



Professional Roofing

the source for the roofing industry

**THE HEAT
OF THE
MOMENT**

Keep workers safe
while working in
hot weather



KEEP LIVING THE SMALL BUSINESS DREAM.

Progressive Casualty Ins. Co. & affiliates. Coverages and discounts not available in all states or situations. For all vehicles or coverage selections.

Protect your small business from reality with over 30+ customizable coverage options and personalized discounts. Get a quote in as little as 6 minutes at [ProgressiveCommercial.com](https://www.ProgressiveCommercial.com)

PROGRESSIVE
COMMERCIAL

Get stuck

Being honest about struggles can help build a stronger team

by Ambika Puniani Reid



We all have been either a participant or organizer of the dreaded weekly team meeting where there always seems to be a lot of talking with little to no action. These meetings often leave people feeling as though they wasted their time, and most count the minutes until they can return to the tasks of the day.

But *Harvard Business Review* says it may be possible to change the tenor of your team meetings by asking: “What are you stuck on?”

The article’s author, Ron Friedman, says: “Naming your biggest obstacle in a room full of strangers may not strike you as a particularly enticing proposition. [But] view these so-called ‘hot seats,’ as an opportunity to gain clarity on major barriers and identify solutions. ...”

Having employees answer this same question every week can provide several benefits:

- **Reduced procrastination.** Employees will come prepared to discuss what they are struggling with, and they will have time for self-reflection and problem solving before the meeting. Friedman writes: “One major reason people procrastinate at work is that they are unclear on how to move a project forward. Lack of clarity makes us uncomfortable, and that discomfort is something we seek to avoid, often by immersing ourselves in distractions. By inviting team members to pinpoint and publicly share an obstacle, leaders snuff out procrastination before it takes hold.”
- **Resilience.** Sharing obstacles among peers shows employees they are not alone in the struggle and difficulty is natural. This perspective “is useful because it fosters resilience. It’s much easier to weather adversity when we anticipate being tested. In contrast, when struggle arrives unexpectedly, it shakes our confidence and leads us to question our abilities,” Friedman explains.

- **Increased trust.** Allowing oneself to share a struggle and accept advice and input will naturally build a stronger team that looks out for all team members while taking advantage of everyone’s strengths.

- **Exposing “coasting.”** There may come a time when an employee says he or she is not currently struggling with anything. That should raise some red flags. “Either the employee is not feeling stretched, or they are unwilling to share,” Friedman writes. “In either case, it’s worth having a one-on-one conversation to dig deeper. Engagement comes from stretching, not coasting along. The ‘stuck’ question helps leaders ensure that everyone on their team is growing.”

Asking “What are you stuck on?” could result in a stronger team, better team meetings and push people to achieve more. So my question to you is: “What do you have to lose by admitting you’re stuck?”

Ambika

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

CLOSE-UP





Parallel Products, a sustainability and recycling company located in New Bedford, Mass., recently completed its Duchaine Boulevard project, a center for processing and technology development, on a 130-acre campus in New Bedford.

The company's main goal when creating the center was to offset its carbon footprint as it processes 3,710 tons of aluminum, 3,892 tons of plastic and 50,000 tons of glass annually. Photovoltaic panels were attached to the standing-seam metal panel roof system using an S-5! PVKIT®—a direct-attach™ rail-less solar solution and S-5-V™ Mini clamps.

The PV panels have increased the facility's solar capacity by 1.9 megawatts, offsetting the company's carbon footprint and exceeding what it consumes on-site.

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



COMMITTED TO GETTING YOUR JOB DONE. EASIER.

When your workday needs flexibility, we're there for you. Place orders, track deliveries and manage your account details with myABCsupply in the office or remotely. But when you need a friendly face, ABC Supply associates are just a phone call or click away, ready when and where you need us.

Go to myABCsupply.com or
download the ABC Supply app.



ROOFING | SIDING | WINDOWS | TOOLS | GUTTER | ACCESSORIES

CONTENTS

May 2023 / Volume 53 Issue 4

Cover image provided by Getty Images (U.S.) Inc., New York, N.Y.
Cover design by Nancy Davis.



FEATURES

32 The heat of the moment

You can help protect employees working in hot weather.

by Cheryl Ambrose, CHST, OHST, and Rich Trewyn

36 Roofing American history

The Durable Slate Company, Savage, Md., helps restore Maryland's state capitol.

by Chrystine Elle Hanus

40 Together again

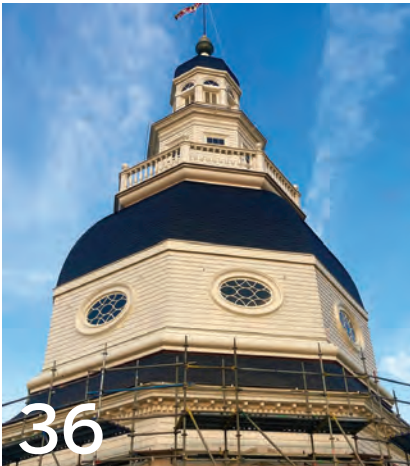
NRCA's 136th Annual Convention and the 2023 International Roofing Expo® reunite the industry.

by Sara Vaughn

46 A revised approach to wind load calculations

You should know the 2022 edition of ASCE 7 includes several roofing-related changes.

by Thomas L. Smith, AIA, RRC, F.SEI



36



40



46

CONTENTS

COLUMNS

3 Focus

Struggling with problems and being honest about them can help build a stronger team.

by **Ambika Puniani Reid**

18 Bring the next boss

It's time to start looking for the next generation of female leaders.

by **McKay Daniels**

24 Understanding underlayment

Did you know I-Codes require enhanced underlayment in high-wind regions?

by **Mark S. Graham**

28 Employee or contractor?

NRCA has concerns regarding DOL's proposed rulemaking to modify determination of independent contractor status.

by **Duane L. Musser**

DEPARTMENTS

4 Close-up

12 #Hashtag

14 New Ideas

18 News + Views

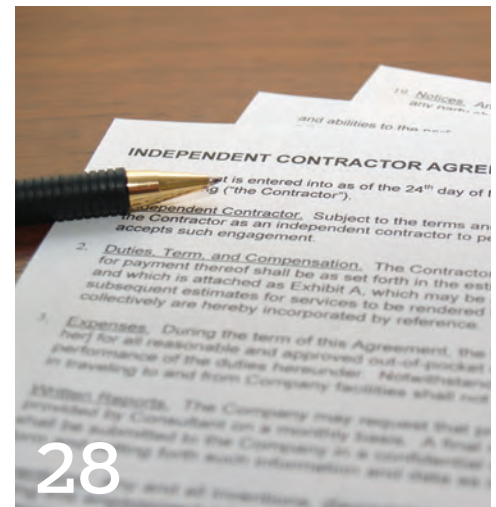
24 Research + Tech

28 Rules + Regs

52 Briefings

56 Marketplace

58 Details



Digital editions: You can find additional editorial and images for this issue and past issues at professionalroofing.net.

Subscription: Subscriptions are free for roofing industry professionals. Subscribe online at professionalroofing.net/subscribe. Single copies may be purchased for \$5 U.S. For questions regarding subscriptions or renewals, call (847) 299-9070. Periodicals class postage paid at Des Plaines, Ill., and additional mailing offices. Postmaster: Send address changes to *Professional Roofing*, 10255 W. Higgins Road, Suite 600, Rosemont, IL 60018-5607.

Letters: Write to 10255 W. Higgins Road, Suite 600, Rosemont, IL 60018-5607; fax (847) 299-1183; or email professionalroofing@professionalroofing.net. Views expressed in Letters are not necessarily those of NRCA. Letters must include the sender's name and company name.

Mission: *Professional Roofing* provides information, insight and innovation to help every roofing professional thrive.

Judgments, opinions and submitted photography in *Professional Roofing* are the authors' alone and should not be considered an expression of opinion, endorsement or official policy of NRCA. Articles are published for the purpose of stimulating independent thought about matters of concern to roofing professionals.

ROOF AND PLAZA PAVERS



The Avenue, Washington, DC



The Foundry Apartments, Alexandria, VA



The Standard at Tampa, Tampa, FL



Cira Green at Cira Center South, Philadelphia, PA



THE SOLUTION FOR ALL YOUR ROOFING NEEDS

Hanover® Roof & Plaza Pavers provide environmental benefits while creating aesthetically appealing rooftops and plaza gardens. A wide range of paver styles, pedestal systems and high wind solutions are available. And with a library of over 3,800 granite-like colors to choose from, paving possibilities are endless.

Contact Hanover® to find your local representative.

HANOVER®
Architectural Products
www.hanoverpavers.com • 800.426.4242

64% OF HOMEOWNERS

value sustainability and want eco-friendly products to be just as available as their non-eco counterparts. – 3M Study, 2021

At Malarkey, we strive simply to make the best shingles in the most sustainable way. It's a dual mission. First, build the industry's highest-performing shingle. Then, aggressively offset its footprint.

Sustainability without sacrificing performance.



WHEN IT MATTERS™



AUTHORS

Editor

Ambika Puniani Reid
areid@nrca.net

Associate Editor

Chrystine Elle Hanus
chanus@nrca.net

Assistant Editor

Sara Vaughn
svaughn@nrca.net

Creative Directors

Nancy Davis
ndavis@nrca.net

Paul Gerwen
pgerwen@nrca.net

Graphic Designers

Jairo Ayala
jayala@nrca.net

Oshla Gray
ogray@nrca.net

Director of Communications

Krista Berns
kberns@nrca.net

Manager of Online Communications

Alyssa DeSantis
adesantis@nrca.net

Manager of Website Content

Stephanie Blackwell
sblackwell@nrca.net

National Advertising Sales Manager

Michael Stack
mstack@nrca.net | (847) 493-7554

CEO

McKay Daniels
mdaniels@nrca.net

Publisher

Carl Good
cgood@nrca.net



Cheryl Ambrose, CHST, OHST
NRCA's vice president of enterprise risk management



McKay Daniels
NRCA's CEO



Mark S. Graham
NRCA's vice president of technical services. He is a member of ASTM International, ASHRAE Inc., the International Code Council® and the National Fire Protection Association.



Chrystine Elle Hanus
Professional Roofing's associate editor and an NRCA director of communications



Duane L. Musser
NRCA's vice president of government relations in Washington, D.C.



Ambika Puniani Reid
Editor of *Professional Roofing* and NRCA's vice president of communications



Thomas L. Smith, AIA, RRC, F.SEI.
President of T.L. Smith Consulting Inc., Rockton, Ill., and a member of the ASCE 7 Task Committee on Wind Loads



Rich Trewyn
NRCA's director of enterprise risk management




Sara Vaughn
Professional Roofing's assistant editor and NRCA's manager of communications



To read exclusive content related to the articles in this issue, go to professionalroofing.net.



 **ProfessionalRoofing** (ISSN 0896-5552) is published 10 times per year by the National Roofing Contractors Association, 10255 W. Higgins Road, Suite 600, Rosemont, IL 60018. Periodicals postage paid at Des Plaines, Ill., and additional mailing offices. Postmaster: Send address changes to *Professional Roofing*, 10255 W. Higgins Road, Suite 600, Rosemont, IL 60018. Statements of fact and opinion are made on the responsibility of author alone and do not imply an opinion on the part of the officers or the membership of NRCA. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher.



The official publication of the National Roofing Contractors Association
Copyright 2023 • Printed in the United States



#HASHTAG

#IRE2023

The 2023 International Roofing Expo® was held in Dallas March 6-9 where 14,036 roofing professionals from around the world came together to network, meet suppliers, discover new products and more! Check out what some attendees shared on social media at #IRE2023!



Centennial Contracting & Roofing
March 7 at 3:00 PM · 🌐

The Centennial guys are continuing education and learning about all of the latest products at the International Roofing Expo!
We get very excited about all of the new services we can provide our homeowners!
[#ire2023](#) [#centennialcontractingandroofing](#)



Watkins Construction & Roofing
March 7 at 2:13 PM · 🌐

Watkins Construction & Roofing takes on the #IRE2023 in Dallas 🇺🇸!! The guys are so excited to learn and visit with everyone at the International Roofing Expo. [#InternationalRoofingExpo](#) [#Watkinsway](#) [Owens Corning Roofing](#)



Greenwood Industries
March 9 at 8:47 AM · 🌐

This week Greenwood won the Sika Project of the Year Award at the International Roofing Expo International Roofing Expo (IRE) for the Boston University Center for Computing and Data Sciences. This project is a cutting-edge example of Greenwood's capabilities, with multiple Hydrotech green roof systems and a traditional Sarnafil roof system on the top deck. Thank you to the journeymen, safety managers, warehouse staff, project managers, and office personnel who made this recognition possible!
[#IRE2023](#) | [#roofingexpo](#) | [#commercialroofing](#) | [#buildingenvelope](#) | [#greenwood](#) | [Suffolk Construction](#) | [Boston University](#)



Olsson Roofing Company
March 9 at 1:20 PM · 🌐

Fun night with Elevate & SJ Mallein & Associates with the team! International Roofing Expo
[#ire2023](#) [#olssonroofing](#)



2023 CUSTOMER APPRECIATION EVENT

Presented by





roofing · Follow

roofing We are having a blast at the IRE 2023 here in Dallas, don't forget to come see us at booth #1718

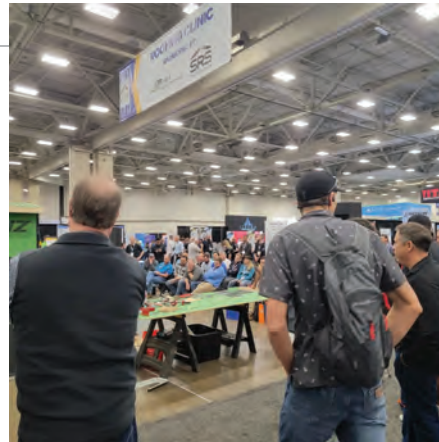
#ire2023

reeva_impact Love this 🙌🏻

17 likes

MARCH 7

Add a comment...



trentcotney · Follow

Key Bailey Hutchison Convention Cen...

trentcotney @roofingexpo learning about the latest products. #roofing #roofingcontractor #roofer #ire2023

6 likes

MARCH 8

Add a comment...



hermansupply · Follow

hermansupply We're having a blast at the International Roofing Expo! Please come join us! Conference sessions start at 7:45am tomorrow. Meet us at 11am at the Expo Hall! The link will be in our story. #HermansSupplyCompany #IRE #InternationalRoofingExpo #HelpingOurCustomersWin

13 likes

MARCH 6

Add a comment...



siplast_roofing · Follow

siplast_roofing If you are at the @roofingexpo stop by and see us at booth 3301.

#siplast #ire #trustedpartner

reeva_impact 🙌🏻

12 likes

MARCH 7

Add a comment...



Roofers Marketers
@roofersmarketers

Feeling grateful that we can all be together for the International Roofing Expo. Being surrounded by passionate, creative individuals who share the same goals and work ethic is truly inspiring. #IRE #internationalroofingexpo #IRE2023 #roofersmarketers



GAF Roofing ✓
@gafroofing

The 2023 @roofingexpo is here and we are so excited! Stop by our booth # 3301 to learn about our new product innovations, community opportunities, and more! #roofingexpo #IRE2023



Aerial imagery is regularly updated

EagleView has made available EagleView Cloud for commercial use. EagleView Cloud is a subscription-based service that enables users to access property-specific data gathered from aerial imagery. With three resolution options and imagery that is refreshed up to two times per year, users can make claims decisions, remodeling estimates, solar designs and more using recent data. EagleView Cloud now covers more than 94% of the U.S. population, including 1-, 3- and 6-inch image capture over more urban areas. Users reportedly can access the service to reduce the amount of site visits and surveys required for projects.

eagleview.com



Underlayment withstands hot temperatures

Petersen has introduced PAC-CLAD HT high-temperature self-adhering roof underlayment. Designed for a variety of roofing applications, the underlayment is said to protect against water and ice damming while withstanding extreme weather conditions. PAC-CLAD HT's self-adhering qualities reduce labor costs and installation times. The 40-mil, skid-resistant, high-tensile-strength rubberized asphalt membrane reportedly is designed to withstand temperatures up to 250 F without adhesive degradation. The rubberized asphalt is laminated to an impermeable polyethylene film layer. In addition, the underlayment has a split-release film for quick installation and seals around roof fasteners. PAC-CLAD HT is available in black and white.

pac-clad.com



Drills are ideal for tight spaces

DEWALT® has added the ATOMIC™ 20V MAX Brushless Cordless 1/2-inch Drill/Driver (DCD794) and ATOMIC 20V MAX Brushless Cordless 1/2-inch Hammer Drill (DCD799) to its tool portfolio. The tools reportedly are DEWALT's shortest 20V MAX drill/driver and hammer drill available to benefit users working in confined spaces. Measuring 5.88 inches, the drill/driver delivers 404 unit watts out and up to 1,650 revolutions per minute (no-load), providing users with up to 16% more power. At 6.49 inches, the hammer drill produces 552 unit watts out with up to 1,650 revolutions per minute (no-load) and delivers up to 14% more power. The drill/driver and hammer drill feature an on-tool LED work light to illuminate dark areas. Both tools deliver high bit retention with a 1/2-inch ratcheting chuck and aid user control with variable speed triggers and 15 clutch settings. The tools are available as bare units or kits.

dewalt.com



SAVE THE DATE

International Roofing Expo 2024

**Las Vegas Convention Center,
Central Hall**

FEBRUARY 6-8, 2024



LEARN MORE!

www.theroofingexpo.com



**INTERNATIONAL
ROOFING
EXPO**

Sponsored by **NRCA**

Tool holders are magnetic

Snap-On® Tools has introduced its Snap-on Flexible Magnetic Can and Prybar Holders and Snap-On Flexible Magnetic Bit Holder. Made of nonmarring silicone polymer, the organization solutions contain powerful neodymium magnets said to secure tool accessories on nearby work surfaces for easy access. The Snap-on Flexible Prybar Holder features front magnets to allow attachment of prybars horizontally or vertically and a modular, interlocking design for multiple prybar holders to be connected. The Snap-on Flexible Magnetic Can Holder uses the same front-magnet feature to secure spray cans and includes an integrated clip designed to keep loose lids in place. Rear magnets secure the holders to a user's toolbox or other metallic surface, and pull tabs reportedly make removal easy and damage-free. The Snap-On Flexible Magnetic Bit Holder features front and back magnets and has a storage capacity of 48 1/4-inch hex drive bits, ensuring a user can keep many pieces stationary and visible.

snapon.com



Redesigned shingles are thicker

GAF has made available its redesigned Timberline® Ultra High Definition shingles as Timberline UHDZ™ shingles. Timberline UHDZ shingles now include features seen in Timberline HDZ,™ including LayerLock™ technology, Dual Shadow Line and StrikeZone® nailing area for faster installation. The laminate shingles reportedly offer a thicker and 20% heavier design compared with Timberline HDZ shingles and 10% more time-release algae-fighting technology. The shingles are available in several colors, including Barkwood, Charcoal, Pewter Gray, Shake-wood, Slate and Weathered Wood.

gaf.com/uhdz

Shingles have smog-reducing technology

Atlas Roofing Corp. has added Pinnacle® Sun shingles and Pinnacle Impact shingles to its Pinnacle product offerings. Pinnacle Sun features 3M™ Cool Roof technology, 3M Scotchgard™ Protector and HP42® technology. The shingles are designed to reflect the sun's radiant heat away from the roof system, reducing the amount of heat that enters a home. Pinnacle Sun shingles also incorporate 3M Smog-reducing granules formulated with a photocatalytic coating that allows the granules to transform smog into water-soluble ions, helping improve air quality. On an average-sized roof system, Pinnacle Sun shingles reportedly have the smog-fighting capacity of two or three trees. Pinnacle Sun shingles are available in a variety of colors inspired by coastal regions. Pinnacle Impact shingles also feature 3M Smog-reducing granule technology and HP42 technology, as well as 3M Scotchgard Protector, which is said to prevent black streaks caused by algae. Pinnacle Impact shingles are manufactured with special polymers to achieve a Class 4 impact rating. The shingles' unique polymer blend reportedly reduces energy usage and emissions during the manufacturing process and provides greater hail resilience. Pinnacle Impact shingles are offered in a neutral palette of colors.

atlasroofing.com



HEY ROOFING PRO!

INCREASE YOUR PROFITS WITH
PROVIA METAL ROOFING



ProVia Metal Roofing is **more profitable per square** than asphalt roofing. It's the next generation of metal roofing—a premium stamped panel roof system that elevates your product offering, provides long-term ROI, and boosts your bottom line as well.



DOORS | WINDOWS
SIDING | STONE | ROOFING

**SCAN TO
LEARN MORE**





Bring the next boss

It's time to start looking for the next generation of female leaders

by McKay Daniels

My daughter is 8 years old, but if age is a construct, I'd peg her closer to 14. She's a strong-willed, stubborn, smart planner/hustler/go-getter. Sounds a lot like a roofing contractor, right?

When she was 4, I asked her and her older brother to help set the table. Trying to pretend to be a good dad, I decided to make it a game.

I said: "Cicily, Thatcher, come help set the table. We can pretend we're at a restaurant and be waiters and bring out the food!"

She, who could barely enunciate her "R's" or "S's," wasted zero time in her response: "I'm not going to be the waiter. I'm going to be the boss!"

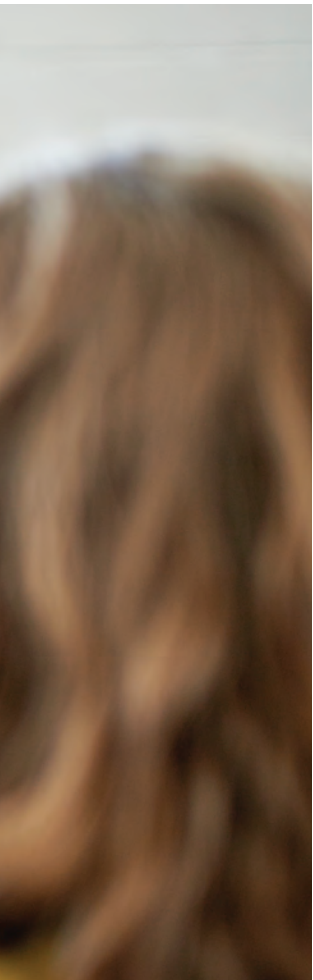
I've told this story several times since it happened because it's awesome on so many levels:

- A child already staked her claim in the world.
- A young girl decided she was not going to fit into a predetermined role.
- She was perfectly comfortable with her brother being the waiter!

This story came to mind again recently during the 2023 International Roofing Expo® in Dallas.

During the week, I encountered a number of daughters with their parents (exclusively fathers, actually).

Scott Gipson, vice president and general manager for Fibertite Roofing



Systems, Wooster, Ohio, introduced me to his daughter, Jodie, who was attending the IRE for the first time. Jodie was attending the week's events because of her work with Creativate, an Ohio marketing firm whose principal, Michelle Jones, was leading an educational session during the week. A father and daughter at a roofing industry function as peers was pretty cool to see.

John Campbell, vice president of sales and marketing for Eagle Roofing Products, Rialto, Calif., introduced me to his daughter, Reagan, who works in communications for the roofing industry. The three of us engaged in a way-too-nerdy discussion

about Gallup's StrengthFinders capabilities and how Eagle Roofing Products has successfully used it (John and Reagan even use it for family dynamics and offer it to employees as a benefit if they wish, which is amazing).

NRCA Chairman of the Board Kyle Thomas, executive vice president of Thomas Industries Inc., Mobile, Ala., brought his daughter-in-law, Campbell, to the show. She works in the company as an estimator.

Tim Stephens, vice president of Architectural Sheet Metal Inc., Orlando, Fla., introduced me to his daughter, Rylee, who was working for Dallas-based National Roofing Partners. She had only been with the company for a week but was getting a quick immersion in the field by helping staff the company's booth. Even better, when talking with Tim later, he mentioned there were actually two

Stephens sisters at the IRE—both working in the industry!

Even a member of the Chinese delegation who attended the IRE brought his daughter with him for the week. She's studying data and robotics in Pittsburgh and is graduating in a few months.

When I mentioned some of these encounters to Gary Howes, COO of The Durable Slate Company, Columbus, Ohio, he said his daughter has been to a number of IREs and would have been at this one, too, had she not been on maternity leave!

And during NRCA's Annual Member Meeting during which the upcoming slate of NRCA's officers and directors are presented for approval, Sherri Miles, vice president of JD Miles & Son Inc., Chesapeake, Va., was nominated. Chairman Thomas introduced her as: "Sherri Miles of JD Miles & Son (and daughter!)."

Daughters can start in the industry young, too. During the past few Roofing Day in D.C. events, Greg Bloom, vice president of national and strategic accounts for Beacon Building Products, Herndon, Va., has brought his young daughter, Kelly, to help attendees register. She was 10 years old at her first Roofing Day in D.C.

This is fantastic!

Before the IRE kicked off, National Women in Roofing held its annual event, and roughly 500 women from throughout the U.S. and all segments of the industry participated.

Although this, too, is fantastic, we now need to multiply it tenfold! And I think it's possible with a bit of focus and proactivity.

The roofing industry is filled with sharp, smart, tough individuals. The nation is full of sharp, smart, tough women. We just need to invite, cajole and beg them to join the industry for the industry's sake!

If you've read this column a few times, you'll rightly assume I'm a music fan of all sorts and genres. But humor me and search for the lyrics to "Anything You Can Do (I Can Do Better)." It was written in 1946 by Irving Berlin for the Broadway musical *Annie Get Your Gun* about Annie Oakley. The song is a duet between Annie Oakley and her male

competitor in a sharp-shooting contest, and they riff through various scenarios where Annie one-ups him through a series of activities. And. It. Is. So. True.

The song may have been shocking and unprecedented in 1946 just like Billie Jean King beating Bobby Riggs in 1973 in the battle of the sexes shook the foundation of tennis. But in 2023, we should be through with being surprised by women and stop making their successes a rarity.

The Washington Post recently published an article titled "People doubt her as a female roofer: 'We're proving them wrong every day.'" The story contained many anecdotes from a number of women in the roofing industry who participated in a two-week GAF Roofing Academy exclusively for women. They are modern Annie Oakleys.

In the article, Kimberly Santiago-Vega, an instructor in the course who left academia to join the roofing industry, says: "Women can play an important role in filling the shortages in the industry. To those who think we can't do it, guess what? We're proving them wrong every day."

And Nancy Yobei, a 25-year-old class participant, states: "I love to see women do what men can do because we can do it better."

The roofing industry would be far better having greater engagement from the 51.1% of the population that are women, a segment with which we are currently dramatically underperforming. But that increased engagement isn't just going to happen on its own. We've got an unprecedentedly low unemployment rate in this nation; talented workers aren't likely to randomly stumble through your door. We need to go get them.

Look around your shop, home, community and bring the next boss into the roofing pipeline. Our industry's workforce needs are so great and women's talents so exceptional, we'd be idiots not to. 🌈🌟

MCKAY DANIELS is NRCA's CEO.

✉️ mdaniels@nrca.net

Construction industry needs more than 500,000 workers in 2023

The construction industry will need to attract an estimated 546,000 additional workers on top of the normal pace of hiring in 2023 to meet the demand for labor, according to Associated Builders and Contractors.

A proprietary model developed by Associated Builders and Contractors uses the historical relationship between inflation-adjusted construction spending growth from the U.S. Census Bureau's Construction Put in Place survey, as well as payroll construction employment from the U.S. Bureau of Labor Statistics, to convert anticipated increases in construction outlays into demand for construction labor at a rate of about 3,620

new jobs per billion dollars of additional construction spending. The increased demand is added to the current level of above-average job openings; calculations also include projected industry retirements, shifts to other industries and other forms of anticipated separation.

The construction industry averaged more than 390,000 job openings per month in 2022—the highest level on record—and the industry unemployment rate of 4.6% in 2022 was the second lowest on record. National payroll construction employment was 231,000 higher in December 2022 than in December 2021.

“Despite sharp increases in interest rates over the past year, the shortage of construction workers will not disappear in the near future,” says Associated Builders and Contractors Chief Economist Anirban Basu. “First, while single-family home building activity has moderated, many contractors continue to experience substantial demand from a growing number of mega-projects associated with chip manufacturing plants, clean energy facilities and infrastructure. Second, too few younger workers are entering the skilled trades, meaning this is not only a construction labor shortage but also a skills shortage.

“With nearly one in four construction workers older than 55, retirements will continue to whittle away at the construction workforce,” Basu continues. “Many of these older construction workers also are the most productive, refining their skills over time. The number of construction laborers, the most entry-level occupational title, has accounted for nearly four out of every 10 new construction workers since 2012. Meanwhile, the number of skilled workers has grown at a much slower pace or, in the case of certain occupations like carpenter, declined.”



For a link to NRCA's workforce recruitment toolkit, go to professionalroofing.net.



NRCA launches podcast addressing the roofing industry workforce



NRCA has launched a new podcast series, “Growing America’s Roofing Workforce.” Episodes will discuss ways to recruit, train and retain future members of the roofing industry and focus on one simple question: What can we all do to help grow the roofing industry’s future?

In the first episode, “Making Connections: From CTE to ProCertification,” Tony Rader, COO of National Roofing Partners, Coppell, Texas, reveals how his company and its 238 roofing service partners are helping the U.S. workforce development effort. In the second episode, “Rehabilitation Through the Trades,” Doug Van Dyke, president of Van Martin Roofing, Dayton, Ohio, discusses Emerge, a trades educational program that houses at-risk individuals and creates a support system to help them succeed.

NRCA will release a new podcast episode monthly. Episodes are available at roofingworkforce.podbean.com; on NRCA's website, nrca.net; or wherever you get your podcasts, including Apple, Google and Spotify.

MY SHELTER PETS ARE MY BEST FRIENDS

#AdoptPureLove



OLIVIA MUNN WITH CHANCE AND FRANKIE: ADOPTED 2014 AND 2016.

[THESHELTERPETPROJECT.ORG](https://theshelterpetproject.org)





VIRTUAL
CONSTRUCTION
ASSISTANTS



JOHN MALIZIA

President & CEO of A1 Roofing
A New York Commercial & Residential Roofing Company

"Virtual Construction Assistants has helped my Roofing Company by providing highly skilled full time Estimating Assistants.

This has helped us increase our estimating output while lowering overhead."



VIRTUAL
CONSTRUCTION
ASSISTANTS

WE SPECIALIZE IN:

- *Estimating Assistants*
- *On Screen Takeoff Assistants*
- *Construction Administrative Assistants*
- *QuickBooks Accountants*

Roofing Contractors
10% Discount

Visit our website for more information



We are the only Virtual Assistant Business dedicated to the Construction Industry.

Female construction workers identify ways to improve the industry

The National Center for Construction Education & Research reports workers are retiring from the construction industry much faster than new people are being hired, and for every four people who leave, only one enters, according to Construction Dive. Meanwhile, the industry is seeing rising demand for workers as the Infrastructure Investment and Jobs Act and the CHIPS Act bring more projects. Recruiting and retaining women—who currently make up 14% of the overall construction workforce—is crucial.

To learn more about women’s experiences in construction, NCCER surveyed women in the trades and met with them in groups. Following are some identified key challenges.

- **Discrimination and sexual harassment.** Women said they felt disrespected and subjected to unprofessional treatment more often than men, and nearly half said they had been the target of derogatory comments or jokes at work. Establishing and publishing a sexual harassment prevention policy is important.
- **Bias in the hiring process.** Companies often require a recommendation before interviewing for a position, which can hurt women, who are less likely to know someone in the field. It is crucial employers ensure consistent hiring practices.
- **Lack of flexibility for care work.** Women are responsible for a disproportionate amount of care work in the U.S., and lack of employer accommodations is a significant obstacle. Providing support via clear working hours, schedule flexibility and consistent paid time-off policies can help.
- **Lack of training opportunities.** Women surveyed voiced a need to establish training programs to bring women into the industry.
- **Unequal treatment.** Women want to be held to the same standards, receive the same training and pay, and have the same career advancement opportunities.
- **Few women in site leadership positions.** Fifty-seven percent of women said they had never had a female supervisor. There must be an intentional plan in place to identify and develop potential women leaders.
- **Poor job-site experience.** Two job-site problem areas mentioned are bathroom facilities and properly fitted workwear and equipment. Women surveyed noted a lack of access to restrooms stocked with feminine hygiene products and said most PPE and clothing are not designed to fit women.



Construction salaries are rising faster than most industries

As construction wages rise in response to inflation and an industry labor shortage, contractors continue to struggle to attract and keep talent, according to Construction Dive.

The Associated General Contractors of America’s 2023 Construction Hiring & Business Outlook, which gathered data from more than 1,000 construction firms, shows average hourly earnings for construction workers rose 6.1% from December 2021 to December 2022—higher than the 5% increase in average pay for all private sector production workers.

Although 72% of contractors increased base pay rates and about one-third boosted bonuses and benefits in 2022, 80% reported having difficulty filling positions. Associated Builders and Contractors of America reports workforce shortages likely will worsen, with 69% of contractors expecting to need more workers in 2023.

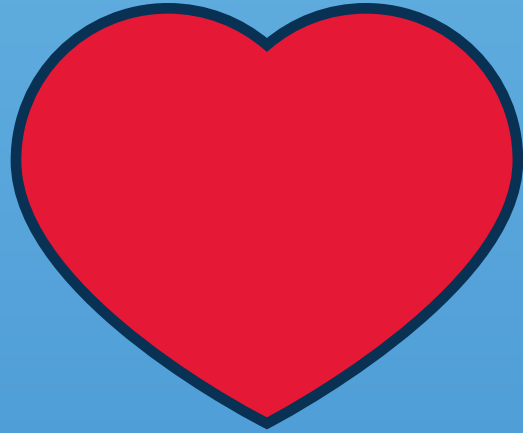
“Contractors now are competing not only with other contractors but also with Amazon and the distribution segment and potentially jobs that offer remote work,” says Associated Builders and Contractors of America Economist Zachary Fritz. “So that’s pushed wages up, and they’ve particularly accelerated over the past year. Construction wages have increased faster than overall wages in 10 of the past 12 months and increased at a faster rate than overall monthly inflation in each of the past six months.”

Associated General Contractors of America Chief Economist Ken Simonson says construction companies always have had to pay a premium to attract workers; that premium averaged 21.5% from 2000 to 2019 but, despite wage increases this year, has dropped to 18%. He says firms are going to have to raise pay even more to meet or exceed the historic premium.

Contractors are trying to find other ways to attract workers, including employee coaches, direct access to company leaders, more paid time off, and more work-life balance. More construction companies also are moving toward creating employee-owned organizations.



Read AGC’s 2023 Construction Hiring & Business Outlook report at professionalroofing.net.



MEMBERS

(Members love us, too!)

Find out why at nrca.net/becomeamember



The benefits are great; the mission is even greater.

nrca.net/becomeamember | (800) 323-9545 | membership@nrca.net



Understanding underlayment

Did you know I-Codes require enhanced underlayment in high-wind regions?

by Mark S. Graham

The *International Building Code*,^{® 2021 Edition} and *International Residential Code*,^{® 2021 Edition} require enhanced underlayment materials and application methods for asphalt shingle roof systems in certain situations, such as when installing them in low-slope applications or high-wind regions. Asphalt shingle roof system designers and installers should be aware of these enhancement requirements; highlights follow.

Low-slope applications

For asphalt shingle roofs with slopes between 2:12 and 4:14, IBC 2021 and IRC 2021 require a two-layer underlayment application. The underlayment is required to be applied as a 19-inch-wide starter parallel to and starting along the eaves. Next, full-width underlayment rolls must be applied shingle fashion starting at the eaves, overlapping successive sheets by 19 inches. End laps must be a minimum of 4 inches and offset by a minimum of 6 feet.

High-wind regions

IBC 2021 considers high-wind regions to be areas where the basic design wind speed is 140 mph or more. These areas include the Gulf



of Mexico coastline; along the Atlantic coastline for Risk Categories II, III and IV buildings from Massachusetts to Florida; along the Alaskan coastline; and along portions of the Hawaiian coastline.

IRC 2021 considers residential buildings to be in a high-wind region when high-wind design, not IRC 2021's prescriptive design, applies. IRC 2021's high-wind design applies when the ultimate design wind speed is 140 mph or more.

When asphalt shingle roof systems are installed in high-wind regions, IBC 2021 and IRC 2021

require underlayment to be applied in two layers and comply with ASTM D226, "Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing," Type II (No. 30); ASTM D4869, "Standard Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing," Type IV (No. 30); or ASTM D6757, "Standard Specification for Underlayment Felt Containing Inorganic Fibers Used in Steep-Slope Roofing."

Underlayment must be applied as a 19-inch-wide starter parallel to and starting along the eaves. Next, full-width underlayment rolls must be applied shingle fashion starting at the eaves, overlapping successive sheets by 19 inches. End laps must be a minimum of 4 inches and offset by a minimum of 6 feet.

“Specialized, enhanced underlayment requirements apply to asphalt shingle roof systems used in low-slope applications and high-wind regions”

Underlayment also must be attached with corrosion-resistant, minimum 0.083-inch-diameter, annular ring- or deformed-shank cap nails in a grid pattern of 12 inches between side laps and 6-inch on-center spacing at side and end laps. Metal caps must be a minimum 1-inch diameter and have a thickness of no less than 32 gauge. Power-driven metal caps must be at least 0.010 inch thick. Plastic cap nails must be a minimum 1-inch diameter and have a minimum outside edge thickness of at least 0.035 of an inch. Cap nails must be long enough to penetrate not less than $\frac{3}{4}$ of an inch into roof sheathing.

As an alternative to the high-wind region, two-layer underlayment requirement, IRC 2021 permits a self-adhering polymer-modified bitumen underlayment complying with ASTM D1970, "Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection," to be applied according to the manufacturer's installation instructions.

An additional alternative permits the use of minimum 4-inch-wide strips of self-adhering, polymer-modified bitumen underlayment to be applied over all joints in the roof deck sheathing followed by a single layer of underlayment. Attachment of the underlayment must comply with the code's attachment requirements for high-wind regions.

Synthetic roof underlayments do not specifically comply with IBC 2021 and IRC 2021.

However, NRCA's code change proposals have been approved by the International Code Council,[®] so synthetic roof underlayments complying with ASTM D8257, "Standard Specification for Mechanically Attached Polymeric Roof Underlayment Used in Steep Slope Roofing," will comply with the upcoming IBC 2024 and IRC 2024.

Closing thoughts

Specialized, enhanced underlayment requirements apply to asphalt shingle roof systems used in low-slope applications and high-wind regions. If you design or install asphalt shingle roof systems in these conditions, you should be aware of these required underlayment enhancements.

You should consult IBC 2021 and IRC 2021 for the specific code requirements applicable to asphalt shingle roof systems and other roof system types. Online versions of IBC and IRC are accessible at codes.iccsafe.org, and IBC 2021, IRC 2021 and previous editions can be purchased from shop.iccsafe.org.

Additional information about asphalt shingle roof systems is provided in the Asphalt Shingle Section of *The NRCA Roofing Manual: Steep-slope Roof Systems—2021*. This manual is available electronically to NRCA members free of charge; hard copies can be purchased from shop.nrca.net. 🌱🌿

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

 [@MarkGrahamNRCA](https://twitter.com/MarkGrahamNRCA)

Phishing remains active cybersecurity threat to businesses

IBM research found more than two in five of all cybersecurity incidents in 2022 involved phishing as the pathway to compromise, according to Construction Dive.

Three in five of all phishing attacks were conducted through attachments, according to IBM Security X-Force's annual threat intelligence report released in February. Phishing via links accounted for one-third of all phishing attacks. One-quarter of attacks involved the exploitation of public-facing applications, and 16% abused valid accounts for access. Only one in 10 attacks involved external remote services.

The consistent prevalence of phishing attacks underscores the need for organizations to focus on people, process and technology, according to Stephanie Carruthers, global head of innovation delivery and chief people hacker at IBM Security X-Force Red. Phishing has enjoyed long-standing success as an initial access vector, and attackers are constantly innovating their approach to keep phishing alive and thriving, Carruthers says.

The latest phishing tactics should be shared with employees

so they know what to look out for. Thread hijacking, which involves a threat actor hijacking an email account and responding to email threads pretending to be the original victim, doubled in 2022.

A majority of penetration tests IBM Security X-Force Red ran for clients in 2022

revealed improper authentication or handling of credentials. Many organizations lacked visibility into applications and endpoints exposed through identity access management services, the report found.

The report is based on research data IBM Security X-Force gathered in incident response engagements throughout 2022, in addition to vulnerability and exploit databases and network and endpoint tracking.



View highlights from IBM Security X-Force's report at professionalroofing.net.

Construction technology funding held steady during 2022

A report from Monterrey, Mexico-based construction technology venture capital firm Cemex Ventures reveals the construction technology industry showed resilience during adverse economic conditions as investment during 2022 held steady at around \$5.38 billion, according to Construction Dive. The funding was only slightly less than \$5.4 billion in 2021.

More than 80% of investment in the market was in North America and Europe in 2022. Within those regions, the most active country was the U.S., where 97 startups have their headquarters and 42.5% of all construction technology investment dollars flowed. The next most active country, the U.K., had 20 startups and 8.8% of funding dollars.

Cemex Ventures predicts construction technology investment will continue to hold steady in 2023 with an expectation that economic issues will begin to abate and provide a path forward at the end of the year.

The report highlights four key areas of

investment in the construction technology field that will continue to be important to the industry: enhanced productivity, future of construction, green construction and construction supply chain.

- **Enhanced productivity:** Digital solutions aimed at increased efficiency in construction by improving stakeholder collaboration, communication and coordination. Examples include subsurface mapping and data-driven construction improvements for time and speed. This area represented 53% of construction technology's total investment in 2022, more than any other category.
- **Future of construction:** Programs such as artificial intelligence, advanced building materials, industrialized construction methodologies, robotics and machine-assisted applications such as 3D printing robots, BIM and autonomous equipment. This area received 20.6% of funding in 2022.

- **Green construction:** Processes, products and services that Cemex Ventures predicts will be in demand to offset the negative effects construction has on the environment. Firms in this category received 14.9% of 2022 construction technology funding.
- **Construction supply chain:** Construction supply chain solutions also will see growth, but it will be slowed because this is one of the most difficult operational areas to solve, according to the report. The segment received 11.4% of funding dollars in 2022.

The report indicates North America and Europe will continue to dominate shares of the construction technology market. However, it also notes there is concentrated construction technology innovation in Latin America and the Asia Pacific area.



GET INVOLVED. GIVE BACK.

**COMMITTED TO SECURING
THE ROOFING INDUSTRY'S
FUTURE EXCELLENCE**

The Roofing Alliance advances the roofing industry through education and training; technology and research; sustainability; and philanthropic outreach.

Your investment supports these initiatives.

Please join us.

roofingalliance.net



Employee or contractor?

NRCA expresses concerns regarding proposed rulemaking to modify determination of independent contractor status

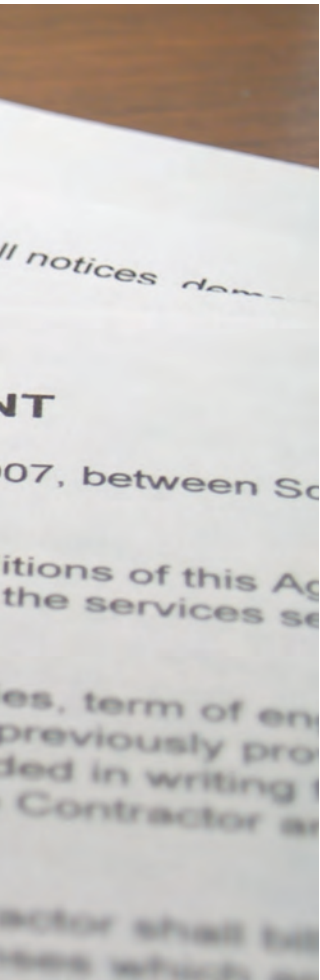
by Duane L. Musser

In October, the Department of Labor issued a Notice of Proposed Rulemaking titled Employee or Independent Contractor Classification Under the Fair Labor Standards Act. This proposed rulemaking would substantially modify the rules for determining whether an individual is classified as an employee or independent contractor under federal law, which is of great interest to roofing professionals.

Under the FLSA, employers are required to provide certain benefits such as wages and overtime compensation to employees. However, employers are not bound by FLSA rules for individuals with whom they contract for services as independent contractors. To determine whether an individual is an employee or an independent contractor, the employer must analyze the relationship with the individual based on regulations issued by the DOL.

Proposed criteria

The regulations governing independent contractor status were most recently modified in January 2021 and are focused on two primary criteria for determining independent contractor status: the level of control an employer has over the work being performed and the



opportunity for profit or loss by the individual who is classified as an independent contractor. DOL's proposed rulemaking would rescind the current standard and replace it with a new, more complex process for determining independent contractor status.

The "totality of circumstances" analysis under the proposed rulemaking contains six equally weighted factors used to determine independent contractor status: the opportunity for profit or loss depending on managerial skill; the level of investments by the worker and the employer; the degree of permanence of the work relationship; the nature and degree

of employer control; the extent to which the work performed is an integral part of the employer's business; and the worker's use of skill and initiative.

In addition, the new rule would provide for "other factors" unique to a given situation that could be relevant to the final determination of independent contractor status on a case-by-case basis. DOL officials indicate the more complex definition is designed to combat deliberate misclassification of employees as independent contractors.

The independent contractor or subcontractor model of employment has been widely used within the roofing industry for decades. Independent contractors serve a vital function in roofing and other segments of the construction industry by providing specialized skills

in a flexible manner. This enables employers that use independent contractors to provide high-quality products and services to consumers at competitive prices. Employers also can more efficiently meet short-term needs and constantly fluctuating changes in the marketplace. In addition, the independent contractor model benefits entrepreneurial workers who desire more flexibility and autonomy in their work.

NRCA's concerns

For the independent contractor model to continue working effectively for the roofing industry, it is critical federal regulations under the FLSA are clear and unambiguous. NRCA recognizes it is important to prevent the deliberate or inadvertent misclassification of workers, and to do so effectively requires well-defined criteria employers and workers can comprehend without having to employ an army of attorneys.

NRCA is concerned DOL's expanded criteria for determining independent contractor status will inject greater uncertainty and confusion into the determination process. The regulation provides little guidance regarding how businesses and workers should apply the new criteria with respect to the various types of independent contractor relationships that currently exist. Specifically, the provision that provides for unspecified "other factors" that may be unique to a given situation is of great concern because of its lack of definition.

NRCA is further concerned DOL's cost estimates to implement the new standard significantly underestimate the costs employers are likely to incur. The anticipated cost analysis assumptions appear unrealistic because the new rule adds more complex and confusing criteria for making independent contractor determinations. This will result in higher costs for businesses attempting to discern how the new criteria will be applied to complex business relationships.

The substantial changes in the criteria to determine independent contractor status likely will make it more difficult and costly

“NRCA is concerned DOL's expanded criteria for determining independent contractor status will inject greater uncertainty and confusion into the determination process”

to correctly classify workers and consultants who are legitimate independent contractors. The resulting disruption and higher costs would have adverse effects on the roofing industry and its customers.

To address these serious concerns, NRCA filed comments based on member feedback. NRCA's comments urge DOL to withdraw or dramatically modify the rulemaking to address the roofing industry's concerns before finalizing the regulation. NRCA will continue to be actively engaged in the ongoing process to minimize regulatory and financial burdens on members. 🌟🌟

DUANE L. MUSSER is NRCA's vice president of government relations in Washington, D.C.

Contractor faces \$584,333 in fines for exposing workers to fall hazards

Guelsin Lima, operating as Extreme Roofing and Siding LLC, Trenton, N.J., faces more than \$584,000 in fines after an inspection by the Occupational Safety and Health Administration found workers on a roof exposed to a 30-foot fall hazard without fall protection. The contractor is not an NRCA member.

Following the inspection July 6, 2022, at an Upper Saddle River, N.J., worksite, the agency issued Lima 12 citations—nine willful and three serious violations—and proposed \$584,333 in penalties for exposing workers to fall hazards, improperly using ladders, and failing to provide head and eye protection.

In March 2022, Lima was issued four willful and two serious violations, and OSHA proposed \$247,309 in penalties after inspectors noted failure to provide fall protection and head and eye protection for workers installing roof shingles.

Lima had 15 business days from receipt of the citations and penalties to comply, request an informal conference with OSHA's area director or contest the findings before the independent Occupational Safety and Health Review Commission.

OSHA publishes interim final rule regarding whistleblower retaliation complaints

The Occupational Safety and Health Administration recently published an interim final rule establishing procedures and time frames for handling employee retaliation complaints under the Criminal Antitrust Anti-Retaliation Act, which was enacted Dec. 23, 2020. The interim final rule took effect Feb. 10.

The Department of Labor and Department of Justice will collaborate to enforce the Criminal Antitrust Anti-Retaliation Act to ensure protection of whistleblowers from retaliation for reporting potential criminal antitrust violations or engaging in other protected activities, such as testifying for, participating in or assisting with certain federal government investigations or proceedings.

Protected reports include providing information to an employer or the federal government related to price fixing, bid rigging or market allocation schemes between competitors, or information relating to violations of other criminal laws committed in conjunction with potential violations of the criminal antitrust laws or in conjunction with a

Department of Justice investigation of potential violations of those laws.

OSHA accepted public comments regarding the interim final rule through April 23.

OSHA issues enforcement guidance to make penalties more effective

The Occupational Safety and Health Administration has issued new enforcement guidance to make its penalties more effective in stopping employers from repeatedly exposing workers to life-threatening hazards or failing to comply with certain workplace safety and health requirements.



OSHA regional administrators and area office directors now have the authority to cite certain types of violations as “instance-by-instance citations” for cases where the agency identifies “high-gravity” serious violations of OSHA standards specific to certain conditions where the language of the rule supports a citation for each instance of noncompliance. These conditions include lockout/tagout, machine guarding, permit-required confined space, respiratory protection, falls, trenching and for cases with other-than-serious violations specific to record keeping.

The change is intended to ensure OSHA personnel are applying full authority of the Occupational Safety and Health Act where increased citations are needed to discourage noncompliance. The new guidance covers enforcement activity in general industry, agriculture, maritime and construction; it took effect March 27. The previous policy was in place since 1990 and applied only to egregious willful citations.

OSHA also is reminding its regional administrators and area directors about their authority to not group violations and instead cite them separately to more effectively encourage employers to comply with the intent of the OSH Act.

DOL issues final rule regarding employee retaliation complaints

The Department of Labor issued a final rule regarding handling employee retaliation complaints under the Taxpayer First Act, which was enacted July 1, 2019.

The act protects employees who report or assist in an investigation regarding underpayment of taxes or potential violations of the internal revenue laws or federal laws relating to tax fraud. It also protects employees who assist in any action taken by the IRS relating to these issues.

The final rule adopts the procedures and time frames established in the Occupational Safety and Health Administration's interim final rule—published March 7, 2022—without substantive change.

The final rule took effect March 13.



Learn how to file a complaint with OSHA under the Criminal Antitrust Anti-Retaliation Act at professionalroofing.net.



NRCA
PROCertification®

Grow your business with NRCA ProCertification®

- **GAIN** national, professional recognition and provide proof your company is committed to quality.
- **STRENGTHEN** customer confidence and enhance your position in your local market(s).
- **ATTRACT** quality talent with your track record of career path development.
- **SHOW** current employees you're dedicated to their professional advancement.

Get started today!

nrca.net/procertification

New! Metal Shingle Systems

**Coming this month:
Modified Bitumen Systems: Torch Applied**



KEEP WORKERS SAFE WHILE WORKING IN HOT WEATHER

by Cheryl Ambrose, CHST, OHST, and Rich Trewyn

As summer weather arrives, temperatures heat up, and in northern regions, roofing workers are able to get back on rooftops. According to the National Institute for Occupational Safety and Health, body temperature can rise to 106 F or higher within 10 to 15 minutes of people being exposed to high temperatures, and heat stroke can cause death or permanent disability if emergency treatment is not provided. Other heat-related effects include heat exhaustion, heat cramps and heat rash.

Knowing how to work safely in hot weather can help prevent heat-related illnesses. *Professional Roofing's* May 2022 article, "When is hot too hot?," discussed the topic and early Occupational Safety and Health Administration rulemaking activity. Since then, the emphasis on heat safety has been increasing across the roofing and construction industries. We will take a closer look at accelerated regulatory activity and practical solutions and approaches to heat-related illness prevention.

REGULATIONS

In October 2021, OSHA issued its Advanced Notice of Proposed Rulemaking for Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings, setting in motion the agency's official rulemaking for a heat standard covering all industries, including construction. NRCA submitted comments to OSHA regarding the rulemaking, as well as signed onto comments submitted by the Construction Industry Safety Coalition, which comprises numerous construction trade associations.

NRCA's comments focused on the need for protective measures that follow a practical approach while considering the dynamic and unique nature of the roofing workforce and workplaces. Since the formal comment period closed in January 2022, OSHA has held several stakeholder meetings. The Advisory Committee on Construction Safety and Health, representing stakeholders throughout the construction industry, is required to review proposed rulemaking affecting construction. During a June 2022 public meeting, ACCSH voted to recommend OSHA proceed with a heat standard rulemaking.

In January during a meeting of the National Advisory Committee on Occupational Safety and Health, the committee addressed recommendations and updates from its Heat Injury and Illness Prevention Work Group. The work group was tasked with evaluating and providing input and recommendations regarding

compliance assistance materials associated with heat-related illness prevention and creating key recommendations regarding potential elements of a Heat Injury and Illness Prevention Standard rulemaking for OSHA's consideration.

The committee did not receive any rulemaking recommendations. However, it voted unanimously to accept recommendations aimed at improving OSHA's guidance for heat dangers, expanding outreach efforts, and identifying new technology and best practices to mitigate and/or monitor heat.

OSHA also is moving forward and initiating the Small Business Regulatory Enforcement Fairness Act review process, where a panel of small-business representatives reviews the draft regulation and provides a report to OSHA 60 days following review completion. This is an important next step in the process and another opportunity for small businesses to comment.

Although OSHA's regulatory agenda is possibly the busiest in recent history, industry experts and those close to the process expect the heat standard to become a rule within the remaining months of the Biden administration. NRCA will continue to closely monitor and stay engaged in the rulemaking process for an OSHA heat standard.

In the meantime, you should be aware enforcement action is possible even absent a final OSHA standard. Under OSHA's General Duty Clause in Section 5(a) of the Occupational Safety and Health Act, all employers are required to provide a work environment "free from recognized hazards that are causing or are likely to cause death or serious physical harm."

Additionally, OSHA launched an enforcement National Emphasis Program for Outdoor and Indoor Heat-Related Hazards in April 2022. The NEP applies to outdoor and indoor workplaces, including those in construction and general industry.

What does this mean? The NEP directs OSHA compliance officers conducting inspections for other purposes to open or refer a heat-related inspection for any hazardous heat conditions



THE HEAT OF THE MOMENT

observed. OSHA also may initiate inspections in high-hazard industries when the National Weather Service issues a heat warning alert or advisory for an area. Additionally, the NEP establishes heat priority days when the heat index is expected to be 80 F or hotter, allowing OSHA to take enforcement action.

During a heat-related inspection, OSHA compliance officers are instructed to review OSHA 300 logs and 301 incident reports and other records for heat-related incidents and interview workers about heat-related symptoms such as headaches, dizziness, dehydration and other conditions to indicate a heat-related illness. OSHA may ask to review a company's heat illness and injury program for adequate measures to address heat exposure including access to water, rest breaks, shade, acclimatization procedures, a buddy system and training to list a few.

As part of your company's overall safety and health program, you should examine heat-safety plans and procedures, as well as heat-illness prevention training and emergency procedures to ensure they address these key components.

At the state level, Oregon OSHA's new Heat Illness Prevention Standard took effect June 15, 2022, and replaced the temporary emergency rule enacted in July 2021. The permanent standard applies to workplaces when employees are performing work activities in any environment (indoor and outdoor) when the heat index is 80 F or hotter.

Oregon employers must provide access to shade, cool or cold drinking water, and supervisor and employee training. In addition, Oregon employers must develop emergency medical plans, acclimatization plans and a written heat-related illness prevention plan. Additional high-heat requirements apply if the heat index reaches 90 F.

ANSI/ASSP A10.50

While OSHA continues moving forward with a federal standard, development of the first consensus standard addressing heat by the American National Standards Institute, A10 Committee for Construction and Demolition Operations is nearly complete.

The A10.50 Standard for Heat Stress Management in Construction and Demolition Operations was developed to assist users in recognizing signs and symptoms of heat-related disorders in indoor and outdoor work environments; provide methods and strategies for reducing

or eliminating workers' emergent heat-related disorders at construction worksites; and provide planning help to establish training content for workers and supervisors related to heat stress and heat-related disorders.

During the past two years, NRCA risk management staff and other safety professionals met weekly to develop the voluntary heat standard that will serve as a guide to prevent heat-related illnesses and injuries in the roofing industry and across construction.

The draft standard currently is in technical review and will be sent for ballot before the full A10 Committee for Construction and Demolition Operations. Public and committee comments will be addressed before the standard receives final ANSI approval and is published.

ADVOCACY

In addition to the hefty amount of regulatory activity, NRCA is thrilled to participate in some notable efforts to prevent heat-related illnesses.

Roofing Alliance research

A heat stress research study currently is underway through the Roofing Alliance's Heat Stress Task Force to address multiple aspects of heat illness, including an investigation into roofing worker response to working in hot environments. The three-phased research program, Heat Stress Conditions and Awareness Research, was developed through Florida Gulf Coast University's U.A. Whitaker College of Engineering, Fort Myers.

The research project studies the effects of heat on workers by performing real-time on-site observations, conducting a national survey of roofing contractors and workers, and developing educational programs based on survey findings to assist roofing contractors in establishing safer work practices for hot environments. The findings of the heat-stress survey have been prepared and are being reviewed by the research team. Next, the team will create an educational resource roofing contractors can use to strengthen their training programs for working in hot conditions.

Heat-safety coalition

The Heat Safety & Performance Coalition, a division of the Korey Stringer Institute at the University of Connecticut, Storrs, is focused on preventing heat-related injuries and illnesses in working populations.

You might remember in August 2001, Korey Stringer, a Minnesota Vikings offensive lineman, passed away from exertional heat stroke. Since Stringer's death, his wife, Kelci, has worked tirelessly to develop an exertional heat stroke prevention institute to honor her husband's legacy. As a result of her efforts, the Korey Stringer Institute was founded, and a Heat Safety & Performance Coalition was created.

The Heat Safety & Performance Coalition produces high-quality heat-safety research, education and awareness in a variety of labor settings. The coalition is fully equipped to assist companies in creating and/or developing their heat policies, emergency action plans and heat-safety training materials to reflect evidence-based approaches to reduce risk of injury and fatality.

The Heat Safety & Performance Coalition also advocates for heat stress consensus standards and recommendations to improve heat safety in workers who labor in the heat.

PREVENTION

Creating and implementing an overall heat-safety plan not only can reduce or prevent heat-related illnesses and injuries but also demonstrates a company's dedication to keeping workers safe from the dangers of heat. It can reap rewards for your company by building a strong reputation for taking care of employees while reducing productivity losses associated with heat stress.

Committing to a heat-safety plan can be a win-win for employees and employers. Following are some key elements to consider:

- Designate a heat-safety champion who can help develop the plan, assist with implementation and help assess effectiveness. Create a safety committee to get feedback about implementing the plan.
- Take time to examine your company's current heat-safety practices and make necessary adjustments for current safety guidelines sooner than later. Assess worksite heat safety hazards to optimize heat safety and its effectiveness through greater preparedness.
- Consider a daily checklist to assist with heat monitoring and preparedness.
- Develop or update written plans that clearly communicate your company's policies and procedures for preventing heat-related illnesses, including a heat emergency action plan that is clearly communicated and workers are properly trained to implement.

Gather heat-safety resources, training materials and supplies such as those available through NRCA and other resource-rich organizations like CPWR—The Center for Construction Research and Training, NIOSH and other health and safety solutions providers.

TRAINING


Training is an important part of an effective heat-safety plan. Start by asking whether the amount and level of training being conducted is adequate. Is it a quick toolbox talk that everyone rushes to sign so they can get back to work? Or is it training that will help ensure supervisors and workers know how to recognize the signs and symptoms of heat-related illness, understand personal risk factors, know how to prevent heat-related illness and know how to respond in the event of a heat emergency when critical seconds count?

New employee onboarding is a great way to communicate information in your company's heat-safety plan, including risk factors for heat-related illness, signs and symptoms, how to mitigate or prevent heat-related illness with acclimatization, hydration, body cooling and what to do in a heat emergency, among other things.

Remember, the information and delivery of heat-safety training should not be complicated but rather delivered in a straightforward and effective way that is easy for employees to understand.

NRCA IS AVAILABLE TO HELP

Preventing heat-related illnesses is a familiar topic and one that continues to develop. Notwithstanding the high level of regulatory activity, the past year has proved there now is a much greater interest in the topic.

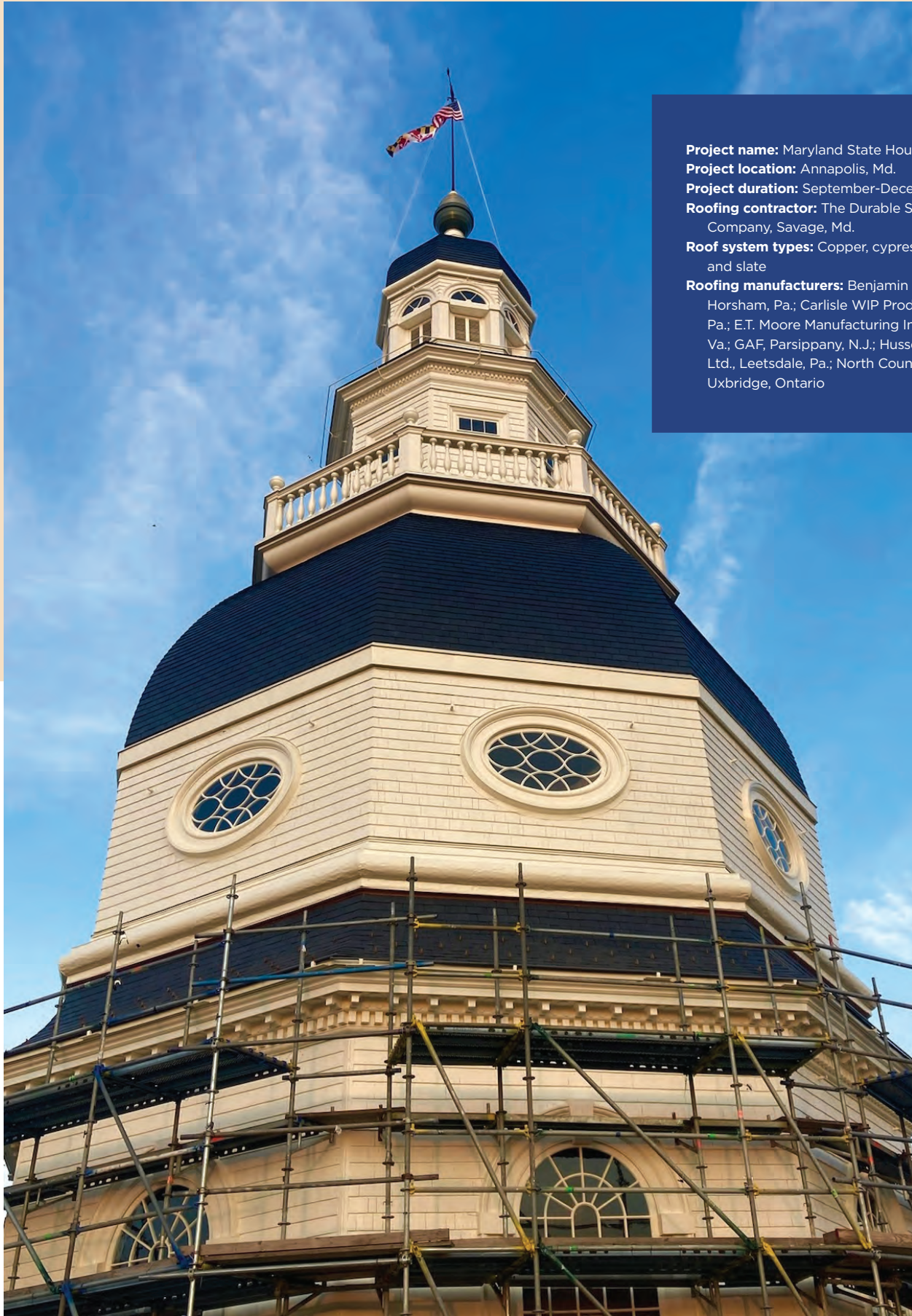
NRCA will continue to remain engaged with all regulatory rulemaking and consensus standard development related to heat safety while providing updates as efforts progress. NRCA is available to provide members with resources and training regarding heat safety and other safety- and health-related topics. For more information, visit nrca.net/safety. 

CHERYL AMBROSE, CHST, OHST, is NRCA's vice president of enterprise risk management, and **RICH TREWYN** is NRCA's director of enterprise risk management.



To view NRCA's sample Heat Illness Prevention Program and access services offered by the Heat Safety & Performance Coalition, go to professionalroofing.net.

Photos courtesy of The Durable Slate Company, Savage, Md.



Project name: Maryland State House
Project location: Annapolis, Md.
Project duration: September-December 2022
Roofing contractor: The Durable Slate Company, Savage, Md.
Roof system types: Copper, cypress shingles and slate
Roofing manufacturers: Benjamin Obdyke Inc., Horsham, Pa.; Carlisle WIP Products, Carlisle, Pa.; E.T. Moore Manufacturing Inc., Richmond, Va.; GAF, Parsippany, N.J.; Hussey Copper Ltd., Leetsdale, Pa.; North Country Slate, Uxbridge, Ontario

Maryland State House, Annapolis, is the oldest state capitol building still in use. Construction began in 1772, but the American Revolutionary War paused construction and the state capitol was not completed until 1797. The two-story, Georgian-style building was designed by Joseph Horatio Anderson who also designed St. Anne's Church located across State Circle. In 1960, Maryland State House was recognized as a National Historic Landmark.

When the Continental Congress came to Annapolis in 1783, it met in the Old Senate Chamber, one of the only sections completed at the time. In 1784, the Continental Congress ratified the Treaty of Paris—the document that officially ended the Revolutionary War—in the Maryland State House. Soon thereafter, George Washington came before Congress to resign his commission as commander in chief of the Continental Army, cementing the U.S.' democratic process.

In 2022, The Durable Slate Company, Savage, Md., restored the capitol building's tower and domes with new slate, copper and cypress shingles.

TOWER OF DOMES

Maryland State House's 215-foot-tall tower has two domes and is a defining landmark on the Annapolis skyline. The lightning rod that tops the tower was constructed and grounded to Benjamin Franklin's specifications.

Lower tower

All the roof systems on the tower are octagonal except for the bottom 800-square-foot, flat-seam copper plinth roof that has four sides. The copper on this roof area will be replaced during a second phase of work scheduled for this summer.

Above the plinth roof is a 20- by 15-foot lower drum with cypress shingles. The Durable Slate Company team

installed bib flashings to make watertight repairs to some shingles that had split and salvaged the remaining shingles as they were in good condition. Team craftsmen custom manufactured new head flashings from lead sheets and installed them over eight arched windows.

Above the lower drum is a concave 720-square-foot

lower sweep slate roof system with each face measuring 90 square feet. The team removed the slate, installed 1/4-inch-thick CDX plywood over the existing heart pine deck, placed Carlisle WIP® 300 self-adhering underlayment and installed new 10- by 12-inch North Country Unfading Black slate roof tiles with a 5-inch exposure.

“All the slate was installed with appropriate head laps and exposures using two smooth shank copper nails,” says Chase Collins, project manager for The Durable Slate Company. “We added a small amount of adhesive

to the backs of the slate to help minimize chattering, which leads to breaking. The slate hips were mitered and installed with hip flashings.”

Above the lower sweep roof is an upper drum originally installed with slate. The team removed the slate on each 100-square-foot side and replaced it with reclaimed cypress shingles installed in a random-width pattern with 1 1/2-inch side laps, appropriate head laps and exposures.

“For all the shingled areas, we used Benjamin Obdyke Slicker® HP rainscreen as it has a housewrap and drainage matrix,” Collins says. “We used HydroFlash® GP flashing tape as needed to seal around penetrations.”

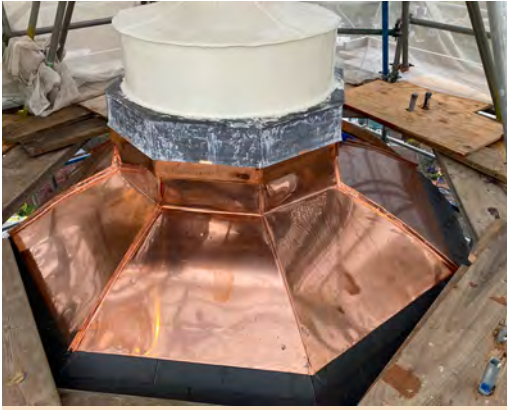
Each shingle was installed with two stainless-steel ring shank siding nails. New copper window architraves custom manufactured by Chicago Metal Supply & Fabrication Inc., Chicago, were fitted and installed around circular window openings.

Above the upper drum is the convex main dome. Team members removed existing slate, fastened GAF Deck-Armor® Premium Breathable Roof Deck Protection and installed 10- by 12-inch North Country Unfading Black slate roof tiles with a 5-inch exposure. Each face

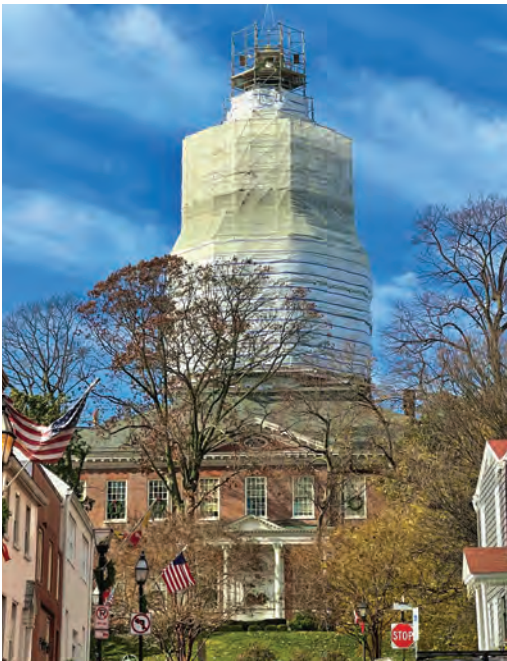
Roofing American History

The Durable Slate Company
helps restore the dome on
Maryland's state capitol

by Chrystine Elle Hanus



New double-locked, standing-seam copper panels on the acorn base



Scaffolding was erected around the tower and included two beta hoists to carry materials.

measured 17 by 15 feet at the bottom and tapered to 10 feet at the top.

Upper tower

Separating the lower and upper portions of the tower is a balcony roof with flat-seam copper.

“The original copper was in great shape and remained,” Collins says. “We installed new expansion batten details at the eight hips in this roof area and installed copper rail caps on the top and bottom rails of the balustrade that surround the edges of the balcony.”

Above the balcony stands the lower lantern roof. On the lantern’s 65-square-foot faces, the team replaced the original cypress wood shingles with reclaimed cypress shingles and installed new copper head flashings on the windows.

Next up was the concave upper sweep roof that originally consisted of slate.

“We ran into rotted decking issues and had to replace about 75 square feet of concave radiused decking with reclaimed heart pine lumber,” Collins says. “This required steaming

the boards and bending them to match the radius of the upper sweep deck.”

Team members installed ¼-inch-thick CDX plywood over the repaired deck, placed Carlisle WIP 300 self-adhering underlayment and replaced existing slate with 10- by 12-inch North Country Unfading Black slate roof tiles with a 5-inch exposure on each 32-square-foot face.

Above the upper sweep is an upper lantern with a lead-coated, flat-seam copper sill. To eliminate a potential source for leaks, the team added copper extension flashing and cleated it to the existing copper sill and extended it under the original wood shingles that act as a floor inside the upper lantern. The original cypress shingles on this roof area were in good condition and remained.

Above the upper lantern is a convex lantern dome that originally had three sizes of slates in varying exposures that caused the slates to stick out as the courses went up, splitting the dome into a bottom, middle and top. Each face on the upper dome’s lantern measured 7 by 5 feet at the bottom and tapered to 3-foot-wide sections at the dome’s apex.

“Through mock-ups and trial and error, we decided to replace the slates with 5½- by 10-inch North Country Unfading Black slate roof tiles with a consistent 3-inch exposure to eliminate the visual splits in these sections of the dome and allow the slate to lie flat,” Collins explains. “Because some of the slate was so short, we did not have an appropriate head lap. To account for this, each row of slate was interlaced with 6-inch-wide soft copper flashing strips. This flashing acted as an extension to the slate, giving it a proper head lap to prevent leaking.”

At the top of the lantern dome is an acorn base that originally consisted of double-locked, standing-seam, lead-coated copper.

“The double-locked seams didn’t have enough minimum lap in the locks, creating potential sources for leaks,” Collins says. “We replaced the existing apron with new double-locked, standing-seam panels that were stretched to match the dome’s radius.”

SAFETY

Worker safety was paramount throughout the tower’s renovations. A team from Scaffold Resource LLC, Lanham, Md., erected scaffolding around the tower for safe access with two beta hoists added to raise and carry material. Hoist inspections and worker training were required before operating the hoists. Each hoist was guided by a flagger who used hand signals to guide the basket. Flaggers were tied off with harnesses and retractable lines to avoid fall hazards around the baskets.

When handling materials containing lead, workers wore appropriate PPE such as Tyvek® body suits, gloves, masks and Versaflo™ Hoods. Lead washing stations were available for workers at every level, and PPE was stored in appropriately labeled containers to prevent contamination.

The original slate removed by the team had an adhesive applied to the backs that contained asbestos. Retro Environmental Inc., Sykesville, Md., was contracted by the general contractor to remove and demolish the slate in accordance with all applicable standards.

LOGISTICS

In addition to coordinating multiple roof system installations, the team arranged a carpool schedule as there was no on-site parking at Maryland State House. Drivers picked up designated crew members each day and dropped them off at the job site around 6:30 a.m. The drivers then drove to nearby Navy-Marine Corps Memorial Stadium to park their cars and take a shuttle back to the job site by 7 a.m.

“Each crew member had to be accountable,” Collins says. “If one crew member overslept, it would throw off the whole logistics plan and the entire crew would be late to the job, jeopardizing our strict schedule.”

Deliveries also were a challenge because Maryland State House is located on State Circle, a one-way loop with cars parked on both sides.

“We had heavy pallets of slate and no lift on-site, so we shipped all the slate to our shop in Savage,” Collins says. “Then, we loaded one pallet at a time into a pick-up truck. We had to unload the slate by hand from the pallet on the truck and into a pallet in the lay down yard. This added many extra hours and labor to the job.”

After the slate was in the yard, team members hand carried and loaded the slate into the hoist baskets on the ground to be lifted to the roof areas when needed.

“We had a light roof rating and couldn’t store much material on the scaffolding or the main roof,” Collins says.

The cypress shingles arrived in pallets on a box truck and were unloaded via a small forklift parked on State Circle. The pallets were set on a deliveries bay built near the scaffolding tower and then moved by a pallet jack where team members hand-loaded the shingles into one of the beta hoists to raise to the roof areas.

In addition to logistical challenges, The Durable Slate Company team operated on a strict schedule as work had to be completed before the governor’s inauguration in January.

“We had our backs up against the wall the entire time trying to meet the schedule—any weather delay or wasted hours would affect it,” Collins says. “We persevered by directing our team’s focus to what it needed to accomplish on a specific day or week while tracking and forecasting the overall schedule.

“We had a great team with good leadership who worked together to beat the deadline,” Collins continues. “Our team members are not only the best in the business at what they do but they also can produce extremely

high-quality work at a good pace, which was crucial to our success on the project.”

A lot of the work on the building was tied together with other trades and scopes of work such as siding, carpentry, painting, fire detection, sprinklers, pipe fitting and a demo crew. Multiple trades worked on the same areas and scaffolding levels nearly every day, requiring vital constant communication between all the trades to remain on schedule.

“We had a foremen meeting every morning to discuss each trade’s plans for that day to coordinate between trades,” Collins explains. “We also had a weekly subcontractor meeting with the general contractor to discuss schedules and any coordination needed between the trades during the upcoming week.”

HISTORY RENEWED

Despite long lead times obtaining materials, a cornucopia of logistical issues and a strict deadline, The Durable Slate Company successfully completed work on Maryland State House in December 2022.

“Seeing all the hard work from all the trades come full circle when the scaffolding was lowered to reveal the beautiful, high-quality work of the teams was a memorable experience,” Collins says. “Our crew members accomplished a great deal of complex work on a tight deadline.

They grew, learned more and increased their skills daily. Being able to take part in the renovation of such a historical landmark that was the location of many defining moments in American history was truly rewarding.” 📸🌟

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



Custom-manufactured copper window architraves were fitted and installed around circular window openings.



A newly renovated window



To view a 3D virtual tour of Maryland State House, go to professionalroofing.net.

TOGETHER



AGAIN

NRCA'S 136TH ANNUAL CONVENTION AND THE 2023 INTERNATIONAL ROOFING EXPO[®]
REUNITE THE INDUSTRY

BY SARA VAUGHN

As anticipated, attendance numbers nearly reached pre-pandemic levels as the roofing industry reunited during NRCA's annual convention and Sarasota, Fla.-based Informa's 2023 IRE in Dallas March 6-9. More than 14,000 professionals—significantly more than the 10,000 attendees at the 2022 show—descended upon the Kay Bailey Hutchison Convention Center to explore the expo floor and learn about the latest industry news and trends.

“This year’s IRE was another phenomenal event,” says McKay Daniels, NRCA’s CEO. “With a tremendous turnout, attendees were treated to excellent educational content and an impressive exhibit. The energy and excitement at the show were palpable. It makes me incredibly excited for what lies ahead in Las Vegas next year.”

The sixth annual National Women in Roofing Day, a full-day conference for female roofing professionals, was held Sunday, March 5. During the event, 500 participants learned about the latest business strategies and shared their tactics and secrets to success before attending an evening reception.

The convention kicked off Monday, March 6, with NRCA’s Executive Committee and board of directors meetings at the Omni Dallas Hotel. NRCA’s affiliate executives meeting was held at the convention center the following day.

COMMUNITY SERVICE

On Monday, March 6, Informa partnered with Rebuilding Together® North Texas to host the IRE’s 14th annual Community Service Day sponsored by Canton, Mass.-based Sika® Sarnafil. During the event, 75 volunteers helped renovate three homes of Dallas residents in need.

Donald Duckworth served as a Navy medic on the front lines during the Vietnam War before he was honorably discharged and bought a house in 1974. He cared for his grandmother at his home until her passing and his mother after she was diagnosed with Alzheimer’s disease. Prioritizing caring for his family above home maintenance, Duckworth’s home fell into disrepair, and he has no family left to provide assistance. Community Service Day volunteers installed subflooring and vinyl plank flooring, replaced the front and back doors, installed storm doors, painted inside the home and completed exterior yard work.

Mildred Garcia fell in love with her community and her home when she purchased it in the late 1990s. She completed almost all the home’s necessary repairs herself and quickly became a pillar of the close-knit community

NRCA'S 2023-24 LEADERSHIP

NRCA announced its 2023-24 slate of officers and directors during NRCA’s Awards Ceremony and Cocktail Reception March 8 in Dallas. The officers and directors will begin their terms June 1.

Lisa Sprick, president of Sprick Roofing Co. Inc., Corvallis, Ore., was named chairman of the board, and Doug Duncan, president of Nations Roof of Illinois, Villa Park, was named chairman of the board-elect. Randy Adams, chairman/CEO of R. Adams Roofing Inc., Indianapolis; Alex Hernandez, president of Clark Roofing Company, Broadview, Ill.; and Gary Howes, COO of The Durable Slate Company, Columbus, Ohio, were named vice chairmen for two-year terms.

Additionally, the following were named as new NRCA directors:

- Danny Davis, president of DAVCO Roofing & Sheet Metal Inc., Charlotte, N.C.
- Piers Dormeyer, president of commercial group for Eagleview, Bellevue, Wash.
- John Embow, president of Grove Roofing Services, Buffalo, N.Y.
- Jean-Paul Grivas, project manager for Ray Nolan Roofing Co. Inc., Louisville, Ky.
- Bryan Karel, vice president of operations for Garlock-French Corp., Minneapolis
- John Kiesel, president of Division 7 Roofing, Galena, Ohio
- Michael Kruger, vice president of L.E. Schwartz and Sons Inc., Macon, Ga.
- Christian Madsen, president of Madsen Roofing & Waterproofing Inc., Sacramento, Calif.
- Jake Magalsky, president of Ace Roofing LLC, Wilsall, Mont.
- Wendy Marvin, CEO and founder of Matrix Roofing & Home Solutions, Vancouver, Wash.
- Sherri Miles, vice president of J.D. Miles & Sons Inc., Chesapeake, Va.
- Lynn Price, president of Dryspace Inc., Cedar Rapids, Iowa
- Jim Prusak, owner of Prusak Roofing Inc., Bridgeview, Ill.

by serving as a Spanish-language translator for neighbors in need. After caring full-time for her mother and aunt in her home before their passings, Garcia found her home needed more repairs—but this time, she could not do the work herself, and her community had disbanded as a result of regentrification over the years. A fall at home left Garcia permanently disabled, and she worried her home’s condition remained unsafe. Community Service Day volunteers completed interior work to help improve Garcia’s mobility and safety and performed a general clean-up of the home.

Barbara Shaw escaped from a domestic violence relationship and became a single mother to two teenagers in 2000. Her family moved to Dallas, where she could fulfill her dream of becoming a homeowner. Shaw purchased a fixer-upper and made it her family’s home. She spent years volunteering to assist other domestic violence survivors, homeless women and neighbors in need before suffering a heart attack that severely limited her mobility. After a fall at home caused an injury, Shaw believed her home no longer was a place she could age safely. Community Service Day volunteers installed handrails for the home’s front steps, installed gutters and completed exterior work.

Primary sponsor Sika Sarnafil has sponsored Community Service Day each year and donated \$15,000 for the event, and safety sponsor Carlisle Construction Materials, Carlisle, Pa., donated \$1,000. IRE attendees fundraised an additional \$5,000 for Rebuilding Together North Texas. GAF, Parsippany, N.J., donated roofing materials, and KPost Roofing & Waterproofing, Dallas,

donated labor for a roof system replacement. In addition, CentiMark Corp., Canonsburg, Pa., donated tool sets to Rebuilding Together North Texas; OMG® Roofing Products Inc., Agawam, Mass., sponsored lunch for participants; and *Roofing Contractor* sponsored shuttle buses for the event.

EXPO EVENTS

On Tuesday, March 7, the IRE kicked off with a keynote address delivered by Chris Czarnik, an author, motivational speaker, and recruiting and retaining talent subject matter expert. Czarnik explained he wrote his book, *Winning the War on Talent*, specifically for the roofing

industry and outlined real-world strategies for employee recruitment, engagement and retention that attendees can implement right away.

During the evening, Informa held a welcome party at House of Blues Dallas. Attendees enjoyed food, drinks and live music, as well as a large collection of southern vernacular art from more than 150 artists.

More than 1,200 roofing professionals visited NRCA’s booth to learn about the benefits of NRCA membership and speak with NRCA experts about NRCA ProCertification,® Qualified Trainer Conferences, Training for Roof Application Careers, LEGALCon Virtual and LEGALCon Live, Roofing Day in D.C. 2023, and technical topics and risk management issues. Information about the 2023 edition of The NRCA Roofing Manual, *Professional Roofing* magazine, the Roofing Alliance and other resources also was available. Visitors tried their luck at the NRCA “Spin to Win” wheel, where lucky winners received prizes such as a Solo Stove,® Bosch job-site radio, DEWALT® tool backpack, free NRCA ProCertification registration and free NRCA membership for one year. Twenty-five companies joined NRCA during the IRE.

NRCA’s training programs offered during the IRE were well-attended by enthusiastic industry professionals. NRCA held a Roofing Industry Fall Protection from A to Z class March 7 and a Foreman Leadership Training, Level 1, program March 9 for foremen, superintendents and field managers. NRCA staff also served as speakers for educational sessions and hosted a roundtable event, “The Upside of a Downturn,” during which attendees discussed how they overcame challenges during the past year.

NRCA conducted NRCA ProCertification assessment demonstrations on the trade show floor March 7-9. Industry professionals were able to see what a hands-on skills assessment looks like and speak with NRCA Qualified Assessors about the ProCertification process.

NRCA University’s Future Executives Institute—Class 10 met twice during the week to study leadership theory and practice and develop management and communication skills. FEI-10 students are in their second year of the three-year program.

BENEFITING ROOFPAC

ROOFPAC, NRCA’s political action committee, hosted 253 industry professionals during “A Lone Star Evening,” an NRCA/ROOFPAC fundraising event held in conjunction with National Women in Roofing at Gilley’s Dallas



Czarnik delivers the keynote address.



Attendees enjoy “A Lone Star Evening” at Gilley’s Dallas.

March 6. Attendees enjoyed a cocktail reception and live auction with opportunities to bid on vacations, spirits and artwork, among other items. The event raised \$63,775.

In addition, ROOFPAC held its annual silent auction in NRCA’s booth March 7-8. On Wednesday afternoon, participants enjoyed an open bar during the final two hours of the event while bidding on jewelry, vacations and electronics. The silent auction raised \$36,429.

Thanks to generous corporate sponsors that underwrote the events’ costs, a record amount of funds was raised during the IRE and will be used directly to support NRCA’s ongoing efforts to advocate for the roofing industry in Washington, D.C.

ROOFING ALLIANCE STUDENT COMPETITION

The talent of future industry professionals was on display during the IRE as six finalist teams of college students competed in the Roofing Alliance’s ninth annual Construction Management Student Competition.

Student teams from the following schools were tasked with creating a bid for installing a roof system on Globe Life Field in Dallas:

- Bradley University, Peoria, Ill.
- California Polytechnic University, San Luis Obispo
- Clemson University, Clemson, S.C.
- Colorado State University’s Department of Construction Management, Fort Collins
- Texas A&M University, College Station
- University of Florida’s M.E. Rinker Sr. School of Building Construction, Gainesville

Each team was required to research the project and submit a qualified bid package proposal. The teams each

delivered oral presentations before a panel of judges March 8.

Later that evening during NRCA’s Awards Ceremony and Cocktail Reception, Clemson University was announced the winner of the competition. The team received a trophy and a \$5,000 L.B. Conway scholarship for its school, and team members received individual trophies.

The University of Florida placed second. Team members received a team trophy, a \$2,500 scholarship for their school and individual awards.

The student team from Texas A&M University placed third. Team members received a team trophy, a \$1,000 scholarship for their school and individual awards.

In addition, Dylan Smithwick from Colorado State University was named Best Individual Student Presenter, and Adam Wascher from Bradley University was named second Best Individual Student Presenter.



Clemson University’s team won the student competition.

INDUSTRY AWARDS

NRCA’s Awards Ceremony and Cocktail Reception honored several roofing professionals. NRCA’s 2023-24 slate of officers and directors was presented (see “NRCA’s 2023-24 leadership” on page 41) as well as the industry’s most prestigious awards: NRCA’s J.A. Piper Award; NRCA’s John Bradford Volunteer Award; NRCA’s Gold Circle Awards; the CNA/NRCA Community Involvement Award; the Roofing Alliance’s Most Valuable Player Awards; and NRCA’s Charlie Raymond Award.

J.A. PIPER AWARD

Robert Daly Jr., president of Kaw Roofing & Sheet Metal, Kansas City, Kan., received NRCA’s 76th annual J.A. Piper Award. Named for former NRCA President Joseph A. Piper, whose



Robert Daly Jr., president of Kaw Roofing & Sheet Metal, receives NRCA’s J.A. Piper Award.



**TO VIEW A GALLERY
OF CONVENTION
AND IRE PHOTOS, GO TO
PROFESSIONALROOFING.NET.**

extraordinary efforts kept NRCA alive during the Great Depression, the J.A. Piper Award is the industry's most prestigious honor. The award is presented to an individual who has demonstrated constant, outstanding service to NRCA and the industry.

Daly is a third-generation roofing contractor who joined his father—who received the J.A. Piper Award in 1950—brothers and sister in the family business founded by his grandfather after graduating from college. In 1996, he was elected to NRCA's board of directors and served as a director from 1996-99 and 2002-06. In 2000, he was elected as an NRCA vice president and served from 2000-02 and 2003-04. In 2006, Daly served as senior vice president before being elected as NRCA's president in 2007. He also served on many NRCA committees and task forces, including the Associated Specialty Contractors, Energy Conservation and Environment, Government Relations, National Roofing Service Corporation and PAC Advisory committees.

In addition, Daly served on the board of directors of the Associated Roofing Contractors of Greater Kansas City; The Builders—a chapter of the Associated General Contractors; and the Sheet Metal and Air Conditioning Contractors' National Association—Kansas City chapter before serving as president.

Daly also served as secretary/treasurer of National Roofing Partners; has co-chaired the Joint Roofing Industry Labor and Management Committee of the United Union of Roofers, Waterproofers and Allied Workers since 1989; has served on the Labor Negotiating Committee for Greater Kansas City Building and Construction Trades Council since 1993; and is a member of the Roofing Alliance.

JOHN BRADFORD VOLUNTEER AWARD

Bill Collins, former president and CEO of GAF, Parsippany, N.J., received the John Bradford Volunteer of the Year Award, which is presented to an individual who has consistently demonstrated outstanding acts of volunteerism.

Collins is a registered civil engineer who served as president and CEO of GAF for several years beginning in 2000. During his time at GAF, he took a year's sabbatical to work with Habitat for Humanity. Collins joined Habitat for Humanity International's Global Leadership Council and served as senior vice president for Habitat for Humanity International, co-leading Operation Home



Bill Collins, former president and CEO of GAF, receives the John Bradford Volunteer of the Year Award.

Delivery, which helped build more than 1,000 homes in 18 months after Hurricanes Katrina and Rita.

Collins also has mentored startup company executives, seasoned CEOs and Naval ROTC undergraduate civil engineering students; provided pro bono investment advice to emerging or new companies; and helped develop COVID-19 contact tracing systems. He currently volunteers on the advisory boards of Englert Metals, iRoofing, Jordan Energy, Lifetime Tool and National Nail.

Collins was a founding member of the Center for Environmental Innovation in Roofing, including its research advisory committee, and was a founding board member of the Roofing Alliance. He remains an active member, offering pro bono cybersecurity advice to NRCA and Roofing Alliance members and currently serves on the organization's Fundraising Committee.

The John Bradford Volunteer Award is named after John Bradford, who served as NRCA's president from 1982-83 and was a past president of the Midwest Roofing Contractors Association. He was instrumental in the development of the Montana Roofing Contractors Association, served on many boards during his roofing career and enjoyed civic involvements.

GOLD CIRCLE AWARDS

NRCA's 2023 Gold Circle Awards were presented to NRCA members for their significant contributions to the roofing industry. The following received Gold Circle Awards:

- Innovative Solutions: Flynn Group of Companies, Beaverton, Ore., for Oregon-Columbia Roofer JATC, Portland, Ore.
- Outstanding Workmanship—Steep-slope: Midland Engineering Co. Inc., South Bend, Ind., for Remick

Family Hall at University of Notre Dame, Notre Dame, Ind.

GNA/NRCA COMMUNITY INVOLVEMENT AWARD

NRCA and CNA, Chicago, presented the eleventh annual CNA/NRCA Community Involvement Award to Bliss Roofing Inc., Clackamas, Ore. The award honors charitable works performed by NRCA contractor members between Jan. 1 and Dec. 16, 2022. Bliss Roofing was honored for its charitable efforts with Metro Portland Housing Industry Foundation, d/b/a Home Builders Foundation. Bliss Roofing participated in four projects supported by Home Builders Foundation—a sleeping pod community for veterans, a home for girls escaping sex trafficking, a youth drop-in center and a family shelter—for vulnerable communities experiencing homelessness and housing instability. CNA awarded Bliss Roofing with \$7,500 to be presented to Home Builders Foundation. In addition, NRCA dedicated the proceeds of its Cyber Monday sale in November 2022 to Home Builders Foundation.

Beck Roofing Corp., Norfolk, Va., was chosen as the second-place winner for its charitable efforts with ForKids. Beck Roofing provided a full roof system replacement on a ForKids home. ForKids' mission is to break the cycle of homelessness and poverty for families and children. The organization currently helps more than 250 families, including 500 children, in 14 cities and counties in southeastern Virginia. CNA awarded Beck Roofing with \$5,000 for its charity.

Dan Perkins Construction Inc., Ishpeming, Mich., was chosen as the third-place winner for its work with Bay Cliff Health Camp, which helps children ages 7-17 overcome handicaps and become more independent in a summer camp setting that is fun and challenging. The company replaced the roof on the camp's arts and crafts building. CNA awarded Dan Perkins Construction with \$2,500 for its charity.

Additionally, the winner of the People's Choice category was chosen via online voting. Foster Contracting Inc., Indianapolis, won the People's Choice Award for its work with Isaiah 117 House. Foster Contracting is acting as general contractor and plans to provide a fully renovated home to Isaiah 117 House in July. The home will provide a safe, loving space for children waiting for an alternate placement, such as foster care. CNA awarded Foster Contracting with \$1,500 for its charity.

MVP AWARDS

The Roofing Alliance announced the winners of its 23rd annual MVP Awards during the ceremony. The awards recognize outstanding roofing workers who achieve work-related and personal goals to which others aspire. Award winners are chosen by a panel of roofing industry representatives.

The winner in the outstanding community involvement category was Christopher Knott, field worker for East Coast Roofing, Siding & Windows, Mays Landing, N.J. The winner in the outstanding performance and leadership category was Oscar Salas, superintendent for KPost Roofing & Waterproofing, Dallas.

The Best of the Best Award winner also was announced. Terry Tilsen, superintendent for Advanced Roofing Inc., Fort Lauderdale, Fla., won the Best of the Best Award based on his extraordinary contributions to the roofing industry. The Best of the Best Award is sponsored by *Professional Roofing* and OMG Roofing Products.



Terry Tilsen, superintendent for Advanced Roofing, receives the Best of the Best Award.

CHARLIE RAYMOND AWARD

NRCA presented the Charlie Raymond Award, its prestigious membership recruitment award, to GAF. Named for former NRCA President and J.A. Piper Award recipient Charlie Raymond, the award honors members for their efforts to recruit new members into NRCA.

ON TO VEGAS

Bringing the roofing industry together for peer engagement, learning and fun is what makes NRCA's annual convention and the IRE attractive and successful events each year.

Make plans now to attend NRCA's 137th Annual Convention and the 2024 IRE Feb. 6-8 in Las Vegas, an always-popular destination that also will be gearing up for Super Bowl LVIII. It's sure to be another hugely successful show, and you won't want to miss out! 🎉🎊

SARA VAUGHN is *Professional Roofing's* assistant editor and NRCA's manager of communications.

A REVISED APPROACH TO WIND LOAD CALCULATIONS

The 2022 edition of ASCE 7, “Minimum Design Loads and Associated Criteria for Buildings and Other Structures,” became available in December 2021 and replaces the 2016 edition. ASCE 7, issued by the American Society of Civil Engineers, provides information that allows designers to determine various types of loads and load combinations on buildings. The 2022 edition will be referenced in the 2024 editions of the International Building Code® and International Residential Code®, as well as the 2023 edition of the Florida Building Code.

The new edition’s wind load provisions have not changed dramatically except for the inclusion of a new chapter addressing tornado loads.

For those familiar with calculating loads in accordance with the 2016 edition, other than new tornado provisions, the transition to the 2022 edition will be easy. Changes that were made in the 2010 and 2016 editions laid an important foundation for users of the 2022 edition. For those unfamiliar with the 2010 and/or 2016 changes, see “Mapping the 2010 wind changes,” August 2010 issue, and “How do I load thee?” October 2017 issue.

The primary 2022 changes that pertain to the roofing industry include:

The 2022 edition of ASCE 7 includes several roofing-related changes

by Thomas L. Smith, AIA, RRC, F.SEI

- Relatively minor revisions to the wind speed maps for the U.S. mainland
- New wind speeds for Puerto Rico, U.S. Virgin Islands and Northern Mariana Islands
- Site-specific wind speeds for select special wind regions
- Wind speed-up at abrupt changes in topography
- Minor revisions to the velocity pressure coefficients (Table 26.10-1)
- Relocation of the wind directionality factor K_d
- Clarification of the wind-borne debris region
- Commentary on internal pressure coefficients
- Rooftop solar panel arrays
- Deletion of simplified tables in Chapter 30
- Zone changes for low-slope stepped roofs
- Gable and hip roofs
- Attached canopies on buildings higher than 60 feet
- Roof pavers
- Tornado loads

Following is an overview of these additions and changes. I do not address changes that only pertain to primary structural elements such as beams, columns, shear walls and diaphragms that provide overall support and stability for buildings.

Wind speeds

The basic (design) wind speeds for hurricane-prone regions are derived from modeling rather than historical records because of the infrequency of hurricanes. An updated hurricane simulation model was used to develop the wind speeds for the 2022 edition, which resulted in modest changes to the wind speed contours along the Atlantic Ocean and Gulf of Mexico. Speeds increased in parts of Texas and the Florida Panhandle. Speeds decreased in parts of Louisiana, along the Mississippi and Alabama coastlines, and in parts of the Northeast. The difference between the 2016 and 2022 basic wind speed at a specific location can be found quickly using the ASCE 7 Hazard Tool.

Wind speeds in American Samoa, Guam and Hawaii are unchanged.

For the first time, ASCE 7 includes speed for the Northern Mariana Islands, which matches that of nearby Guam. The Hawaii maps are not included in the print and online version of the 2022 edition; instead, the ASCE 7 Hazard Tool should be used to obtain Hawaii's wind speeds. As with the 2016 edition, Hawaii's speeds are microzoned "effective" wind speeds that include the wind speed-up effect of topography. Inclusion of topographic

DID YOU KNOW?

The Commentary is not part of the standard, but it is included with it. The Commentary consists of explanatory and supplementary material intended to assist with applying the standard's requirements or providing a basis for the requirements.

effects will simplify load calculations, particularly for sites with complex topography. However, designers still should examine local site conditions of finer topographic scale, such as ocean promontories and local escarpments.

The 2022 edition includes new microzoned wind speed maps for the U.S. Virgin Islands and Puerto Rico. As with Hawaii, these maps include the

wind speed-up effect of topography. However, these maps use a grid with a resolution of about 100 m, so most local site conditions won't need examination by a designer. The ASCE 7 Hazard Tool also must be used to obtain these speeds. These new maps were developed after Hurricanes Irma and Maria struck these islands in 2017.

Outside the hurricane-prone regions, there are a few minor changes to the mainland wind speed contours. Alaska's contours are unchanged.

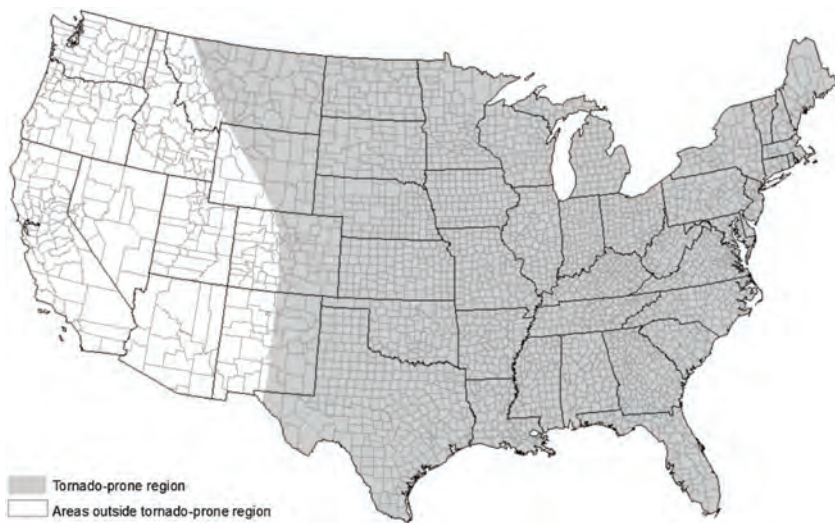
The ASCE 7 Hazard Tool indicates special wind regions, which are mountainous areas. Site-specific values for the special wind regions in northern Colorado and Kern County, Calif., are included in the hazard tool. If site-specific values at other mainland areas are not provided, the authority having jurisdiction should be consulted for the basic wind speed.

Miscellaneous changes

A variety of other 2022 changes affect wind loads on roof systems and rooftop equipment. Most of the

following have relatively minor effects on the roofing industry:

- **Wind speed-up at abrupt changes in topography:** Changes were made to Section 26.8 and Figure 26.8-1.
- **Velocity pressure exposure coefficients (K_z), Table 26.10-1:** K_z accounts for the exposure (B, C or D) and building height. Several of the exposure B and C coefficients have changed because of revisions to the height of the atmospheric boundary layer (also known as gradient height). Further background information regarding these changes is provided in the standard's Commentary section.
- **Velocity pressure calculation, equation 26.10-1:** In earlier editions, the wind directionality factor (K_d) was included in the velocity pressure equation. In the 2022 edition, K_d was removed from that equation and placed in the individual wind pressure equations and force equations. So for rooftop equipment and rooftop solar panels, K_d is applied in Chapter 29, and for roof systems it is applied in Chapter 30.
- **Wind-borne debris regions:** These regions occur in portions of hurricane-prone regions. There are two criteria for defining the location of the wind-borne debris region, and changes only were made to the first criterion, which pertains to buildings within 1 mile of bodies of water. In previous editions, the first criterion was ambiguous, particularly in locations with complex shorelines. The first criterion has been clarified to remove the ambiguity. Incidentally, the only requirements related to wind-borne debris pertain to glazing. For new buildings, the wind-borne region does not affect loads on roof systems. However, the wind-borne region may affect roof system loads on existing buildings.
- **Commentary on internal pressure coefficients:** Section 26.12 provides criteria for determining internal pressure coefficients as a function of a building being classified as open, partially enclosed or partially open. The 2022 commentary has substantially more guidance to assist designers in selecting the enclosure classification and corresponding internal pressure coefficients. New information is given regarding breached glazing outside and within wind-borne debris regions; the influence of compartmentalization on the distribution of increased internal pressure following a



The American Society of Civil Engineers' map of tornado-prone regions

breach of the building enclosure; lobby entry vestibules; and remedial work on existing buildings located in wind-borne debris regions.

- **Rooftop solar panel arrays:** Changes were made in Section 29.4.4 regarding the array edge factor. Also, the pressure equalization factor in Figure 29.4-8 was revised to account for different gap widths between panels.
- **Deletion of simplified tables:** Chapter 30 pertains to components and cladding loads. The 2016 edition had simplified methods to determine wind pressures. With the simplified methods, pressures were determined from tables in lieu of calculations. These methods were deleted from the 2022 edition.
- **Zone changes for low-slope stepped roofs:** The field, perimeter and corner zone layout shown in Figure 30.3-3 substantially changed in the 2022 edition because the figure was not updated in 2016 to reflect the low-slope zone changes made that year. For 2022, there are no changes to the zone layout or the pressure coefficients for roofs with slopes up to 1½-in-12.
- **Gable and hip roofs:** For slopes greater than 1½-in-12, the zones have been simplified and the pressure coefficients have been reduced for some zones. The 2016 edition had a figure for hip roofs with slopes of 27 to 45 degrees. That figure was replaced with one that only has a slope of 45 degrees. The new figure notes linear interpolation is required to determine pressure coefficients for slopes greater than 27 degrees and less than 45 degrees. This will result in higher values in zones 2 and 3 as slopes decrease. In the 2016 edition, the figures included roof overhangs. For 2022, overhang pressure coefficients are addressed in Section 30.7. Some of the gable and hip figures in the 2016 edition provided coefficients for effective wind areas less than 10 square feet. In the 2022 edition, all the figures truncate the effective wind area at 10 square feet. The Commentary advises practitioners may need to determine the approximate pressure coefficient for roof systems that have effective wind areas less than 10 square feet (such as asphalt shingles and tile). The Commentary provides guidance for doing so.
- **Other roof shapes:** Neither the pressure coefficients nor zones changed for multispans, gable, monoslope, sawtooth and dome roofs.

- **Buildings with attached canopies:** The 2016 edition only provided pressure coefficients for canopies on buildings up to 60 feet high. Figure 30.9-2A was added in 2022 to provide coefficients for canopies on buildings higher than 60 feet.
- **Roof pavers:** Section 30.12, which is new, provides an equation for calculating uplift pressures on roof pavers. The Commentary references the 2013 edition of ANSI/SPRI RP-4, “Wind Design Standard For Ballasted Single Ply Roofing Systems,” for guidance on roof heights up to 150 feet. The Commentary of the 2019 edition of ANSI/SPRI RP-4 provides guidance for heights greater than 150 feet.

Tornado loads

The new Chapter 32 only applies to Risk Category III and IV buildings in the tornado-prone region. Category III buildings include schools and theaters. Category IV buildings include hospitals, police stations and fire stations.

For sites located in the tornado-prone region, the ASCE 7 Hazard Tool provides tornado speeds for use with the new load criteria. The tornado return periods for each risk category are the same as the mean recurrence intervals for straight-line winds given in Chapter 26. Design tornado speeds approximately correspond to tornado intensities of EF0-EF2 on the Enhanced Fujita Scale.

Design tornado speeds also are a function of a building’s plan size and shape. A larger building has a greater design tornado speed than a smaller facility at the same geographic location. Not all Category III and IV buildings located in the tornado-prone region are required to be designed for tornadoes.

Registered design professionals must determine whether tornado loads are required. Depending on tornado speed and the ratio of it to the basic wind speed given in Chapter 26, tornado loads may or may not control over wind loads. A flow chart in Chapter 32 shows the process for determining when design for tornado loads is required. By using the chart, a designer can quickly determine when design for tornadoes is not required.

The procedures and equations for determining tornado loads are similar to the ones for determining wind loads. However, parameters used in tornado design are modified to account for unique characteristics of tornadoes and their interaction with the considered building.

Go to professionalroofing.net for a link to the ASCE 7 Hazard Tool, the FEMA and NIST guide, and NIST’s economic analysis of tornadoes.



A NOTE ON GLAZING

The new Commentary addressing work on existing buildings located in wind-borne debris regions recommends if the existing glazing is not protected, it should be replaced with impact-resistant glazing or retrofitted with shutters in accordance with Section 26.12.3.

If existing noncompliant glazing is to remain and new building enclosure elements (such as a roof system) are going to be installed, it should be assumed the glazing can be breached, and load calculations for the new elements should include confirmation of building enclosure (enclosed vs. partially enclosed) to determine the correct internal pressure coefficient. The Commentary also recommends considering the uplift resistance of the existing roof deck and deck support structure if a roof system is replaced.

DID YOU KNOW?

NRCA's Roof Wind Designer is an online tool intended to provide users with an easy-to-use means for determining roof systems' design wind loads for many commonly encountered building types. It can be used to determine loads based on the 2005, 2010 and 2016 editions. When it is updated for the 2022 edition, use of the tool will be a convenient alternative to performing manual calculations. To access the tool, go to roofwind.designer.nrca.net.

The Federal Emergency Management Agency and National Institute of Standards and Technology have published a design guide regarding the new tornado load requirements. The guide is intended to help design professionals and building officials determine when a building or other structure is required to be designed for tornadoes and how to calculate design tornado loads. The guide includes a design example to illustrate application of the new tornado criteria in Chapter 32.

It is important to note neither Chapter 32 nor its Commentary address existing buildings. In my opinion, when reroofing a Category IV building in the tornado-prone region is planned, it would be prudent for the building owner to consider having a design professional design the new roof system and rooftop equipment to meet the Chapter 32 loads. It also would be prudent to consider strengthening the roof deck attachment to meet tornado loads.

The only requirement regarding wind-borne debris pertains to glazing. However, the Commentary notes wind-borne debris can penetrate other portions of a building enclosure and create a pathway for rain to enter. The Commentary references a FEMA publication for design guidance to minimize debris and/or rain penetration through roof and wall assemblies.

NIST published case studies comparing tornado and wind loads and cost implications of tornado loads on several building types (elementary school, high school, fire station, hospital) in nine cities in the tornado-prone region. The study includes discussion of potential effects on roof systems. In some cases, the tornado loads governed; in others, the increased load did not affect the number of required insulation or membrane fasteners or spacing of foam ribbon adhesive. Sometimes, the tornado loads require additional foam ribbon adhesive and/or additional fasteners. In no case did the tornado designs require the use of a different roof system or roof system components.

Get the standard

A subscription to an online version of the publication is available at asce7.online and provides a side-by-side display of the standard's provisions and explanatory information in the Commentary. The online version also offers real-time updates when supplements or errata are issued.

In the print version, vertical lines in the margins indicate changes from 2016. However, the online version explicitly shows the changes, so it is much easier to see what changes were made. Neither the printed nor online version show the Commentary changes. 📄🔍

THOMAS L. SMITH, AIA, RRC, F.SEI, is president of TSmith Consulting Inc., Rockton, Ill., and a member of the ASCE 7 Task Committee on Wind Loads.

USE TRAINING
FOR ROOF
APPLICATION
CAREERS





SPECIALIZED TRAINING

creates

SUPER WORKERS

Get your new and inexperienced installers on the roof and productive with NRCA's worker training packages.

They start at just \$199!

-  State-of-the-art training materials with unlimited use
-  A dashboard for supervisors and employers to track employees' progress
-  All content is in English and Spanish
-  Flexibility to train whenever it's best for you

Just released: Clay and Concrete Tile Installation



NRCA
UNIVERSITY

GET YOURS TODAY!
nrca.net/trac



MANUFACTURER NEWS

Owens Corning updates product packaging

Owens Corning, Toledo, Ohio, has updated its product packaging for flat-packed, plastic-wrapped shingles and shingle components. The redesigned packaging is intended to make it easier for installers to access product details and instructions.

Installers now can use smart devices to access installation instructions available via an interactive website listed on each package. Each package also features a QR code at the top and bottom of the poly-wrap package. Interactive access allows installation instructions to remain intact and unwrinkled after packaging is opened. Instructions are available in English and Spanish in the U.S. and in English, Spanish and French in Canada.

Other modifications include more prominent callouts for attributes associated with different products such as algae resistance, warranty protection and Class 4 impact resistance. Packaging features the American flag icon denoting shingle products made in the U.S.

Owens Corning is maintaining its PINK™ color scheme on shingle packaging with color bars denoting specific product lines, such as a black bar for TruDefinition® Duration® shingles and a red bar for the TruDefinition Oakridge® product line. The spines of packaging remain the same for easy locating in a supply house.



CertainTeed expands shingle availability

CertainTeed, Malvern, Pa., has expanded regional availability of Landmark® ClimateFlex and Landmark Solaris® AR shingles.

Landmark ClimateFlex now is available in the East Central, Lake Central and North Central regions, as well as parts of Canada, including Alberta, Manitoba, Ontario and Saskatchewan. Landmark Solaris AR, the cool roof version of the classic Landmark shingle, has expanded availability throughout all regions of the U.S. and Canada in two colors, Graphite and Weathered Wood.

Atlas Roofing announces truck giveaway winner

Atlas Roofing Corp., Atlanta, has announced Sondra Davis, co-owner of All Things New Roofing & Restoration, Colorado Springs, Colo., is the winner of its Asphalt Life Truck Giveaway.

As part of Atlas Roofing's 40th anniversary celebration in 2022, contractors could earn points throughout the year to qualify for chances to win a fully refurbished 1982 Chevy Silverado pickup truck featuring custom black leather seats with red-embroidered Atlas logos, a roll bar with KC Lights and a Bluetooth stereo.

Points were awarded to contractors for registering warranties, attending Atlas Roofing-sponsored events, reaching AtlasPRO+ and PRO+ Select status and interacting with Atlas Roofing on social media, among other tasks. Ten finalists were chosen before a winner was randomly selected during the 2023 International Roofing Expo® March 8.



Elevate™ announces recipients of Master Contractor program

Nashville, Tenn.-based **Holcim Building Envelope's** Elevate brand has announced the 2023 recipients of its Master Contractor program, which honors contractors for excellence in commercial roofing.

All Elevate Red Shield™ licensed contractors are eligible for the program. For 2023, Elevate awarded Master Contractor status to 251 of the top roofing contractors that accumulated the most Master Contractor quality points during the program year. Contractors earned quality points for installing Elevate RubberGard™ EPDM, UltraPly™ TPO, PVC, PVC KEE, asphalt and metal roof systems, as well as qualifying waterproofing systems.

The complete list of Elevate's 2023 Master Contractor recipients is available at [holcim-elevate.com/us-en/news/2023-master-contractor-program-award-recipients](https://www.holcim-elevate.com/us-en/news/2023-master-contractor-program-award-recipients).

CONTRACTOR NEWS

United Materials celebrates anniversary

United Materials, Denver, is celebrating 100 years in business.



Founded in 1923, United Materials

built its reputation as a commercial roofing company in Colorado serving the private sector and fulfilling government contracts. The company credits its success to quality products, customer service and community support.

United Materials held a celebration at the end of April, inviting community members of all ages to enjoy food and fun at its headquarters.

DISTRIBUTOR NEWS

Gulfeagle Supply opens new location

Gulfeagle Supply, Tampa, Fla., has opened a new branch in Romulus, Mich.

The new branch, Gulfeagle Supply's fifth location in Michigan, will better serve the southern communities of metro Detroit, including Ann Arbor and Toledo. Gulfeagle Supply now has more than 110 locations in the U.S.

OTHER NEWS

SPFA announces award winners

The **Spray Polyurethane Foam Alliance** has announced the winners of the 17th Annual SPFA National Industry Excellence Awards. The awards program highlights standout projects and recognizes contractors for their applications of spray polyurethane foam in insulation, roofing, specialty applications and concrete lifting, as well as for elastomeric coatings applications. The SPFA recognized the winners Feb. 14 during the SprayFoam 2023 Convention & Expo in Daytona Beach, Fla.

The winners include: Midwest Spray Foam Insulation, Bay City, Mich., for Hawkins Chemical, Rosemount, Minn.; Peak Spray Foam Insulation, Annandale, Minn., for Stowman, Rothsay, Minn.; Polyseal Insulation, Butte, Alaska, for Fort Yukon LRRS Barracks, Fort Yukon, Alaska, and Port of Whittier Dolphin Cell Repair, Whittier, Alaska; NRCA member Wedge Roofing Inc., Petaluma, Calif., for Napa County Vineyard, Napa Valley, Calif., and Hotel Healdsburg, Healdsburg, Calif.; and NRCA member West Roofing Systems Inc., LaGrange, Ohio, for Sharpville Container, Sharpville, Pa.

SPFA also awarded two grand prizes. Midwest Spray Foam Insulation and West Roofing Systems were drawn from a raffle of the winners and each received a local digital marketing package worth \$5,000.

MCA announces executive committee

The **Metal Construction Association** has announced its 2023 Executive Committee.

Brian Partyka, vice president of sales and marketing for Drexel Metals, Louisville, Ky., will serve as chair, and Chandler Barden, president of CIDAN Machinery Inc., Peachtree City, Ga., is vice chair/chair-elect. James Bush, vice president of sales for ATAS International Inc., Allentown, Pa., is past chair; Brian Jaks, vice president of Green Span Profiles, Waller, Texas, is treasurer; LeeAnn Slattery, sales support manager

for ATAS International, is secretary; and David Stermer, director of engineering for Metal Sales Manufacturing Corp., Louisville, is technical committee chair. Metal Roofing Alliance President Dick Bus, president of ATAS International, also will serve on the committee.

Roofing Alliance welcomes new members

The **Roofing Alliance** has announced Global Roofing

Group, Phoenix, a roofing contractor providing service to commercial and industrial buildings, and The Durable Slate Company, Columbus, Ohio, a slate, tile and copper roofing contractor, joined at the Governor level. The Roofing Alliance now has 188 members.

Since its inception, Roofing Alliance members have committed more than \$14.1 million to fund research, educational and technical projects such as educational partnerships with some of the top construction management schools in the U.S. to expose college students to roofing as a career choice; sponsorship of a national construction management student design competition; national survey of roofing workers; and helping to develop NRCA ProCertification.® The Roofing Alliance also supports philanthropic outreach, including its partnership with Ronald McDonald House Charities® to maintain the roof systems on 165 Ronald McDonald Houses in the U.S.



Former Gold Circle Awards judge passes away

Jack R. West of Moon Township, Pa., passed away Dec. 8, 2022. He was 85.

After serving in the U.S. Marines, West earned a bachelor's degree in chemistry and worked as a consultant. He was a member of ASTM International for 32 years and served on ASTM International's Committee D08 for Roofing and Waterproofing. He received Committee D08's Award of Merit in 1994 and Award of Appreciation in 2002 and 2010. West also served as a judge for NRCA's prestigious Gold Circle Awards program for 18 years.

West is survived by his wife, Margaret D. "Peggy"; children, Jack Andrew West and Mary "Meg" West-Ball; grandchildren, Anna Marie Ball and Jacob Morgan Ball; and sister, Ellen Riffle.

Donations in West's memory may be made to the American Lung Association at lung.org or the Humane Animal Rescue at humaneanimalrescue.org/donate.



West

IIBEC names first female president

IIBEC has announced Amy Peevey, principal and director with SOCOTEC Consulting Inc., New York, as its first female president. Peevey will serve as IIBEC president for the 2023-24 year.

“What a true honor to be serving as IIBEC president for this upcoming year,” Peevey says. “I look forward to serving the IIBEC membership.”

The new board and executive committee were announced March 6 during IIBEC’s Annual Meeting of the Members, which was part of the 2023 IIBEC International Convention and Trade Show in Houston.



Peevey

NCCER announces 2023 board of trustees

The **National Center for Construction Education and Research** has announced its 2023 board of trustees. The board of trustees guides NCCER’s mission to provide rigorous, relevant workforce development solutions that create opportunities for individual career advancement and support industry growth.

Scott Marshall, senior group director—people operations (Americas) at Worley, Houston, has been named chairman and will head the compensation, budget and finance, and nominating committees. David Chapin, president of Willmar Electric Service, Lincoln, Neb., will serve as vice chairman. Monique V. Ford, CPA, of Monique Valentine Ford, Woodbridge, Va., will continue serving as treasurer. Stephen Toups, president and CEO of Turner Industries, Baton Rouge, La., will assume the role of past chairman.

THE INDUSTRY ONLINE

DaVinci® Roofscapes has made available an **online portal**, dmcmembers.com, for DaVinci Masterpiece Contractors program members. The portal enables 24/7 access to rebates, marketing tools and sales support materials and features a series of educational and training programs, webinars, installation guides and tips. Contractors also can access new design tools to help them select the right products and colors for roof systems.

UP THE LADDER

MTL Holdings has named **Steve Glasenapp** director of envelope.

EVENTS

MAY

1-5

National Safety Stand-Down Week

OSHA

Nationwide

Contact: OSHA

oshastanddown@dol.gov

osha.gov/stop-falls-stand-down

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

24

CERTA Train-the-trainer

NRCA

Elgin, Ill.

Contact: NRCA’s Customer Service Department

(866) ASK-NRCA (275-6722) or info@nrca.net

nrca.net

JUNE

4-10

National Roofing Week

NRCA

Nationwide

Contact: NRCA’s Customer Service Department

(866) ASK-NRCA (275-6722) or info@nrca.net

nrca.net

28

Virtual CERTA Train-the-trainer

NRCA

Online

Contact: NRCA’s Customer Service Department

(866) ASK-NRCA (275-6722) or info@nrca.net

nrca.net



NRCA NEW MEMBERS

ARCHITECTS/ENGINEERS/ CONSULTANTS

American Experts, San Diego
 Aspito Associates, Mount Savage, Md.
 Bradley Gygi Architect & Associates, Salt Lake City
 Commercial Building Solutions, Fort Thomas, Ky.
 Daniel Design Studio, Tupelo, Miss.
 Joyce Engineering LLC, Jupiter, Fla.
 RCL Engineering Group, Waukesha, Wis.
 Sabal Engineering, Tampa, Fla.

CONTRACTORS

3G Construction & Roofing, Colorado Springs, Colo.
 A&B Commercial Construction LLC, Bethlehem, Ga.
 Aiden Homes LLC, Prairieville, La.
 All Purpose Roofing and Gutters, Colorado Springs, Colo.
 All Valley Sheet Metal Inc., Yakima, Wash.
 ALP Roofing, Fallston, Md.
 B&R General Contracting, Richardson, Texas
 Blue Ridge Roofing, Taylors, S.C.
 Bonac Builders Inc., Quogue, N.Y.
 Bradley Roofing LLC, Hebron, Ind.
 Carrasco Construction Corp., Chicago

Commercial Roofing Rana, Memphis, Tenn.
 Core Four Roofing, Tomball, Texas
 CRC, Kingwood, Texas
 D M Ring Contracting, Clintondale, N.Y.
 David T Construction, Milford, Mass.
 Dynamic General Contracting LLC, Millersville, Md.
 Erie Home, Toledo, Ohio
 Florida Roof Design Inc., Ocala
 Hammerbrush Roofing, Aurora, Ill.
 Highland Residential and Commercial Roofing, Greenville, N.C.
 HomeStar Restoration Group LLC, Des Plaines, Ill.
 Istueta Roofing, Miami
 John Matthews Roofing, Russellville, Ky.
 KODA Contracting LLC, Pittsboro, N.C.
 Landmark Contracting LLC, Baker City, Ore.
 Latino Roofing LLC, Stafford, Va.
 Marathon General Contractors, Forney, Texas
 My Style Exteriors, Bourbonnais, Ill.
 New Britain Roofing Co., Newington, Conn.
 New Era Skilled Roofing, Placentia, Calif.
 P.L. Hurley Roofing Systems, San Leon, Texas

PKC Roofing Inc., d/b/a Wayne's Roofing & Sheet Metal, Ormond Beach, Fla.
 Platinum Roofing, Summersville, W.Va.
 R&D Construction & Roofing, Miami
 Rob's Roofing LLC, Wallingford, Conn.
 Rojas Roofing, Noblesville, Ind.
 Scope RRC Corp., Reserve, La.
 Southern Shingle Roofing, Sugar Hill, Ga.
 Striker Roofing and Construction LLC, McKinney, Texas
 Stronghold Premier Roofing LLC, Warr Acres, Okla.
 Texas Stag Roofing Solutions, Spring
 Tom Machin Contracting Inc., Shirley, N.Y.
 TRURoof, Charlotte, N.C.

MANUFACTURER

Premiere Metal, Suwanee, Ga.

SERVICE PROVIDERS

Rapid Installation Group Inc., Coplay, Pa.
 Texas Solar Outfitters, Houston

You need to know Dave Peterson

Forty-three years of experience.

A lifetime of providing services in commercial roofing.

A lifetime of partners and ethical business practices.

Dave has built a network of knowledge, individuals and companies, including those hiring, those moving up in the industry, and those who are now thinking of buying or selling.

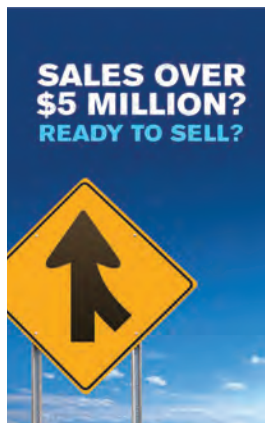
Whatever your needs, contact Dave for a frank conversation of the pulse of the industry and your individual situation.

If you've even thought of selling, buying or moving up the ladder in your career, you need to contact Dave at (772) 778-4343, ext. 2, or dave@onlinepcg.com, or visit onlinepcg.com. All information is kept in the strictest of confidentiality.



Are you considering selling your roofing, sheet metal and/or HVAC business?

Join us. With a solid financial base, available capital and an appreciation for what's already working in your business, our group has a solid track record of creating successful alliances. We can tailor the sale to meet your needs. If you have an interest, please email acquisition.pr@gmail.com. All responses will be kept confidential.



Your boss bad? Your quality bad? Your service bad? Your environment bad?

Are you a hardworking, intelligent, experienced, likable and successful commercial estimator/project manager who wants to be part of a professional roofing organization that has maintained a heritage of excellence since 1913?

You need to call Larry at (847) 774-1972 and email a personal application letter with your resume today to lpmarshall@lmarshallroofing.com. All information will remain confidential.



Production-ready metal panel cut-lists with Metal Roof Estimating LLC

Speed up your quoting process while also increasing your accuracy with a metal panel layout and a corresponding cut-list (bill of materials) with **Metal Roof Estimating**. We also do tile and shingle take-offs. Revisions included.

We service roofing contractors and small manufacturers and excel in residential and smaller commercial projects with most take-offs returned in 24 to 48 hours.

Please contact us at estimator@metalroofestimating.com or (813) 777-9432. More information can be found at metalroofestimating.com.



Mule-Hide Products

Shur-Gard Roof Wrap is a 12-mil polyethylene shrink film that is heated to shrink to the roof to temporarily protect the structure. It exhibits exceptional exterior durability, ultraviolet stability, superior flexibility and high reflectivity. It is a temporary shrink film that protects the structure and can last up to 12 months, which is five to 10 times longer than a traditional tarp. Contact **Mule-Hide Products** at (800) 786-1492 or mulehide@mulehide.com, or visit mulehide.com for more information.



Shur-Gard Roof Wrap is a 12-mil polyethylene shrink film that is heated to shrink to the roof to temporarily protect the structure. It exhibits exceptional exterior durability, ultraviolet stability, superior flexibility and high reflectivity. It is a temporary shrink film that protects the structure and can last up to 12 months, which is five to 10 times longer than a traditional tarp. Contact **Mule-Hide Products** at (800) 786-1492 or mulehide@mulehide.com, or visit mulehide.com for more information.

SpeedStands speed up jobs

SpeedStand makes protecting workers from falls quick and easy. Compact, one-piece stands set up instantly and are made with a broad base that allows them to be spaced 40 feet apart. The durable welded steel stands meet OSHA requirements and have rubber-padded legs to protect the roof membrane. They are engineered to save labor and increase production job after job. To see why SpeedStand has been the industry standard for 18 years, call (800) 460-7579 or visit qe-1.com.



One-component liquid flashing compound!

Polystick® XFR—fire-resistant, self-adhering waterproofing underlayment. Polystick XFR features our patent-pending Burn-Shield Technology,™ which offers fire resistance capable of achieving the highest level of fire ratings. Polystick XFR has superior protection against fire spread/penetration and ember resistance in systems tested under UL 790. With a temperature resistance of up to 265 F, Polystick XFR is ideally suited for high-temperature roof covering systems such as steel and copper, where fire resistance is required or desired. Visit info.polyglass.us/lp-polystick-xfr.



Legacy™ Scotchgard™ by Malarkey Roofing Products

Legacy Scotchgard is Malarkey's highest performing laminate roofing shingle.

Designed in a popular architectural style and made with Malarkey's industry-leading NEX® Rubberized Asphalt, Legacy Scotchgard shingles deliver superior all-weather resilience and include granules that reduce algae streaks and help clean the air of emission pollutants. Legacy shingles also have the highest rating possible (Class 4) for impact resistance and meet the Insurance Institute for Business & Home Safety's stringent FORTIFIED™ Roof requirements. Visit malarkeyroofing.com/products/shingles-overview/legacy-scotchgard-shingles.



FIVE STAR REVIEWS



"Furman Insurance highly recommends Jim Brauner and his firm to all of our roofing clients! Brauner Safety Service's hands-on, in-person training has virtually eliminated the frequency of torch fires."

- Rob Foote, Furman Insurance



**CERTA TRAINING
YOU CAN TRUST**

- 40+ Years of Industry Experience
- Award-Winning Service
- Customized Classes

CERTATraining.com
BraunerSafety.com
407-403-3959



Proud member of:



KIRT LININGTON



WHAT IS YOUR POSITION WITHIN YOUR COMPANY? I am CEO of Linear Roofing & General Contractors LLC, Dallas.

WHAT'S THE MOST UNUSUAL ROOFING PROJECT OF WHICH YOU HAVE BEEN A PART? A multistory apartment complex in Dallas

WHY DID YOU BECOME INVOLVED IN THE ROOFING INDUSTRY? Roofing is an interesting business model that essentially was unchanged for decades. It can be profitable, and I decided to get involved and make a difference.

WHAT DO YOU CONSIDER A WASTE OF TIME? Washing your own car

WHAT WAS YOUR FIRST JOB? I was in the Army, which was required when I became of age in South Africa.

WHAT WAS YOUR FIRST ROOFING EXPERIENCE? Working during a large hail-storm in Wylie, Texas

WHAT IS YOUR ROOFING INDUSTRY INVOLVEMENT? I am actively involved in

several organizations, including NRCA, the North Texas Roofing Contractors Association and Roofing Contractors Association of Texas, and maintain conversations with large manufacturers and distributors.

PEOPLE WOULD BE SURPRISED TO KNOW ... Everyone is usually surprised I was a South African Gladiator on the "International Gladiators" show in 1999.



IF YOU COULD TRAVEL ANYWHERE IN THE WORLD, WHERE WOULD YOU GO? WHY? Greece—I've planned to go but haven't been able to get there, and I've heard great things about it.

WHAT IS YOUR FAVORITE STRESS RELIEVER? Relaxing at home with my wife and dog



WHAT IS THE MOST EXCITING/ADVENTUROUS THING YOU'VE DONE? Rock climbing in Arizona

WHEN YOU WERE A CHILD, WHAT DID YOU WANT TO BE WHEN YOU GREW UP? Influential

MY FAVORITE PART ABOUT WORKING IN THE ROOFING INDUSTRY IS ... Being able to connect with so many different people in different areas and roles in the business

WHAT QUALITY DO YOU MOST ADMIRE IN A PERSON? Timeliness



WHAT IS YOUR FAVORITE FOOD? A good steak well done

WHAT'S YOUR FAVORITE ROOFING MATERIAL TO WORK WITH? WHY? Shingles because they are the core of the roofing structure

IF YOU COULD MEET ANY HISTORICAL FIGURE, WHOM WOULD YOU MEET? WHY? Sun Tzu to hear firsthand how he came up with the strategies he described in *The Art of War*



WHAT IS THE MOST HIGH-TECH ITEM IN YOUR HOUSE? An infrared therapy device

BIG CITY OR SMALL TOWN? Big city

WHAT DO YOU CONSIDER YOUR MOST REWARDING EXPERIENCE? Knowing I've been able to positively affect the lives of hundreds of people

WHAT SONG ARE YOU LISTENING TO OVER AND OVER? "Blinding Lights," by The Weeknd





POLYSTICK® XFR

FIRE RESISTANT SELF-ADHERED ROOF UNDERLAYMENT



- Superior protection against fire spread/penetration and ember resistance in systems tested under UL 790
- Robust 80 mils (2 mm) of waterproofing rubberized asphalt
- Utilizes ADESO® Dual-Compound Self-Adhered Technology
- Approved for applications up to 265°F
- 1-Ply UL Class A Systems: Direct to Deck, with Anchor Sheet, or with Insulation



To learn more visit polyglass.us/xfr



Go beyond for your customers and your business



GAF Timberline[®] UHDZ[™]
Ultra High Definition Shingles



©2023 GAF • RESUHDAD-0023

Timberline[®] UHDZ[™] is now our premium laminate shingle.

Featuring our patent-pending Dual Shadow Line, LayerLock[®] Technology and the StrikeZone[®] Nailing Area, 20% heavier weight, new 30-year StainGuard Plus PRO[™]* limited warranty against blue-green algae discoloration, and the opportunity for Master Elite[®] contractors to offer 30 years of workmanship coverage, Timberline[®] UHDZ[™] shingles go beyond any GAF shingle you've been able to offer to date. Visit gaf.com/uhdz

A **standard** INDUSTRIES COMPANY

We protect what matters most[™]

GAF

* 30-year StainGuard Plus PRO[™] Algae Protection Limited Warranty against blue-green algae discoloration is available only on products sold in packages bearing the StainGuard Plus PRO[™] logo. See GAF Shingle & Accessory Limited Warranty for complete coverage and restrictions, and qualifying products.