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Contractors have varying degrees of success based on how they approach daily operations



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Straighten up

Proper posture can help you in more ways than you think

by Ambika Puniani Reid



There is a lot to worry about when it comes to your employees' health and well-being as well as your own. Beyond safety regulations and mental and emotional health issues, most folks also try to maintain healthy diets and adhere to exercise routines.

One historically difficult health problem to fix is posture. In *The Wall Street Journal* article "Yes, you should stand up straight—for all sorts of reasons," Kate Murphy writes: "Good posture is ... essential for optimal circulation, respiration, digestion and bladder function. Increasing evidence suggests it also improves cognitive ability and enhances your mood."

One way to improve posture is to look at yourself in the mirror more often. You can position mirrors throughout your home and workspace to identify furniture that could be contributing to poor

posture. For instance, a mirror in your family room could show how your comfy couch forces your body out of alignment.

You also can stand against a wall several times per day to reteach your body and mind how to stand upright. For proper posture, your head, shoulders, buttocks and heels should be touching the wall.

"By repeatedly putting yourself in that position, to the best of your ability, two or three times a day, you will begin to retrain and re-educate your body," Murphy writes.

She continues: "Also, keep in mind that your head is about as heavy as a bowling ball. Even when your head is in a straight-up, neutral position it exerts 10 to 12 pounds of pressure on your cervical spine. But at a 15-degree forward tilt, the force increases to 27 pounds. At 45 degrees, the angle at which most people bend to look at their cell phones, the force is 49 pounds."

What may be surprising to learn is research shows there is a significant relationship between depression and a slumped posture. And people who can maintain an upright posture while in a stressful situation reported higher self-esteem, better mood and less anxiety compared with those with a slumped posture.

Murphy notes physical therapists or trainers can help identify where your posture needs improvement and provide exercises. Apps such as Upright and PosturePal also can be useful.

You only get one body; taking care of it is important.

Ambika

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



CLOSE-UP

Action Roofing,™ Pompano Beach, Fla., recently partnered with the Florida Panthers and Rebuilding Together® Broward to provide two U.S. Army veterans with new roofs at no cost.

The recipients, Bronda Lucious Williams and Paulette Richardson, both face significant health challenges that make home repairs difficult. Williams, who served in the U.S. Army for 10 years, had a severely deteriorated roof, including a collapsed bathroom ceiling. Richardson, a Gulf War veteran who served for 22 years, had a leaking roof that threatened the stability of her residence.

The roof system replacements had a combined value of \$50,000 and represent significant investments in the veterans' well-being and safety.

"Without the roof there is no house," Richardson says. "For me, it's almost like getting a million dollars."

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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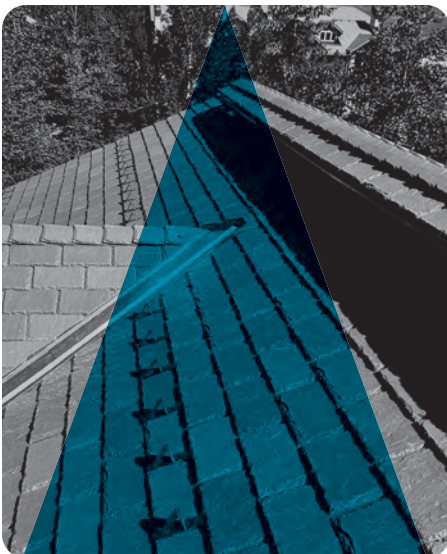
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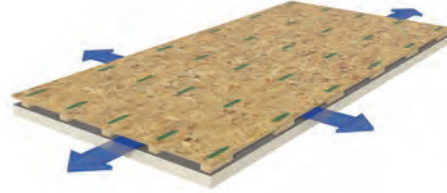
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Venting system controls moisture

Petersen has expanded its PAC-CLAD line of architectural metal cladding systems with the PAC-Shield CV roof venting system, a ventilated composite insulation panel that includes a 4- by 8-foot layer of closed-cell rigid polyisocyanurate, integrated solid wood spacers that create a 1-inch air gap and a top layer of oriented strand board or plywood. It is designed to control moisture in steep-slope roof systems, improve energy efficiency and prevent ice dams.

Reportedly ideal for use with metal roofs, shingles, slate and tile, PAC-Shield CV helps reduce heat transfer in the summer and adds insulation in the winter. It also is said to reduce trapped moisture and support indoor air quality.

pac-clad.com



Membranes available in smaller rolls

MuleHide has made its Self-Adhering EPDM membrane available in 5- by 40-foot rolls for use on low-slope roofs that are small and difficult to access.

A 3-inch nonadhesive, selvage edge along one of the 40-foot edges is said to allow for quick seaming with 3-inch EPDM In-Seam Tape. The membrane resists hail, impacts, punctures, tearing and normal roof traffic and can be installed in temperatures as cold as 20 F. It is said to stand up to mold, ozone and ultraviolet rays.

mulehide.com



Women's boot resists abrasions



Georgia Boot has launched the women's Eagle Trail Chelsea Work Boot. The boot features twin gore panels with nylon pull loops for pull-on convenience, mesh lining for breathability and a polyurethane insole for cushioning. Its Georgia Waterproof System reportedly helps keep feet dry and the dual-density EVA and Carbo-Tec™ rubber outsole

is said to resist abrasions, chemicals, heat and slips.

The boot meets ASTM F2413 standards for protective toe and electrical hazard safety. It also has a fiberglass shank that adds stability and a Tec-Tuff abrasion-resistant heel that offers durability.

georgiaboot.com

Skylight has solar-powered shade

VELUX has made available the VELUX Skylight System. Featuring a pre-installed, remote-controlled solar-powered shade, it reportedly reduces heat loss in winter and blocks heat gain in summer.

The system also features built-in rain sensors on venting skylights to close automatically.

veluxusa.com



Vent improves air quality

GAF has introduced the Master Flow™ Bath & Dryer Rooftop Appliance Vent,

engineered to vent heat and moisture from bathroom and kitchen exhaust fans, clothes dryers and other household appliances. The vent reportedly helps improve indoor air quality and reduces the risk of moisture damage.

It also features a removable stainless-steel bird/pest screen and duct collar.

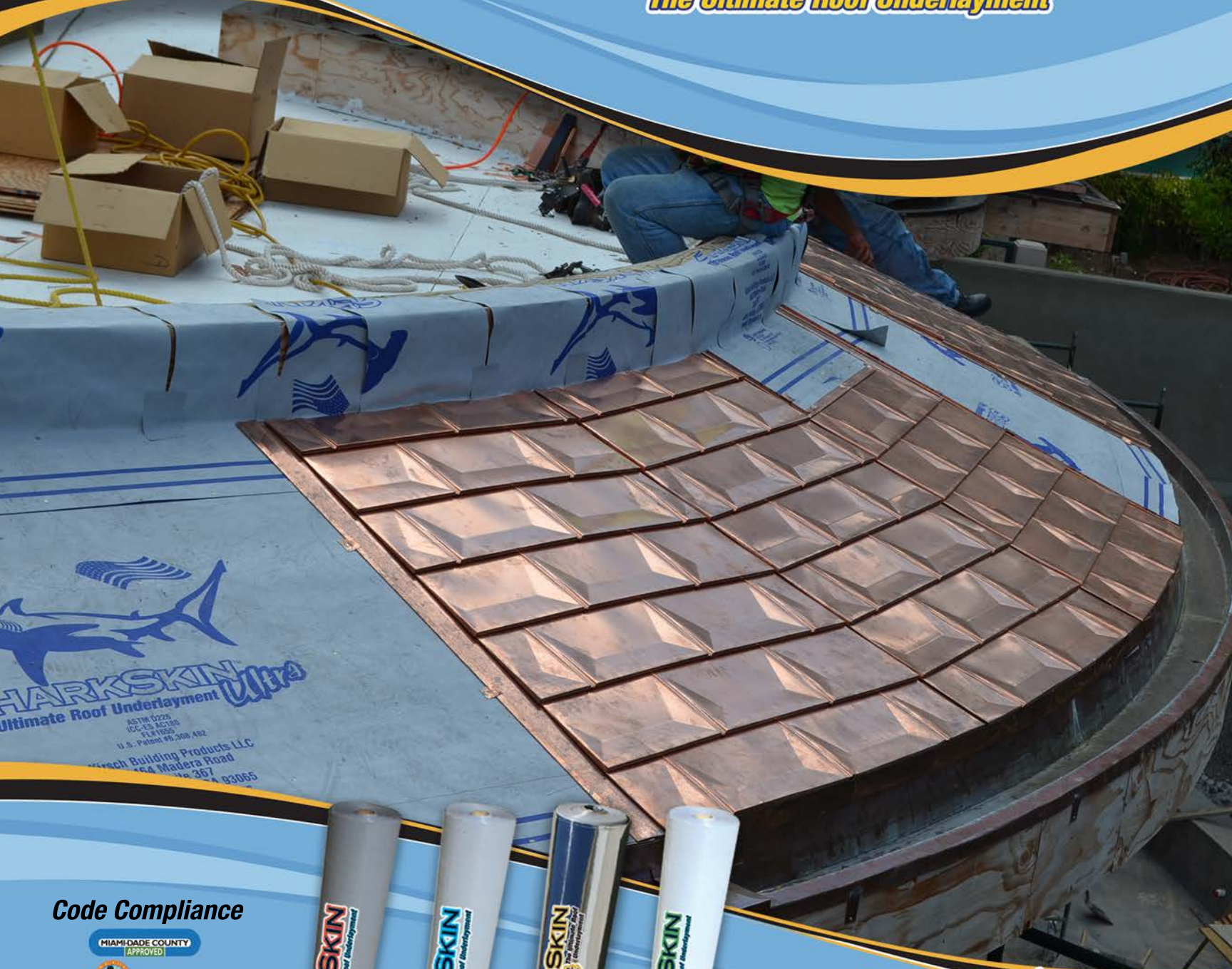
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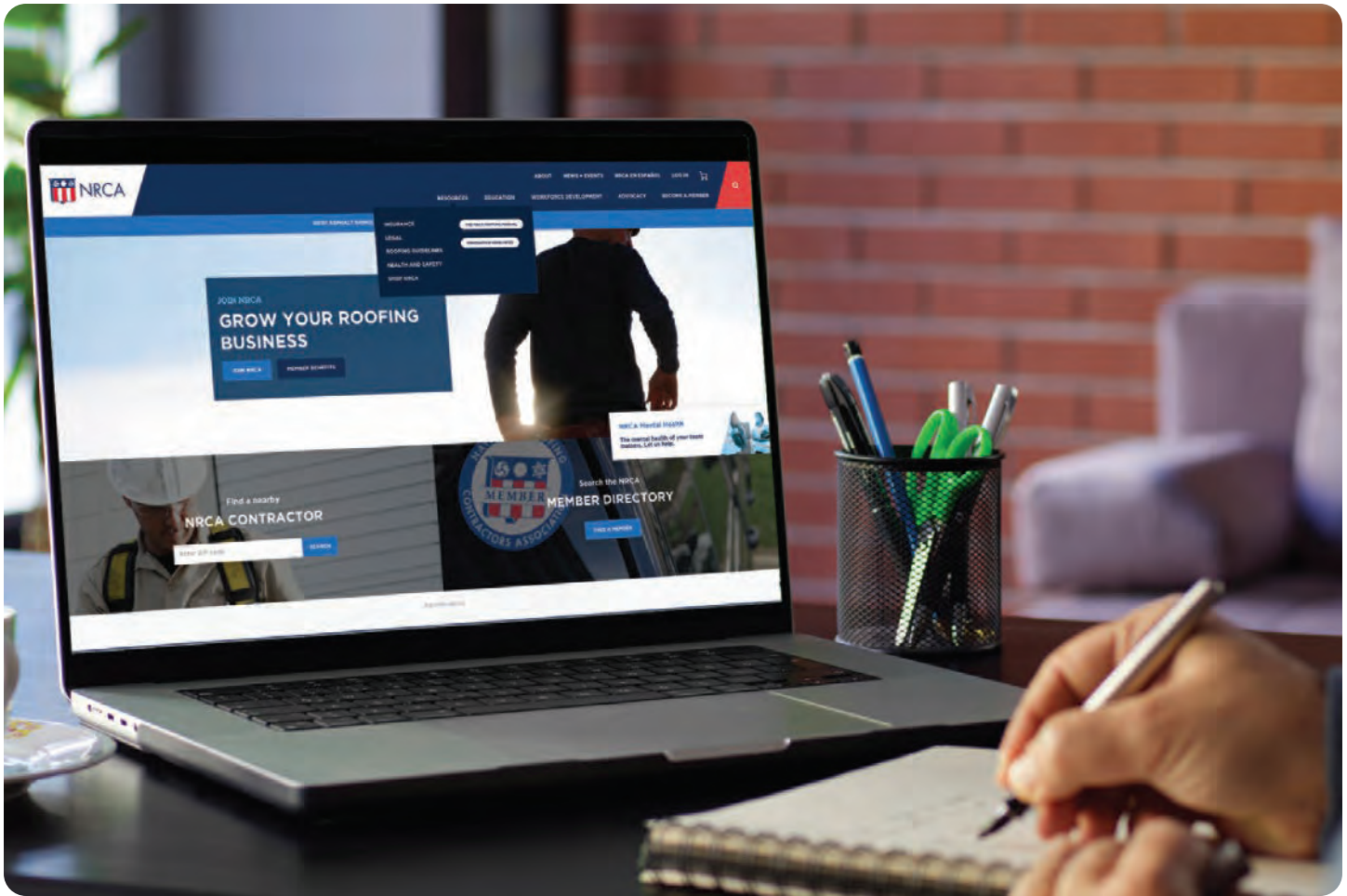
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Here to help

You have questions? Chances are,
NRCA has the answers

by McKay Daniels

One of NRCA's key functions is to provide resources to our members. Between texts, social media, traditional mail and email, we try to inform members when new resources become available. But it's a busy, noisy world, and it's easy to tune out information.

So I wanted to take a little time to make sure you are aware of some ways NRCA can help you and your business. One of the topics we get asked about frequently has been immigration—specifically ICE arrests, audits, deportations, etc. Ensuring roofing professionals are following the law, informed and prepared for possible immigration-related activity is vitally important, and NRCA has created a webpage of resources to use.

At nrca.net/immigrantlabor you will find our Employer Immigration Resources page, which features several handouts, articles and other resources to help you and your workers.

Does your office staff know what to do if ICE comes to your door?

There are different types of warrants. Do you know how to comply with them?

Do your employees know their rights and obligations?

What are you doing to ensure you are following the law with your I-9 forms?

I-9 audits are occurring more frequently. Are you ready?

NRCA can help make sure you can answer “yes” to these and other questions. Give the website a look!

Another significant movement taking place in the industry is consolidation. I have written before about this topic because it’s so significant. Roofing is incredibly fragmented, and that fragmentation makes roofing contracting companies attractive to buyers. Buyers can consist of other roofing contracting companies or private firms, and selling a company will likely be the most important deal contractors make in their careers. After decades of work and perhaps generations of investment, they take one chance to secure their futures and ensure their goals and objectives are achieved.

NRCA wants to help companies and owners make the right decision for them. Buyers of roofing companies may make 10 or more deals per year. But sellers likely will make one deal in their lifetimes. That’s a significant information and experience imbalance, and any seller needs to treat the process with the highest level of due diligence.

In the legal world, there’s a joke that goes something like “Anyone who would represent themselves in court has a fool for a client.” One could say the same thing for those choosing to represent themselves in the sale of a

business. You probably didn’t sell your last house as a “For Sale By Owner;” I would think twice about doing that with your company. Working with a lawyer, accountant or seller’s agent can give you expertise that’s otherwise missing to ensure you’re making the right deal for you.

Are your pricing expectations realistic? Or are they too lofty or low?

Are there things you can be doing today to make your company more attractive to sell in two years?

Is one buyer a more attractive partner than another even if the money is the same? Just like selling a house to a cash buyer who waives the inspection, some buyers and offers are better than others beyond just the dollar amount.

Are the equity expectations at play reasonable?

Please don’t jump into a deal that you have not fully vetted and had professional help crafting. You’ve worked too hard not to. There are companies and consultants that help contractors sell their roofing businesses, and NRCA has a list of referrals to help. We also have produced some Power Hour episodes and interviews with contractors who have recently gone through the selling process. Just reach out, and we can point you in the right direction!

Another newly released resource is the *Quality Control Guidelines for the Application of Asphalt Shingle Roof Systems*. NRCA partnered with the Asphalt Roofing Manufacturers Association to update this booklet to help provide guidance for the on-site evaluation of the application of asphalt shingle roof systems. The document provides visual examination evaluation criteria for the roof substrate surface, underlayment,



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you do best



drip edge, fasteners, asphalt shingles and flashings. And NRCA members can access the digital copy for free at shop.nrca.net.

NRCA also created an in-depth white paper about photovoltaic-ready roof systems. The seven-page report includes key information regarding design considerations and codes and standards for steep-slope and low-slope roofs for PV solar energy installations. As solar continues to be installed on roofing products, make sure you have this guide to help you navigate what’s often called “the wild, wild west.” You can find the guide by entering “PV-ready roofs” in our website search.

And in the coming months, we will be revising *The NRCA Safety Manual* and publishing a new manual focused on fleet safety, as well as a number of other resources, so be sure to be on the lookout!

There are many issues facing our industry. And NRCA wants to ensure you have the information necessary to do what you do best. 🌟🌟🌟

MCKAY DANIELS is NRCA’s CEO.
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Students receive roofing industry scholarship

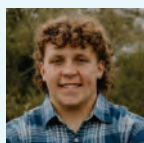
The Roofing Alliance has announced the recipients of its Melvin Kruger Scholarship for the 2025-26 academic year.

The following were awarded new scholarships:

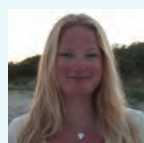
- Jonathan Burt II, studying skilled trades at Henry Ford College, Dearborn, Mich.
- Noah Donahoe, studying construction management at Minnesota State University, Mankato
- Aldyn Hartman, studying building science at Auburn University, Auburn, Ala.
- Erin McCoy, studying construction management at University of Florida, Gainesville
- Lainie Morgan, studying architectural design at University of Florida
- Caleb Morrison, studying civil engineering at University of Alabama, Tuscaloosa
- Graham Roh, studying building science at Auburn University
- Kyle Zirigner, studying construction management at Columbus State Community College, Columbus, Ohio



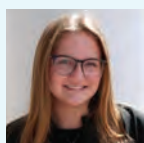
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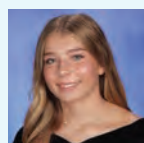
Donahoe



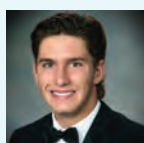
Hartman



McCoy



Morgan



Morrison



Roh



Zirigner

The Roofing Alliance Melvin Kruger Scholarship Program offers three scholarship opportunities. All categories are open to employees of roofing industry companies, their spouses and their dependent children, as well as construction management students enrolled in undergraduate level

programs or students enrolled in career and technical education programs or schools (regardless of industry affiliation).

In addition, the Roofing Alliance renewed 11 Melvin Kruger Scholarships for the 2025-26 academic year.

The recipients include:

- Caylin Angel, who is attending Wheeling Jesuit University, Wheeling, W.Va.
- Evan Cady, who is attending Western New England University, Springfield, Mass.
- Cole Celano, who is attending University of North Florida, Jacksonville
- Kennedy Jones, who is attending North Carolina Agricultural and Technical State University, Greensboro
- Cecelia Krumholz, who is attending University of Minnesota: Twin Cities, Minneapolis
- Hallie Lemmon, who is attending West Virginia University, Morgantown
- Piper Lewis, who is attending Boston College
- Brayden Morford, who is attending Carnegie Mellon University, Pittsburgh
- Alexis Petty, who is attending Rose-Hulman Institute of Technology, Terre Haute, Ind.
- Melina Risi, who is attending Clemson University, Clemson, S.C.
- Kennedy Stockton, who is attending University of Arkansas at Little Rock

The Roofing Alliance awarded \$32,000 for new scholarships and \$55,000 for scholarship renewals for a total of \$87,000 for the 2025-26 school year. To date, 173 students have received \$1.252 million in scholarship awards.

To watch an NRCA webinar recording about how you can develop relationships with career and technical education programs, go to professionalroofing.net.



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Creating a positive customer experience

Everyone has had a bad experience as a customer. As a company, creating an easy, positive customer experience is crucial to gaining and keeping customers and growing your business.

For Construction Pros shares the following tips to ensure your customers have a good experience.

- **Answer calls promptly and respond to them in a timely manner.** This seems simple but often is one of the biggest complaints from customers or potential customers. Being responsive is crucial to attracting more work and can help you stand out from your competition.
- **Provide a quote in a timely manner.** Ideally, you would send a quote hours after initial contact rather than weeks later.
- **Ensure you completely understand what you are selling.** People who ask for a quote want to know options, differences among the options, materials you will be using and more. Be sure your team has the necessary knowledge and training.
- **Make scheduling a breeze.** Work to complete projects within a reasonable timeframe and avoid overscheduling. It is important the schedule you provide for customers is accurate to avoid frustration and lost business.
- **Promptly invoice customers after the project is completed and be open to various payment methods.** Delaying invoicing and restricting payment options affects cash flow. Consider making it more convenient for customers by offering payment options besides checks and credit cards, such as Apple Pay, PayPal and Venmo.
- **Be available to answer questions and provide support.** When customers call with a problem or complaint, answer and solve their problem immediately.

Improved communication is needed on bilingual job sites

CPWR—The Center for Construction Research and Training recently hosted Improving Safety Climate for Hispanic Construction Workers, a webinar that examined findings from a study led by researchers at the University of North Carolina at Chapel Hill. Topics included the results from a survey of 500 construction workers and interviews with more than 50 workers. At least 85% of respondents were Latino, according to *Safety+Health* magazine.

Survey results show only about half of injured Latino workers reported workplace injuries or illnesses to their supervisors. Additionally, 51% of Spanish-speaking Latino workers and 67% of English-speaking Latino workers reported feeling ignored or not taken seriously by a supervisor either “once a week or more” or “a few times a month.”

To combat these issues, webinar presenters suggest increasing the number of Spanish-speaking supervisors in the field and prioritizing real-time interpretation on job sites by conducting important meetings in English and Spanish and identifying translators with hard hat stickers or helmets of a different color.

“It’s best if you can make sure that there’s someone bilingual on every team,” says Maija Leff, associate director of the Carolina Center for Healthy Work Design and Worker Well-being, Chapel Hill, N.C. “Better if that bilingual person is actually your foreman or ... someone who has some authority.”

Additional recommendations include involving workers in finding solutions for safer workplaces; implementing worker-led safety committees in workers’ main languages; aligning safety messages with Latino cultural work values; teaching supervisors the differences between Latino and American culture; and ensuring all essential documents are available in English and Spanish.

To learn about NRCA’s Spanish membership offerings, go to spanish.nrca.net.



David Lawrence Convention Center
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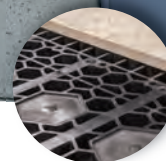
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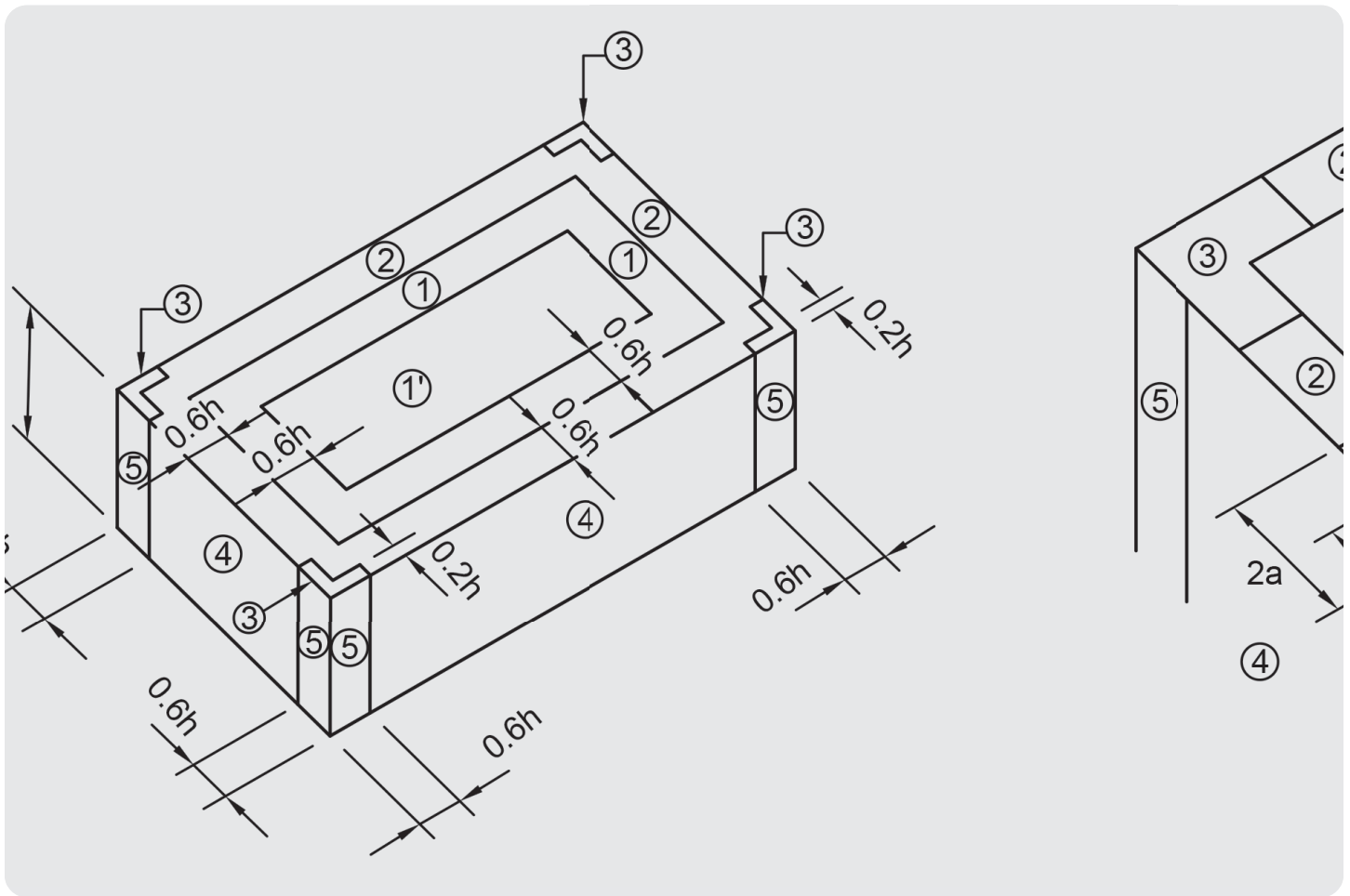


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Understanding wind design

Proper wind design is essential for roof system performance

by Mark S. Graham

Proper wind design of roof systems is a relatively complex, sometimes misunderstood undertaking; however, it is essential for proper roof system performance. It is important to know the requirements and process for proper wind design of most low-slope roof systems.

Code compliance

The International Building Code® requires design wind loads be determined according the ASCE 7, “Minimum Design Loads and Associated Criteria for Buildings and Other Structures.” IBC 2024’s Section 1609.1.1-Determination of Wind Loads indicates wind loads for buildings be determined in accordance with ASCE 7-22’s Chapters 26 to 30. Section 1609.5-Tornado Loads indicates Risk Category III and IV buildings in the tornado-prone region east of the Rocky Mountains also be in accordance with ASCE 7-24’s Chapter 32-Tornado Loads.

IBC Section 1603.3 requires construction documents show wind and tornado design data, including the basic wind speed

(V), tornado speed (V_T), allowable stress wind speed (V_{ASD}), and design wind pressures and their applicable zones with dimensions.

IBC Section 1504.4 requires built-up, polymer-modified bitumen, adhered or mechanically attached single-ply and metal panel roof systems over roof decks be tested for wind resistance in accordance with FM 4474, “American National Standard for Evaluating the Simulated Wind Uplift Resistance of Roof Assemblies Using Static Positive and/or Negative Differential Pressures;” UL 580, “Tests for Uplift Resistance of Roof Assemblies;” or UL 1897, “Uplift Tests for Roof Covering Systems.” The code does not require this testing be conducted at FM or UL Solutions; testing at other recognized laboratories using FM or UL test methods is acceptable.

Structural metal panel roof systems without roof decks must be tested in accordance with FM 4474 or ASTM E1592, “Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference.” Through-fastened, structural metal panel roof systems must be tested in accordance with ASTM E1592, FM 4474 or UL 580.

Ballasted single-ply membrane roof systems are not required to be tested. They must be designed in accordance with ANSI/SPRI RP-4, “Wind Design Standard for Ballasted Single-ply Roofing Systems.”

ASCE 7-22

ASCE 7-22 provides a recognized means for determining minimum loads, hazard levels, associated criteria and intended performance levels for buildings. Versions ASCE 7-10 through ASCE 7-22 use the ultimate strength design method.

The ultimate strength design method results in higher loads than the earlier allowable stress design method used in ASCE 7-05 and earlier editions.

When it comes to determining wind loads on roof systems, ASCE 7’s Chapter 26-Wind Loads: General Requirements, Chapter 30-Wind Loads: Components and Cladding and Chapter 32-Tornado Loads apply.

ASCE 7-22’s Chapter 26 provides definitions; basic wind speed maps; explanations of the necessary calculation variables; and the fundamental equation, Equation 26.10-1, for determining a building’s velocity pressure at a height above grade (q_z).

Using Chapter 30, q_z can be converted to a low-slope roof system’s field, perimeter and corner design wind pressures by applying external pressure coefficients ($G C_{p,s}$). Chapter 30’s Part 1, Equation 30.3-1 and Figure 30.3-2A apply to enclosed, partially enclosed and partially open buildings with a mean roof height of 60 feet or less. Part 2, Equation 30.4-1 and Figure 30.4-1 apply to enclosed, partially enclosed and partially open buildings with a mean roof height greater than 60 feet. Part 3, Equation 30.5-1 and Figures 30.5-1 through 30.5-3 apply to open buildings of all heights.

Chapter 32’s tornado load provisions apply to Risk Category III and IV buildings located in the tornado-prone region, which is east of the Rocky Mountains.

Section 32.17 provides separate calculations based on tornado speeds for buildings with a mean roof height of 60 feet and less and for buildings taller than 60 feet. The chapter includes 16 tornado speed maps based on risk category and effective wind area. ASCE’s Wind Design Geodatabase also can be

used to determine building-specific tornado wind speed.

If Chapter 32’s calculated tornado loads are greater than the calculated wind loads for a specific building, the higher tornado loads should be used for wind design purposes.

Tested resistances

Code-approved testing agencies, such as FM and UL Solutions, provide uplift testing based on the code-prescribed test methods. Roof system manufacturers typically make the results of these tests available. FM Approvals makes the results of its testing available via its RoofNav application, roofnav.com. Similarly, UL makes its test results available on its UL Product iQ® application, which is accessible at productiq.ulprospector.com.

Designers aim to design roof systems to have a tested uplift greater than the highest design wind pressure, typically the perimeter or corner pressures.

FM Property Loss Prevention Data Sheet 1-29, “Roof Deck Securement and Above-Deck Components,” provides an alternative method, referred to as the prescriptive enhancement approach, to address higher design wind loads at roof perimeters and corners. With this approach, designers use a roof system with a tested uplift greater than the roof field pressure then enhance the roof system’s attachment at the roof area’s perimeter and corners. Perimeter attachment is increased by a minimum of 50%, and corner attachment is increased by at least two times.

Although FM 1-29’s prescriptive attachment approach often is used, IBC does not recognize it.

Also, designers typically apply an additional safety factor, which

effectively reduces a roof system's tested resistance to allowable capacity. For example, a minimum safety factor of 2.0 traditionally has been applied when using ASCE 7-05's and previous editions allowable strength design method.

Using ASCE 7-22's ultimate strength design method, a safety factor of 1.25 is equivalent to the 2.0 safety factor.

DID YOU KNOW?

ASCE's Wind Design Geodatabase, ascehazardtool.org, provides a web-based application alternative to using ASCE 7-22's maps for determining the basic wind speed at a building's specific address.

NRCA's Roof Wind Designer provides a web-based application that provides project-specific design wind and tornado loads based on ASCE 7. Roof Wind Designer is accessible free of charge at roofwinddesigner.com.

Additional guidance

Additional information about using ASCE 7-22 is available in the Commentary to ASCE 7-22. ASCE 7 and its commentary can be purchased from ASCE by accessing asce.org.

Also, Appendix

1-Wind Uplift in *The NRCA Roofing Manual: Membrane Roof Systems—2023* provides additional information about proper wind design of roof systems. The manual also can be purchased at shop.nrca.net; NRCA members can download the manual free of charge. 🌱🌱🌱

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

AI can't do everything on a job site

The construction industry increasingly is using artificial intelligence for scheduling, safety planning, job-site data analysis and more. However, there are things AI cannot do on a job site.

For Construction Pros shares the following things humans do that AI currently cannot replace.



1. **Make gut-check calls in the middle of a task.** Humans have experience and instincts to guide them while AI requires data. Snap decisions—such as feeling a piece of equipment strain before a gauge shows it—are made using a wealth of personal experience and knowledge, and AI currently cannot match that.
2. **Handle on-the-fly field fixes.** Construction projects are unpredictable. Issues arise, and sometimes a creative fix is needed with whatever resources are available. AI does not have the improvisation ability of those who work in the field and can grab tools and troubleshoot a situation.
3. **Manage people.** People are complicated, and managers need patience, emotional intelligence, empathy and toughness to manage different individuals. AI cannot effectively motivate or help address tension between co-workers.
4. **Keep morale up.** Humanity is crucial when a morale boost is needed. Crew members can laugh, lift each other up and keep everyone in good spirits—something AI cannot handle.
5. **Take pride in a job well done.** Although AI can report positive data and metrics showing success, it does not feel pride when a job is completed. The feeling of creating something real and finishing what you started is purely human and cannot be replaced.



Protecting your business from ransomware

Only 14% of small businesses say they have a cybersecurity plan, so most small businesses are unprepared for a ransomware attack, according to the U.S. Chamber of Commerce. In 2023, small businesses were the target of 43% of all cyberattacks.

The cost of a cyberattack can range from \$120,000 to \$1.24

million per incident, and most small businesses that experience a cyberattack reportedly close within six months of the incident.

Ransomware restricts access to a computer system or data—often by encrypting files—and demands a ransom payment for their release. The U.S. Chamber of Commerce shares the following

steps to protect your company from ransomware attacks.

- **Ensure your software is up to date.** Software providers issue updates that include important security patches and upgrades. Update your security programs regularly and promptly.

JOIN THE BUILDING ELITE.

Answering the need to establish a standard of qualifications and practice in the building enclosure industry, IIBEC offers several robust credential programs. IIBEC credential holders have demonstrated extensive knowledge and proved their expertise through examination, character reference, and professional experience. Credential holders are required to complete annual continuing education requirements and follow a code of ethics for the objectivity of service.



André Coppin, RRC, RRO
Seattle, WA



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



- **Layer security measures.** Use more than one security tool, such as a combination of a firewall, antivirus software, anti-malware software, spam filters and cloud data loss prevention. If one tool fails, there are backup protections in place.
- **Conduct training.** An “insider threat” describes any action from an employee that compromises the security of a company’s data and systems. These threats often come from negligence or human error. Be sure your team is trained regarding what ransomware is and how they can prevent an attack.
- **Use multifactor authentication and strong passwords.** Multifactor authentication requires a user to provide more than a single factor—such as username and password—to gain access; for

example, a code might be texted to your phone. Additionally, encourage employees to set strong passwords that are a minimum of eight characters but no more than 64 characters; use special characters; avoid using sequential or repetitive characters; and use uncommon passwords. A password manager tool also can help employees keep their accounts secure.

- **Back up everything.** Avoid paying a ransom by backing everything up regularly—every day, if possible. Store a copy of your system on an external hard drive that is kept offline and only can be accessed by your team.
- **Set up strong spam filters.** This can reduce the risks of phishing and your employees falling for a scam that introduces malware into your system.

- **Set up application whitelisting.** Sometimes known as allowlisting, it only allows trusted files, applications and processes that have been explicitly permitted to run.
- **Verify email senders.** Phishing is one of the most common ways a ransomware attack occurs. Pay close attention to senders’ email addresses.
- **Sign up for regular threat reports.** There are resources available to help you stay informed about cybersecurity threats. Subscribe to receive regular emails that will inform you of threats and tips.

To help contractors address cyber liability risk, NRCA has partnered with BPM Insurance Services and Acrisure to offer NRCA’s Cyber Liability Insurance Program, available at nrca.net/insurance.

Study examines substance use at work

A report from researchers at The Ohio State University, Columbus, shows about 9% of U.S. workers in their early 30s use alcohol, marijuana or hard drugs while at work, according to Construction Dive.

The risk for substance use was highest among workers in food preparation, service and safety-sensitive occupations, including construction, which had a higher risk of alcohol and marijuana use.

The study surveyed more than 5,000 employees who participated in the National Longitudinal Survey of Youth 1997, which included individuals between ages 12-17 in 1997 and followed them through 2022. The surveys were conducted by The Ohio State University’s Center for Human Resource Research and the study focused on survey data from 2015-16.

Among workers who reported substance use immediately before or during a work shift during the past month, 5.6%

said they drank alcohol, 3.1% used marijuana and 0.8% took cocaine, opioids or other hard drugs.

A 2023 study found comprehensive workplace substance use policies, including recovery-friendly options, were linked to a significant decrease in employee alcohol and drug use. In another 2023 study, Sehun Oh, an associate professor of social work at The Ohio State University, found availability of workplace support services led to lower rates of marijuana use and other illicit drug use.

“Our research shows that those under adverse working conditions with many barriers to economic and well-being resources tend to use substances as a coping mechanism, whether that relates to an emotional toll or physical demands of not just working conditions but their life circumstances,” Oh says. “There is a need for more structural support to address these huge implications for the health of workers and others and to reduce the stigma associated with substance use.”





NRCA

FOR
SUICIDE PREVENTION

NEED TO TALK?
CALL OR TEXT

988

Support mental health in the roofing industry

The construction industry has the second-highest suicide rate of all major industries in the U.S. To support your mental health awareness efforts, NRCA offers several resources:

- Perspectives is an employee assistance program that provides counseling and resources for life issues (available to NRCA members only)
- Hard hat stickers, a poster, toolbox talks and a video serve as visual reminders for your crews

By working together, we can build a healthier roofing community.

Learn more about NRCA's resources and join the movement for better mental health.

nrca.net/mentalhealth



NRCA





An industry win

The One Big Beautiful Bill Act provides benefits for the roofing industry

by Deborah Mazol

On July 4, President Trump signed into law the One Big Beautiful Bill Act (H.R. 1), a package that cements and expands many provisions from the 2017 Tax Cuts and Jobs Act. The final bill includes a host of pro-growth provisions that benefit roofing contractors, suppliers and the broader construction sector.

Although the law also includes measures related to defense, border security and immigration, its tax, workforce and business provisions will deliver significant and lasting benefits to the roofing industry.

The legislation delivers long-sought tax relief for roofing contractors, family-owned businesses and skilled trades employers while also expanding support for workforce training. But the bill also includes setbacks, particularly for energy-efficient construction incentives.

Tax relief

At the heart of the legislation is the permanent extension of the Section 199A 20% deduction for qualified business income. This deduction provides critical tax relief to pass-through entities. Coupled with the permanent top individual tax rate of 37%, the bill offers long-term tax certainty for roofing company owners filing as individuals.

Another major win is the increase in Section 179 expensing from \$1 million to \$2.5 million for qualified nonresidential real property, including roof improvements. This allows qualifying businesses to immediately deduct the full cost of a new roof in the year the investment is made, providing a powerful boost to cash flow and project affordability. This provision is effective for nonresidential real property improvements made after Dec. 31, 2024.

Additionally, 100% bonus depreciation is fully restored and made permanent for property acquired and placed in service after Jan. 19, 2025. The bill also includes the permanent restoration of full expensing for U.S.-based research and development costs, retroactive to 2022, benefiting roofing businesses that invest in new materials, methods or systems.

Starting in 2026, family-owned roofing businesses also will benefit from a permanent increase in the estate tax exemption to \$15 million per person or \$30 million for joint filers, helping preserve businesses across generations.

Additionally, NRCA successfully fought to remove a proposed cap on the pass-through entity tax deduction, which would have significantly increased taxes on roofing businesses in many states. This outcome was made possible by NRCA's engagement with congressional

leaders and strategic alliances across the Main Street business community.

Incentives

Recognizing the need for skilled labor in the trades, the bill expands the use of 529 education savings accounts and Pell Grants to cover accredited workforce training and credentialing programs. These reforms will help attract and prepare the next generation of roofing professionals.

The legislation also makes the family and medical leave tax credit permanent and enhances the employer-provided childcare tax credit to 40% with a cap of \$600,000 for small businesses—key incentives that support worker retention and job-site flexibility.

Another notable provision provides temporary relief from federal income tax on overtime pay. From 2025 to 2028, individuals can deduct up to \$12,500 in overtime pay (\$25,000 for joint filers) as long as the deduction is reported separately on a Form W-2 or Form 1099. This measure incentivizes hard work and eases payroll tax burdens.

Other measures

Several administrative improvements also were included. The Form 1099 reporting threshold is updated to \$2,000. Fewer than 200 app transactions will not require reporting nor will transactions less than \$20,000, reducing compliance burdens on contractors.

The legislation also includes reforms to the Employee Retention Credit, introducing new promoter verification requirements and halting the processing of unpaid ERC claims filed after Jan. 31, 2024, to curb fraud.

In a win for domestic manufacturers, the bill increases the advanced manufacturing investment credit from 25%

to 35%, encouraging U.S.-based production of materials and equipment.

Immigration

The bill dedicates more than \$145 billion to border security and immigration enforcement including the expansion of detention centers and new application fees for visa programs. New fees will affect visa categories vital to the roofing workforce, such as H-2B and Temporary Protected Status.

Although intended to fund enforcement, these added costs could increase burdens for small businesses and will require close monitoring. With the enactment of these provisions to strengthen border security and reduce illegal immigration, NRCA believes now is the time for Congress to pursue immigration reforms to address the workforce needs of the roofing industry.

Clean energy tax

The One Big Beautiful Bill Act, combined with a July 7 executive order, significantly alters the landscape for clean energy tax incentives, tightening deadlines and adding new restrictions that affect solar, battery storage and energy-efficient roof systems.

The Section 25D residential clean energy credit—a 30% nonrefundable tax credit for solar panels, battery storage and geothermal systems—now is only available for expenditures made or systems placed in service by Dec. 31, 2025. Previously, the credit phased out gradually through 2034.

The Section 48E investment credit and Section 45Y production credit—tech-neutral incentives for clean electricity—now face earlier expiration dates and tighter eligibility rules. Projects must begin construction by July 1, 2026, or be placed in service by Dec. 31, 2027, to qualify.

The 48E credit offers a 6% base rate, 30% bonus and up to 70% for projects meeting domestic manufacturing and equity-focused criteria. However, projects involving foreign entities of concern are ineligible, primarily those linked to China. Leased systems must meet additional requirements tied to construction dates and sourcing. Both credits include a rising domestic content requirement: Starting in 2026, at least 40% of materials must come from non-FEOC sources, increasing to 60% by 2030.

The bill also codifies the IRS' two-part test for beginning construction under these provisions: physical work or incurring 5% of project costs. However,

a July 7 executive order instructs the Department of the Treasury to revise these definitions to prevent abuse. Experts warn that relying solely on the 5% spend test may no longer be sufficient, urging developers to adopt multiple compliance strategies.

The order also directs the Department of the Treasury to end tax credit eligibility for solar and wind projects that don't begin construction by July 4, 2026, or aren't completed by Dec. 31, 2027.

NRCA strongly opposed these rollbacks, which reduce incentives for energy-efficient roof systems and threaten progress in sustainable construction. We continue to press for

policies that promote economic growth and environmental performance.

NRCA also will continue working to ensure implementation supports contractors and remaining workforce and energy concerns are addressed in future legislation. For now, roofing professionals should review their tax planning strategies and take advantage of these hard-won benefits. 🏠🔧🌱

DEBORAH MAZOL is NRCA's director of federal affairs in Washington, D.C.

Report shows improvement in workplace safety

A recently released seven-year analysis from ISN highlights a positive shift in workplace safety, showing a decline in serious injuries and fatalities and a growing focus on preventing high-consequence incidents, according to Construction Executive. The 2023 data, included in ISN's updated Serious Injury and Fatality Insights White Paper, reflects progress driven by improved safety culture and operational strategies such as human and organizational performance.

Key positive safety shifts include:

- 16% drop in serious injury and fatality cases from 2022 to 2023, marking the lowest total since 2017
- An increased adoption of human and organizational performance, focusing on improving systems rather than blaming workers
- Greater emphasis on proactive safety strategies like hazard assessments and near-miss reporting
- Mature safety organizations leading the way by cultivating learning environments that prevent future incidents

To watch an NRCA webinar recording about how to protect workers against fatal risks when working at heights, go to professionalroofing.net.

These trends suggest a sustained shift toward preventing high-risk events and building stronger, more resilient safety cultures.

ISN's safety report is available at isnetworld.com.

Construction supervisor sentenced to prison for role in fatality cover-up

A New York construction supervisor was sentenced in July to a year in prison and two years of supervised release after pleading guilty to obstructing an investigation of a fatal workplace incident, according to *Safety+Health* magazine.

In December 2018, Richard Zagger of Northridge Construction Corp., East Patchogue, N.Y., was overseeing workers who were assembling a metal shed on company property in Long Island, N.Y., according to the Department of Justice. During the assembly, a worker fell from an improperly secured shed roof and died.

The Occupational Safety and Health Administration's investigation identified several worker safety standard violations, including failing to maintain the stability of a metal structure during construction. Inspectors say Zagger made false statements and conspired with others to do so during the investigation.

Zagger pleaded guilty to three counts of conspiracy and one count of obstruction of official proceedings related to the investigation of the incident. Northridge Construction had previously been fined \$100,000 and given five years of probation for violating a worker safety standard, causing a death, and making false statements.

Construction-related MSDs are trending downward

The number of construction workers who developed a musculoskeletal disorder that resulted in days away from work decreased more than 20% during a recent 10-year period, according to a report from CPWR—The Center for Construction Research and Training.

Researchers explored industry trends in MSDs, which include tendinitis, back strains and sprains, and carpal tunnel syndrome. According to the National Safety Council, MSDs are the most common workplace injury and remain the leading cause of disability, early retirement and limitations to gainful employment.

Using Bureau of Labor Statistics data, the researchers tabulated 33,200 MSDs among construction employees that resulted in days away from work between 2021 and 2022, a decrease from the 42,100 MSDs recorded between 2011 and 2012.

Other findings include:

- At 25,000, specialty trade contractors accounted for an overwhelming majority of the MSDs among construction subsectors. Building construction was next with 5,000.
- In 2023, 40.5% of construction employees limited their activities for at least 24 hours after a “likely work-related” repetitive strain injury. For all other industries, that percentage was 31.7.

The report is available at cpwr.com.



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How to ensure effective safe work practices

Most companies have workplace policies and procedures regarding safety, but effectiveness of such policies can vary.

Safety+Health magazine shares the following recommendations for effective safe work practices.

1. **They should be clearly stated.** Use simple, easy-to-understand words in an active voice. For example:

“Wear hard hats on the job site at all times.”

2. **They should be positively phrased.** Employees are more likely to follow a rule when it is worded in a positive way, such as “Always wear rubber gloves on the job,” rather than a negative way, such as “Don’t forget to wear your rubber gloves.”
3. **They should be fair.** Restrictive practices that are meaningless and selectively enforced can make all work practices seem less credible.
4. **They should be consistently communicated.** Share safe work practices regularly in meetings; discuss them during performance reviews; integrate them into department procedures; and post them on posters throughout the workplace, among other strategies.

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Contractors have varying degrees
of success based on how they
approach daily operations
by David Sanders



WHERE PATHS DIVERGE

*“Life is choice. All day, every day. Who we talk to,
where we sit, what we say, how we say it. And our lives
become defined by our choices. It’s as simple and as
complex as that. And as powerful.”*

—Louise Penny, author



In 1998, Sanders began his training with a roofing manufacturer.

When I first set out into the professional world, my path seemed clear. After years of study, I received a lifetime teaching certification. It felt like an accomplishment that would anchor the rest of my life. Of course, I also was carrying the weight of substantial student loan debt—the kind of debt that makes you believe the only logical path forward is a “safe” career, one with a steady paycheck and long-term security. Teaching and coaching, I believed, would be that course. I imagined decades in the classroom, forming connections with students, shaping young minds and retiring with a long list of success stories to tell.

But reality has a way of testing our assumptions. My first year in education was not the warm, fulfilling experience I had anticipated. It wasn't that the students were difficult or I couldn't handle the work. Rather I could already feel, deep down, I wasn't in the right place. There was a restlessness, a gnawing sense I was in the wrong career entirely. Teaching is a noble profession, but for me, I felt I could make a greater impact elsewhere.

That summer, determined not to drift aimlessly, I launched into a kind of personal research project. I explored industries I had never seriously considered before. The oil and gas sector fascinated me with its sheer scale and intricacies of global supply. Semiconductors offered a look into the microscopic yet powerful forces driving modern technology. The cellular industry was in a period of rapid expansion, promising innovation at every turn. I also examined insurance with its mix of risk, protection and complex regulations and building materials, an industry I had always considered unglamorous but reliable and stable.

Roofing wins out

It was building materials—and, more specifically, roofing—that unexpectedly caught my attention. Roofing wasn't flashy, and it wasn't on anyone's list of trendy careers. But that was part of the appeal. Here was an industry where the work was tangible and essential. The more I looked into it, the more I realized the industry depended not just on product

quality but also on relationships, trust and reputation. A good roof lasts decades; a bad one fails in a matter of years. That kind of clear accountability was refreshing.

When I was offered a position in a roofing manufacturer's new hire program, I saw a fresh opportunity. The program came with three uncompromising conditions:

- I could have no prior industry experience.
- I had to be willing to relocate anywhere in the country.
- I had to complete an intense six-month training regimen.

I signed on, ready for a complete career reboot. Training was rigorous. We studied product lines, installation methods and building codes. We learned about the architectural design process, science of materials and complexities of the supply chain. There were sales techniques to master, customer service standards to internalize and a constant emphasis on professionalism. By the time I completed the program, I felt as though I had been given a crash course not just in roofing but also in how an entire ecosystem of manufacturing, distribution and installation functioned together.

My first territory assignment sent me to a new address in a new city. My role was multifaceted: I had to work closely with distributors, persuading them to purchase, stock and promote our materials. I had to visit architects, presenting our products so they would specify them in their designs. And I spent half my time on job sites and in offices with roofing contractors engaging in what's known as “pull-through” selling—creating demand at the contractor level so distributors would feel compelled to keep our products in stock.

The contractor interactions quickly became the most rewarding and revealing part of my job. I learned early on that my role went beyond selling. I became a consultant, helping contractors think strategically about their workflows, customer relationships and profitability. I began to understand success in roofing wasn't limited to technical skill;

it was about running a business with the mindset of an effective and efficient entrepreneur.

Since that first territory, I relocated multiple times, managing territories in different regions. Each market had its own personality. Hailstorms affected various markets sporadically while new construction created demand unevenly in certain territories. In the Northeast, historical architecture and harsh winters shaped the types of products in demand. In the South, heat, humidity and hurricane season dictated material choices and installation timelines. In the West, high winds and wildfires posed seasonal threats while energy efficiency and modern design trends influenced buying decisions.

But across all these markets, one truth held firm: Manufacturers thrive when they partner with the right suppliers and the best contractors.

Recognizing this, I eventually transitioned to the distribution side of the business. If working for a manufacturer had taught me about creating demand, distribution showed me the day-to-day realities of fulfilling it. Now, contractors weren't just influencers; they were my direct customers. I was responsible for point-of-sale relationships, making sure products were available, and ensuring service met or exceeded expectations.

The closer I got to contractors' daily operations, the more I saw how seemingly small decisions could lead to extraordinary results. I learned the rhythms of their workweeks, the pressure points in their busy seasons and the bottlenecks that slowed them down. This proximity made my consulting role even more important. I became a partner in their businesses' success. The more I understood their workflows, the better I could anticipate their needs and help them profitably grow their businesses while avoiding costly mistakes.

Observations

During the past 27 years, I've interacted with thousands of contractors. I've seen what makes some of them thrive and others become extinct.

Some were perpetually disorganized, bouncing

from job to job without a clear plan. Their projects were often short-ordered or placed too late, forcing everyone down the line to scramble. Communication was inconsistent or nonexistent, and they were always playing catch-up. For these contractors, running a business felt like a constant emergency.

Struggling contractors often share common traits: chronic disorganization, financial instability, resistance to education and weak supplier relationships. They operate without clear systems, jumping from one reactive decision to another. Jobs are bid too low in a misguided attempt to win work only to realize after the fact there's little or no profit to be made. Some depend entirely on insurance work, leaving themselves vulnerable when that pipeline slows. Others resist change, ignoring new technologies and methods until they are left behind.

Other characteristics of "ugly" contractors include:

- Minimal knowledge about products
- Accepting jobs they are not qualified and/or certified to complete
- No understanding of how to create schedules
- Believing business fundamentals are unimportant
- Not having responsible accounting functions in place
- Living from job to job
- Seeing little value in education or training
- Having no awareness of profit margin
- Assuming heavy activity equals success
- Not cultivating healthy relationships with suppliers and vendors

But I also met contractors on the opposite end of the spectrum. I met contractors who were visionaries, running their companies with precision and passion. They were constantly thinking ahead, innovating and building strong reputations in their communities. Some started with a single truck and a handful of tools, growing their operations into respected local brands. Others were newer but hungry to learn, absorbing every piece of advice and insight they could find.

Successful contractors run their businesses



As part of his training, Sanders had to install a roof system.



with structure and foresight. They view themselves as entrepreneurs, building partnerships with suppliers, vendors, crews and industry organizations. They invest in training, stay current with new products and regulations and have clear business plans with measurable goals. They manage cash flow carefully, balancing reinvestment with personal reward. They market themselves consistently and present a professional image to every customer.

Good contractors also:

- Take advantage from qualified assistance such as NRCA
- Fully understand they need to partner with others to succeed (suppliers, vendors, crews, trade organizations)
- Adjust their workflow according to prepared plans and processes
- Value training and education as foundational to remain qualified
- Have clear business plans with specific goals, milestones and measurements
- Prioritize others before themselves
- Create a set of core values that are acted upon and not just written on a website or pamphlet
- Understand the value of the services provided
- Accept constructive criticism so they can improve
- Operate within a predetermined business process
- Understand and implement basic accounting practices and cash flow considerations
- Are knowledgeable about product performance and installation
- Have a clear balance of saving and indulgence
- Proactively promote and market their businesses
- Want to learn and understand innovation and technology
- Recognize the need for business and sales processes
- Approach sales from a retail-type approach with clear processes regardless of insurance involvement



Sanders fell in love with the roofing industry after his training program.

Adaptability is key

The roofing industry has changed dramatically since I started. When I first entered the field, many contractors relied on word of mouth alone for new business. Now, digital marketing, online reviews and social media presence can make or break a company. Product innovations, from reflective coatings to impact-resistant shingles, have changed how roof systems are installed and how long they last. Safety regulations have become more stringent, and customers are more informed (and more demanding) than ever.

The next five years promise even more change. Technology will continue to reshape the industry, and labor shortages will continue to challenge contractors to find and retain skilled workers. Supply chain disruptions also will test contractors' resilience and their relationships with suppliers.

For roofing contractors, adaptation isn't optional. The ones who will thrive will be those who invest in continuous education, embrace technology and strengthen their professional networks. They'll understand suppliers are more than transactions: They are strategic partners who can offer support, insight and solutions when challenges arise.

Looking back, my journey from education to roofing has been one of constant learning and reinvention. The work may not always be glamorous, but it's deeply satisfying. Roofing is about more than shingles and rolled goods; it's about trust, problem-solving and helping people protect what matters most to them.

If there is one lesson I've carried with me, it's that success in this industry comes from building a strong foundation on technical savviness and solid business acumen. Systems, relationships, financial discipline and commitment to learning are the real load-bearing beams. With them in place, a contractor can weather any storm. Without them, even the best craftsmanship won't keep a business standing for long. 🏠🔧🌟

DAVID SANDERS is sales director of training & development for QXO, McKinney, Texas.

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SLIP SLIDIN' AWAY

SNOW GUARDS CAN KEEP SNOW FROM DAMAGING PROPERTY AND HARMING BYSTANDERS

by Brian Cross

This past March, the roofing industry shined a spotlight on a specific area of roof safety. For the first time, National Snow Guards Safety Month made it a priority to focus on education and safety related to the installation of snow-retention systems. The focus on these systems can help save lives and prevent property damage.

From snow guards to fences and bars, snow-retention systems are installed on roofing projects throughout the U.S. Especially useful on “slick” roof surfaces such as metal, slate, synthetics and tile, they also are mounted on concrete and asphalt roof systems, as well as in conjunction with solar panels. Without them, roofs can be dangerous after heavy snowfalls.

Protecting property

As contractors understand, customers often don’t know what is in their best interest. And they don’t always listen either, which can result in problematic situations.

Scott Kim, president of WGM Contracting, Fairfax, Va., recently dealt with one such client. After advising and educating the homeowner about why a snow-retention system should be installed on their home, the homeowner denied the recommendation. Then winter came. Along with it came a chunk of built-up snow that slid off the main roof onto the home’s glass sunroom’s roof, nearly breaking the glass.

“The homeowner saw the impact of what happened and came back to us,” Kim says.

Kim told the homeowner their synthetic slate roof could be slippery when snow builds up.

“We ended up doing a retrofit application of galvanized snow guards and staggered them 12 inches on center top and bottom. This solved the problem immediately,” he says.



Snow bondage

What makes snow so “slippery” on certain roofs that it has the potential to cause dangerous slides?

When snow falls on a roof, two bonds are formed. The first is an adhesive bond between the snow and the roofing material. It’s easy to visualize this type of bond in other areas. Think of a wind-blown snowstorm when you see snow stuck to a stop sign. The stop sign is vertical, yet the snow is stuck to it. That’s an adhesive bond at work.

The second type of bond is a cohesive bond. It’s the connection between molecules of the same substance. Imagine a snowball. As you pack snow together, the pressure causes some snowflakes to melt, creating a tiny film of water between them. The water refreezes and forms ice that binds the other snowflakes together, creating a cohesive snowball. The snowball is stronger packed together than the individual flakes would be separately.

Both these bonds form when snow falls on a roof. When the sun is out, even if it’s behind clouds, it can warm roof surfaces. Because clouds and snow are translucent (meaning the sun’s energy will penetrate through both), a layer of water can form on the roof surface below the snowpack.

This layer of water on the roofing material breaks the adhesive bond from the roof. At this point, the only thing keeping snow on the roof is the cohesive bond. Once the cohesive bond breaks, the entire snowpack can release in one slide. And snow is surprisingly heavy. The weight of 1 square foot of snow at a depth of 1 foot can range from about 3 pounds for light, dry snow to 21 pounds for

wet, heavy snow. Multiply that by 200 square feet of roof surface, and you can see how quickly the weight adds up. This is what makes snow on roofs so dangerous.

However, a snow-retention system is designed to keep a snowpack stable, so when the bonds break, the snow will stay put until it turns into meltwater and safely leaves the roof through the gutters.

Selling snow guards

Although snow-retention systems are designed for safety, they are not always understood by or appreciated by homeowners. People resist adding them to their roofs for a variety of reasons. Some do not wish to mar the appearance of their roofs with snow-retention systems; others believe they don’t have a need for a snow-retention system.

In Littleton, Colo., most of the projects worked on by On Point Contracting require snow-retention systems.

“One of our clients originally refused repairs to a pipe boot and adding a snow-retention system on his home,” says Nick Piontek, founder of On Point Contracting. “He was initially shocked at the cost of the system and decided not to move forward. I kept following up to understand his reservations better. It turned out that though price was a factor his main concern was the snow-retention pieces would make his roof look unattractive.”

According to Piontek, this is a challenging perception to change, but he comes across it often.

“Our client had invested in high-end slate tiles and didn’t want anything to damage the aesthetics

of the home exterior,” Piontek says. “However, after showing him photos of completed projects with snow guards and explaining their vital purpose, the homeowner relented.”

After repairing the pipe boot and installing the snow guards in a soldier row pattern, the homeowner was pleased.

“He actually liked the modern touch the snow guards add to the house,” Piontek says. “He even left us a 5-star Google Business review on our listing because he was so happy with how the project turned out.”

New versus existing roofs

Contractors should note there are differing approaches to snow guard installation that depend on whether installation will take place on a new or existing roof.

When installed at the same time as a roof system, snow guard fasteners can be “buried” under the courses above. A retrofit installation will have exposed fasteners. This is one of the biggest motivators for a roofing contractor to get customers to have snow guards installed at the time of roof system installation.

Some other things to consider are the size of the snow guard product being used and whether a non-penetrating attachment can be used.

A longer snow guard (for example one that is 16 inches) would be used as part of a new roof system installation. However, a shorter (5- or 10-inch) snow guard would be used in a retrofit option. The longer length allows the piece to be fastened far above the course line, and the shorter guards allow for installation without removing the roofing tile.

Some roof systems, such as standing-seam metal, could benefit from snow guard installation that does not penetrate the roof surface. Some options include clamps or brackets.

Safety tips

Whether installing roofing materials or snow-retention systems, nothing is as important as safety. Because of this, Rocky Mountain Snow





Guards, a distributor of various snow-retention systems based in Englewood, Colo., developed some safety tips for roofing contractors as part of National Snow Guards Safety Month:

- Make sure the roof surface is snow-, water- and frost-free. Wet roofs are slippery. This also means snow-retention systems should not be installed during or immediately following a snowstorm. Roofing workers should not work on snowy, frosty or wet roofs. If required to work at heights, regardless of the conditions, workers must be protected from falling with proper fall-protection systems.
- Always tie off ladders at eaves and make sure the bases of ladders are secure. Ladders should be positioned high enough above the eave to allow enough space (NRCA suggests at least 3 feet) to get on and off as safely as possible.
- Follow all standard roof safety procedures. Don't take shortcuts. Workers must be protected from falling with the use of fall-protection systems, including guardrails or personal fall-arrest systems.
- Mark the locations for snow guard placement on roofs before installation. This can speed

up the installation, keep workers focused and eliminate a sloppy placement appearance.

- Snow guards often are required to be installed within 3 feet of eaves. Depending on the property, it may be safer to work off a ladder or lift versus being on the roof for the installation. NRCA notes that snow guards in unheated overhanging portions of a roof can aid in the formation of ice dams. The lowest row of snow guards should be kept upslope of a vertical line drawn 1 foot inside the heated wall. Snow on roofs below snow guards can shear off, so the benefits of snow retention compared with ice dam limitation should be considered when determining the location of the lowest row of snow guards especially where large overhangs exist.
- Always follow the snow guard manufacturer's suggested layout. Many roofing contractors assume they know the best pattern for snow guards. However, often what they know is different than the tested and proven layouts manufacturers recommend.
- When fastening a snow fence into a truss system, it is crucial to pre-drill to avoid splitting the truss.
- Snow-retention products should never be used as anchor points for a fall-protection system.
- Always team workers up so you have an installer and a handler. This way, a snow guard gets passed on safely and doesn't fly off the roof, potentially causing a dangerous falling-object situation.

Simplifying snow

Snow can complicate any number of roofing-related issues, but snow guards can prevent or reduce those complications and any resulting damage snow can cause. Educating customers about the benefits of snow guards can be an important part of your relationship building. 🛠️❄️

BRIAN CROSS is production and marketing manager for Rocky Mountain Snow Guards, Englewood, Colo.

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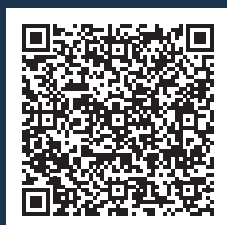
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Deadline: Jan. 30, 2026

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BOUNTIFUL ROOFING

ADVANCED ROOFING INSTALLS
NEW ROOFS ON HARVEST TIME
INTERNATIONAL'S HEADQUARTERS

by Chrystine Elle Hanus



Harvest Time International Inc. is a faith-based nonprofit headquartered in Sanford, Fla., dedicated to humanitarian efforts. Established in 1992, the organization has assisted more than 9 million families worldwide through its partnerships with corporations and community organizations.

For more than 30 years, Harvest Time International and its volunteers have distributed much-needed supplies in times of disaster and have supported communities by providing food, clothing and household essentials to children and families.

In 2023, the organization undertook a significant project to rehabilitate the roof on its existing building and construct a new facility to expand services. Advanced Roofing Inc., Fort Lauderdale, Fla., was selected by Harvest Time International's project team as the roofing contractor for the project.

"Advanced Roofing has a long-standing history of supporting Harvest Time International, regularly donating food, toys and essential items during the holiday season and throughout the year," says Rob Kornahrens, president and CEO of Advanced Roofing. "We are committed to continuing the support."

Phase one

In June 2023, the Advanced Roofing team began work on Harvest Time International's existing 102,800-square-foot roof. The team was tasked with providing a retrofit solution using the existing standing-seam metal panels. Team members placed a layer of Carlisle EPS Flute Fill insulation boards into the flutes of the metal panels, creating a uniform substrate across the roof surface.

Next, the team added a layer of Carlisle polyisocyanurate insulation and fastened the boards to the metal panels using metal insulation plates and fasteners. To complete the roof system, workers installed Carlisle single-ply, 60-mil TPO membrane using Carlisle's RhinoBond® induction welding system, which involves screwing

plates into the purlins, rolling out the membrane and welding the membrane to the plates.

The team also installed vent curb flashing, flashing around HVAC units and a new gutter system. The retrofit process raised the height of the roof, so the team at Advanced Roofing, an authorized fabricator in NRCA's UL certification program for compliance with ES-1, installed new edge metal around the perimeter to ensure a smooth transition into the gutter system.

The eight-person crew completed phase one of the project in 20 days.

Phase two

After the retrofit roof system was completed on the existing building, in April 2024, the Advanced Roofing team began work on Harvest Time International's newly constructed 30,092-square-foot building located across from the existing 100,000-square-foot facility.

The new building houses the organization's Community Hope Center that provides affordable food, clothing and household essentials as well as free emergency aid to families in crisis. Previously located in the original building, the Community Hope Center is where volunteers gather to sort products for local, national and international distribution. The new space provides an improved, air-conditioned, safe work environment for the organization's many volunteers.

During phase two, the Advanced Roofing team worked with The Collage Companies, Lake Mary, Fla., the general contractor for the project. On the concrete building, the team installed a 22-gauge stainless-steel Type B roof deck with a built-in slope to direct water through several scupper openings located at various levels. The lower scupper serves as the primary drainage point with an upper scupper functioning as emergency overflow.

On the deck, team members fastened Carlisle polyisocyanurate insulation followed by Carlisle TPO membrane using the RhinoBond attachment method.

HARVEST TIME INTERNATIONAL'S IMPACT

Since 1992, Harvest Time International has supported communities throughout the world and has distributed:

\$539 MILLION

WORTH OF
SUPPLIES



27,000

TRUCKLOADS
OF GOODS



431 MILLION

POUNDS OF ESSENTIAL
HOUSEHOLD PRODUCTS



The roof system layers on the new building



Aerial view of the new roof system on the existing facility

The Advanced Roofing team also adhered Carlisle TPO membrane on newly constructed walls using bonding adhesive.

After completing the roof, team members installed walk pads to create a clear path from the roof edge to HVAC units, mechanical equipment and other maintenance areas. Phase two was completed by an eight-person crew in two weeks, on time and with no safety incidents.

“The efforts resulted in a high-performance, durable roofing solution that supports Harvest Time International’s mission to serve the community, combining advanced techniques and strong collaboration to meet the complex demands of the facility,” Kornahrens says.

Fruits of labor

On Nov. 22, 2024, Harvest Time International opened its relocated Hope Center to serve the community during the Thanksgiving holiday weekend. Careful planning and teamwork contributed to the project’s success.

“This project was a significant contribution to the

PROJECT NAME: Harvest Time International Inc.
PROJECT LOCATION: Sanford, Fla.
PROJECT DURATION: Phase one: June-July 2023; phase two: April-May 2024
ROOFING CONTRACTOR: Advanced Roofing Inc., Fort Lauderdale, Fla.
ROOF SYSTEM TYPE: TPO membrane
ROOFING MANUFACTURER: Carlisle SynTec Systems, Carlisle, Pa.

community,” Kornahrens says. “Harvest Time International now has a state-of-the-art building that provides vital services to local residents in need.”

The expanded Hope Center offers an improved computer center with much-needed devices to assist families experiencing homelessness. Every day, hundreds of individuals visit the facility.

“Our team was thrilled to be a part of the new development from Harvest Time International,” Kornahrens says. “We are neighbors in the community and continue to support the mission Harvest Time offers.” 🌟🌟🌟

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



The future of roofing estimation

Machine learning is changing the way projects are planned

by Arturo Pina

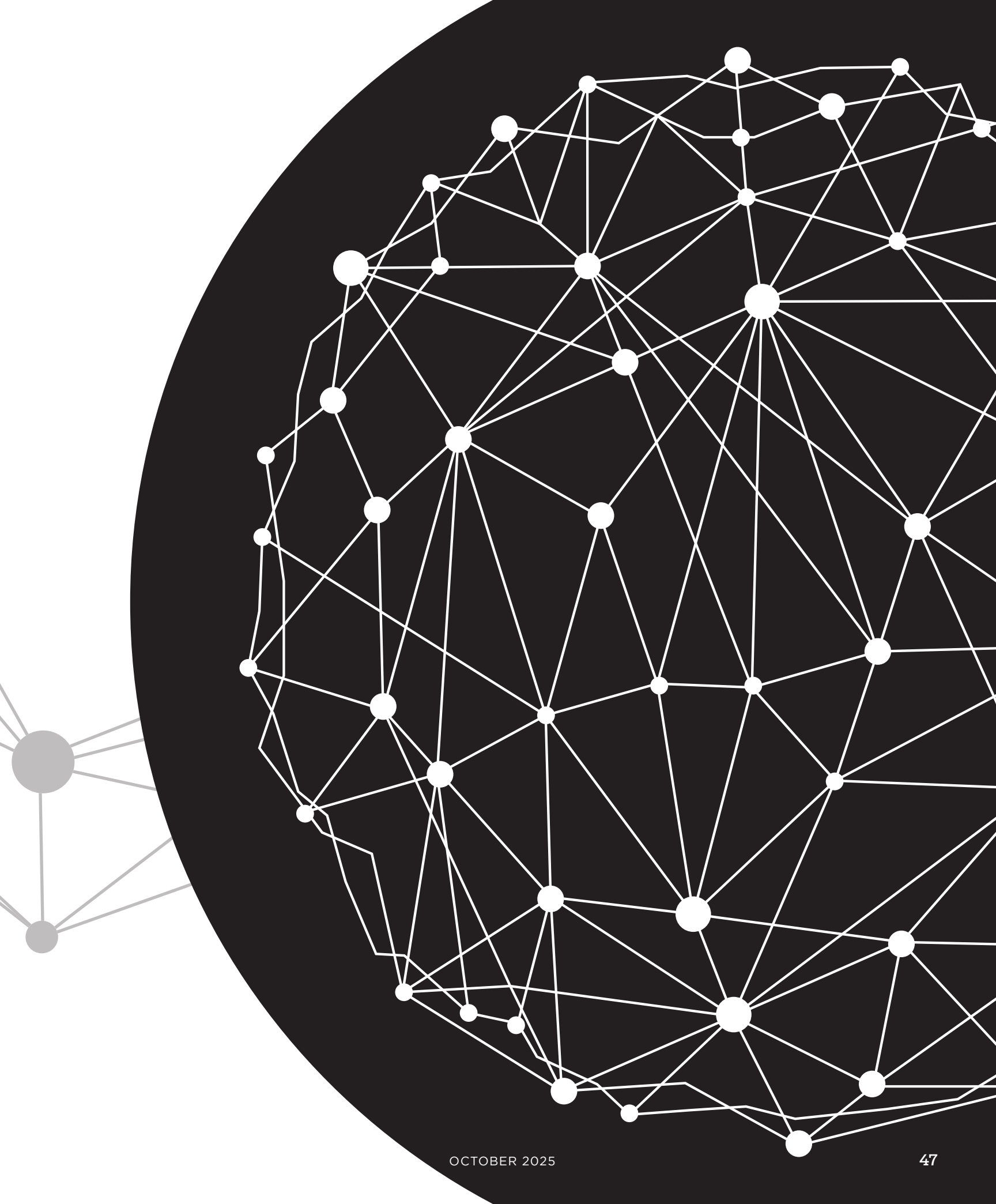
Accurate labor estimation in commercial roofing is essential for cost control, efficiency and profitability. Traditional estimation methods often rely on experience and historical averages, leading to errors in workforce planning and budgeting. Machine learning is transforming this process by using data-driven approaches to enhance prediction accuracy.

What is machine learning?

Machine learning is a way for computers to learn from data and make predictions. For example, if a model is given past roofing project details such as crew size, roof type and weather conditions, it can learn how these factors affect labor productivity. Later, when given new project details, the model can predict how much labor will be needed.

In simple terms, machine learning helps computers find patterns, make smart guesses and improve over time just like how people learn from experience.

As a roofing estimator and mechanical engineer, I am interested in how technology can help streamline and make projects more efficient. I recently conducted a study that explored how machine learning models can improve labor forecasting by analyzing key factors that influence productivity. By leveraging data from past projects, estimators can make more precise and informed decisions.



Dataset overview

The dataset used in my study consisted of hypothetical historical roofing project data, including key variables that affect labor productivity. These variables include:

- Roof size and type
- Wet ratio (amount of moisture damage)
- Detail ratio (complexity of roof details such as flashings and penetrations)
- Building height
- Time of year
- Crew size
- Management style (self-managed versus traditional supervision)
- Application method (spray versus roll application)
- Roof life expectancy (age and condition of the roof)

The dataset captured linear and nonlinear relationships among these variables and labor productivity. Some factors had straightforward effects; others required advanced modeling techniques to analyze their impact accurately.

A vertical heat map (see Figure 1) illustrates the correlation between each feature and labor production in roofing projects. Each row represents one variable with color indicating the strength and

direction of its correlation to labor productivity.

Blue shades represent positive correlations, where an increase in the variable is associated with higher labor production, and red shades indicate negative correlations.

From the heatmap, we see:

- Roof life has the strongest positive correlation (0.29), suggesting longer-lasting roof systems may be linked to better labor performance.
- June, September and July show moderate positive correlations, possibly reflecting seasonal productivity peaks.
- Wet ratio, on the other hand, stands out with a strong negative correlation of -0.68, implying wetter roof conditions significantly reduce labor productivity.
- Details ratio, February, November and March also show negative correlations, suggesting complex detailing and colder months may hinder efficiency.

To analyze labor productivity in roofing projects, I followed a three-step process.

Step one

The first step was to see whether the project factors had a simple, straight-line relationship with labor productivity. For example, I wanted to see whether productivity went up by a fixed amount per crew member added. To do this, I used a standard statistical method to build a basic model and then created a chart of its prediction errors known as a residual plot (see Figure 2).

If the simple model were a good fit, the errors would look like a random shotgun blast of dots. Instead, the chart showed a clear, curved pattern. This curve in the errors is a telltale sign the relationship among project factors and labor productivity is more complex than a simple straight line.

This meant a more advanced model was needed to make accurate predictions.

Step two

Step two used a predictive mode. I used insights from step one to capture complex, nonlinear

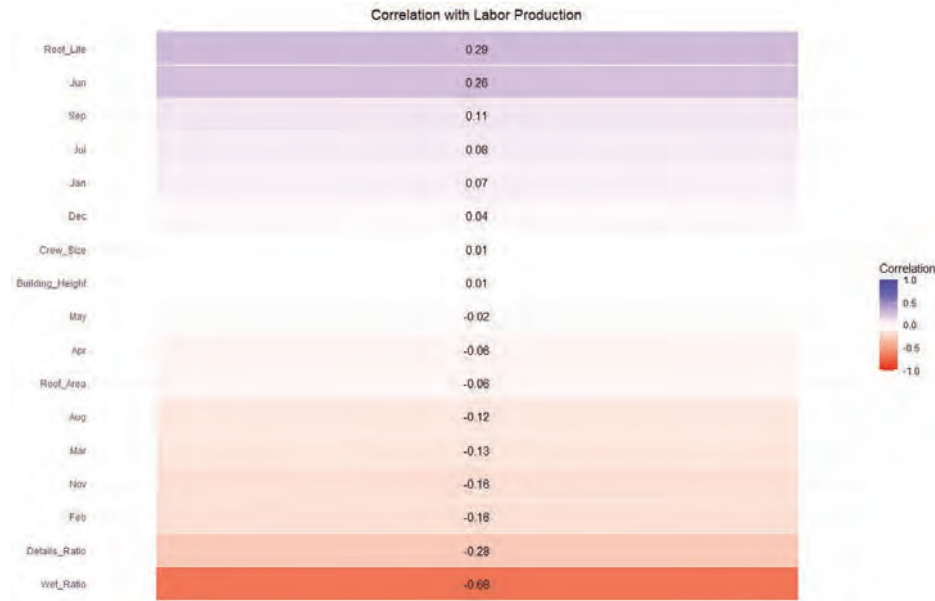


Figure 1: Vertical heat map

patterns within the data. To account for nonlinear relationships, I selected a random forest model.

A random forest model constructs multiple decision trees and aggregates their predictions, improving accuracy and reducing overfitting. Random forest models illustrate complex interactions between variables, making them well-suited for datasets with nonlinear dependencies. They perform well on structured data with mixed categorical and numerical features.

After training the model, it achieved an 81.44% accuracy rate. An accuracy rate above 80% is generally considered reliable for real-world forecasting applications, making this model a useful tool for estimators.

Step three

The next step focused on analyzing feature importance, highlighting factors that most influence productivity, and providing valuable insights for more effective project planning. Once the model was trained, a feature importance analysis was conducted to determine which variables had the greatest effect on labor productivity.

Figure 3 on page 50 displays the feature importance results from a random forest model predicting labor productivity in roofing projects. The metric used here is the percent increase in mean squared error, which shows how much the model's error increases when a feature is randomly shuffled—higher values indicate greater importance.

In Figure 4, also on page 50, wet ratio stands out as the most critical feature, significantly affecting the model's predictions. This confirms earlier findings where wet ratio also had a strong negative correlation (-0.68) with labor production.

However, some variables such as September, March and details ratio show moderate importance in this model even though their correlation with labor productivity was weaker. This highlights one of the key benefits of random forest models: They capture nonlinear patterns and interactions that basic correlation cannot detect.

Notably, roof life also is ranked highly, consistent

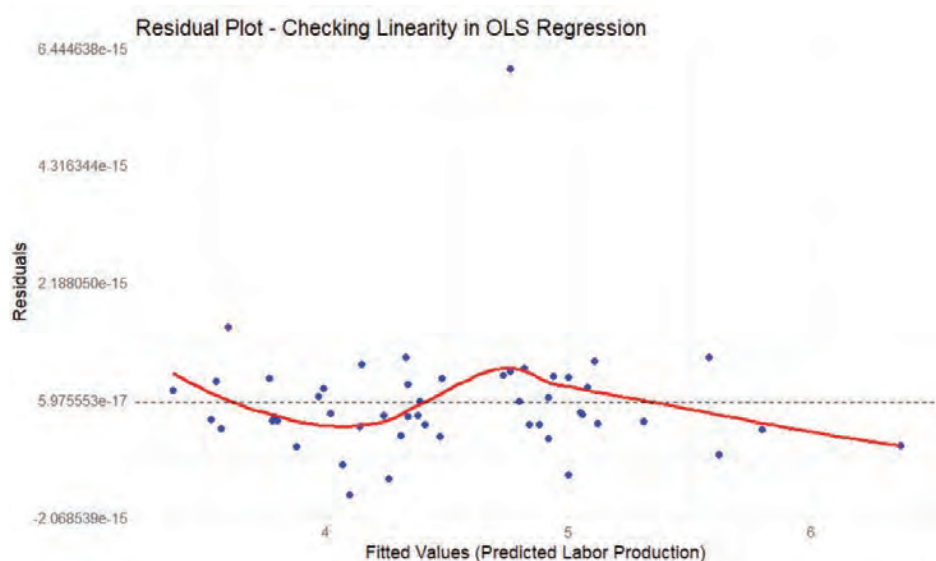


Figure 2: Residual plot analysis (R studio)

with both correlation analysis and its expected influence on project efficiency. On the other hand, variables like January, roof area and building height show minimal or negative importance, suggesting they do not meaningfully contribute to the predictive power of the model.

This step is crucial because it helps move beyond surface-level relationships and identifies which features truly matter in forecasting labor performance. Although correlation shows only direct, linear relationships, feature importance from a random forest considers linear and nonlinear effects as well as interactions between variables, making it a more reliable tool for decision-making and model development.

Management style

Before analyzing how management style can affect labor production, it's crucial to recognize this is a nonlinear and highly complex variable influenced by multiple interdependent factors. Key determinants include crew size, organization, skill level and project coordination. With these considerations in mind, the dataset was designed to reflect real-world dynamics:

- *Nonlinear relationship between crew size and productivity*
 - * Smaller crews in self-managed teams tend to perform exceptionally well because of efficient task delegation and autonomy.

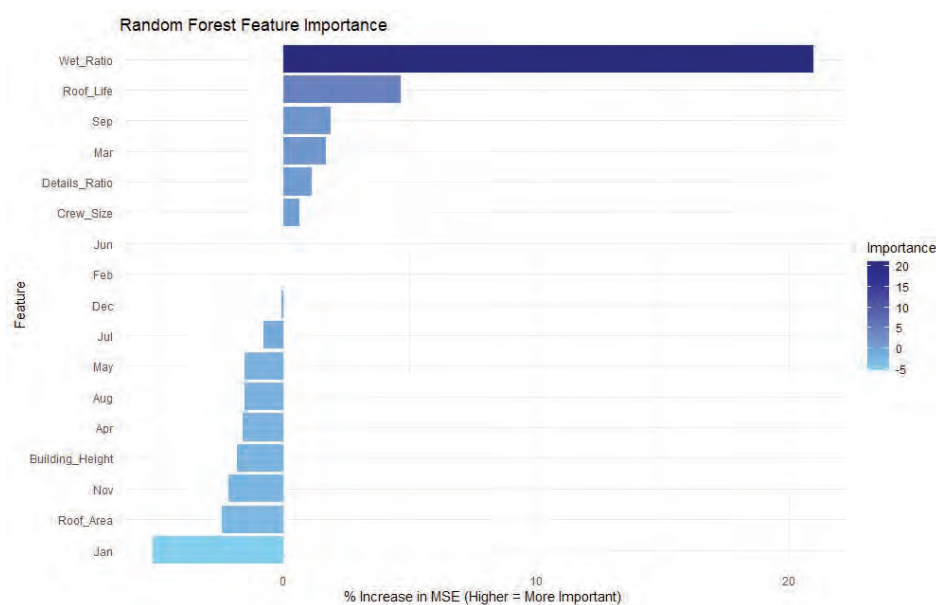


Figure 3: How variables affect labor productivity (R studio)

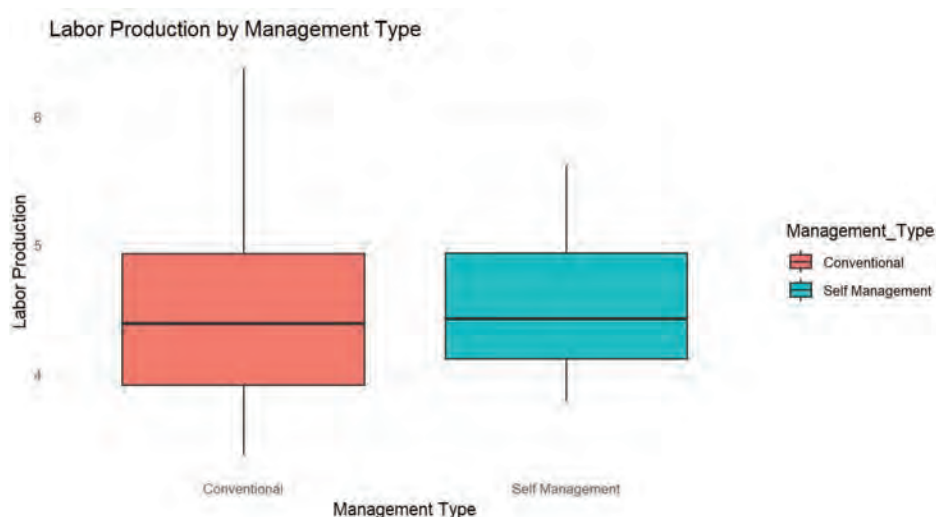


Figure 4: Boxplot labor production versus management type (R studio)

- * However, as crew size increases, productivity declines as a result of coordination challenges and diminishing accountability.
- *Effects of project complexity on labor*
 - * Projects with lower wet and detail ratios demonstrate higher labor efficiency in self-management as crews can work with fewer interruptions.
 - * In contrast, projects with a high wet and detail ratio demand enhanced logistics and organization to enable skilled workers to improve self-management effectively.

- *Skill level and its role in self-management*
 - * Highly skilled crews excel in self-managed environments as their expertise allows them to operate with minimal oversight, maximizing efficiency.
 - * Conversely, less-experienced crews may struggle with self-management, requiring more supervision to maintain production standards.
- *The influence of coordination and pre-job planning*
 - * Projects that prioritize kickoff meetings and structured planning sessions tend to benefit self-managed teams the most as these teams rely on clear communication and proactive problem-solving.
 - * But when projects lack proper organization, conventional management outperforms self-management as direct oversight compensates for planning deficiencies.

Although this approach provides valuable insights, management style is a complex factor that requires further study in different project conditions. Labor production is influenced by many different factors, including team dynamics and job complexity.

Because management style interacts with these factors in different ways, it is important to analyze it across multiple situations to understand its true effect. A single study or dataset may not capture the full range of effects, so continuous evaluation is necessary to identify patterns and trends.

The results in Figure 4 show similar outcomes, suggesting the differences in management style may not be fully captured yet. To gain a clearer understanding, we need to refine the model by training it further and exploring how different variables interact.

Small adjustments in data selection, additional training or incorporating new influencing factors could help reveal stronger distinctions. By deepening this analysis, we can improve our ability to predict labor production under different management styles and develop strategies to optimize workforce efficiency.

Predicting labor production

Like a chatbot, this model can answer specific questions such as predicting outcomes for a new project. By inputting project details, the model can analyze the data and provide estimates based on past patterns. This makes it useful for decision-making, allowing managers and estimators to anticipate labor needs, costs or potential challenges before work begins.

However, for the model to work correctly, the input data must be accurate and relevant as the quality of predictions depends on the quality of the information it processes.

Putting it into practice

Although this study highlights the power of machine learning, the main takeaway for a roofing contractor is not smaller crews working in good weather are more productive but that the data can be leveraged to build a competitive advantage. Following are a few practical steps to begin using machine learning in your business:

1. *Start with data collection.* Machine learning runs on data. The most crucial first step is to start digitally recording project information consistently. You can log the information in a simple spreadsheet program; examples include Microsoft Excel or Google Sheets. Go beyond basics like square footage and material costs; track variables such as:
 - a. *Labor.* Actual hours per phase (tear-off, insulation, membrane installation, etc.)
 - b. *Conditions.* Weather on job days (temperature, precipitation, etc.), moisture damage found (wet ratio) and complexity (details)
 - c. *Team.* Crew size, foreman and management style (self-managed or conventional)
 - d. *Timeline.* Start and end dates
2. *Explore AI-powered software.* You don't need to be a coder to use machine learning. Many modern software platforms for the roofing industry are beginning to incorporate these tools. When looking for new software for your

company, such as estimating, project management or CRM, inquire about AI, machine learning or predictive analytics features. These tools can help you analyze your historical data to generate more accurate bids, forecast project timelines and identify which types of jobs are more profitable for your company. Examples include specialized estimation software and comprehensive project management suites that offer data dashboard and insights.

3. *Start small and ask a specific question.* Don't try to predict everything at once. Use the data you collected to answer a single, important business question. For example, are smaller, specialized crews more profitable than larger, general crews for repair work? Answering such a question with your own data can provide an immediate return on investment in your data collection.

Augment, don't replace

Machine learning is a powerful tool, but it is not a replacement for the intuition and experience of a seasoned estimator. The goal is to combine your professional judgment with data-driven insights. The model might tell you a project should take 400 hours, but your experience will tell you a difficult building owner or tight site logistics will add another 50. The most successful approach uses technology to sharpen, not replace, human expertise. 🧠🔗

ARTURO PINA is a roofing estimator at Niles Industrial Coatings LLC, Fenton, Mich., and a mechanical engineer from Los Andes University, Merida, Venezuela. He is pursuing a master's degree in engineering at the University of Oklahoma, Norman.

MANUFACTURER NEWS

GAF and NWIR donate roof

GAF, Parsippany, N.J., recently partnered with National Women in Roofing Seattle Council; Fields Roof Service, Puyallup, Wash.; and Rebuilding Together South Sound to donate and install a new roof system for a disabled woman living in Puyallup, Wash.

The project included removing the more than 20-year-old roof system and replacing it with GAF shingles, new gutters and downspouts. The crew also assisted with yard cleanup and maintenance, including removing old fencing and shrubbery.

The project was part of the She Builds program, which aims to provide critical home repairs for women in need, and GAF Community Matters, GAF's social impact initiative that is focused on making a positive difference as neighbors and partners in the community by leveraging roofing expertise, resources and products to help build resilient communities.



From left to right: Hartley Koschitzky, owner of IKO; Kameron Raburn, mayor of Ennis, Texas; and David Koschitzky, CEO of IKO North America, celebrate the manufacturing facility's grand opening.

IKO opens manufacturing facility

IKO North America, Wilmington, Del., recently celebrated the grand opening of a 205,000-square-foot manufacturing facility dedicated to producing IKO Metals Residential Metal Roofing products in Ennis, Texas.

"The opening of the Ennis facility strengthens our position in Texas and supports our focus on advancing metal roofing technology," says David Koschitzky, CEO of IKO North America.

"This investment enables us to better serve our customers ... while contributing to the region's economic growth."

Eagleview partners with SkyWatch

Eagleview, Rochester, N.Y., has announced its collaboration with SkyWatch. The partnership makes Eagleview's aerial imagery available across the SkyWatch platform.

Through the integration, users can browse and purchase Eagleview's aerial imagery for residential and commercial properties, broader tracts of land or neighborhoods.

The SkyWatch platform is available at explore.skywatch.com.

Malarkey Roofing Products® donates its 500th roof

Malarkey Roofing Products, Portland, Ore., has donated its 500th roof to Central Oklahoma Habitat for Humanity.

"We have worked with Central Oklahoma Habitat for Humanity since our Oklahoma City manufacturing plant opened in 2012," says Jay Kreft, Malarkey Roofing Products' vice president of manufacturing. "Members of our team have volunteered their time to frame walls and help with construction at building sites."



Georgia-Pacific Building Products expands DensDeck® availability

Georgia-Pacific Building Products, Atlanta, has announced its DensDeck portfolio of gypsum board products is commercially available nationwide.

"We're excited to meet the demands of roofing contractors, architects and roofing consultants who want a streamlined labor solution, a material cost solution and products with greater ease of use," says Hamed Kayello, DensDeck Roof Board product manager.

CONTRACTOR NEWS

Former NRCA chairman of the board passes away

Jim Barr, president of Barr Roofing Co., Abilene, Texas, and a former NRCA chairman of the board, passed away Aug. 12. He was 72.

Barr attended the University of Texas, Austin, before returning home to work full time at his father's roofing company, Barr Roofing. In 1993, he became a minority shareholder in the business.

During his roofing industry career, Barr served as president, owner and operator of Barr Roofing. He began volunteering with the Midwest Roofing Contractors Association and in 2001 was elected as MRCA's president. After his presidential term, he remained an active volunteer and continued to serve as chairman of the organization's Technical and Research Committee for eight years, acting as MRCA's representative to NRCA's Technical Operations Committee.

In 2009, Barr was elected to NRCA's board of directors and served on NRCA's Technical Operations and Manual Update committees. In 2011, MRCA bestowed its highest honor on Barr—the James Q. McCawley Award, which is presented annually to an individual in recognition for outstanding service to the roofing industry. The next year, he was elected to NRCA's Executive Committee, where he served as a vice chairman from 2012-14. The Roofing Alliance also recruited Barr and elected him as secretary-treasurer while he served as NRCA's chairman of the board-elect and then NRCA's chairman of the board in 2017.

In 2024, Barr was awarded the prestigious J.A. Piper Award, presented to one roofing professional per year for exceptional and sustained service to NRCA and the industry.

In Abilene, Barr gave back to his community, serving on numerous boards, including the Military Affairs Committee. He also founded the Key City Rhythm & Blues Festival and participated in Dancing with the Abilene Stars, a local event where he and 11 dancers helped raise \$300,000 for Hendrick Home for Children.

Barr is survived by his wife, Sue; his children—Alana Michelle Hendrick and her husband, Joel; Amy Lane Barr; James Alan Barr Jr. and his wife, Mary Catherine; Austin Dylan Esquivel and his wife, Briana; Chelsea Kendell Esquivel and fiancé, Ethan Music; Sydney Elsie Tebet and her husband, Nicholas; and many grandchildren. He also is survived by his sister, Brenda Meckley, and her husband, Jim, and nieces Megan Meckley and Taylor Meckley.

In lieu of flowers, the family requests memorial contributions be made to Hendrick Hospice Care at hendrickhealth.org or The Episcopal Church of the Heavenly Rest at heavenlyrestabilene.org.



Barr

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Tecta America acquires Christianson Roofing

Tecta America, Rosemont, Ill., has announced it has acquired Christianson Roofing, Riverside, Calif. It is Tecta America's third acquisition this year.



Founded in 1984, Christianson Roofing specializes in new construction, reroofing, and service and maintenance for commercial clients.

Ryan Christianson will take over as president of Christianson Roofing and continue leading the company with the same team. The company now will operate as Christianson Roofing, a Tecta America Company LLC, and all employees will remain through the transition.

"We're happy to welcome Christianson Roofing to Tecta America," says Tecta America CEO Dave Reginelli. "Charles and Ryan Christianson have built a great company with a strong culture. Their focus on doing great work and taking care of their employees fits right in with how we do things at Tecta America. We're looking forward to supporting their continued growth."

Northeast Contracting acquires Ducks Roofing

Northeast Contracting Co., Lorton, Va., has acquired NRCA member Ducks Roofing, Portsmouth, Va. The acquisition extends Northeast Contracting's geographic reach and reinforces its position across the Mid-Atlantic and Southeast.

"[We have] been serving the Tidewater region for more than a decade, and with the integration of Ducks Roofing, we're establishing a dedicated branch led by trusted local leader Scott Gibson," says Cagen Williams, CEO of Northeast Contracting.

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Roofed Right America acquires B&M Roofing of Colorado



Roofed Right America, Milwaukee, has announced its acquisition of B&M Roofing of Colorado, Frederick, Colo., a provider of reroofing, architectural metal roofs and repair services. Roofed Right America is backed by Great Range Capital, a Kansas City, Kan.-based private equity firm.

B&M Roofing is Roofed Right America's third acquisition.

OTHER NEWS

SPRI to revise and canvass standard

SPRI has announced it is revising ANSI/SPRI IA-1 and plans to canvass the document for reapproval as an American National Standard.

The ANSI/SPRI IA-1 standard specifies a field test procedure to verify the suitability of an existing roof substrate or roof assembly and adhesive combination. The results generated from the standard provide the roof system manufacturer, design professional and other interested parties with information necessary to determine whether a substrate is compatible with the proposed adhesive.

The standard was originally developed in 2010 and most recently recanvassed in 2021.



Dan Pratt

UP THE LADDER

Central States Inc. has promoted **Dan Pratt** to vice president of sales-manufacturing.

Flex Membrane International Corp. has named **Greg Rose** sales representative for the Connecticut market. **Connor Williams** and **Tim Williams** have joined Flex Membrane International as sales representatives for the Florida market.

Ed Kochanek, territory manager for MuleHide, has relocated to the company's New York Metro territory.



Greg Rose



Ed Kochanek



Connor and Tim Williams

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EVENTS

OCTOBER

8-10

LEGALCon Live 2025

NRCA
Chicago
Contact: Crystal Wukovits,
manager of NRCA University
cwukovits@nrca.net
nrca.net

20-22

2025 MRCA Conference & Expo

Midwest Roofing Contractors
Association
Schaumburg, Ill.
Contact: MRCA
(800) 497-6722 or mrca@mrca
.org
mrca.org

21-23

METALCON

Las Vegas
Contact: METALCON
(617) 965-0055 or info@metal
con.com
metalcon.com

27-30

NRCA's Fall Committee Meetings/ Roofing Alliance Member Meeting

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

NOVEMBER

4-7

Greenbuild 2025

U.S. Green Building Council
Los Angeles
Contact: info@greenbuildexpo
.com
greenbuildexpo.com

5-7

China Roofing & Waterproofing Expo

China National Building
Waterproof Association
Shanghai, China
Contact: annazhang@cnwb.net
chinaroofexpo.cn

11-12

Fall-protection Trainer Course for Roofing

NRCA
Elgin, Ill.
Contact: Rich Trewyn, NRCA's
director of enterprise risk
management
(847) 493-7575 or rtrewyn@
nrca.net
nrca.net

13

CERTA Train-the-trainer

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Elgin, Ill.
Contact: NRCA's Customer
Service Department
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nrca.net

DECEMBER

3

Roofing Industry Fall Protection from A to Z

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Itasca, Ill.
Contact: NRCA's Customer
Service Department
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4

Foreman Management Training

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5

Foreman Leadership Training, Level 1

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10

Virtual CERTA Train-the-trainer

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CONSULTANTS

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Orlando, Fla.
ITEL Inc., Jacksonville, Fla.
Sprotte Watson Architecture and
Planning Inc., Vista, Calif.
Westlund Consultancy LLC,
Ashland, Wis.

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Above Roofing LLC, Manor, Texas
Allied Construction Services,
Livermore, Calif.
AlphaCore Roofing Inc., Orlando,
Fla.
Alternative Roofing Solutions,
Ridgeland, S.C.
Axis Roofing, Mesa, Ariz.
Baldwin Roofing Co. Inc., Corpus
Christi, Texas
Cadmus Construction, Raleigh, N.C.
Christman Roofing and Construc-
tion LLC, Montana City, Mont.
Core 4 Contractors Corp., Mansfield,
Texas
Corey Construction LLC, Houston
Courtney Roofing Inc., London,
Ontario, Canada
Cross Construction Co. Inc.,
Jonesville, La.
Custofoam Corp., Mauston, Wis.
D Project Inc., Glen Burnie, Md.
Dayco Inc., Sharon, Vt.
Duarte's Roofing LLC, Clarksburg,
W.V.
Duration Construction Inc.,
Bridgeton, Mo.
Elemental Weather Solutions d.b.a.
Elemental Roofing, Benicia, Calif.
Enviro-Tech LLC, Tallevast, Fla.
G Storm Solutions LLC, Houston
General Roofing, Fairview, Texas
Guardian Roofing, Auburn, Wash.

Heavenly Roofing, Ephrata, Wash.
Island Roofing Inc., Inwood, N.Y.
L.R. Watts & Son Roofing and
Construction Inc., Perth Amboy,
N.J.
Lakeshore CA Group LLC, Elgin, Ill.
Lucid Services LLC, Houston
Madrid's Contracting Inc., Annapolis,
Md.
Persevere Roofing, Pineville, N.C.
Repel Exteriors LLC, Midland, Texas
Rightmark Roofing, New Philadelphia,
Ohio
Rio Roofing, Washington, Utah
Rivertop Roofing, Plano, Texas
Roady Exteriors, Marine, Ill.
Roof Artistry, Norfolk, Va.
RoofLynx, Charlestown, Ind.
Scott Macczak Roofing, Mohnton,
Pa.
Stallion Contracting LLC, Indianapolis
Storm Vets, The Colony, Texas
SunMade Energy, Fresno, Calif.
Trades Mosaic LLC, Wilmington, Del.
True Built LLC, Greer, S.C.
V & F Roof Consulting & Service,
Pewaukee, Wis.
Vaughan Roofing & Sheet Metal Inc.,
Port Allen, La.
VersaCon LLC, Mulvane, Kan.
Vision Roof Services Inc., Palm
Desert, Calif.

INDUSTRIAL/INSTITUTIONAL

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S.C.

MANUFACTURERS

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United Arab Emirates
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f. Total Distribution (<i>Sum of 15c and 15e</i>)			16026	16038
g. Copies not Distributed (<i>See Instructions to Publishers #4 (page #3)</i>)			476	520
h. Total (<i>Sum of 15f and g</i>)			16502	16558
i. Percent Paid (<i>15c divided by 15f times 100</i>)			64.0	64.1

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c. Total Print Distribution (Line 15f) + Paid Electronic Copies (Line 16a)	16026	16038
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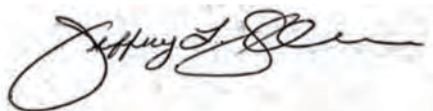
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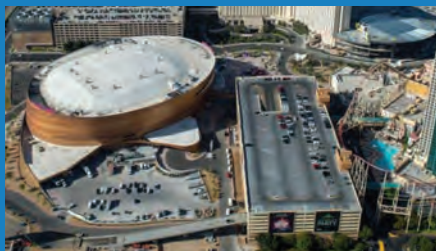
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- THE EFFECTS OF ULTRAVIOLET RAYS
- THE EFFECT OF COLD ON SELF-RETRACTING LIFELINES

Source: Safety+Health magazine



During a recent NRCA webinar, Amy Staska, NRCA's vice president of workforce development, discussed important leadership skills.

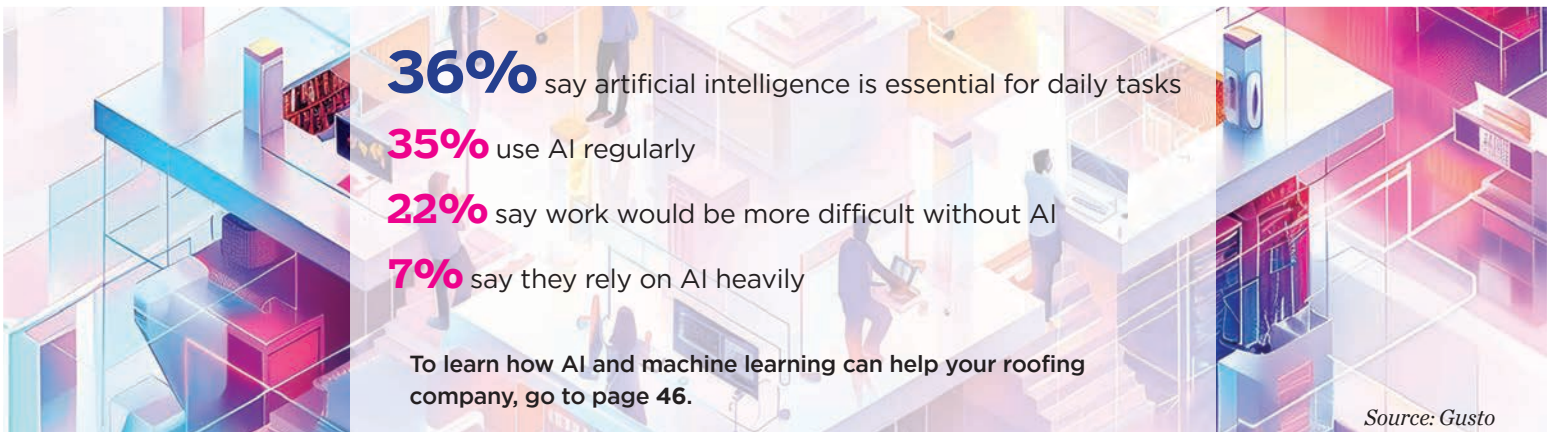
Watch the webinar recording at nrca.net/education and learn the qualities of a good leader on page 30.



Did you know NRCA and the Asphalt Roofing Manufacturers Association recently released *Quality Control Guidelines for the Application of Asphalt Shingle Roof Systems*, a booklet intended to provide guidance for the on-site evaluation of the application of asphalt shingle roof systems?

The booklet is available at shop.nrca.net.

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