replacement generally would not meet the new definition for a substantial improvement, roofing professionals should be aware of a new Subsection, C503.6–Additional Energy Efficiency Credit Requirements for Alterations. This subsection requires alterations that meet the new definition of a substantial improvement to also comply with the additional energy credits in Section C406.2 previously discussed.

How to get it

Many of the updates discussed for the commercial provisions in the 2024 IECC are similar for the residential provisions. For specific updates of the 2024 IECC residential provisions, visit codes .iccsafe.org.

A read-only copy of the 2024 IECC is available at codes.iccsafe.org/codes/i-codes/2024-icodes. To purchase a copy, go to shop.iccsafe.org/ international-codes.html. �●≉

GLEN CLAPPER, AIA, LEED AP, is an NRCA director of technical services.



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WAGNER ROOFING HELPS TRANSFORM A SCHOOL INTO AN ART GALLERY

BY CHRYSTINE ELLE HANUS

ocated at 65 I Street in Washington, D.C., Rubell Museum DC is an art gallery showcasing contemporary art in the nation's capital. The building was constructed in 1906 and served as a public school until it closed in 1982. Soon thereafter, the building was repurposed as a homeless shelter until closing in 2004. The property remained vacant until the Corcoran Gallery of Art purchased the land in 2006; however, development plans fell through and the site was never redeveloped.

In 2007, the site was designated a DC Historic Site, and one year later, it was added to the National Register of Historic Places. In 2010, the Rubell family purchased the building with plans to refurbish it into a satellite museum of art and add a multistory apartment building next to the original structure.

In 2020, Wagner Roofing Co., Hyattsville, Md., was selected by the project's general contractor, The Christman Company, Sterling, Va., to conduct emergency roofing work on the building's three wings.

After completing temporary repairs, Wagner Roofing was invited to bid on replacing the wings' existing multiple roof systems and, subsequently, was selected as the roofing contractor for the project.



Before renovations, the building was in an advanced state of deterioration.



Aerial view of the new roof systems under construction

ROOFING TRIAGE

When the Wagner Roofing team joined the renovation project, the former school building was in a state of deterioration and neglect.

"We contacted Wagner Roofing to 'triage' the roof to stop decades of water intrusion," says Thomas Whitmore, vice president of historic preservation for The Christman Company. "They worked with us to develop a scope of work to perform structural repair of the collapsed area of the main wing of the building, and roof patching the worst of the leaking areas in the slate and metal roofing on all three of the wings of the building."

As part of efforts to stabilize the main building, Wagner Roofing was tasked with shoring up the interior attic space to support the building's failing components.

"Metal cladding had been stolen from the original dormers, leaving the facility completely exposed to the elements for years," says Bob Kraft, president of Wagner Roofing. "The deterioration

and rot were so bad, phase one efforts focused solely on removing failed components and replacing roof joists and sheathing to temporarily protect the structure with new waterproofing until phase two of the restoration project could later commence in 2021."

After the worst problems were temporarily under control, The Christman Company and Wagner Roofing teams worked with architectural firm Beyer, Blinder, Belle, Washington, D.C., to find an appropriate balance between cost-effectiveness and preservation response for the many varied areas included in the project's phase two.

PHASE TWO TEAR-OFF

In 2021, the Wagner Roofing crew removed existing materials from the roofs on the main, east and west wings down to the existing substrates. When possible, workers salvaged slate and cataloged the pieces to be reinstalled on repaired substrates along with new S1-grade slates. All debris was bagged and removed from the job site daily.

In addition to repairing roof decks, the team rebuilt deteriorated wood outriggers, framing and built-in gutter substrates.

Each building was fully scaffolded to the eaves of the built-in gutter system. Team members used Guardian[®] safety ropes and harnesses; rope grabs were used when working at heights of 6 feet or greater from the top of the scaffolding deck.

"Working in Washington, D.C., typically presents access challenges because of the many one-way streets and small staging areas," Kraft says. "Luckily, this job site presented a large footprint where staging materials or loading with cranes and forklifts did not present too many problems."

INSTALLATION

Following the tear-off process, the Wagner Roofing team installed new roof systems on the building's three wings:

Main wing

The team installed the following materials on the main wing's 3,600-square-foot low-slope roof area:

- Georgia-Pacific[®] 5%-inch DensDeck[®] mechanically fastened to the wood plank deck
- GAF[®] SA Vapor Retarder
- GAF 2-inch EnergyGuard® Polyiso Insulation
- GAF 1/8-inch-per-foot slope EnergyGuard Tapered Polyiso Insulation
- GAF .060-mil EverGuard® TPO Smooth Membrane

To build the main wing's 6,500-square-foot steep-slope roof system, the crew installed:

- Carlisle[®] WIP 300HT self-adhering underlayment applied to the existing wood plank deck
- Owens Corning Titanium[®] UDL25 Synthetic Roofing Underlayment
- North Country Slate: 11- by 20-inch in Unfading Black

One of the more complex features of the project included a newly engineered retrofit balustrade system. The main building's signature decorative tin balustrade had long since been eliminated from the structure. As part of restoration efforts, the Wagner Roofing team was tasked with reinstating this previously prominent architectural element.

"The new design called for a fiberglass replica that would be far more structurally robust than the original, which proved to be no easy task," Kraft explains. "Contemporary engineering guidelines required a new fiberglass shell to be built around a structural steel framing system.

"To meet wind load requirements, special 6-inch steel saddles had to be installed over the existing 16-inch-thick masonry wall to support more than 40 new 4- by 4-inch square tube steel columns," Kraft continues. "This required precise drilling of 1 ½-inch-diameter holes that would enable installation of stainless-steel through-bolts, all of which had to be performed within an attic that provided less than 3 feet of clearance to work."

The balustrade was assembled, installed and tied into an expansive built-in perimeter gutter system also custom-fabricated in 20-ounce, fully soldered Revere Copper that included 340 lineal feet of decorative fiberglass; 900 lineal feet of 4- by 4-inch tube steel; 30 field-fabricated wood-framed copper crickets; and 600 square feet of wood and lightgauge metal framed walls.

The Wagner Roofing team of craftsmen also replicated and custom-fabricated 300 lineal feet of 16-ounce lead-coated Revere Copper decorative cornice, soffit and fascia; restored 12 existing dormers; restored the existing wood cupola structure to match the original design; restored the central building's custom copper skylight with new framing, cladding and insulated glass; and prepared and painted all additional roofing and decorative components designated to remain.

"Wagner Roofing's crew efficiently moved through the different areas of the project," Whitmore says. "They planned ahead, dealt with substrate problems quickly, communicated and collaborated with our team about the details of dormer restoration, repairs to the sheet-metal cornice and structural support of the balustrade. The copper and sheetmetal cornice work was exceptional. The slate removal and reinstallation was done with an experienced eye toward historical appearance and system integrity, and the sheetmetal roofing was installed with proficiency."

The Wagner Roofing team also custom-designed and fabricated a replica of an original decorative, historical shield mounted to the main wing railing system.

East wing

The east wing consisted of one steepslope slate roof area and a low-slope flat-seam copper roof area.

For the 5,900-square-foot slate roof, team members resurfaced the deteriorated lightweight concrete deck to accommodate new slate and then installed:

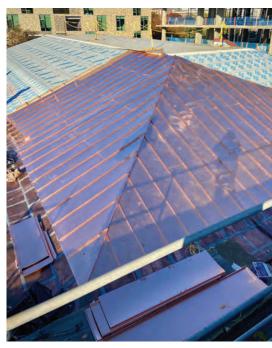
- 3⁄4-inch plywood adhered to the existing Creteplank[®] deck
- Carlisle[®] WIP 300HT selfadhering underlayment
- Owens Corning Titanium[®]
 UDL25 Synthetic Roofing



Wagner Roofing craftsmen fully restored 12 dormers.



New slate roof system under construction



New standing-seam copper roof system in progress



Rubell Museum DC before renovations



Rubell Museum DC after renovations

Underlayment

 North Country Slate: 11- by 20-inch in Unfading Black
 For the 1,500-square foot copper roof, Wagner
 Roofing craftsmen custom fabricated 20-ounce
 Revere Copper double locked, standing-seam
 panels to replicate the
 panels originally installed
 and fully soldered 20 ounce Revere Copper
 18- by 24-inch flat-seam
 panels.

In addition, the team custom-fabricated, fully soldered 20-ounce Revere Copper built-in gutters and 16-ounce Revere Copper flashings and 4-inch round downspouts.

West wing

The team installed the following materials on the west wing's 1,100-square-foot low-slope roof area:

- Georgia-Pacific 5⁄8-inch DensDeck[®] mechanically fastened to the wood plank deck
- GAF SA Vapor Retarder
- GAF 2-inch EnergyGuard Polyiso Insulation
- GAF 1/8-inch-per-foot EnergyGuard Tapered Polyiso Insulation
- GAF .060-mil EverGuard TPO Smooth Membrane

On the west wing's mansard, the team installed 4,350 square feet of 16-ounce Revere Copper 1-inch standing-seam panels; custom-fabricated, fully soldered 20-ounce Revere Copper built-in gutters with 16-ounce Revere Copper flashings and 4-inch round downspouts; and tied-in the gutter with 975-square-feet of custom-fabricated, fully soldered 20-ounce Revere Copper 18- by 24-inch flat-seam panels.

HATS OFF

In September 2022, the Wagner Roofing team successfully completed all roof systems. As a result of unforeseen conditions that required new details to be developed with the design team, the project schedule was delayed a few times.

"Almost every time we work on historical buildings, unforeseen challenges arise; that's just the nature of the beast," Kraft says. "From the east wing substrate and structural issues to the baluster railing supports for the main wing, having collaborative relationships with The Christman Company and Beyer, Blinder, Belle was key. We worked together to overcome challenges so as to not push out the schedule longer than necessary."

One month after Wagner Roofing completed its work, Rubell Museum DC opened as a free art gallery for Washington, D.C., residents, featuring 32,000 square feet of gallery space and a bookstore.

"We had a 10-man crew made up of sheet metal, slate and low-slope crew members working on-site at any given time on this project," Kraft says. "Plus, an additional 40 field workers within the company had spent time on this project. It was truly a team effort across the board!"

For its work on Rubell Museum DC, Wagner Roofing received a 2023 DC Award for Excellence in Historic Preservation from the DC Preservation League.

"Being able to turn an existing school building into an art gallery is fairly unique," Kraft says. "When we first mobilized on the triage work back in 2020, the overall building was in disarray. It had sat vacant for many years and looked closer to being demolished than restored.

"To be able to look at what the building looks like today versus what it looked like the first day I walked in is truly remarkable," Kraft continues. "My 'hats off' to not only The Christman Company but to all the many subcontractors who were a part of breathing new life into this building." So*

CHRYSTINE ELLE HANUS is *Professional Roofing's* associate editor and an NRCA director of communications.

To view a video about renovating Rubell Museum DC, go to professionalroofing.net.

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he U.S. and Canadian metal roofing markets remain strong, driven by increased consumer awareness and building trends focused on a changing climate and the need for better performing, more resilient solutions.

The Metal Roofing Alliance's latest research forecasts metal roofing will reach more than 4.8 billion square feet in 2028 based on historical and forecast shipment square footage numbers. Research also points to a 19% increase in growth for residential metal roofing from 2024 to 2028. For residential metal roofing, reroofing/roof system replacement will continue to drive a majority of the market.

MRA's research shows metal roofing is continuing to chip away at asphalt roofing's historical market share domination. U.S. and Canadian homeowners are beginning to understand quality metal roof systems can deliver improved performance, reliability and resiliency. Metal roofing has become the second most popular residential roofing option, and the residential metal roofing market now represents 84% of the total amount of metal roof square footage being sold in the U.S.

MRA members (who represent leading metal roofing manufacturers and installers) were asked what trends they see in the residential metal roofing industry, and they noted four issues that will fuel the segment's continued growth.

1. The importance of quality

Although residential metal roofing's popularity is growing, this increased interest comes with caution. More important than ever, how best to define, uphold and maintain quality standards is perhaps the metal roofing industry's most serious issue and one that can help take it to the next level or stall its growth.

At MRA, quality is a priority. MRA members commit to installing quality residential metal roof systems by supporting and promoting the industry's rigorous standards, which are based on verifiable testing protocols, well-documented specifications and third-party research.

The culmination of these industry standards, testing and research are documented in the Metal Construction Association's Roofing Specifications. MCA has recommended ANSI/MCA FTS-1-2019, "Test Method for Wind Load Resistance of Flashings Used with Metal Roof Systems," be used to evaluate wind load resistances of flashings to be installed at perimeters and roof plan transitions of metal roof systems. Research indicates the demand for metal roofing has risen with the increase of climaterelated disasters

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This test method is intended to determine the capacity of flashings to withstand anticipated wind loads, which is especially essential for performance in regions prone to severe storms and hurricane-force winds.

Adhering to standards helps the metal roofing industry deliver the promise of quality. Details, such as selecting the correct metal substrate, gauge and coatings, are key to roof system reliability and longevity. From the underlayment selected to the components and accessories used to deliver performance expectations and warranties, MRA works with other trade organizations to educate installers and consumers so they understand what it takes to ensure a metal roofing job is installed correctly.

This can be a challenge because the installation process for a quality metal roof system is more specialized and requires a higher skill set than installing conventional shingles.

After all, you can choose the best material in the world, but if it is installed improperly, it's all for naught.

2. Recruit to meet demand

The demand for quality metal roofing is high and expected to continue growing. However, the shortage of contractors and installers is hindering growth in many areas.

This opportunity is an attractive one for roofing contractors because profit margins for metal roof system installations are, on average, higher than most other roofing options. Couple that with increased severe weather events, the desire for more sustainable roofing options and the longterm value metal roofing offers, and you've got a hot market with no end in sight.

Contractors who are looking to get started in the field should reach out to reputable metal roofing manufacturers to learn proper installation techniques and gain knowledge for how to enter the field. Many manufacturers offer free seminars and classes. Information and training also are available through organizations such as MCA. Additionally, NRCA offers an NRCA PROCertification[®] designation that will certify a roofing worker's installation skills.

3. Effects of a changing climate

MRA research demonstrates weather-related factors also are driving the interest in quality metal roof systems. When comparing the increase of climate-related disasters to the increase in homeowners choosing metal roof systems, MRA research indicates the demand for metal roofing has risen with the increase of climate-related disasters from 2015 to 2022.

Metal roof systems have proved to be among the best options for regions that face hurricanes, high winds, hail and severe storm damage, heavy snow and ice and can earn a Class A fire classification (the highest rating possible for roof assemblies). For homeowners in wildfire-, tornado- and hurricane-prone areas who have lived through devastating climate disasters, it makes sense to choose stronger, longer-lasting, more durable materials designed to better withstand extreme climatic events.

Forward-thinking contractors recognize resilient building practices aren't just a nice theory, and they are adjusting their offerings to address this major need ahead of the possibilities of more stringent building codes and insurance requirements.

Helping drive that change is a shift in business ownership transitioning to Generation Z and millennials. With increasing awareness and knowledge of building practices that address the challenges of a changing climate and focus on improved sustainability, MRA predicts this evolution will positively affect the residential metal roofing industry. New generations of contractors will help drive new thinking and methods that break from traditional residential roofing and lead the way to help homeowners find better solutions.

4. Growth of PV

Solar is a significant trend contractors will need to monitor. Metal roofs are rated one of the best roofing materials for solar compatibility, and with the growth in residential solar systems, there is a huge opportunity for roofing contractors. In fact, rooftop solar installations jumped 33% in 2021 alone, according to newswire Stacker, driven by surging energy costs and unpredictable prices at the pump.

Why is this an opportunity for roofing contractors? Most solar system installers don't provide roofing services, and because photovoltaic panels typically are not installed on old or damaged roofs, reroofing is a frequent need for homeowners seeking a solar solution. This provides an opportunity for roofing contractors to expand their services to provide roof system inspections, PV panel mounting and reroofing services.

It is worth noting PV panels can last up to 25 years. Given that an asphalt shingle roof system may need to be replaced as frequently as every 12 years, a solar system could outlast an asphalt shingle roof. And when that asphalt shingle roof needs to be replaced, so does the entire system. That's an expensive, frustrating, time-consuming process for homeowners. Conversely, a quality metal roof system can last for more than 50 years, outlasting even the best PV panels.

In addition, metal roof systems are among the lightest of roof systems at just 1.4 to 1.6 pounds per square foot, which may make additional structural support for heavy PV panels unnecessary. On the other hand, asphalt shingle roof systems can be extremely heavy, often requiring structural support for PV panels, as well as penetrations and drilling into roofing materials, which could increase the likelihood of leaks, damage and premature roof system failure.

Quality metal roofing brackets and clamps make it easy to mount solar systems. There also is a wide variety of innovative solar mounting products that are easy to install on either batten or direct-to-deck profiles. The mounts don't require any special materials, tools or hardware, so roofing workers will find them easy and convenient to use.

Metal roofing solar mounting systems don't require any penetrations into the roofing material itself and eliminate the need for self-ballasted systems. This keeps roofs weathertight and helps eliminate potential leaks or damage that may ultimately compromise a roof's integrity. It also helps ensure warranties remain in place.

Seek support

Beyond some of the emerging business opportunities for residential metal roofing, contractors should lean on professional organizations such as MRA to help drive awareness in their local markets and lend third-party validation to strengthen their reputations.

MRA offers support for contractors by connecting them with homeowners and serving as the leading source of credible resources and information about metal roof system benefits. MRA offers a Residential Metal Roofing Buyer's Guide and how-to videos that help potential customers navigate and understand the benefits of metal roofing and what to expect when it comes to the installation process.

To ensure future opportunities and solidify metal roofing's many competitive advantages, the industry must work together. It may take some time and effort, but as the industry's rapid growth and success rate have demonstrated, the end results will be worth it.

RENEE RAMEY is the Metal Roofing Alliance's executive director.

CAA IN NRCA COMMUNITY INVOLVEMENT AWARD

CNA and **NRCA** are accepting submissions for the 2025 CNA/ NRCA Community Involvement Award, which honors charitable works by NRCA contractor members.

Submit your charitable project, activity or donation completed between Jan. 1 and Nov. 1, 2024, for a chance to win up to \$7,500 for your charity!

Winning companies receive the following for their charities:

First place: \$7,500 Second place: \$5,000 Third place: \$2,500 People's Choice: \$1,500

Winners will be notified by December, and the awards will be presented Feb. 20, 2025, at NRCA's Industry Awards and Reception during NRCA's 138th Annual Convention in San Antonio.

The deadline for submissions is Nov. 1. Entries must be submitted electronically via Dropbox to **communityservice@ nrca.net**. Entries submitted by mail will **not** be accepted.

Visit nrca.net/communityaward for a link to the official entry form and more information.



Questions? Contact Madison Mahoney at (847) 493-7548 or communityservice@nrca.net.

MANUFACTURER NEWS

Polyglass announces contest winners

Polyglass U.S.A. Inc., Deerfield Beach, Fla., has announced the winners of its ADESO 20th Anniversary Social Media Contest. The contest celebrates innovation and excellence in the roofing industry, highlighting the success and creativity of contractors who have used Polyglass U.S.A. ADESO products in their projects.

The contest invited roofing professionals to showcase their work featuring ADESO products on social media platforms, using the hashtag #ADESO20thAnniversary. Each winner will receive 20 rolls of ADESO self-adhering products of their choice and be showcased on Polyglass U.S.A. social media.

The full list of contest winners is available at polyglass.us.



Eagleview launches podcast

Eagleview, Bellevue, Wash., has launched "The Altitude Podcast from Eagleview," hosted by Piers Dormeyer, the

company's CEO. Topics include the effects of the Inflation Reduction Act on the solar industry and what makes a good team culture.

"I believe in continuous learning, and there is no better way to learn than by having conversations with the leading thinkers in our fields," Dormeyer says. "Learning how others have led transformations, turned around their businesses or are plotting for the future is insightful for me, employees, customers and business leaders."

"The Altitude Podcast from Eagleview" can be found wherever you listen to podcasts.

ATAS International employee honored

ATAS International Inc., Allentown, Pa., has announced Lee Ann M. Slattery, its sales support manager, was selected as a 2024 Women of Influence recipient and a Circle of Excellence honoree by Lehigh Valley Business.

Women of Influence awards honor high-achieving women for their career accomplishments. The honorees are selected based on professional experience, community involvement



Slattery

and commitment to mentoring. Circle of Excellence honorees are women of long-standing, notable success who lead the way for other women. Honorees are selected by a panel of judges comprised of previous years' Women of Influence recipients and editors of Lehigh Valley Business.

Slattery was nominated for the award by Mark Bus, national sales manager of ATAS International.

"Slattery volunteers within the company for additional initiatives that improve company culture, recommends ideas for community involvement and will truly do any job that is needed," Bus says.

IKO launches warranty portal

IKO, Wilmington, Del., has launched its Warranty Portal, designed to simplify and expedite the warranty process for commercial customers across the U.S. and Canada.

The Warranty Portal provides IKO Approved Applicator Program Contractors with a user-friendly interface allowing them to submit warranty information online, track the progress of their submissions and receive timely updates.

More information is available at iko.com/comm.

DISTRIBUTOR NEWS

ABC Supply acquires America Building Materials assets

ABC Supply Co. Inc., Beloit, Wis., has acquired the assets of America Building Materials, Los Angeles. This acquisition establishes the first ABC Supply location in Los Angeles and the 10th within the surrounding market.

"We're happy to welcome the America Building Materials team and customers to our family," says Matt Cooper, vice president of ABC Supply's West region. "This new location enables us to strengthen our relationships with contractors and provide enhanced service throughout our network of branches in the greater Los Angeles area."

CONTRACTOR NEWS

Bone Dry Roofing appoints new leadership

Bone Dry Roofing, Indianapolis, has appointed Tony Merlie as its new chief financial officer and Billy Smith as its chief operating officer.

Merlie previously served as chief accounting officer for a premier global manufacturer. Smith's most recent role was vice president of service and construction for an industrial and commercial solutions company.

"Bone Dry Roofing continues to grow, and that's primarily due to our people," says Gene Judd, Bone Dry Roofing's CEO. "We're gaining ample leadership and expertise by bringing on these two individuals who come with impressive careers that have exemplified a commitment to mentorship, leadership and strategic thinking."



Merlie





ARMA calls for award entries

The Asphalt Roofing **Manufacturers Association** is accepting entries for its ARMA Excellence in Asphalt



Roofing Awards Program, which recognizes the best steep- and low-slope asphalt roofing projects from throughout North America. The submission deadline is Dec. 1.

The entries will be judged according to four criteria: beauty, project challenges, distinction and why the submitter chose asphalt. Winners will receive a monetary prize as well as recognition in various media outlets.

Submission forms are available at asphalt roofing.org/excellence.

OTHER NEWS

SPRI to canvass wind design standard

SPRI has announced it is revising ANSI/SPRI WD-1, "Wind Design Standard Practice for Roofing Assemblies," and plans to canvass the document for reapproval as an American National Standard.

ANSI/SPRI WD-1 provides a methodology based on rational analysis to enhance securement for wind uplift resistance of nonballasted assemblies, and single-ply, polymer-modified bitumen and built-up roof system assemblies installed over any type of roof deck. The proposed revision will prepare the document for adoption into the International Building Code® with references to Florida Roofing Application Standards 117 and 137.

SPRI developed the ANSI/SPRI WD-1 standard as a reference for the design, specification and installation of ballasted single-ply roof systems. It was previously revised and reaffirmed in 2020.

SPFA elects board of directors

The Spray Polyurethane Foam Alliance has announced its newly elected board of directors.



tion, Alexandria, Minn.; Gary Harvey, secretary/treasurer of SPFA and president/CEO of NRCA member Wedge Roofing Inc., Petaluma, Calif.; and Bonnie Strickler, past president of SPFA and president of PUFF Inc., Charlottesville. Va.

A list of the directors is available at sprayfoam.org.

RoofersCoffeeShop® launches podcast

RooferCoffeeShop, Sisters, Ore., has announced a new podcast series on its AskARoofer site. The series is intended for homeowners and building owners to quickly receive answers about their roof systems through short episodes. Topics include basic maintenance, commercial roofing material choices, insulation, customer service and sustainability practices.

The AskARoofer Minisodes are available wherever you listen to podcasts.



NRCA NEWS

NRCA partners with NHCA

NRCA has partnered with the National Hispanic Construction Alliance to advance the Hispanic community within the construction and roofing industries.

Established with the mission to promote the economic advancement and professional growth of Hispanic-owned construction businesses, NHCA serves as a resource for Hispanic contractors, developers and trade workers in the U.S. Its primary focus is enhancing capacity and fostering business opportunities for its members.

NHCA complements the existing offerings of NRCA, providing networking opportunities across all trades in the construction industry, facilitating access to capital and supporting business development. It also offers the Construction Blueprint, a guide that addresses subjects including crew leadership, bidding and estimating, contract management, bonding capacity and development capital.

More information about NHCA is available at nhca.pro.

THE INDUSTRY ONLINE

IKO has launched its newly designed website for IKO Commercial. The website dynamically adapts to a user's location through geotargeting to display product and information available in the user's market. Key features include a user

login section, mobile-friendly design, enhanced navigation and robust search options. Additionally, the website includes a Newsroom section for media partners.

The website is available at **iko.com/comm**.

UP THE LADDER

McElroy Metal has made **Dustin Watkins** Northeast sales manager.

EagleView has promoted **Mark MacDonald** to vice president of enterprise business development. **Steve Del'Nero** is now Malarkey Roofing Products[®] national and major account manager.

Mule-Hide Products Co. has made **Marshall Powell** territory manager of central Florida.

The Code Compliant Choice

Advanced Model 477

Until now, there was no way to use an out-of-the-box roof cap for venting dryers. Code disallows screens and requires a damper. Even when modified, other vents are too airflow restrictive.

Seamless Galvalume[®] Hood

The DryerJack[®] is *the* choice specifically designed to meet the demanding needs of clothes dryers. Visit DryerJack.com to learn how the patented curved damper delivers superior efficiency and helps minimize a very serious fire risk.



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"The best part of having NRCA PROCertified[®] installers is instilling pride in crew members while inspiring others who want to participate. It reinforces the skill level for quality workmanship and expertise."

David Crowther, president of CFS Roofing Services, Fort Myers, Fla.

NRCA NEW MEMBERS -

ARCHITECTS/ENGINEERS/CONSULTANTS

Engineered Solutions PSC, Caguas, Puerto Rico ESi, St. Petersburg, Fla. Higgs Production Services, Broomfield, Colo. Miami Curtain Wall Consultants Corp., Miami PEGroup, Weston, Fla.

CONTRACTORS

Alexis Contracting Inc., Massapequa Park, N.Y. Allen Roofing Co. Inc., Roswell, N.M. Alpenglow Exteriors LLC, Kalispell, Mont. Ballinger Construction Co., Jefferson City, Tenn. Blackhorse Construction LLC, Tipton, Mich. Branson/Springfield Roof Co., Branson, Mo. BTYA Roofing Solutions LLC, Houston C&C Construction of NWF LLC, Bonifay, Fla. Chisholm Trail Roofing & Construction, Yukon, Okla. CIM Roofing Inc., Dallas Furoga Roofing Solutions, Greenville, S.C. Glim Roofing LLC, Gaithersburg, Md. Gotcha Covered Roofing, Rockledge, Fla. Green Collar Roofing & Exteriors, Middletown, N.Y. Hafling Roofing Service d.b.a. HRS Roofing, Louisville, Ky. Kennedy Roofing, Oklahoma City Liberty Roofing and Construction LLC, Bixby, Okla. North American Contractors, Indianapolis Platinum Roofing Solutions Inc., Valdosta, Ga. Prime Roofing & Construction, Hobbs, N.M. Quality Roofing Solutions LLC, Pensacola, Fla. Riley Hays Roofing & Construction, Little Rock, Ark.



Roof Services LLC, Winchester, Ky. Roof U.S.A., South Amboy, N.J. Roofing Systems of Dallas LLC, Dallas Spicer Bros Construction Inc., Salisbury, Md. Steven Richard Homes, Sycamore, Ill. Sustainable KW LLC, San Antonio Techni Proof Foundation, Riyadh, Saudi Arabia The Third Estimate Corp., Solon, Ohio The Velco Group, North Richland Hills, Texas Tri-State Commercial Roofing Corp., Hillburn, N.Y. Urbach Roofing Inc., San Marcos, Calif. Verus Ventures LLC, Atlanta Zee's Roofing and Construction, Sanford, Fla.

RJM Roofing LLC, Lee Summit, Mo.

INDUSTRIAL/INSTITUTIONAL

The Exam Pros, Coconut Creek, Fla.

MANUFACTURER

CM3 Metals LLC, Cedar Hill, Texas

SERVICE PROVIDERS

Femme Home Builders, McKinney, Texas Hendrick Phillips Salzman & Siegel, Atlanta BRIEFINGS

OCTOBER

9-11 LEGALCon Live 2024 NRCA Clearwater Beach, Fla. Contact: Crystal Wukovits, manager of NRCA University cwukovits@nrca.net nrca.net

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Virtual CERTA Train-the-trainer NRCA Online Contact: NRCA's Customer Service Department (866) ASK-NRCA (275-6722) or info@nrca.net nrca.net

21-23 2024 MRCA Conference & Expo

Midwest Roofing Contractors Association St. Paul, Minn. Contact: MRCA (800) 497-6722 or mrca@mrca .org mrca.org

29-30 CDRA's 10th Shingle Recycling Forum

The Construction & Demolition Recycling Association Louisville, Ky. Contact: CDRA conference@gie.net shinglerecyclingforum.com

30-Nov. 1 METALCON Atlanta Contact: METALCON

info@metalcon.com metalcon.com

NOVEMBER

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CERTA Train-the-trainer NRCA Elgin, Ill. Contact: NRCA's Customer Service Department (866) ASK-NRCA (275-6722) or info@nrca.net nrca.net

12-15 NRCA's Fall Committee Meetings and Roofing Alliance Member Meetings

NRCA Austin, Texas Contact: NRCA's Customer Service Department (866) ASK-NRCA (275-6722) or info@nrca.net nrca.net

12-15

2024 Greenbuild International Conference and Expo

U.S. Green Building Council Philadelphia Contact: info@greenbuildexpo .com informaconnect.com/greenbuild greenbuildexpo.com

13-15 IFD's World Championship of Young Roofers

International Federation of the Roofing Trade Innsbruck, Austria Contact: International Federation of the Roofing Trade info@ifd-roof.com ifd-roof.com

DECEMBER

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NRCA Foreman Leadership Training, Level 1 NRCA Rosemont, III. Contact: Janice Davis, director of NRCA University jdavis@nrca.net nrca.net

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Virtual CERTA Train-the-trainer NRCA Online Contact: NRCA's Customer Service Department (866) ASK-NRCA (275-6722) or info@nrca.net nrca.net

MARKETPLACE



Sales over \$5 million? Considering selling your commercial roofing and/or sheet metal business?

With a solid financial base, available capital and an appreciation for what's already working in your business, our group has a solid track record of creating successful alliances. We can tailor sale to meet your needs.

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Become an NRCA member and engage with a community of professionals dedicated to the roofing industry.

The NRCA Roofing Manual: Metal Panel and SPF Roof Systems 2024

The latest volume of The NRCA Roofing Manual provides you with comprehensive information about the design, materials and installation techniques applicable to metal panel and spray polyurethane foam roof systems used in low- and steep-slope applications.

With two complete sections, Metal Panel Roof Systems and SPF Roof Systems, this manual is a welcome addition to your technical library.

Buy it today at nrca.net/shop/technical.

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2024

MRCA

DETAILS

WHAT IS THE BIGGEST CHALLENGE IN ENSURING A SAFE JOB SITE?



"Communication. Construction is constantly changing: Conditions change throughout the day or week, leading to new hazards that may not have been present when the project started."

-Luciano Perez KPost Company, Dallas



"The biggest challenge is ensuring that while production is being pushed, safety continues to be the primary focus. Ultimately, safety must be embraced as a continuous culture that remains a priority in all aspects of the work we do."

-Langston Cooper Davco Roofing & Sheet Metal Inc., Charlotte, N.C.



A DAD JOKE

What was the most groundbreaking construction invention?



The jackhammer





METAL OF HONOR AWARDS: 3 WEBSITE: www.sharkskinroof.com PHONE: 877-742-7507

Project: St. Peters Cathedral, Erie, PA

Scope of works: Slate Re-Roof, Standing Seam Copper Roof, and Gutters Replacement

Contractor: A.W. Farrell & Son, Inc. Erie, Pennsylvania

Copper Roof and Gutters: Armor Fab, LLC, Erie, Pennsylvania. 30-SQ of Copper Roofing. 750' feet of gutter

Project Manager: Randy Pace **Assistant Project Manager:**

Tony Lazarony

Slate Foremen: Sean Irwin and Gary Fish, and Journeyman Paul Gibbs from Roofer's Local 210. 230-SQ of Slate

Copper Work Foremen: Kody Pace and Chris Hogue from Sheetmetal Local 12

In 1873 ground was broken to begin the building of the St. Peters Cathedral in Erie, Pennsylvania. A slate roof was installed on the steep pitches, along with a standing seam copper roof at lower pitches, and copper gutters set-into the stone perimeter of the roof.

Prior to the re-roof \$2 million in "gold leaf" was applied to the walls and ceilings inside the church. This meant the winter prior to the new roof installation the existing roof had to be protected. The re-roof began in the Spring of 2023, with the 150-year-old slate being removed first, as Sharkskin Ultra SA^{*} was installed to protect the Cathedral.

Sharkskin Ultra SA* was chosen for the re-roof of the St. Peters Cathedral, in Erie, Pennsylvania, for its long term 50-year warranty and High-Temp rating under the new Greenstone Slate roof and Standing Seam Copper Roof. In addition, the Cathedral is approximately a little more than a mile from Lake Erie. Lake Erie is known for its strong "lake breeze" winds. The men from A.W. Farrell & Son, Inc., have experience with Sharkskin Ultra SA* and know once installed properly, it's not going to blow off.

In addition, the walking surface of the





Sharkskin Ultra SA[®] provided the men setting the roof scaffolding, and roof jacks with a safe walking surface. The scaffolding set directly on top of the Sharkskin Ultra SA[®] was leak-free during the roof installation. Sharkskin Ultra SA provided leak-free protection on the entire project from start to finish, as well as providing 12-Month UV Protection.

With the top of the Cathedral steeple at 300' and the distance to the top of the gutters at 80'-100', it was important that the project ran smoothly. Every pallet of slate had to be "ring tested," which means a hammer is used to test the slate, to make sure there are no cracks. The slate will ping in just the right way to confirm, soundness. In addition, slate was pulled from three separate pallets onto one, to maintain even color dispersion across the roof



plane, to eliminate blotches of lighter and darker slates.

The standing seam copper roof panels and copper gutters were fabricated locally by Armor Fab, LLC, owned by Robert Pace. The copper gutters were made in 20' lengths and craned up to the roof. The onsite crane was invaluable for the installation of both the Copper Sheetmetal work and slate roof installation.

Another beautiful roof installation from the men at A.W. Farrell & Son, Inc.

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