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The cost of a trade

As apprenticeships and community colleges create waitlists, private trade schools offer an alternative

by Ambika Puniani Reid

The trades are hot. The convergence of government support, fears of AI and desire for a stable way to earn a living have resulted in more people seeking jobs in the trades.

And for the most part, that's great news. For construction and roofing employers in particular, a steady flow of eager workers is what they have been needing for decades.

But there are signs these potential employees may not be able to follow a path to the trades as easily as their predecessors. In "They chose careers in the trades and still wound up with debt" published in *The Wall Street Journal*, reporters Te-Ping Chen and Lauren Weber explain how the surge in interest in the trades can backfire.

The reporters write: "One recent survey by the tool company DeWalt found that 52% of students had been waitlisted by high-school vocational programs. Enrollment at vocational-focused community colleges has soared nearly 20% since 2020, data from the National Student Clearinghouse show."

This demand has created an opening for private trade schools to charge tuition amounts not often seen in the more traditional union apprenticeship or community college programs.

"Nationwide, trade and technical school revenue hit $5.1 billion in the last quarter of 2025, up 41% from four years before that, according to federal data," Chen and Weber explain.

And that revenue means potential tradespeople are financing their education not unlike their college-bound counterparts.

Universal Technical Institute, a nationwide trade school, charges $37,000 per year on average but as much as $66,000 per year for specialized automotive-technology programs. The average household income for students attending for-profit vocational schools was around $62,000, according to *The Wall Street Journal*.

The tuition, though mostly covered by federal loan programs, still can be a significant barrier unless a prospective employer offers tuition reimbursement.

For many students, though, the debt is worth it. Javier Cigarroa, a recent UTI graduate, told *The Wall Street Journal*: "If I could do it again, I would."

Ambika

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

CLOSE-UP

When the 2025 Eaton Fire in Los Angeles County came down the hill behind Sharon Barlow's single-story ranch, it engulfed the house next door. Embers blew onto Barlow's stone-coated steel roof and scorched the granules, but the flames didn't spread.

J.N. Davis Roofing, Covina, Calif., recently replaced Barlow's roof with new Houston-based Westlake Royal Building Products' United Steel™ Pine-Crest shake panels. When the old United Steel panels were removed, the plywood underneath had not sustained fire damage and remained intact.

The stone-coated roofing materials in combination with stucco walls, stucco eaves and other fire-resistant exterior materials and details likely also helped stop the flames from spreading to neighboring homes.

To read more about fire-hardening homes, see "A hidden protector," page 46.

To submit a photo to Close-up, email professionalroofing@professionalroofing.net. Submittals should include a photo and a description of the photo.

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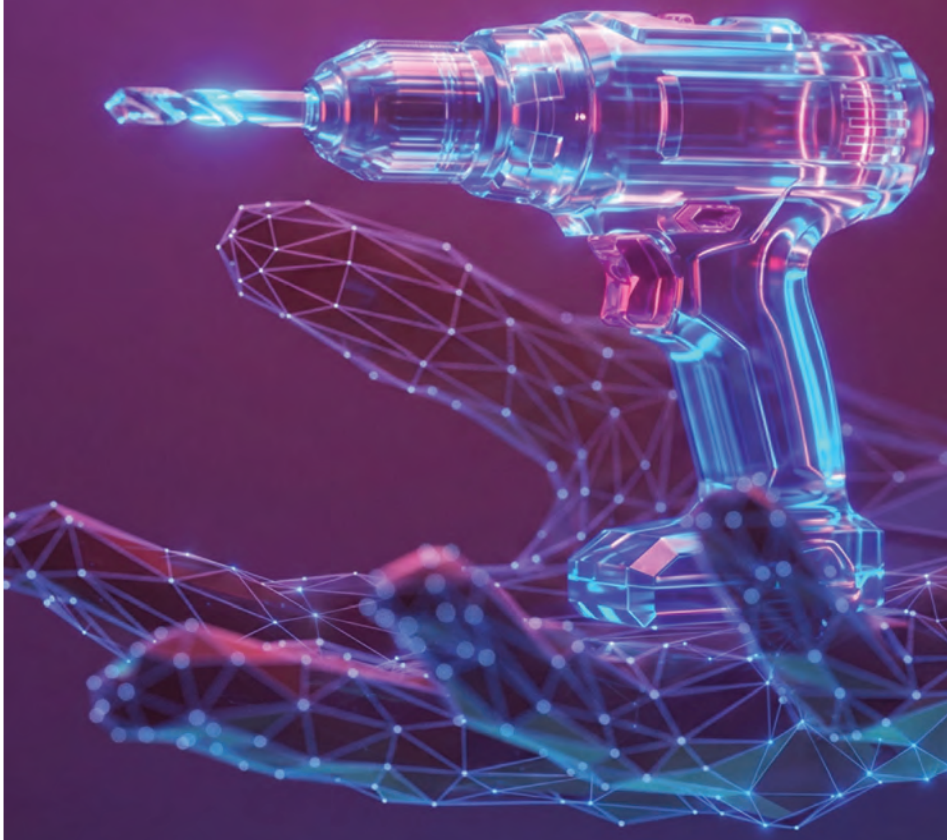

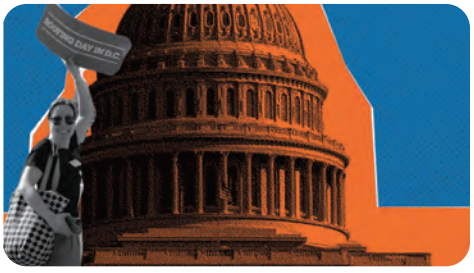

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140 YEARS NRCA

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Home shown in Colonial Slate

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Materials sized for faster installation

Mulehide has expanded its self-adhering EPDM and polyisocyanurate insulation lineups with new sizes to streamline installation.

White-on-Black SA EPDM Membrane Rolls sized 5- by 40-feet are narrower, shorter and lighter than 10-foot-wide rolls. Designed for portability, they weigh about 80 pounds and fit in a standard pickup truck. They reportedly can be installed up to 80% faster compared with traditional bonding adhesive, and the reflective white surface is said to lower rooftop interior temperatures.

Flat Poly ISO 1 Insulation Panels are sized 4- by 12-feet and are 4 feet longer than traditional polyisocyanurate boards, giving contractors a simpler, faster and more efficient option for large commercial roofing projects as fewer panels are required. On certain mechanically attached systems, the fastener pattern also is reduced, requiring fewer seams to complete, which can create potential for a significant boost in crew productivity while lowering labor and material costs.

The 20-psi panels are available in thicknesses ranging from 1 ½ inches to 3 ½ inches to achieve desired R-values.
mulehide.com

Shingles now available in black

IKO has expanded its IKO Dynasty® collection of colors to include Blackstone, available throughout the U.S. and Canada.

Blackstone is a rich black shingle, pairing naturally with most exterior palettes. It offers striking contrast against whites and grays, blends with deep charcoals and navy siding and adds depth to warm tones like taupe and cedar.
iko.com

Job-site poster simplifies compliance

J.J. Keller® & Associates Inc. has introduced a job-site poster to simplify compliance and improve organization on construction sites.

The Jobsite Poly Poster includes required safety signs, permits, site-specific documents, labor law postings and compliance notices into a single centralized compliance display printed on polyurethane to withstand harsh outdoor conditions and ensure long-term visibility. Each poster displays clear headings and color-coded sections with space for project contacts, safety manager information and emergency numbers. Company logos may also be added to personalize posters.

The all-in-one poster allows crew members to remain inspection-ready, reduces risk of fines, improves overall site communication and can reflect a commitment to safety and organization.
jjkeller.com/jobsiteposter

Underlayment provides fire protection

Westlake Royal Building Products™ has launched FYRATEK,™ a fire- and ember-resistant roof underlayment designed for use with concrete and clay tile roof systems in wildfire-prone regions.

FYRATEK provides an extra layer of fire defense and features a noncombustible aluminum surface engineered to reflect heat and help prevent embers from igniting wood roof decks and building structures. It reportedly has a Class A fire rating when used with tile roof coverings and is listed for use in California's Wildland Urban Interface regions.

FYRATEK lays flat, grips the deck and has a grid-patterned scrim for enhanced foot traction. Its blue surface is designed to reduce sun glare for installers. The product is available in 54- by 100-foot rolls with a 30-year warranty.
westlakeroyalbuildingproducts.com

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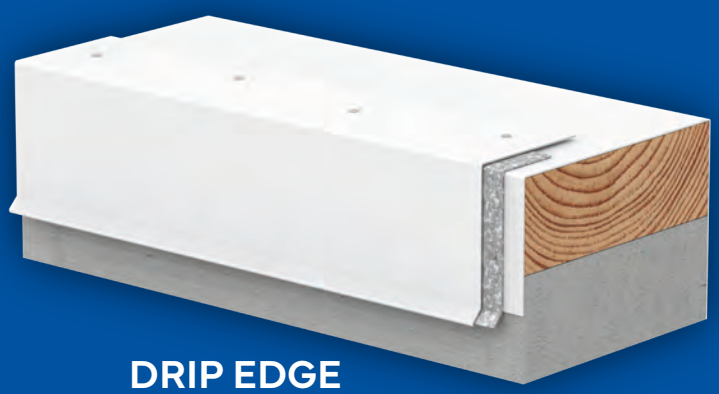

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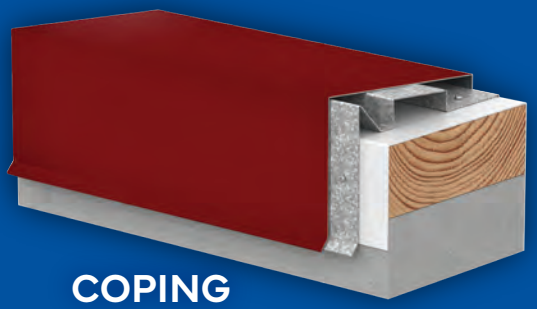

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Skylights designed for high heat

VELUX has launched Residential Polycarbonate Dome Skylights for select southern U.S. markets. The new line provides a solution for areas with severe weather or consistent high heat, including Alabama, Arizona, California, Florida, Louisianna, Mississippi, New Mexico and Texas.

The skylights are built to protect against 2-inch hail and reportedly have a Class A fire rating. They have been tested to endure heavy wind gusts, rain and wind-borne debris associated with hurricanes. The material reportedly remains up to 10 times stronger than acrylic.

VELUX uses polycarbonate with a coextruded ultraviolet guard cap layer to prevent discoloration and maintain impact strength. The dome is paired with a long-lasting, low-maintenance Kynar®-coated aluminum frame and VELUX's InstantGlaze™ patented sealant system, delivering a watertight installation.

The skylights are available in a range of standard sizes in curb-mounted and pan-flashed configurations. The line is available in two color options: Bronze Tint, ideal for southeastern Gulf states from Florida to Texas, which offers improved light diffusion and heat control; and White Tint, designed for western and southwestern climates from Texas to California, which delivers 100% light diffusion.

velux.com

Composite toe for rough environments

Georgia-Boot has introduced a new LTX Logger Waterproof Composite Toe BOA® Logger boot, the lightest and most advanced logger in the Georgia-Boot Logger lineup. Designed for demanding job sites, the 9-inch work boot delivers durability, comfort and protection.

Crafted with full-grain leather and high-abrasion textile upper, the boot features Goodyear welt construction for long-lasting wear. The BOA Fit System provides a fast, micro-adjustable precision fit, ensuring support in tough conditions.

The Georgia AMP LT insole has memory foam for cushioning, an integrated Stretch Gusset Technology that allows for easy movement and flexibility and a five-ribbed steel shank that offers twice the width and support of a traditional shank.

The boot reportedly is ASTM compliant, 25% lighter than standard logger boots, and includes safety features such as an ergonomically designed Nano Composite Toe and waterproof system.

georgiaboot.com

Membranes built for sustainability

The Garland Company Inc.® has announced the newest addition to its ketone ethylene ester membrane system: KEE-Stone® Legacy.

KEE-Stone Legacy is a sustainability-designed, fleece-backed thermoplastic membrane that features ELVALOY™ KEE above the scrim for durability. Below the scrim, the membrane employs nonphthalate, bio-based plasticizers to improve flexibility while avoiding harmful phthalates. The formula actively diverts plastic from landfills by incorporating environmentally conscious raw materials. Mass balance technology increases the use of renewable resources while ensuring high-quality performance. The membrane reportedly meets ASTM D4434, Type III standards.

garlandco.com

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A runaway American Dream

The U.S. must find a workable solution to immigration

by McKay Daniels

During the past few years, immigration has roared back into the national conversation with the urgency of "The Rising." Illegal border crossings skyrocketed; court backlogs grew; and the rhetoric heated up.

Those in the federal government have long sought solutions, yet somehow, always ended up where they started: "Backstreets" negotiations, familiar talking points, noise and some action but no comprehensive answer.

For the roofing industry, this has become a "Long Walk Home." Contractors are still "Working on the Highway," still trying to run businesses, hire crews and meet demand while federal immigration policy remains stuck like a "10th Avenue Freeze Out."

Policy has changed this past year, but it's still only addressing one side of a two-sided album. In the current enforcement-only dynamic, we are risking our economic growth by not meeting the workforce needs of the businesses necessary to Build America Great Again. It's a mechanism that doesn't reflect economic reality, doesn't serve workers or employers

particularly well, and leaves entire industries stuck "Dancing in the Dark."

This isn't about left or right. It's about reality. Roofing contractors are "Tougher than the Rest," proud to employ American workers "Born in the USA," but we're still short on them. We recruit aggressively, invest in training, and support career and technical education. Many companies have built strong internal pipelines, apprenticeship programs and advancement tracks that offer not only jobs but also real, American Dream-fulfilling careers.

But even with these efforts and cultural shifts, the labor gap persists. Demographics are working against us. The workforce is aging. Americans are having fewer kids. And though more young people are entering the trades than ever, we're still at a deficit, and that deficit will likely remain until or unless the economy dramatically slows.

NRCA recently helped lead the eighth annual Roofing Day in D.C. to advocate and educate policymakers regarding the needs of our industry, and immigration was a sizable topic. The association has endorsed the Dignity Act and Essential Workers for Economic Advancement Act, which would allow necessary workers to enter legally through a market-driven system that addresses the needs of the economy and protects American workers.

This legislation is vital as the number of native-born workers declines and the demand for roofing work continues to grow as a result of aging infrastructure, energy upgrades, population shifts, and increased construction of manufacturing facilities and data centers. If Washington, D.C., wants to create a U.S. manufacturing renaissance, it will take workers to do it. Until Tesla's Optimus is able to install a shingle or weld a flashing, the roofing industry and the nation need a solution.

The math is simple even if the politics aren't. Contractors could do more work if they had more people to do it. That's not a slogan—it's the lived experience from coast to coast whether you're in "The Streets of Philadelphia" or "My Hometown."

> For decades, policymakers made it virtually impossible to enter the U.S. the right way and far too easy to enter the wrong way

The Wall Street Journal recently published a story about a booming region of Texas whose economy, especially in construction, is slowing to a crawl because workers are not available or too afraid to work. How long can that trend last without the effects spreading wider and deeper into the area and economy? And when that spread starts, economic momentum says it can be hard to turn around. We could be far down "The River" before realizing "[We're] On Fire."

At the "Hungry Heart" of the immigration debate is a disconnect between labor demand and legal supply. Our economy creates jobs that go unfilled, yet our immigration system offers too few workable, legal, secure pathways for entry.

For decades, policymakers made it virtually impossible to enter the U.S. the right way and far too easy to enter the wrong way. "Born to Run" should not be the criteria for entering the U.S., but for too long, it has been. And it's been ugly and messy.

When lawful programs are temporary or bureaucratically unworkable, demand is pushed into a shadow economy. That's how we ended up with multilayered subcontracting, limited transparency and crews operating several steps removed from a building owner or contractor perhaps without insurance, safety training or any recourses "If [They] Should Fall Behind."

That's not good for workers, employers, the industry or the nation. And it is certainly not good for safety.

Roofing can be dangerous work. Safety depends on training, supervision, communication and accountability. During the past few decades, the industry has made tremendous progress by lowering injury rates, professionalizing practices and reinforcing a culture that values every person going home at the end of the day. But fall fatalities have been trending up in recent years. And I've wondered whether that is the result of the growing use of subcontract labor. When workers exist in legal limbo, safety becomes more difficult to manage and legally precarious to train for. When people are afraid to speak up, change jobs or fully engage with formal systems, everyone operates closer to "Darkness on the Edge of Town." That's a policy failure as much as a moral one.

An effective immigration system that brings workers out of the "Secret Garden" and into the open—lawfully and transparently—should strengthen safety, compliance and professionalism across not only this industry but the nation.

Another challenge contractors face

is instability. Enforcement priorities shift and change geographically and politically. Programs expire, get renewed or canceled at the last minute. Court decisions rewrite rules midstream. Enforcement explodes in one area and people are "Racing in the Streets" only to have it stop again a short time later while the status quo largely resumes. Employers are left guessing, dancing to the rhythm of policy whiplash and trying to make long-term decisions while "Waiting on a Sunny Day" that never arrives.

An effective solution would mean employers would know the rules, follow them and trust they won't change overnight. Workers would know where they stand. Instead, we have built a framework where uncertainty is the only constant and where "No Easy Money" exists for anyone trying to comply in good faith. When work permits, visas or processes that have been valid for years are no longer legal or available, how can contractors plan or reasonably navigate that dynamic? They're stuck in the "Badlands."

The roofing industry doesn't ask for special treatment. It asks for realism. Border security and the rule of law matter. So does acknowledging that industries with chronic labor shortages need legal ways to hire when domestic labor supply falls short.

Those ideas are not mutually exclusive. In fact, they reinforce one another. Enforcement without legal immigration pathways fuels chaos. Immigration pathways without enforcement undermine trust and the rule of law. As a nation, we have experienced both in recent years and our economic amplifiers can only "play to 11" for so long before our nation or economy blows a fuse.

What's missing isn't principle—it's political will. The president has done an amazing job securing the border. Illegal crossings have dropped to essentially zero. That's a tremendous feat and should be recognized for the achievement that it is. Additionally, after roughly 18 months of rigorous internal enforcement, the worst of the worst have been identified, pursued and arrested. Unfortunately, far more often, we are not deporting the worst of the worst; we are deporting the best of the best workers. Roofing workers who have worked in this country for 10, 15 or 20 years without running afoul of law enforcement or other issues are leaving their jobs without replacements to fill their roles.

For decades, the federal government has talked about fixing immigration while punting the hard decisions down the road. Meanwhile, contractors adapt, innovate and keep building. But adaptation has limits. At some point, "No Surrender" stops being admirable and starts being unsustainable.

We are not asking for perfection. We are asking for progress and a system that brings workers out of the shadows and into the daylight.

As summer hits full speed and the 2026 election season gets underway, NRCA will stand with policymakers and support any Boss who can lead this nation to those "Glory Days" and bring a lasting solution.

Until then, contractors will keep doing what they always have: hit the "Thunder Road" and serve their communities, hoping someday the people charged with fixing this system listen to the music and decide it is time to start building a system that actually works.

This topic doesn't need another speech or soundtrack. It needs a full, complete, lasting solution. Right now, we're only playing the B-side of the album.

MCKAY DANIELS is NRCA's CEO
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Roofing Alliance celebrates 30 years

The Roofing Alliance is celebrating its 30th anniversary this year, marking three decades of advancing the roofing industry through education, research, philanthropy and workforce development.

Serving as the foundation for the roofing industry, the Roofing Alliance brings together forward-thinking leaders committed to shaping the future of the industry. Through strategic investments and collaborative initiatives, the organization has helped address critical challenges, elevate professionalism and create lasting opportunities across the roofing sector.

Since its founding in 1996, the Roofing Alliance has funded millions of dollars in impactful programs, including university partnerships, student scholarships, groundbreaking research and national workforce development initiatives designed to strengthen and sustain the industry.

As part of its 30th anniversary milestone, the Roofing Alliance will highlight members, partners and programs that have defined its legacy.

Number of women in construction continues to climb

According to data from the Bureau of Labor Statistics, the number of women in construction has climbed for 10 consecutive years, growing from 939,000 in 2016 to 1.36 million in 2025—a 45% increase, according to *Construction Executive*. In 2025 alone, women made up 11.3% of the construction workforce as 22,000 women entered the industry.

Management, professional and related occupations employ the largest segment of women at 506,000, which is 37% of the female construction workforce. Thirty-six percent of women (498,000) in the construction industry work in sales and office occupations. However, the presence of women in field and technical roles has increased. Women in service operations rose 47%, and women in production, transportation and material moving rose 27%.

When *Construction Executive* interviewed 12 women currently working and leading the construction industry, 10 of the 12 women said they have experienced discrimination on the job, and 9 out of 12 said there still is a gender pay gap in the industry.

Construction Executive shared the following insights from those interviews regarding how to attract and retain women in construction trades:

- *Early exposure:* Reach out to female middle and high school students through trade programs, apprenticeships and site visits.
- *Visible role models:* Ensure women are being represented at the leadership level so girls and women considering the industry can see what is possible. Providing mentors and sponsors can also be crucial.

- *Flexible work policies:* When possible, expand hybrid and remote options to help provide balance for workers as they manage personal responsibilities.
- *Cultural modernization:* Companies that ensure proper personal protective equipment sizing, job-site facilities and workplace norms show they genuinely want women to be included.

New perspectives on work stress

The American Psychological Association's Stress in America survey reports nearly seven in 10 employees say work is a major source of stress, and burnout has reached a six-year high despite many people taking action to improve mental well-being, according to New York City-based *Fast Company*, a business magazine focusing on technology, business and the future of work and design.

Chronic stress is the main culprit because the "body's alarm system never shuts off" and remains in survival mode. Research from Harvard University, Cambridge, Mass., shows this can diminish focus, creativity and overall health over time. The research recommends these strategies to effectively reduce stress:

- **See stress differently:** Start reducing work stress by asking yourself whether the source of the stress is important and whether you have control over it. People often skip those questions and jump straight to worry, which often leads to assuming the worst or taking responsibility for things that are not their responsibility.
- **Sort stress into categories:** Not all work stress is the same. Schedule-induced stress comes from having too much to do and not enough time; suspense stress comes from waiting for what is uncertain or looming; social stress comes from tension in relationship and team dynamics; sudden stress is unannounced—such as an urgent request—and demands a response; system stress comes from structures, processes and culture, such as unclear expectations. Although sorting the stress does not immediately resolve the issue, it can help clarify the problem.
- **Solve stress without spinning:** Stress often causes people to spin out as they attempt to solve everything at once while effectively solving nothing. Instead, identify the stressor and implement one small doable action to take to address it.

EnergyWise update

New standards and codes are reflected in NRCA's online calculator

by Kurt Fester

NRCA has updated its EnergyWise Roof Calculator, a free online calculator that determines roof assemblies' minimum thermal insulation requirements and energy usage costs for heating and cooling for specific low-slope roof assembly designs. The update incorporates the latest revisions to model energy codes and energy-efficiency standards.

To date, nearly 6,300 registered users have input more than 13,000 projects. With this new update, these numbers should increase significantly.

How it works

EnergyWise enables users to input a building's size and location, select a standard or code, and complete specific climate and building information for a project. Heating and cooling information, such as the type of heating appliance, interior design temperature and relative humidity, are collected to determine annual energy costs and dew point for vapor retarder placement.

Details about the roof are added layer by layer. Users can select materials like rigid board insulation and membrane, each with a specific set of properties that affect a building's energy efficiency. R-values are provided for common material types and thicknesses.

NRCA recommends designers use a design R-value of 5.0 per inch thickness for polyisocyanurate insulation in all climates for more accurate performance evaluations. There also is the option to use the LTTR value of 5.6 per inch or manually enter another value. Keep in mind NRCA does not consider LTTR use to be appropriate for roof system design purposes when actual in-service R-values can be important aspects of roof system and whole building performance.

For background information about NRCA's recommendations for polyisocyanurate, visit professionalroofing.net for a link to NRCA's Industry Issue Update, "New polyisocyanurate R-values," January 2016.

Results generated by EnergyWise can be viewed from within the online application, and users can generate detailed reports of the specific buildings and roof areas analyzed. Results also are saved in a user's personal account for future reference.

What's new

With this recent update, EnergyWise now includes minimum R-value requirements for roof assemblies from the following codes and standards:

- International Energy Conservation Code®: 2000, 2003, 2006, 2009, 2012, 2015, 2018, 2021 and 2024 editions
- ASHRAE 90.1: 2004, 2007, 2010, 2013, 2016, 2019 and 2022 editions
- International Green Construction Code®: 2012 and 2015 editions
- ASHRAE Standard 189.1, "Standard for the Design of High-Performance Green Buildings": 2009 and 2011 editions

In addition, the following updates to the program allow for new and improved energy estimates:

- 2024 IECC and 2022 ASHRAE 90.1 climate zones
- Heating degree days and cooling degree days for all climate regions
- Design heating dry bulb temperature
- Fuel cost estimates

Requirements and calculated estimates provided in the report are based on information found in the referenced codes and standards. R-value requirements for a project are determined based on the climate zone of the county in which a building resides; climate zones are based on heating degree days and cooling degree days.

Heating degree days and cooling degree days measure the difference between outside temperatures and design inside temperatures on a daily basis throughout the year. The higher the numbers, the more HVAC equipment has to work to condition an inside space.

As new weather stations are built, more data is collected and heating and cooling requirements change over time, climate zones are updated.

ASHRAE and IECC had unique changes to their climate zone lists in their latest versions. For example, heating degree days, cooling degree days and design heating dry bulb temperatures for more than 2,700 stations in the U.S. were added or updated so the estimated energy costs and dew point locations for vapor retarder placement can be more accurately determined.

EnergyWise is available free of charge at energywise.nrca.net.

Default fuel costs have also been updated to reflect the latest information available from the U.S. Energy Information Administration, which is part of the Department of Energy.

Estimates only

EnergyWise results are estimates based on recognized engineering principles using the parameters input by users. Actual energy costs and savings are based on multiple factors, including specific energy costs during an analysis period, actual building operation, and interior and exterior temperature conditions during the analysis period.

Also, EnergyWise only evaluates a building's roof assembly and does not consider other building envelope components, such as walls, windows and doors, which can be large overall contributors to heating and cooling losses and overall building energy costs. For these reasons, NRCA recommends EnergyWise's results only be used for comparison purposes. Specific representation or guarantees of actual energy cost savings should not be made.

KURT FESTER is an NRCA director of technical services.

AI causes issues in work relationships

The *Harvard Business Review* recently published an article, "How AI Damages Work Relationships—And Where It Can Actually Help," by Amy Gallo, where she shares the following problems caused by including AI in work relationships:

- It creates "workslop," not efficiency. When not used thoughtfully, AI can make your work more difficult. If AI helped your co-worker write a report more quickly, you now likely need to check sources and decide whether the information is valuable. Colleagues receiving AI workslop would then need to take extra steps to decode and correctly interpret information and submitted work.
- It damages trust. The workslop research revealed about half of survey respondents viewed co-workers who sent workslop as less creative, less capable and less reliable than previously believed. Forty-two percent viewed them as less trustworthy, and 37% viewed them as less intelligent.
- It eliminates necessary friction. Many employees use AI to help navigate conflict and respond to difficult interpersonal situations. Gallo says: "I'm a big believer that we need tension and messiness to do good work. The friction, the back-and-forth, even the occasional miscommunication—these aren't bugs in the system, they're features. They're how we collaborate, build understanding, and create something better together."
- It prevents us from building real relationships. When employees turn to AI instead of people, relationships weaken. "When things go completely smoothly with someone, it may feel good, but we don't necessarily grow or bond," Gallo says. "It's in awkward moments, expressions of vulnerability, and the clearing up of miscommunications that we get to know others, and ourselves, better."
- It may be training us to be less civil. When collaborating with AI, you don't have to worry about its feelings. And many generative AI programs tell you what you want to hear. This can affect relationships with co-workers as you may have less patience when there is a disagreement or be less understanding if there is a result you do not like.

However, Gallo says when used intentionally, AI can be helpful in the workplace; she provides the following recommendations:

- Be transparent when you have used AI. Being upfront about your use of AI helps to reduce the cognitive load for your co-workers and helps you keep their trust. Note that some people may use AI as an accommodation if they are dyslexic, for example.
- Reserve AI for transactional relationships. If an interaction is purely transactional and you are not building a relationship with someone, AI can be useful. For example, you might use AI to write a firm email to a general contractor who is not delivering work as promised. But do not use it in relationships when you are trying to build trust and connection.
- Use AI to strengthen human relationships—not replace them. You can ask AI for ideas about how to build rapport with a new co-worker or conversation starters for a one-on-one meeting. This way, you are using it to help make an initial connection but not to build a trusting relationship.
- Recognize you have different norms for people versus AI. Take a moment to identify and distinguish between how you want to handle your in-person conversations and how you want to handle your interactions with AI.

Help define quality workmanship

NRCA and the Insurance Institute for Business & Home Safety have partnered to collect insights from professional roofing contractors about what defines quality workmanship in residential roofing.

In addition, the survey asks about common causes of roof system failure, customer priorities and real-world challenges in the field.

By capturing these perspectives, the goal is to better understand the gaps between building codes, best practices and homeowner expectations. The findings will help improve product recommendations, installation standards and customer education, ultimately leading to stronger, more durable roof systems and better-informed decision-making across the U.S.

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Doing it their way

In the absence of federal guidance, states are reshaping workplace safety

by Cheryl Ambrose, CHST, OHST

As another season of elevated temperatures is upon the roofing industry, workplace heat illness and injury prevention in the U.S. is entering a transitional phase. The Occupational Safety and Health Administration has not yet finalized a comprehensive heat standard, a process that began in October 2021, but OSHA has reaffirmed its enforcement priority for heat by issuing a revised National Emphasis Program for outdoor and indoor heat-related hazards, which became effective April 10.

The revised directive continues targeted inspections, outreach and citation guidance across high-risk industries, underscoring the absence of a final rule does not mean there is no regulatory pressure. In practical terms, employers are operating in an environment where federal enforcement continues while a more detailed, durable regulatory framework is increasingly being built at the state level.

That state-level development is now the more consequential story. Some states, such as California, Maryland,

Minnesota, Nevada, Oregon and Washington already have standards in place. And Colorado, New Mexico and Virginia illustrate three distinct models of heat governance in their proposed standards: incremental legislative structuring, aggressive rulemaking and delegated future regulation.

Considered together, these approaches reveal workplace heat policy is no longer developing along a single national track. Instead, it is emerging through a patchwork of state experiments that differ in timing, legal form and regulatory aim, all targeting the void left by the absence of a federal standard. This fragmentation is rapidly becoming the central challenge of heat-risk management.

Colorado

Colorado's 2026 legislation demonstrates a comparatively phased approach. House Bill HB26-1272, "Extreme Temperatures Worker Protections," directs the Colorado Department of Labor and Employment to begin collecting data regarding temperature-related injuries, illnesses and emergencies by Jan. 1, 2027; to develop a model temperature-related injury and illness prevention plan by Jan. 1, 2028; and to require covered employers to develop and submit their own plans by Sept. 1, 2028. The law also contemplates training standards related to temperature safety.

This is a significant development, and its structure is notable. Rather than imposing an immediate, highly prescriptive heat code, Colorado has chosen to build an administrative framework first—one that combines surveillance, model planning and employer preparation before broader implementation. The result is a regulatory design that favors institutional capacity-building and evidentiary support while signaling heat exposure has become a matter of formal labor regulation rather than discretionary safety practice. If the bill is passed in its current form, it could take effect Aug. 12.

New Mexico

New Mexico, by contrast, is pursuing a far more immediate and prescriptive route. The New Mexico Environment Department, through its Occupational Health and Safety Bureau, has advanced a revised version of its proposed Heat Illness and Injury Prevention rule for indoor and outdoor workplaces.

The proposal reflects full operational standards. Employers would be required to:

- Maintain a written heat-illness prevention plan
- Conduct heat-exposure assessments when the heat index reaches 80 F
- Implement controls such as acclimatization measures, fluids, rest breaks, cooling areas, emergency medical procedures, training, record keeping and reporting obligations

Although the federal rulemaking process remains unresolved, New Mexico's proposal demonstrates a willingness to move ahead with state-specific obligations that translate recognized heat hazards into concrete employer responsibilities.

Virginia

Virginia's approach occupies middle ground, but it is no less consequential. "Protection of employees; standards for heat illness prevention; Safety and Health Codes Board" (HB 1092/SB 288) was signed by the governor April 13 and directs the Safety and Health Codes Board to adopt regulations designed to protect employees from heat illness in indoor and outdoor work by May 1, 2028. The legislation requires future regulations to address core prevention elements, including water, rest periods, acclimatization, training, emergency response procedures and, when practicable, access to shade or climate-controlled environments but leaves the precise thresholds and technical details to subsequent rulemaking.

Virginia has chosen not to codify a comprehensive heat standard immediately, but it also has not deferred the issue indefinitely. Instead, it has converted heat protection into a statutory mandate for future regulation backed by a legislative deadline and an advisory process. That choice is especially important because this legislation revives the adoption of a heat-illness rule that the commonwealth considered but did not complete in 2021.

What's ahead

These three jurisdictions demonstrate the future of heat regulation may be shaped less by a single federal rule than by cumulative state action. The revised federal National Emphasis Program remains important because it preserves inspection pressure and keeps heat hazards within OSHA's active enforcement framework. But an emphasis program, by design, is not the same as a binding federal standard. It directs agency attention and structures inspections, but it does not create the kind of uniform, detailed compliance code many employers have anticipated.

States, by contrast, are filling that space in different ways. Some are building reporting and planning systems; others are drafting standards with

defined triggers and controls; and others are legislating toward enforceable rules in the future. The practical consequence is a compliance environment in which employers operating across multiple jurisdictions cannot rely on a single national baseline to organize heat-safety obligations.

For that reason, heat-illness prevention should be understood as a developing field of governance rather than a seasonal compliance issue. The legal and operational questions are expanding: what temperature triggers protections, what controls must be provided, how acclimatization should be documented and when a state should move from guidance to enforceable obligation. Those questions are increasingly being addressed in legislatures, state agencies and administrative hearings before they are settled by federal regulation.

NRCA remains engaged in heat rulemaking developments and continues to advocate for an effective federal standard that is reasonable, workable and brings consistency to the heat regulatory landscape.

CHERYL AMBROSE, CHST, OHST, is a safety consultant from Reedville, Va.

Small construction companies report higher injury rates

A recent bulletin from CPWR-The Center for Construction Research and Training shows 42.4% of construction industry deaths in 2022 happened at companies with 10 or fewer employees, according to *Safety + Health* magazine. The bulletin was based on data from the Bureau of Labor statistics and the U.S. Census Bureau.

Additionally, workers at construction companies with 11 to 19 employees accounted for about 8.1% of deaths in 2022.

Other findings from the bulletin include:

- Fatal injuries at companies with 10 or fewer employees jumped to 27.5% from 2011 to 2022. During the same period, all construction deaths increased nearly 40%.
- The nonfatal injury rate for construction employers with 10 or fewer employees was 0.8 per 100 full-time workers, which is double the rate of nonfatal injuries for companies with more than 1,000 employees.
- In 2023, 2.7 million employees were at construction companies with fewer than 20 workers, accounting for 91% of the employees in the industry.
- In 2023, about 2.9 million workers were self-employed or independent contractors, which was up from 2.4 million in 2014.

CPWR said workers at small-sized construction companies often face higher injury rates because of a lack of resources, training programs and proper equipment.

To protect workers from job hazards, visit NRCA's health and safety resource page at nrca.net/safety.

IBHS expands Wildfire Prepared Designation program

The Insurance Institute for Business & Home Safety has expanded its Wildfire Prepared designation program to 10 additional states, bringing the total to 14. The expansion is in response to increasing demand for proven, research-based wildfire mitigation actions that help homeowners and builders in high-risk areas better protect their homes and neighborhoods from wildfires.

The program was previously available in California, Nevada, New Mexico and Oregon. The program is now also available in Arizona, Colorado, Florida, Idaho, Montana, Oklahoma, Texas, Utah, Washington and Wyoming.

Established in 2022, Wildfire Prepared is built on the latest IBHS research examining how homes ignite during wildfire events and the mitigation measures that most effectively reduce spread from home to home.

Wildfire Prepared Home outlines essential actions to reduce risk from wind-driven embers, and Wildfire Prepared Home Plus outlines an enhanced level of protection against radiant heat and direct flame contact. Homeowners can earn the designation by completing a set of science-based steps verified by a third party.

The program also includes Wildfire Prepared Neighborhood, which recognizes builders and communities working together to reduce home-to-home wildfire spread.

Learn more at wildfireprepared.org.

Roofing company fined after fatal fall

The Department of Labor cited Pasat Roofing and Solar Energy, Weston, Fla., for willfully exposing employees to safety hazards after a worker suffered fatal injuries and another worker was seriously injured, according to the Occupational Safety and Health Administration. The company is not an NRCA member.

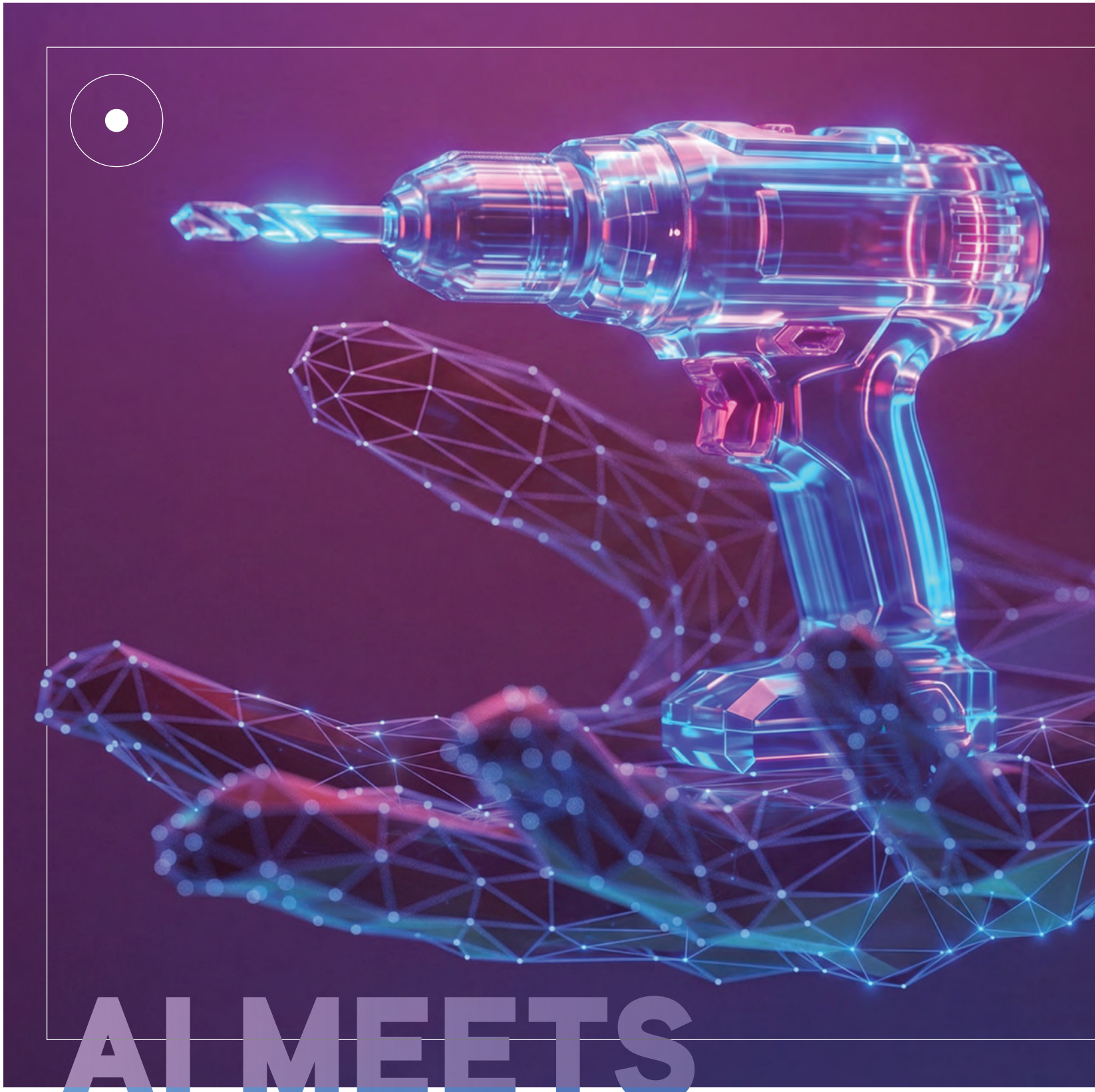
On Sept. 24, 2025, OSHA investigators found two workers from Max Home Services LLC, Weston, Fla., operating as Pasat Roofing and Solar Energy, installing tarp when they slipped from the roof of a two-story home into an empty pool. One employee suffered fatal injuries and another sustained serious injury.

OSHA cited Pasat Roofing and Solar Energy for willfully allowing both employees to work without personal fall protection at heights exceeding 20 feet. The company also reportedly did not adequately train employees to recognize fall hazards and did not implement a hazard communication program for workers using hazardous chemicals.

OSHA cited Pasat Roofing and Solar Energy with one willful and two serious violations and proposed $172,324 in penalties.

Pasat Roofing and Solar Energy has contested the findings before the independent OSHA Review Commission. Penalties and citations may be adjusted during the case process.

Learn how to reduce roofing-related injuries and deaths with NRCA's safety classes, Power Hours and publications at nrca.net/education.



AI MEETS THE JOB SITE

FROM TAKEOFFS TO TIE-OFFS, AI CAN BE USED IN A VARIETY OF WAYS

by Adrianne Anglin, CSP

Artificial intelligence has shifted from a general idea to a practical tool shaping industries worldwide, and roofing is no exception. Roofing professionals increasingly see AI not as a futuristic novelty but as an emerging force influencing estimating, inspections, workforce management, safety and risk mitigation. As the industry faces growing pressures from labor shortages to insurance volatility and higher demands for documentation, AI is taking on a role that is transformative and highly practical.

According to a 2025 Research and Markets report, analysts predict construction-focused AI tools could become a $12.1 billion market by 2030 fueled by demand for automation, predictive analytics and improved project efficiency. Roofing, with its mix of risky fieldwork, changing site conditions and paperwork-heavy processes, is especially well-placed to benefit from these technologies. Drone imaging, automated measurement systems and machine-learning-enhanced estimating tools are now common. Many roofing contractors depend on AI-powered software to generate takeoffs, identify storm damage or improve customer communication. These early uses set the stage for a deeper AI integration in roofing operations.

But the next wave of innovation is not just about efficiency; it's about safety.

AI POTENTIAL

AI's potential in risk and safety management is already visible in adjacent industries. Manufacturing facilities use computer-vision systems to detect unsafe behaviors and alert supervisors in real time. Logistics companies rely on AI-enhanced telematics to identify distracted driving, fatigue and high-risk patterns before they lead to incidents. And general construction firms are experimenting with predictive analytics to flag projects that have elevated injury risk based on historical data, weather patterns, crew composition and task sequencing, according to a 2025 article published in the *World Journal of Advanced Engineering Technology and Sciences*.

The roofing industry now stands at the threshold of adopting similar tools tailored to the unique hazards of roofing job sites, which present a complex mix of variables that AI is particularly well-suited to analyze. Weather conditions, ladder placement, material staging, crew experience levels and even the geometry of a roof can influence risk on any given day. Traditionally, assessing these variables has relied on the judgment of field supervisors and foremen whose experience is invaluable but cannot be everywhere at once.

AI, by contrast, can process thousands of data points simultaneously, identify patterns invisible to the human eye and provide early warnings that enhance rather than replace human expertise. Whether through wearable sensors, drone-based hazard detection or predictive models that anticipate injury risk, AI has the potential to augment the safety culture roofing contractors have spent decades building.

Yet the conversation about AI in roofing must be grounded in realism. These tools are not magic nor are they a substitute for training, supervision or regulatory compliance. They also raise new questions about data privacy, workforce acceptance and balancing automation with human judgment. And they need careful implementation to prevent overdependence or misinterpretation. You should approach AI the same way you approach any emerging technology: with optimism and discernment.

PROMISING USES

Computer-vision systems, which are AI models trained to interpret images and videos, are among the most promising technologies for roofing safety. In other construction sectors, these systems already identify missing personal protective equipment, unsafe ladder angles, unprotected edges and hazardous worker behaviors in real time, according to a 2024 National Institute for Occupational Safety and Health report. For roofing contractors, the potential applications are even more compelling.

Mounted cameras, drones or even mobile devices can feed images into AI models that automatically flag items such as improper ladder setup, workers outside designated fall-protection zones, missing or misused harnesses, unsafe material staging, trip hazards created by debris or tools, and weather-related risks such as wet surfaces or high-wind conditions.

These systems do not replace the role of a competent person; they extend that person's reach. A superintendent cannot be on every slope at once, but an AI-enabled camera can monitor multiple areas simultaneously and alert supervisors before a risky condition escalates. As insurers increasingly focus on proactive risk management, AI-supported hazard detection has the potential to lower serious injuries and fatalities, creating an insurance experience that could set you apart when seeking better rates or underwriting approval.

Predictive analytics and AI models that analyze historical and real-time data to forecast risk are increasingly vital in construction, particularly for preventing injuries. A review of studies from various sources, including *Scientific Reports Journal* and the International Conference on Construction in the 21st Century, indicate machine-learning models can identify high-risk projects and injury scenarios with more than 80% accuracy by analyzing variables such as crew composition, task sequencing, weather and past incident patterns.

Predictive analytics also enable daily risk scoring for projects; crew-specific alerts based on experience levels or previous incidents; and weather-adjusted hazard forecasts, especially for wind, heat and lightning. These insights support claims—likelihood modeling to identify patterns that can lead to losses. By providing early warnings, this technology allows you to intervene proactively to adjust staffing, modify schedules or reinforce training before incidents occur. As insurers continue to scrutinize loss histories, predictive analytics are poised to become a central component of risk management strategies.

Drones are already common in roofing, but AI is changing what they can do. Instead of only capturing images, AI-powered platforms can now detect hail, wind and thermal anomalies; identify weak areas or moisture intrusion; map fall-hazard zones before crews arrive; generate automated safety plans based on roof geometry; and flag areas needing special access or staging controls.

For safety managers, this means hazards can be identified before anyone climbs a ladder. Prejob planning becomes more accurate, and crews receive clearer guidance about anchor placement,

material staging and travel paths. AI-enhanced drone inspections also reduce the need for initial "walk the roof" assessments, lowering exposure hours and aligning with the Occupational Safety and Health Administration's emphasis on eliminating hazards before relying on PPE.

Wearable sensors, already used in manufacturing and logistics, are beginning to be adopted in construction. These devices can track items such as workers' locations relative to fall-hazard zones; heat-stress indicators like heart rate and exertion; slip or trip incidents; and proximity to equipment or vehicles.

AI models analyze this data to spot patterns that may signal fatigue, dehydration or unsafe movement. In roofing, heat illness and falls are ongoing safety concerns, and wearable technology provides an added layer of protection. Some systems can even alert workers directly via haptic feedback when they near a hazard or exceed safe exertion thresholds, as reported by CPWR—The Center for Construction and Research Training in 2024.

In addition, your fleet of vehicles represent a significant portion of risk. AI-enabled telematics systems can detect distracted driving, harsh braking or acceleration, speeding relative to road conditions and driver fatigue patterns. These insights can help you coach drivers, reduce collisions and improve your insurance profiles. With auto liability premiums rising nationwide, AI-supported fleet safety is becoming a strategic advantage.

RISKS AND PITFALLS

As promising as AI is, its adoption carries real risks. Implementation faces challenges from workforce trust issues to new legal and ethical risk exposures. AI is not a plug-and-play solution, and the industry's growing reliance on automated systems introduces new vulnerabilities you must understand before integrating these tools into safety or operational workflows.

The first pitfall is assuming AI will work flawlessly right away. Many AI systems require clean, consistent data to function properly, yet roofing environments are inherently variable. Lighting, weather, roof geometry and camera angles can all affect computer-vision accuracy. Predictive models may misinterpret patterns if fed incomplete or biased data. And because AI outputs often appear authoritative, there is a risk supervisors may trust an AI system's conclusions too much. Users must follow a "trust but verify" approach to ensure AI conclusions are checked against reality.

AI should augment—not replace—a competent person's judgment. You must develop implementation plans that include calibration, validation and ongoing human oversight. Without these safeguards, AI can introduce new types of errors that are more difficult to detect because they are embedded in automated processes. AI is a useful tool, but it cannot replace human experience and judgment.

Additionally, it is important to note even the most advanced AI tools will fail if workers do not trust them. Roofing workers might worry wearable sensors or computer-vision systems are used for surveillance rather than safety. Drivers could resist AI-powered telematics if they believe the data will be used punitively. And field leaders might feel their expertise is being replaced by algorithms.

Successful adoption requires transparency, communication and worker involvement. You should clearly explain what data is being collected, how it will be used and what protections are in place. When workers realize AI is meant to protect and not police them, acceptance grows. Without this cultural groundwork, even well-designed systems can generate resentment or disengagement.

AI also introduces several regulatory and ethical issues. Wearables, cameras and telematics can collect sensitive data about worker behavior, location and health indicators. Depending on the system, this data may be stored by third-party vendors, transmitted across borders or used to train future models.

For links to the AI Incident Database or Cambridge, Mass.-based Massachusetts Institute of Technology's AI Risk Initiative, visit professionalroofing.net.

Before implementing AI, it is important to evaluate things like:

- Data privacy responsibilities, including data-retention periods and access permissions
- Vendor security protocols, especially for cloud-based systems
- Possible bias, such as models that misidentify PPE on workers or misinterpret movement patterns
- Adherence to state-level AI and biometric privacy laws, which are rapidly expanding

Ethically using AI requires clear policies, worker consent when needed and vendor agreements that define data ownership and limits.

An often-overlooked risk is AI-generated data may become discoverable in litigation. If a system flags hazards, near misses or risky behaviors, that information may be subpoenaed in the event of an injury, fatality or incident. Plaintiffs' attorneys are increasingly requesting telematics records, video analytics and predictive-risk reports to argue a contractor "knew or should have known" about unsafe conditions (see "When AI data enters discovery").

This does not mean you should avoid AI. Rather, treat AI outputs as you would any other safety documentation. Clear retention policies, consistent follow-up on alerts and documented corrective actions are imperative. AI can strengthen your legal defensibility, but unmanaged data can create new liabilities.

Another challenge is the nature of AI itself. Some models are designed to keep users engaged, which can cause them to generate confident but inaccurate information, a phenomenon known as a "hallucination" in the generative AI world. In safety-critical contexts, this is unacceptable. Certain types of AI may provide incorrect or fabricated explanations, misidentify hazards, infer patterns that do not exist or present outputs with unwarranted certainty. AI should never be the sole basis for a safety decision. Human review remains essential.

Finally, some AI tools, especially consumer-grade or experimental models, have been known to overreach by trying to install software, change system settings or access files beyond their intended scope. Although enterprise-grade systems usually include safeguards, be wary of AI platforms that require too many permissions or attempt to automate actions beyond their limits.

Strong IT governance, thorough vendor vetting and well-defined internal policies are necessary to prevent unintended system access or cybersecurity vulnerabilities. Visiting the AI Incident Database or the Massachusetts Institute of Technology's AI Risk Initiative, which offer additional insights into the types of harm AI causes each year, can provide a revealing view of how AI can be used maliciously.

AI will not replace the craftsmanship, judgment or leadership that defines roofing, but it will increasingly influence how you plan work, protect crews and manage risk. The challenge ahead is not just adopting new tools but also doing so thoughtfully with clear policies, worker involvement and a firm understanding of the benefits and limits of this emerging technology.

Those who approach AI with curiosity, caution and commitment to safety will be positioned to harness its strengths while avoiding its pitfalls. In an industry where every decision matters, AI offers a powerful new way to anticipate risk; strengthen culture; and build a safer, smarter future for the roofing workforce.

ADRIANNE ANGLIN, CSP, is NRCA's vice president of enterprise risk management.

WHEN AI DATA ENTERS DISCOVERY

Artificial intelligence can improve safety but also creates new discoverable documentation. AI alerts, risk scores and predictive assessments become part of your company's digital footprint. In incidents like injuries or disputes, attorneys may request these records to show your company "knew or should have known" about hazards.

When AI data is requested as part of discovery, know that:

- AI data and alerts are as accessible as other safety records.
- Poor follow-up can cause liability.
- Video and telematics data may be requested.
- Predictive scores can be used for and against you.
- Retention policies matter.
- Contracts should clarify data ownership, including who controls, accesses, shares or deletes it.

Make sure to consult your attorney regarding any AI-related matters. Remember: NRCA members can receive a 30-minute free consultation each month with NRCA General Counsel Trent Cotney. To schedule your consultation, go to nrca.net/legal and click on Legal Helpline.

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DESIGNING ROOF DRAINS

Proper roof system design involves managing the water a roof system is expected to encounter during its service life, and multiple trades and disciplines are involved in the task.

If you are responsible for the design or installation of roof drains, you should be aware how guidelines and requirements differ.

Positive drainage

Positive drainage provisions for thoroughly draining a roof area include the correct number, sizes and placement of roof drains, scuppers or gutters, as well as design of drainage crickets and saddles with sufficiently sloped valleys to assist with drainage. A general rule of thumb for designing sufficiently sloping saddles and crickets is the saddle and cricket material should be twice the slope of the adjacent roof field. This generally will keep water from remaining on the surface of a cricket and/or saddle.

However, for cricket or saddle valleys to drain, NRCA recommends designers recognize the importance of cricket geometry and, specifically, valley slope. Refer to *The NRCA Roofing Manual: Membrane Roof Systems—2023* Section 4.15—Tapered Insulation for information regarding the design and use of tapered insulation (available at shop.nrca.net).

NOT ALL GUIDELINES ARE THE SAME

by Kurt Fester

Drains should be located at low points in a roof (points of maximum deck deflection) not at columns or bearing walls (points of minimum deflection). When a design dictates drains be placed adjacent to column or bearing walls, the designer should ensure positive drainage.

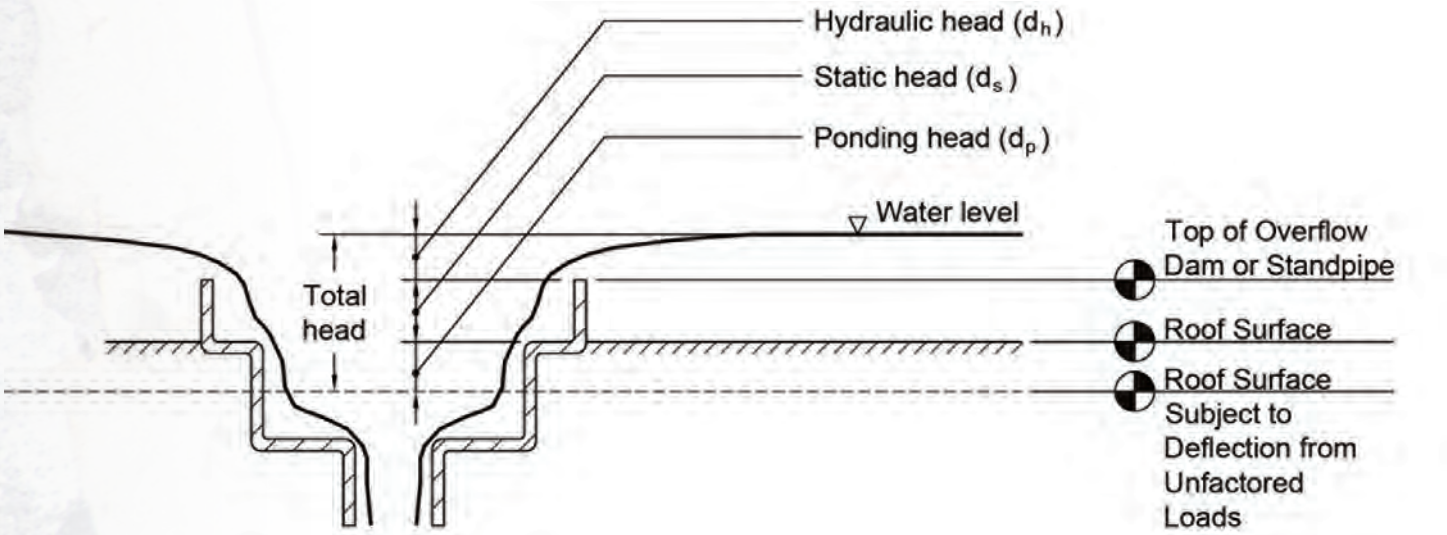
International Plumbing Code®

The 2024 IPC provides requirements for the proper design of drainage for roof systems.

To appropriately size conductors, leaders and storm drains as required in IPC, Section 1106.1—General Requirements for Stormwater Drainage System Sizing, plumbing and mechanical engineers use the 100-year hourly rainfall rate for a building's specific area to determine the maximum anticipated ponding at the location of the roof drain.

The maximum anticipated ponding is determined from the geometry of a roof system's slopes around the drain, as well as the published roof drain flow rate based on the head of water above the roof drain.

This calculation is difficult because the flow rate through a roof drain is not constant as water depth changes. The more water arrives at a drain, the faster it exits. Finding the depth at which there is balance often requires iteration and is



ASCE 7-22 rain load design diagram

further complicated because more water at a drain also means more structural deflection in that area, which begets still more water and more iterations.

The maximum depth of water can be used to determine the maximum anticipated flow rate through the roof drain, which needs to be considered for the proper selection of leaders, conductors and storm drains.

A study conducted in 2012 by the American Society of Plumbing Engineers Research Foundation can help explain why the maximum anticipated flow rate through the roof drain needs to be considered for the proper selection of leaders, conductors and storm drains. The study found roof drains affect how well water drains from a roof. The following summarizes the findings:

- Roofs drain water better through roof drains versus just a hole.
- The flow rate through a given roof drain is directly correlated with and depends greatly on the depth of water at the drain.
- Flow rates through similar roof drains can vary dramatically from one another.

To avoid installing a roof drain that has a maximum anticipated flow rate exceeding the capacity of the leaders they are connected to, the leader size is chosen to handle the roof drain flow rate at the maximum ponding depth not the other way around.

The secondary drainage is determined in much the same way but assumes all primary roof drainage means are blocked.

The 2024 IPC provides 100-year, one-hour rainfall maps that are used along with the roof layout and roof drain manufacturer's published flow rates to determine the maximum anticipated flow rate through that drain. This number then can be used with IPC Table 1106.2 to select an appropriate storm drainpipe size.

Uniform Plumbing Code®

The primary model code used in some states and jurisdictions is the International Association of Plumbing and Mechanical Officials 2024 Uniform Plumbing Code. This provides a different set of requirements that has designers arriving at drain size in a totally different way.

In many ways, the UPC is simpler and more conservative. Determining drain size requires only two things: rainfall rate and horizontal projected roof area. First, you determine how many square feet on a roof a specific drain services based on the slope and taper layout using only the area's horizontal dimensions. Then, use that value and the desired rainfall rate to find a corresponding drain, leader or pipe size found in UPC's Chapter 11—Storm Drainage, Table 1103.1.

If the desired rainfall rate is not in the table, it can be linearly interpolated or calculated as a factor in the "1 inch per hour column." The other detail this code takes into consideration is the inclusion of side walls draining onto a roof into the calculation of horizontal projected roof areas. Depending on the layout of the sidewall or walls, up to 50% of the vertical area of the wall is added to the roof area to account for water that hits the wall and ends up on the roof where it would otherwise not have fallen.

There is no consideration for the manufacturers' published roof drain flow rate information at different heads of water and assumes a consistent 1 ½-inch head of water at drains. This method provides less flexibility for the designer to get precise about anticipated ponding and flow rate and typically leads to larger pipe sizing.

International Building Code®

Separately, the structure needs to be designed to withstand the weight of water. The 2024 IBC Section C1611.1—Design Rain Loads outlines the structural design requirements for rain loads that are based on the requirements of Chapter 8—Rain Loads of ASCE 7-22, "Minimum Design Loads and Associated Criteria for Buildings and Other Structures."

The load is split into three factors. These factors are combined resulting in rain load R measured in pounds per square foot (see figure).

R = 5.2(ds + dh + dp)

ds = Static head: The depth of water in inches on the undeflected roof up to the inlet of the secondary drainage system for structural loading in inches

dh = Hydraulic head: The depth of water in inches on the undeflected roof above the inlet of the secondary drainage system for structural loading required to achieve the design flow

dp = Ponding head: The depth of water in inches as a result of deflections of the roof subjected to unfactored rain load and unfactored dead load

5.2 = The weight in pounds of 1 square foot of water at a depth of 1 inch

The way the depth of water above the secondary drainage system is calculated is based on ASCE 7, which requires using the rainfall intensity of a 15-minute duration storm with a return period of 100, 200 or 500 years depending on the risk category of the building.

This means a drainage system for a Risk Category IV building strictly following the IPC may be sized for a one-hour duration, 100-year rain and then the structural design would base calculations from those drain and pipe sizes but use the much more conservative 15-minute, 500-year rain, resulting in a potentially much larger hydraulic head because water would be arriving at the drain faster than it could leave.

This means design decisions for roof drains based on the IPC affect the design of the structure based on the IBC and vice versa. Conservative roof drain designs reduce the expected ponding and the structural requirements that come with the larger rain load. Less conservative structural design can mean more deflection and more water at roof drains, leading to larger drains and pipes required than the IPC.

Closing thoughts

Designers have a lot to consider and, in some cases, a range of options for proper selection of roof drains and pipes:

- These decisions cannot be made in a vacuum as they can be consequential for other design decisions like structural member sizing.
- In many cases, proper roof drain selection relies on roof drain manufacturers providing published flow rate data at different heads of water.
- When contractors are responsible for the installation of the roof drain, it is important to use the exact drain specified and set it as close to the design height as feasible.
- Membranes and target sheets should be cut per the manufacturer's installation instructions so as not to limit flow rate through the drain.

KURT FESTER is an NRCA director of technical services.

Isle Roofing

Huber and Associates helps build a private residence on St. Simons Island

by Chrystine Elle Hanus

Photos courtesy of Huber and Associates, Lake City, Fla., and Luxhunters Productions, Miami.

Project name:
Private residence

Project location:
King's Point, St. Simons Island, Ga.

Project duration:
October 2023-August 2024

Roofing contractor:
Huber and Associates, Lake City, Fla.

Roofing material:
Cedar shingles and copper

Cedar shingle distributor:
Custom Shingles, Lake City, Fla.

Copper distributor:
Cambridge-Lee Industries LLC, Reading, Pa.

Roofing manufacturers:
Owens Corning, Toledo, Ohio; AirCore Ventilation, Lake City, Fla.

St. Simons Island is the largest of the Golden Isles located along Georgia's southeastern coast, midway between Savannah, Ga., and Jacksonville, Fla. Only 18 square miles, St. Simons Island is known for its moss-draped oak trees, historical charm and pristine beaches, including 3 miles of natural beach.

Named by *Travel + Leisure* magazine as "America's Most Romantic Town" and featured on HGTV's "Island Life," St. Simons Island is a popular destination for relaxation and recreation. The island's gated community of King's Point has 35 homes near Sea Island Golf Club and Retreat that overlook sprawling fairways, marshes, lakes and expanses of the Frederica and Mackay Rivers.

One of the newest custom homes in King's Point was designed by Robert A.M. Stern Architects, New York City, and constructed by 3181 Construction LLC, St. Simons Island. NRCA member Huber and Associates, Lake City, Fla., was selected as the contractor to install the roofing and siding on the private residence.

Aerial view of completed roof system

Plans and details

The Huber and Associates team began initial work on the King's Point house in October 2023. Many details were tended to between the on-site and project management teams.

"Before installation began, our project management team, field supervisors and installation crew spent significant time coordinating the details of the roof system," says Jamin Huber, vice president of Huber and Associates. "This included multiple planning meetings, field measurements, layout mapping, sequencing, and reviewing the unique transitions and custom details. Because of the complexity of the rooflines and the level of finish required, it was important the teams clearly understood the installation plan before and during the project."

The 8,800-square-foot roof design called for 18-inch-long red cedar shingles to be installed at a standard 5 ½-inch exposure with an additional design detail of triple-stacking the shingles every seventh course to give the roof more dimension.

With roof slopes ranging from 6 ½:12 up to a 11:12 slope, the crew used a variety of safety equipment including tie-off anchors, ropes, harnesses and toe boards during the project.

"Given the roof complexity and working conditions, safety planning, access, staging and fall protection were all important parts of the project approach," Huber says.

As installation day approached, the team's plan hit a snag.

"Despite the varying slopes among 30 different roof planes, the triple-course lines were to line up at all junctures," Huber says. "This meant we had to go back to the drawing board to reach a solution."

The new plan allowed for every triple-stacked course of the main field shingles to seamlessly align with a triple-stacked row from the transitions all the way around the roof.

"We then worked with the on-site installation crew to implement the new design," Huber says.

Installation

In February 2024, the Huber and Associates team began the roof system installation by applying Owens Corning Titanium® PSU30 high-temperature, self-adhering underlayment

with Sure-Foot® technology on the plywood deck followed by a layer of AirCore Falcon™ ventilation mesh. Next, team members installed Western Red Cedar Perfections shingles using 316 stainless-steel nails, triple-stacking the shingles every seven or eight courses per section as required for alignment around the roof.

Additionally, the team installed the house siding using 18-inch Perfections cedar shingles stained in Sherwin-Williams® Orchard Green. The siding design called for installing the shingles in wavy and diamond-shaped profiles—all with different, intricate installation patterns including framing some of the windows at an angle.

"The synchronizing roof courses flowed into the siding, which had its own creative challenges," Huber says. "Typical of a Robert A.M. Stern project, varying insertions of custom-cut shingles were to grace the walls of the house."

Huber and Associates craftsmen also custom-fabricated and installed all flashings including chimney flashings, headwall flashing, valley flashings and drip edges using 16-ounce lead-coated copper.

"All the small details and planning came together on the exterior in a truly stunning roof and home overall," Huber says.

Now to the point

The crew wrapped up roofing work in April 2024, and the siding project was completed in August 2024. Thanks to skillful planning and execution, the King's Point residence's roof and siding embody the spirit of the architect's designs while providing expert workmanship and artisanship.

"The most rewarding part of the project was seeing all the planning, craftsmanship and custom detailing come together so cleanly in the finished roof and walls," Huber says. "It was a complex project with a lot of moving parts, so seeing the final result, and knowing the client was so pleased with the quality of the work, made it especially rewarding."

For the siding, the team installed shingles stained Orchard Green and included varying insertions of custom-cut shingles.

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

Left to right: The Huber and Associates team triple-stacked the shingles every seventh course to give the roof more dimension; the shingles on the siding were installed in wavy and diamond-shaped profiles.

ASSEMBLING FOR ADVOCACY

Roofing Day in D.C. attendees push for meaningful changes

by Brad Stine

On April 14-15, the roofing industry gathered in Washington, D.C., for Roofing Day in D.C. 2026, the premier industry advocacy event of the year that allows lawmakers to hear the industry's collective voice regarding key government policy issues. This year, 199 registered participants from 33 states engaged with 158 congressional offices to advocate on behalf of solutions for workforce shortages and affordable housing legislation.

The event is an annual collaboration among NRCA members; industry stakeholders; and national, regional, state and local associations.

TRAINING, EDUCATION AND NETWORKING

Roofing Day in D.C. provides participants with specialized advocacy training, in-depth issue briefings, and educational and networking experiences.

On Tuesday, April 14, attendees were provided advocacy training regarding key policy issues and how to tailor messages to individual members of Congress. Participants met to plan for the next day's congressional meetings, research their representatives and develop the best pitch for the industry's collective message.

On Wednesday, April 15, participants heard from two congressional keynote speakers. The first speaker, former Rep. Peter Roskam (R-Ill.), reiterated the value of advocacy fly-ins such as Roofing Day in D.C. and the difference they make with policymakers in Washington. Attendees found his viewpoints greatly encouraging as they prepared to visit Capitol Hill later that day.

Rep. Raja Krishnamoorthi (D-Ill.), whose congressional district includes NRCA's headquarters in Itasca, Ill., was the other keynote speaker. He spoke about the values of workforce policies such as bipartisan immigration reform and robust career and technical education programs.

Sherri Miles, NRCA chairman of the board-elect, and Chad Collins, NRCA chairman of the board, showed their support for NRCA's legislative agenda.

Participants also heard from subject matter experts from the Association for Career and Technical Education and Advance CTE regarding how roofing industry employers can further expand workforce development opportunities in all 50 states. In addition, panelists from Washington, D.C.-based lobbying firm Porterfield, Fettig & Sears and the Real Estate Roundtable went into greater detail about affordable housing policy and how the legislation featured during Roofing Day in D.C. fits into the landscape.

One of the highlights of the event was the annual awards for the states, contractors and companies that had the most attendees. This year's winners included Amrize, Chicago, for largest attendance from a manufacturer; Flynn BEC LP, Salt Lake City, for largest attendance from a contractor; and Texas for largest attendance from a state. The winners were provided with unique congressional swag as prizes.

Participants then headed to Capitol Hill for meetings with members of Congress and their staffs to convey the roofing industry's message. To enhance attendees' experiences, all meetings were scheduled by NRCA and its partner Advocacy Associates, a Washington, D.C.-based consulting firm specializing in managing large advocacy events. After an afternoon of productive meetings, participants gathered back at the hotel for cocktails, great food, and an opportunity to debrief and share their stories from the day.

KEY ISSUES

This year, Roofing Day in D.C. focused on two advocacy pillars: solutions to workforce shortages and supporting affordable housing legislation.

Solutions included increased funding for Perkins Career and Technical Education State Grants and immigration reform to meet workforce needs.

Rep. John Rutherford (R-Fla.), pictured to the right, hears from a Florida participant about issues important to the roofing industry.

Attendees enjoyed a beautiful day at the Capitol advocating for the roofing industry.

Rep. Robert "Bobby" Scott (D-Va.), pictured in middle, meets with Roofing Day attendees from Virginia's third congressional district.

Attendees advocated for a new market-oriented visa category under H.R. 5494, the Essential Workers for Economic Advancement Act, that would enable employers to address workforce shortages with legal temporary workers in accordance with economic demand. The focus on immigration reform also featured H.R. 4393, the Dignity Act, which would provide a permanent solution for qualified long-term undocumented individuals as well as those working legally under Temporary Protected Status or the Deferred Action for Childhood Arrivals program. These bipartisan bills are critical to stabilizing and expanding the roofing industry's future workforce.

To support legislation promoting affordable housing policies, the industry advocated for the bipartisan Revitalizing Downtowns and Main Streets Act (H.R. 2410) and the Neighborhood Homes Investment Act (H.R. 2854/S. 1686). The Revitalizing Downtowns and Main Streets Act would provide a federal tax credit to facilitate the conversion of older, underutilized offices and other commercial buildings into residential housing. The Neighborhood Homes Investment Act would provide a federal tax credit that covers the cost between building or renovating a home in qualifying urban and rural areas and the price at which the home can be sold. Advocating for these tax incentives enabled attendees to highlight the role the roofing industry plays in facilitating more affordable housing for all Americans.

PAST SUCCESSES

Thanks to past participants and sponsors of Roofing Day in D.C. events, progress and success has been realized regarding many issues presented to Congress.

During the inaugural Roofing Day in D.C. in 2018, attendees advocated for the Strengthening Career and Technical Education for the 21st Century Act,

Rep. Raja Krishnamoorthi (D-Ill.) was pleased to welcome the Illinois delegation.

Sen. Jon Ossoff (D-Ga.) hosts fellow Georgians on Capitol Hill.

Roofing Day attendees debrief during a break in their day.

landmark legislation to ensure workforce development programs work better for the roofing industry. The legislation reauthorized funding levels for Perkins Career and Technical Education State Grants and was approved by Congress soon after Roofing Day in D.C. 2018.

Since 2018, Roofing Day in D.C. attendees have advocated for increased funding for Perkins Career and Technical Education State Grants, and Congress has approved an increase of nearly $300 million through the annual appropriations process. This funding is critical to helping the roofing industry meet workforce development needs.

To view a photo gallery and advocacy issues discussed at Roofing Day in D.C. 2026, visit **nrca.net/roofingday**.

Most recently, Roofing Day in D.C. 2025 attendees highlighted the need to pass pro-growth tax policy. And in July 2025, via the One Big Beautiful Bill Act (H.R. 1), Congress enacted the most comprehensive tax reform bill in nearly a decade. It included several provisions the roofing industry had long advocated for, including the bipartisan Main Street Tax Certainty Act, which made permanent the Section 199A Qualified Business Income Deduction for passthrough entities, and the American Innovation and R&D Competitiveness Act, which restored the ability for businesses to immediately deduct their research and development expenses. These and other key provisions of importance to the roofing industry are now set permanently in the tax code and will benefit employers for years to come.

SEE YOU NEXT YEAR!

The primary goal of Roofing Day in D.C. is to provide opportunities for attendees to establish and strengthen long-term relationships with lawmakers in Congress that ultimately will help achieve key policy goals for the roofing industry's future. Continued engagement is key!

NRCA and its partners look forward to seeing you at Roofing Day in D.C. 2027 April 6-7 in Washington, D.C., at the Hyatt Regency on Capitol Hill.

BRAD STINE is NRCA's director of federal affairs.

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GUTTER PROTECTION CAN HELP FIRE-HARDEN HOMES

by Mike Cellura

***Editor's note**: The opinions in this article are those of the author not NRCA.*

The California fires in 2025 were sheer devastation—from Malibu and the Pacific Palisades to Eaton, Altadena and Pasadena—neighborhoods were devastated as homeowners helplessly looked on.

Wildfires used to be contained to forest fires. Sometimes, there were air quality issues from the smoke, but for the most part, the fires didn't affect homes, possessions and people's livelihoods. The main risk in these situations was the safety of the brave firefighters who were putting their lives on the line to extinguish the mammoth fires.

The California fires encroached on highly populated areas. And in some cases, there was no logic to their paths. A whole neighborhood could be affected, and then by some miracle, a house here or there was spared. According to the California Department of Foresty and Fire Protection, 16,246 structures were destroyed and 31 lives were lost in Los Angeles County.

No clause in any building code could have prevented the disaster, but building codes exist for a reason and, in this case, may have helped slow the spread of fire and reduce the overall impact. As with any tragedy, whether it be fires, hurricanes or tornadoes, building codes adapt over time to help minimize losses.

Great progress has been made during the past 30 years. In all parts of the U.S., codes have become more stringent to deal with various scenarios—fires, earthquakes, hurricanes, heavy snow, wind, etc. The good news is most building material manufacturers have met or exceeded the guidelines. But more can and needs to be done to further protect homes and residents from wildfires.

A gutter system with proper protection represents one of the most overlooked but highly effective components of a home's wildfire defense system.

Why gutter guards?

When installed, most homeowners don't give them much thought unless they are clogged, there is interior water penetration, or they collapse under the weight of heavy ice and snow. Often, gutters are unprotected and the onus is on the homeowner to maintain them by keeping them free from debris. This can be accomplished by homeowners as a DIY project or with the help of a professional roofing contractor.

Unprotected gutters can create the perfect scenario for fire to spread under the eaves as leaves and other debris can quickly accumulate and dry out, creating a virtual tinderbox when ignited.

Through real-life situations such as the Los Angeles County fires and as the building industry has evolved, we have learned gutter guards can have much more of an impact on roof system performance.

For years, we have known gutter protection by the simple premise of keeping debris out of gutters and water flowing properly to the downspouts and away from a home. However, as

A HIDDEN *Protector*

gutter accessory lines have evolved and become more sophisticated, gutter guards also make great wildfire deterrents.

What do gutter guards have to do with fire prevention? Gutter guards are a simple, cost-effective, easy-to-install product that can make a big difference in reducing the spread of fire. Right now, all it takes is for an ember to fly from one house to another, hit the roof and roll into an unprotected gutter where dried leaves and debris can ignite.

Flying embers are a real concern and risk. Once debris in a gutter ignites, the fire is positioned immediately beneath the roof edge where flames can enter under the roof deck, spreading into attic spaces or unprotected components of the roof assembly.

> For more information about the International Wildland-Urban Interface Code® and gutter requirements, see "Wildfire mitigation," December/January 2023-24 issue.

The bigger issue is preventing anything from entering a gutter that can ignite dried debris. Fireworks, bonfires and backyard firepits in any part of the country can lead to flying embers and debris ignition through unprotected gutters. The source may be different, but the concept is the same.

Wildland-Urban Interface

The 2025 California fires gained so much attention globally because of their proximity to popular residential neighborhoods. These are called Wildland-Urban Interface areas, officially defined as the geographical area where structures and other human developments meet or intermingle with wildland or vegetative fuels. This is not just a California issue; the risk exists in many regions where people live near or among forests and other vegetation.

According to U.S. Fire Administration data, though California has the greatest number of homes in Wildland-Urban Interface areas, Florida, North Carolina, Pennsylvania and Texas are next in line. The data cites there are more than 60,000 communities in the U.S. at risk of fires in Wildland-Urban Interface areas, and every year the amount of Wildland-Urban Interface area grows by an estimated 2 million acres.

Historically, the U.S. Fire Administration notes between 2002-16 (the most recent data), an average of more than 3,000 structures per year were lost to fires in Wildland-Urban Interface areas in the U.S.

Not just a West Coast issue

On any given day, you can search any major weather website for "red flag warnings" and be given a list of states that are at high risk for fire. A red flag warning means the conditions of hot temperatures, low humidity, strong winds and dry vegetation create an atmosphere conducive to wildfires. Smoke and particulates from wildfires can travel hundreds and even thousands of miles, potentially affecting human health.

While I was writing this article, ABC News reported 20 million residents in Arizona, Colorado, Kansas, Missouri, New Mexico, Oklahoma and Texas were under red flag fire danger warnings.

The threat of wildfire is real, and it is everywhere. Building material manufacturers need to take stock in this as they design new products that are functional, aesthetically pleasing and meet strict standards for fire resistance.

A solution

Can gutters and gutter guards really deter the spread of fires? Yes, they can.

But not all gutter protection is created equal. For fire resistance, PVC, foam inserts and brush guards are not good options and are not permitted by the International Wildland-Urban Interface Code.® For true fire resistance, noncombustible materials, such as aluminum, powder-coated steel, stainless steel and tightly woven stainless-steel mesh should be used.

It is easy for manufacturers to make a lot of lofty claims when touting features and benefits around

fire hardening. It's another thing to prove them. Let's start with testing.

When it comes to fire hardening, a Class A fire rating is the highest and best classification for building products. Class A fire-rated building assemblies play a critical role in enhancing the safety, resilience and longevity of structures. These materials are specifically designed and tested to offer the highest level of resistance to fire spread, making them essential components in modern building practices where safety standards and risk mitigation are paramount.

Gutter protection products are tested for fire protection in several ways. The first and most common is ASTM E-84, "Standard Test Method for Surface Burning Characteristics of Building Materials." Also known as the Steiner Tunnel Test, it is the standard method for evaluating the surface burning characteristics of building materials. It measures how quickly flames spread across a material and how much smoke is produced when exposed to a controlled flame for 10 minutes in a horizontal tunnel setup (typically 24 inches wide by 24 feet long) with forced airflow.

Taking this a step further is the more advanced ASTM E2768, "Standard Test Method for Extended Duration Surface Burning Characteristics of Building Materials." This standard test method evaluates surface burning for an extended duration. It is designed to assess the ability of materials to limit the surface spread of flames under controlled laboratory conditions for a duration of 30 minutes.

It is important to note only certain gutter guards will fall within these flame spread classifications: All aluminum, powder-coated steel, stainless steel and tightly woven stainless-steel mesh products should be covered under these standards if properly tested and approved. However, ask your supplier for proof from the manufacturer that their products meet these standards.

Gutter protection products rated at these designations can significantly slow the progression of flames across sufaces, buying valuable time for occupants to evacuate and or emergency responders to act.

Stainless-steel mesh (left) and powder-coated steel gutter guards

Flying embers

As previously mentioned, aluminum, powder-coated steel and stainless-steel gutter guards are best in many applications for flame spread resistance. However, when it comes to flying embers, that is something entirely different. In fact, the California Department of Forestry and Fire Protection estimates 60% to 90% of the homes that caught fire in Southern California in 2025 resulted from flyer embers.

When it comes to embers, size of gutter guard holes matters. Standard aluminum and mesh gutter guards have holes that are great at managing water flow and are perfect in areas where there isn't fine debris like pine needles and oak pollen. However, flying embers can get through those holes, subsequently igniting anything inside the gutter and potentially causing fire spread.

For added protection, particularly in fire-prone areas, look for gutter protection made with tightly woven stainless-steel mesh. This type of product not only keeps fine debris out of gutters, it also meets critical ASTM E-84 and ASTM 2768 flame spread standards while preventing embers from getting into a gutter.

The challenge is there is no standardized official ember intrusion test for gutter protection like there is for flame spread. In early 2025, I worked with experts at QAI Laboratories, Rancho Cucamonga, Calif., to see whether we could apply existing testing methodology currently used for exterior roof vents to stainless-steel mesh gutter guards.

Painted-aluminum gutter guard

We used ASTM E2886/E2886M-20, "Standard Test Method for Evaluating the Ability of Exterior Vents to Resist the Entry of Embers and Direct Flame Impingement." Often called an "ember intrusion" test, this test method evaluates the ability of exterior vents that mount vertically or horizontally to resist the entry of embers and flame penetration through the vent.

Working with our research and development team from E-Z Gutter Guard, St. Clair, Mo., and QAI Laboratories, we conducted the test with positive results—no signs of ember intrusion and no evidence of ignition or charring of the cotton pad test material. It was a simple concept that yielded powerful results.

It's important to note gutter protection is only one, albeit critical, piece of a large puzzle of complementary building products needed to fire-harden homes. Gutter protection is just another way to further reinforce homes.

Future building codes

Gutter guard protection is a small but mighty component of any building assembly. When working in tandem, all building products that meet strict fire requirements can potentially save lives, protect properties, earn more favorable ratings by insurance companies, and, of course, meet the evolving landscape of local and state building codes.

The challenge remains for manufacturers to get their share of attention from code writers and fire organizations about the importance of this product category. As the roofing industry has learned through the years, weather tragedies often bring enhancements and stricter building codes. For example, Florida and its highly advanced Miami-Dade County Building Codes were driven by multibillion-dollar weather events that continue to devastate that part of the U.S. year after year.

In California, the building codes include some of the most advanced fire-hardening regulations in the U.S., largely driven by the state's increasing exposure to wildfires. These requirements are primarily found in the California Building Code and the California Residential Code, particularly in Chapter 7A, which applies to structures located in Wildland-Urban Interface zones.

Regarding gutter protection in the California Building Code, it is a bit vague and open to interpretation: "705A.4 Roof gutters. Roof gutters shall be provided with the means to prevent the accumulation of leaves and debris in the gutter."

"Means" could be anything including types of gutter protection that will easily melt or be compromised with high heat and fire. Roofing contractors should be aware of what works and does not work when it comes to fire resistance to properly educate homeowner customers.

Overall, California's fire-hardening regulations aim to create a system where structures are less likely to ignite even in severe wildfire conditions, thereby improving community resilience and firefighter safety.

Although fires aren't unique to California, other states may not have as strict regulations and follow other codes that may be less restrictive. It's time for building code writers to argue for the inclusion of this simple, yet powerful building component that inhibits ember intrustion and slows fire spread.

A great opportunity

As wildfires become more frequent and structural fire risks continue to rise, the roofing industry is uniquely positioned to raise its voice about the critical importance of the right way to fire-harden a roof system. It is about educating homeowners and implementing the right solutions.

If you are not selling gutters or gutter protection as part of your sales pitch, you may want to consider doing so. While your crews install Class A roof assemblies, adding the right gutter protection can be the perfect complement to a homeowner's fire-hardening efforts as well as creating a profitable extension to your services.

MIKE CELLURA is western regional sales manager for E-Z Gutter Guard, St. Clair, Mo.

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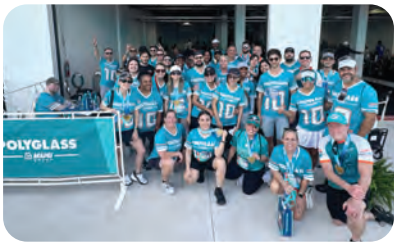
MANUFACTURER NEWS

Polyglass fundraises for cancer research



Polyglass U.S.A. Inc., Deerfield Beach, Fla., recently participated in the Dolphins Cancer Challenge XVI where 125 employees participated in cycling and run/walk events to support cancer research.

Support for the challenge extended across Polyglass' operations with manufacturing facilities in Winter Haven, Fla., and Fernley, Nev., organizing local fundraising events and raffles. The Hazelton, Pa., location also rallied behind and sponsored Cristian Cocconcelli, Ph.D., a research scientist at Polyglass, in a 54-mile cycling effort to help drive additional contributions.

The company's nationwide fundraising efforts contributed to a milestone year for the event. The Polyglass team raised more than $10,000 in donations, more than doubling its original goal, and achieved a total fundraising amount of $40,000.

EagleView launches geospatial engine

EagleView, Rochester, N.Y., has released Eagleview Horizon,™ an agentic geospatial intelligence engine that includes more than two decades of imaging gathering of nearly every property in the U.S.

EagleView Horizon leverages the company's property data and aerial imagery platform EagleView One™ to supercharge the capacity for construction, insurance, government, infrastructure and property management firms looking to solve real-world challenges. EagleView Horizon's agent-to-agent capabilities enable external AI systems to directly integrate EagleView's comprehensive analyses with geospatial data.

EagleView Horizon represents a new interface that allows customers to leverage AI agents to explore properties and structures, identify and implement solutions and find new opportunities.

EagleView Horizon is currently available by invitation only through EagleView One, the company's unified customer-facing platform. For more information, visit eagleview.com/horizon.

Soprema announces new CEO

Soprema U.S., Wadsworth, Ohio, has announced a planned CEO transition following Tim Kersey stepping down from the role to spend more time with his family.

Effective July 1, Greg Morgan will assume the role as CEO. Morgan has been with Soprema since 2000 and has served as the company's COO since 2023.

Kersey will remain at the company as chief technical officer.

IKO opens new facilities

IKO Industries Inc., Wilmington, Del., has opened two new fiberglass and glass mat manufacturing facilities in Chester County, S.C. The milestone marks the completion of more than $500 million in investments that will significantly advance IKO Industries' vertically integrated manufacturing capabilities in North America.

The facilities include a fiberglass manufacturing plant and a 325,000-square-foot glass mat production facility that uses output from the adjacent fiberglass plant.

The facilities will support IKO Industries' growing network of shingle manufacturing operations.

Sika announces Project of the Year Awards

Sika, Canton, Mass. has announced the 2025 winners of its Project of the Year Awards. Each year, projects are evaluated for design complexity, technical execution, aesthetics, and the creative use of Sika's roofing and waterproofing systems. The following NRCA members won awards:

- Letner Roofing Company, Orange, Calif., for its work on the California Science Center-Samuel Oschin Air and Space Center, Los Angeles, in the Low Slope—New Construction category.
- BEST Contracting Services Inc., Gardena, Calif., for its work on LAUSD Narbonne High School, Harbor City, Calif.; Commonwealth Building Systems LLC, Rockland, Mass., for its work on 500 Boylston, Boston; Hayden Building Maintenance Corp., West Nyack, N.Y., for its work on Albertus Magnus High School, Bardonia, N.Y.; J. Reynolds & Co., a Tecta America Company, Saginaw, Texas, for its work on the Hess Tower wind turbine building, Houston; and L. Marshall Roofing & Sheet Metal Inc., Glenview, Ill., for its work on Mitchell International Airport-Concourse D, Milwaukee, won awards in the Low Slope—Re-Roof category.
- Patuxent, Laurel, Md., for its work on the Walter E. Washington Convention Center, Washington D.C.; and Silktown Roofing Inc., Manchester, Conn., for its work on the Solnit Children's Center, Middletown, Conn., won awards in the Steep Slope category.
- Greenwood Industries Inc., Worcester, Mass., for its work on Francis M. Leahy Elementary School, Lawrence, Mass.; and Roofing Solutions LLC, Baton Rouge, La., for its work on Lady of the Sea Hospital, Cut Off, La., won awards in the Waterproofing category.

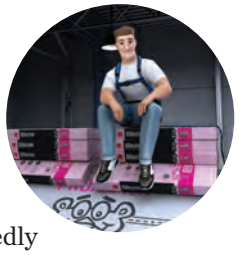
To view a full list of 2025 Project of the Year Award winners, visit usa.sika.com.

TAMKO® acquires solar reform alliance

TAMKO Building Products Inc., Joplin, Mo., has announced its acquisition of the Roofing & Solar Reform Alliance. TAMKO Building Products and RSRA will relaunch together as The Roofing STRONG Alliance™ by TAMKO.

The Roofing STRONG Alliance will operate as an extension of the TAMKO Edge® program, and the RSRA team will remain intact.

Owens Corning® launches virtual sales agent



Owens Corning, Toledo, Ohio, and Roof Count Inc., Boise, Idaho, have introduced Scout, a virtual sales agent. Scout is reportedly the roofing industry's first virtual sales agent tailored to homeowners' buying personas and contractors' business needs.

Developed exclusively for Owens Corning Contractor Network members, Scout is designed to bridge the gap between advanced e-commerce technology and human interaction. The virtual agent is available 24/7 and educates homeowners about the Owens Corning Total Protection Roof System® while walking them through a personalized product selection process in an interactive presentation environment.

For more information, visit roofscout.com.

GAF provides new roof for veteran

GAF, Parsippany, N.J., has partnered with Habitat for Humanity® of Tuscaloosa, Ala., to provide a new FORTIFIED Roof™ for a veteran.

The project kicked off a joint effort between GAF; Habitat for Humanity of Tuscaloosa; and Strengthen Alabama Homes, a division of the Alabama Department of Insurance, to expand access to storm-resilient roof systems in western Alabama.

Through the program, eligible homeowners can access grants to install FORTIFIED Roof system materials donated by GAF and installed by a GAF Master Elite® contractor.

For the veteran's roof, GAF provided support to help the home meet FORTIFIED roof standards, and GAF-certified contractor Alliance Roofing, Mobile, Ala., donated the labor for the installation.

During the past 10 years, the team at GAF's Tuscaloosa manufacturing plant has produced and donated roofing materials to more than 100 homes.

To learn more, visit habitattuscaloosa.org.

DISTRIBUTOR NEWS

QXO unites with NAHICA to advance Latino contractors

QXO, Herndon, Va., has announced it has joined the National Hispanic Contractors Association as a national sponsor, reinforcing a shared commitment to empowering Latino contractors across the U.S.

The partnership marks a significant step in QXO's mission to elevate Hispanic professionals in the building products industry. With QXO's support, NAHICA will expand its efforts to provide education, resources and business opportunities tailored to the needs of Latino contractors, one of the fastest-growing segments in the U.S. construction workforce.

Together, NAHICA and QXO will work to create new pathways for growth, visibility and success for Hispanic contractors, helping them thrive in an increasingly competitive landscape while contributing to the continued development of communities nationwide.

ABC Supply presents Ken Hendricks Awards

Ford

Jackson

ABC Supply Co. Inc., Beloit, Wis., presented Ken Hendricks Awards to Mike Ford, southwest region operations manager, and Fran Jackson, managing partner of ABC Supply's Malvern, Pa., facility.

The awards are presented annually to associates who demonstrate commitment to ABC Supply's character and seven core values in honor of the company's late co-founder. Recipients are nominated by their peers for the positive impacts they have on their teams and for consistently leading in ways that reflect ABC Supply's core values.

Ford started at ABC Supply as a warehouse associate in Midland, Texas, in 1988. He has held many positions within the company and has led multiple Texas locations. He was inducted into the company's President's Club in 1998.

Jackson joined ABC Supply in 1994 as a district purchasing manager but left the company in 1998. He returned to ABC Supply in 2010 and has earned several company recognitions since, including his induction into the President's Club in 2014.

Ford and Jackson will be recognized at the company's annual Founder's Celebration at ABC Supply's National Support Center in Beloit, Wis., in August.

To learn more about the award, visit abcsupply.com.

CONTRACTOR NEWS

Roofing Corp of America acquires Schefers Roofing

Roofing Corp of America, Atlanta, has acquired Schefers Roofing Company, Kansas City, Mo., marking the company's 16th acquisition since its founding.

Schefers Roofing Company will operate as a stand-alone entity within Roofing Corp of America while they continue to operate under their current leadership.

OTHER NEWS

ASCE announces 2026 Distinguished Members

The American Society of Civil Engineers announced its 2026 class of Distinguished Members, the organization's highest honor.

This year's class includes 12 active members who have made significant contributions to civil engineering throughout their careers. Of ASCE's more than 160,000 members worldwide, only a few hundred have been honored as a Distinguished Member. This highest grade of membership is reserved for those who have attained eminence within the realm of engineering, whether in construction, related arts and sciences or engineering education. A new class of Distinguished Members is inducted annually.

To view the list of 2026 ASCE Distinguished Members, visit asce.org.

Roofing Alliance announces Bennett Award winner

The Roofing Alliance has named Cori Vernam, director of marketing, cause and business development at Antis Roofing & Waterproofing LLC, Irvine, Calif., as the recipient of the 2026 Bennett Award.

Vernam was honored during the Roofing Alliance spring meeting in Jekyll Island, Ga., for her leadership and longstanding commitment to the Roofing Alliance's partnership with Ronald McDonald House.®

The Bennett Award recognizes individuals who go above and beyond by volunteering their time and contributing to the Roofing Alliance and the roofing industry.


Vernam

Vernam served on the original task force that helped launch the Roofing Alliance's relationship with Ronald McDonald House, helping establish a partnership that continues to support families nationwide. She connected contractors with Ronald McDonald House locations throughout California and volunteered her own company to assist several houses, including Camp Ronald McDonald for Good Times.

Vernam currently serves on the Ronald McDonald House Orange County Board and has volunteered with the organization for more than 26 years. Additionally, she is a member of National Women in Roofing, supports numerous charitable organizations and leads marketing and community impact efforts at Antis Roofing & Waterproofing.

UP THE LADDER


Karins


Brabham


Mulcahy


Bader

GAF, Parsippany, N.J., has promoted **Dan Karins** to head of commercial sales business. He will assume the role at the end of 2026.

Georgia-Pacific, Atlanta, has promoted **David Brabham** to vice president of stewardship capability and **John Mulcahy** to senior vice president of communications, public affairs and stewardship.

Mulehide, Beloit, Wis., has promoted **Alejandra Mahecha Bader** to field technical manager.

EVENTS

JULY

9
Foreman Management Training
NRCA
Phoenix
Contact: Brad Martz, NRCA's director of sales
bmartz@nrca.net
nrca.net

10
Field Leadership Training, Level 1
NRCA
Phoenix
Contact: Brad Martz, NRCA's director of sales
bmartz@nrca.net
nrca.net

14-17
NRCA's Midyear Committee Meetings
NRCA
Chicago
Contact: NRCA's Customer Service Department
(866) ASK-NRCA (275-6722) or info@nrca.net
nrca.net

AUGUST

6
CERTA Train-the-trainer
NRCA
Elgin, Ill.
Contact: NRCA's Customer Service Department
(866) ASK-NRCA (275-6722) or info@nrca.net
nrca.net

17-20
Future Executives Institute
NRCA
Chicago
Contact: NRCA's Customer Service Department
(866) ASK-NRCA (275-6722) or info@nrca.net
nrca.net

SEPTEMBER

9
Virtual CERTA Train-the-trainer
NRCA
Online
Contact: NRCA's Customer Service Department
(866) ASK-NRCA (275-6722) or info@nrca.net
nrca.net

27-29
Western Roofing Expo 2026
Western Roofing Expo
Las Vegas
Contact: Western Roofing Expo
(800) 725-0333, (650) 938-5441 or info@wsrca.com
westernroofingexpo.com

OCTOBER

7-8
LEGALCon Live
NRCA
Chicago
Contact: NRCA's Customer Service Department
(866) ASK-NRCA (275-6722) or info@nrca.net
nrca.net

7-9
METALCON
Metalcon
Orlando, Fla.
Contact: Metalcon
(617) 965-0055 or registration@metalcon.com
metalcon.com

14
Virtual CERTA Train-the-trainer
NRCA
Online
Contact: NRCA's Customer Service Department
(866) ASK-NRCA (275-6722) or info@nrca.net
nrca.net

18-20
2026 IIBEC Building Enclosure Symposium
International Institute of Building Enclosure Consultants
Indianapolis
Contact: IIBEC
(800) 828-1902
bes2026.iibec.org

21-23
Texas Roofing Conference
Roofing Contractors Association of Texas
Grapevine, Texas
Contact: RCAT Customer Service
(512) 251-7690 or rcat.net/contact-us
rcat.net

NRCA NEW MEMBERS

ARCHITECTS/ENGINEERS/CONSULTANTS

Jax Kneppers Associates Inc., Richardson, Texas
Objective Services, Edmonds, Wash.
Thompson Engineering, Mobile, Ala.
Thornton Tomasetti, Dallas

CONTRACTORS

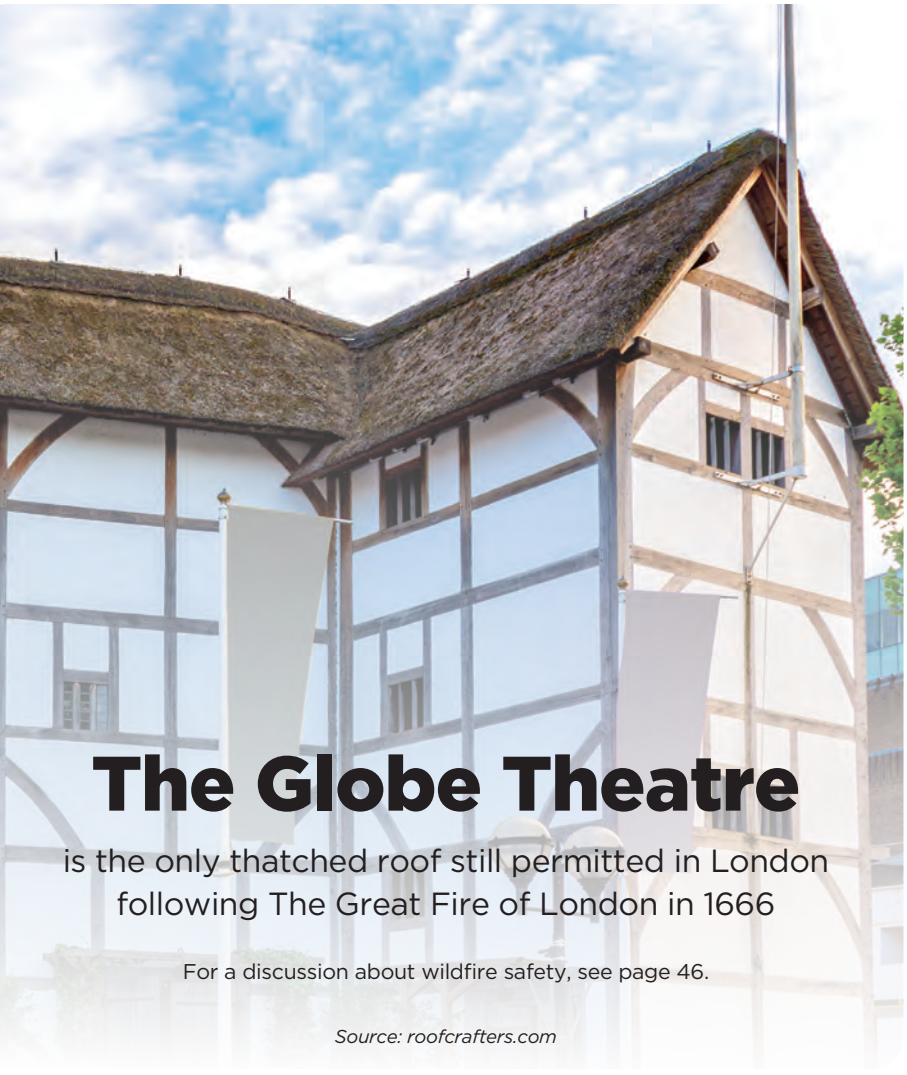
6 Brothers Contractors LLC, Lincoln Park, N.J.
Advance Home Pros Inc., Trenton N.J.
All Spec Roof Corp., Little Rock, Ark.
American Weather Shield, Jackson, Tenn.
Artisan Quality Roofing, Apex, N.C.
Clean Roofing, San Jose, Calif.
D&G Metal Works Inc., Waterloo, Iowa
DE Group Roofing & Waterproofing, Walnut Creek, Calif.
Deer Creek Exteriors, Whiteford, Md.
DM Construction, Englewood, Colo.
Good Roof, Centerville, Utah
Halo Roofing Inc., Naples, Fla.
HRC Roofing and Solar Inc., Hayward, Calif.
Interior Alaska Roofing Inc., Fairbanks, Ark.
KW Roofing, Thomasville, N.C.
L33 Roofing, Atlanta
Mayorga Construction Group, Pensacola, Fla.
Ray Gilbert & Sons Inc., St. Louis
Remodeling M.D., Phoenix, Md.
Rocky Valley Contractors, Gypsum, Colo.
Roofing & Exterior Pros, Ellisville, Mo.
Roofing Specialists, Sun Prairie, Wis.
RoofPro Roofing, Destin, Fla.
Simpkins Construction, Flint, Mich.
Skyview Roofing, Medina, Ohio
Solcon Texas LLC, Spring, Texas
Sure Roofing Systems Inc., San Francisco
Ted Weber Jr. Roofing, Wiscasset, Maine
Triumph Roofing Solutions LLC, Athens, Ga.
Valhalla Roofing Solutions, Lynnwood, Wash.
Verity Roofing, Castle Rock, Colo.
Vulcan Roofing, Nashville, Tenn.
Willoughby Roofing & S/M Inc., Cullman, Ala.

MANUFACTURER

Metal Roofing Solutions, Wheat Ridge, Colo.

MEMBER BRANCHES

Boone Brothers Commercial Roofing, a Nations Roof Company, Sioux City, Iowa
Boone Brothers Roofing Inc., a Nations Roof Company, Omaha, Neb.
Fidelity Roof Co., Oakland, Calif.



The Globe Theatre

is the only thatched roof still permitted in London following The Great Fire of London in 1666

For a discussion about wildfire safety, see page 46.

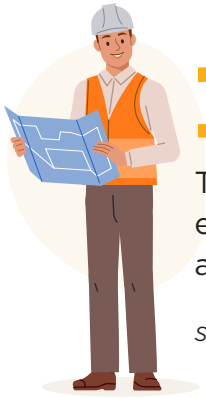
Source: roofcrafters.com

140 YEARS

MONTHLY HIGHLIGHT

1971

Roofing Spec (now *Professional Roofing* magazine) becomes NRCA's official publication



135,490

The estimated number of employed roofing workers across the U.S.

Source: Bureau of Labor Statistics

ROOFING DAY IN DC

199

The number of registered participants at Roofing Day in D.C. 2026

To read more about Roofing Day in D.C., see page 40.

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André Coppin, RRC, RRO
Seattle, WA

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Registered Roof Consultants (RRCs) are independent roofing experts with industry- wide knowledge of materials performance and design requirements. An RRC is knowledgeable of every facet of the roof construction process and serves as the building owner's councilor for matters on both existing and new construction. The demand for the RRC credential continues to grow as the industry recognizes the value of the RRC's quantified skill set.

GCK EXAM: 90 QUESTIONS 4 HOURS
RRC EXAM: 60 QUESTIONS 4 HOURS

Registered Roof Observers (RROs) are roofing quality assurance observers who monitor the construction process and report roofing project compliance with approved construction specifications and best-practice installation procedures. An RRO is an on-site monitor for the design team. The RRO's vigilance helps keep construction on track with milestone tasks, deadlines, and budget. The RRO credential is the preferred standard of practice for quality assurance professionals.

RRO EXAM: 75 QUESTIONS 3 HOURS

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RRO®
REGISTERED ROOF OBSERVER

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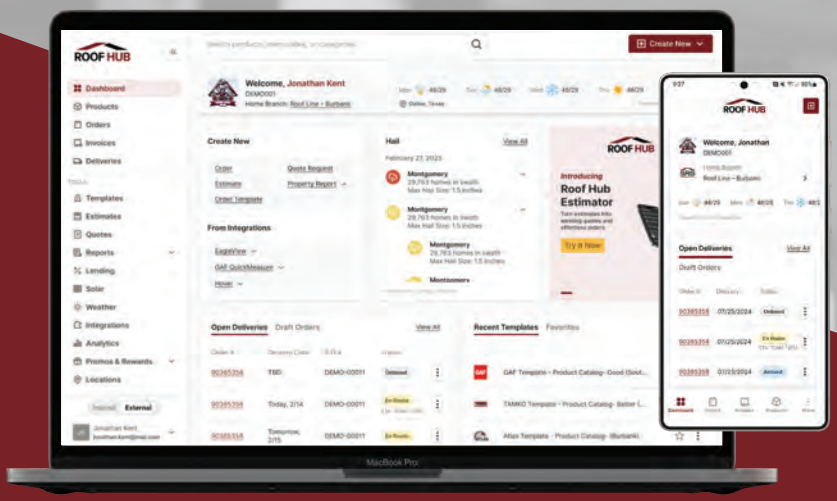
iibec.org/credentials

SRS BUILDING PRODUCTS

SRS DELIVERS
INNOVATION



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