



Official Sponsor of the International Roofing Expo,® Feb. 1-3, 2022

# Professional Roofing

*the source for the roofing industry*

## *A COMPENDIUM OF CHANGES:*

BUILDING CODES & ROOF SYSTEMS



Backpack and Applicator Kit



Introducing:

## CAV-PRIME

### Primer in Pressurized Cylinders

Carlisle's CAV-PRIME product line provides a revolutionary new way to apply primer to EPDM and TPO. The CAV-PRIME system features three of Carlisle's time-tested primers (HP-250, TPO Primer, and Low-VOC EPDM & TPO Primer) packaged in pressurized cylinders, offering the following benefits:

- » Application is up to 3 times faster than traditional primer in a pail
- » Eliminates potential spills or kicked-over cans of primer that create a mess and waste product
- » No need to worry about primer curing in a pail that has been improperly sealed
- » Increased coverage rate



Scan here to learn more about CAV-PRIME.

Experience the Carlisle Difference | 800-479-6832 | [www.carlisesyntec.com](http://www.carlisesyntec.com)

## A united front

The construction industry bands together to share concerns regarding COVID-19 vaccine mandates

by Ambika Puniani Reid



During a recent NRCA board of directors meeting, members expressed concern and displeasure with the impending federal Occupational Safety and Health Administration rule that would require all employers with 100 or more employees to mandate the COVID-19 vaccine or submit unvaccinated workers to frequent testing. Members were concerned not only with compliance but also how exemptions would be offered and general logistics.

In response to members' concerns, NRCA joined a Construction Industry Safety Coalition with 25 other trade organizations to send a letter to OSHA asking the agency to recognize the unique aspects of construction when developing its vaccine-related Emergency Temporary Standard.

As part of President Biden's Path out of the Pandemic COVID-19 Action Plan, OSHA has been directed to develop a rule to "require all employers with 100 or more employees to ensure their workforce is fully vaccinated or require any workers who remain unvaccinated to produce a negative test result on at least a weekly basis before coming to work." The rule also will require employers with more than 100 employees to provide paid time off for workers to get vaccinated or to recover if they are feeling ill post-vaccination.

The coalition supports Biden's goal of increasing vaccinations among the population and has undertaken numerous efforts to increase worker awareness of and access to vaccines in the construction industry. However, Biden's plan provides little detail regarding how OSHA is to apply and craft the regulatory approach to implement the mandate. Given the importance of this initiative and the significant implications for the construction industry, the Construction Industry Safety Coalition letter notes the following concerns (among others):

- The construction industry has been proactive in promoting the vaccine to its workforce.
- Those in the construction industry are at relatively low risk compared with high-risk sectors, such as first responders, grocery store employees, educators and manufacturing plant employees.
- The construction industry already is facing a labor crisis, and a vaccine mandate may exacerbate the issue.
- It is unclear who will pay for testing unvaccinated employees, and testing kits in some regions are difficult to obtain.
- The mandate would create an undue and costly paperwork burden.

The letter ultimately asks OSHA to seek formal public comment on the rule, which will allow for these concerns to be addressed. We will keep readers apprised of new developments as they occur. 📧🌟

*Ambika*

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



Providing exceptional customer service is the primary focus of the service department at Korellis Roofing Inc., Hammond, Ind. Service Manager Karen Knezic and Service Coordinator Meredith Moran-Pruim schedule, dispatch and manage the department.

“I manage an awesome team of 21,” Knezic says. “Most of my day is scheduling, work order review, quick quote review, billing approval, new business development, building customer relationships and departmental development.”

“My favorite part about working in the industry is that it constantly changes, and every day brings on a new challenge,” Moran-Pruim explains. “I love helping customers with questions they have or problems that arise with their roof systems.”

To submit a photo to Close-up, email [professionalroofing@professionalroofing.net](mailto:professionalroofing@professionalroofing.net). Submittals should include a photo as well as a description of the photo.





## What is happening in D.C.? **A lot! And it affects your business!**

NRCA's political action committee, ROOF PAC, needs your support—now—so we can effectively advocate for pro-growth economic policies, career and technical education programs, reasonable immigration reform and more!

NRCA members can contribute any amount, and there are three club levels that offer benefits and recognition, including:

- **EMERGING LEADERS CLUB:** \$250 (NEW!)
- **CAPITOL HILL CLUB:** \$1,000
- **POLITICAL INSIDERS COUNCIL:** \$5,000



To learn more  
and contribute, visit  
[nrca.net/roofpac](https://nrca.net/roofpac)



**NRCA**  
ROOF PAC

# CONTENTS

November 2021 / Volume 51 Issue 9

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

## FEATURES

### 28 A compendium of changes: Part two

Be aware of building codes that reference roof system installations.

by **Mark S. Graham**

### 34 An updated curriculum

Did you know NRCA and NCCER have developed comprehensive roof system installation training?

by **Amy Staska**

### 40 The sound of roofing

TruCraft Roofing LLC, Milford, Ohio, installs a TPO roof system on a new concert venue in Kentucky.

by **Christine Elle Hanus**

### 44 Taking back control

Supply chain disruptions can be mitigated by FAR clauses for federal contractors.

by **Trent Cotney**



34



40



44

# CONTENTS

## COLUMNS

### 3 Focus

The construction industry voices concerns regarding COVID-19 vaccine mandates.

by **Ambika Puniani Reid**

### 16 Make lemonade out of lemons

You can invest time in developing your workforce while the supply chain shortage persists.

by **Reid Ribble**

### 20 Less is more

Product shortages and high demand warrant alternative approaches to insulation requirements.

by **Mark S. Graham**

### 24 Ready to work

Hiring refugees can help meet your workforce needs.

by **Duane L. Musser**

## DEPARTMENTS

### 4 Close-up

### 12 #Hashtag

### 14 New Ideas

### 16 News + Views

### 20 Research + Tech

### 24 Rules + Regs

### 48 Briefings

### 52 Marketplace

### 53 Advertiser Index

### 54 Details



**Digital editions:** You can find additional editorial and images for this issue and past issues at [professionalroofing.net](http://professionalroofing.net).

**Subscription:** Subscriptions are free for roofing industry professionals. Subscribe online at [professionalroofing.net/subscribe](http://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](mailto: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.





## Roofing Shingles Engineered to Outperform

Unlike standard shingles, which are brittle, easily crack, and quickly lose granules, Malarkey shingles are made of **rubberized asphalt** for industry-leading tear strength, granule adhesion, and wind & hail resistance.

WHEN IT MATTERS™

 **Malarkey**  
Roofing Products®

# AUTHORS



**Trent Cotney**  
CEO of Cotney Attorneys & Consultants, Tampa, Fla., and NRCA's general counsel



**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



**Reid Ribble**  
NRCA's CEO and a former U.S. congressman from Wisconsin's 8th district



**Amy Staska**  
Vice president of NRCA University

NRCA  
**Professional Roofing** (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 2021 • Printed in the United States



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





# Professional Roofing

the source for the roofing industry



**Editor**  
Baking, reading and kids' activities ← Ambika Puniani Reid  
areid@nrca.net

**Associate Editor**  
Setting up my new house! ← Chrystine Elle Hanus  
chanus@nrca.net

**Assistant Editor**  
Reading, cooking, training for 5K races and watching Netflix ← Sara Vaughn  
svaughn@nrca.net

**Creative Director**  
After trying to keep up with two teenage daughters' schedules...hockey, video games, movies and music. ← Paul Gerwen  
pgerwen@nrca.net

**Desktop Publisher**  
Keith Taylor  
ktaylor@nrca.net

**Graphic Designers**  
Pets, foster pets and crafts ← Nancy Davis  
ndavis@nrca.net

My kids! ← Jenny Friedman  
jfriedman@nrca.net

**Director of Communications**  
Krista Berns → Every minute outside of work is kept busy with my kids!  
kberns@nrca.net

**Manager of Online Communications**  
Alyssa DeSantis → My crazy family!  
adesantis@nrca.net

**Manager of Website Content**  
Celine Witherell  
cwitherell@nrca.net

**Vice President of Membership, Sales and Business Development**  
Jeff Jarvis  
jjarvis@nrca.net | (847) 493-7512

**Advertising Sales Manager**  
Kristina Damjanoska  
kdamjanoska@nrca.net | (847) 493-7554

**CEO**  
Reid Ribble  
rribble@nrca.net

**Publisher**  
Carl Good → Family, sports and music  
cgood@nrca.net

## Editorial Advisory Board

Mark S. Graham, NRCA vice president of technical services  
Tom Shanahan, MBA, CAE, NRCA vice president of enterprise risk management and executive education  
William A. Good, MBA, CAE, NRCA senior adviser

/nrcainfo | @NRCAnews | /NRCAnews | /nrcaews

# #HASHTAG

## #ROOFINGCOMPANY

According to the Roofing Alliance's A Study of the U.S. Roofing Industry and its Workforce, the projected U.S. roofing industry population is between 725,000-975,000 people. These individuals work for roofing companies that shelter and protect U.S. businesses and families. Roofing businesses often are active in their communities or working on big projects, and social media is the best place to see it all. Check out what a #roofingcompany shares on social media.



**EENGENBURG EXTERIORS, INC.**  
December 30 at 10:28 AM  
Fall is in full swing! Make sure you go through your outdoor checklist to get ready for the cold weather:

- Have your gutters cleaned
- Have air leaks around windows and doors sealed and fixed
- Have your roof and chimney inspected
- Turn off all outside faucets and remove hoses
- Take care of any repairs, paint touch-up, and gardening
- Lastly, remember to enjoy the weather!

Like Comment Share  
Write a comment...



**Monarch Roofing (Wilmington)**  
October 1 at 7:02 AM  
Here at Monarch, we want to give you the best crive for your roofing needs! There is always a superintendent on site for you to speak with and to make sure you are getting the best service possible!

#MonarchRoofing #roofing #roofingcontractor #roofingworld #roofingculture #roofingcompany #RoofingTheCarolinas #roofingtip #roofingsystem #roofingshaet #gatroofers #roofinglifestyle #masteerolite #roofingcontractors #roofingusa #gaf #wilmingtonnc #wilmingtonsbestroofer

Like Comment Share  
Write a comment...



The team is gearing up for another trip, but this time to Orlando! Just a day away! We're excited for another year at RoofCON! Stop by and say hello @ booth 100!

#roofingcontractor #roofers #roofinglife #roofer #rooferslife #roofingworld #roofingcontractors #roofingcompany



Divine Roofing is committed to providing superior service, affordable pricing, and high quality roofing materials to all of our customers.

[divineroofinginc.com](http://divineroofinginc.com) #roofingcompany #roofinginspection #roofrepair #commercialroofing #roofinstallation #shingleroofing #metalroofing





southerneliteroofing · Follow ...

southerneliteroofing #HappyFriday everyone! Here is a little roofing joke to make you laugh 🤔 Our experts really can spot the difference between a skylight and a hole in your roof! Call us today if you're not sure which is in your roof #FridayFeeling

-----

#roofingjokes #justrooftingthings #roofinglife #roofingcontractor #roofingcompany #roofingexperts #fridaymood #roofing #kennesaw #bufordga #MetroAtlanta #georgiarealestate #georgiahomes #construction #constructionlife #constructionjokes #cartoon #comics

12 likes  
4 DAYS AGO



jroofingcompany · Follow  
Chino, California

jroofingcompany Another quality GAF roof installed by the JL ROOFING team in Chino, ca. #experienced #qualityworkmanship #rerof #facia #roofingcompanies #chino #title24 #gaf

4d

omroofing Top dogs 🐾  
4d 1 like Reply

swigartroofing 🐾🐾  
4d Reply

17 likes  
4 DAYS AGO



centimark\_corporation · Follow ...

centimark\_corporation When it comes to steep slope roofs, gravity's natural pull helps keep debris and standing water at bay, allowing relatively low maintenance. However, due to the incline, steep slope roofs require imperative attention to safety details.

#roofing #roof #construction #roofingcontractor #roofer #roofingcompany #roofer #roofinglife #contractor #roofrepair #newroof #roofreplacement #roofingcontractors #commercialroofing #steepslopeproof

4d

12 likes  
4 DAYS AGO



high\_tower\_roofing · Follow ...

high\_tower\_roofing We love serving our Central Florida community and are dedicated to providing the highest quality roofing systems with the best teams available to protect your family's greatest asset.

#trustedlocalroofers #HTR #Roofing #Lakeland #LocalRoofers #roofingcontractor #roofingcompany #floridaroofting #hightowerroofing #gafmasterelite #lakelandlocal

4d

roofingfunnels Please check your request messages when you get a chance 🙌  
-Josh

12 likes  
4 DAYS AGO



fraleyroofing · Follow ...

fraleyroofing 📱📱📱 Swipe to see more before/after: Horizon-Loc standing seam metal roof that will last this customer 40+ years. SPEC Building Materials

#arkansasroofingsystem #metalroofing #metalroofingspecialists #metalroofingsystem #rooferslife #roofing #roofer4life #roofingworld #arkansasroof #rooferlife #roofinglife #roofingcompany #roofingcontractor #roofingexperts #newroof #roofingcontractors #arkansaslife #RoofingCompanies #roofingservices #arkansasbusiness #newroofs #roofers #residentialroofing

6d

19 likes  
6 DAYS AGO



thoroughbredconstruct · Follow ...

thoroughbredconstruction Which metal roof do you prefer? 🤔

The one on the LEFT or the one on the RIGHT? Let us know in the comments!

•  
•  
•

#roofing #hardwork #rontonohio #ashland #ronton #hirelocal #leakyroof #huntingtonwv #roofingcompany #roofinglife #roof #constructioncompany #roofingcontractors #rooferslife

3 likes  
4 DAYS AGO

## Asphalt modifier extends roof life

**BASF Corp.** has introduced B2Last®-R liquid asphalt modifier. The modified asphalt solution reportedly extends the life of a roof system, improves operational efficiencies and is compatible with most liquid asphalts. B2Last-R improves the functional properties of asphalt binders by stiffening the binder while maintaining workable viscosity levels. Unlike traditional polymer-modified asphalts, the liquid asphalt modifier reacts at a molecular level with the asphaltenes in liquid asphalt. B2Last-R can be used with asphalt shingles, self-adhering underlayment and built-up roof systems.

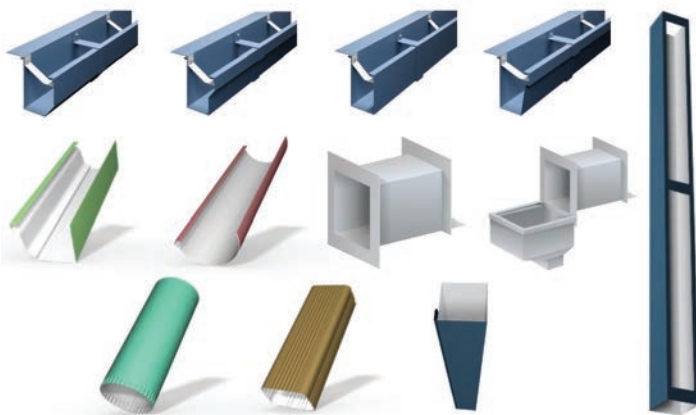
[b2lastna.basf.com](http://b2lastna.basf.com)



## Locks secure job-site equipment

**BOLT Locks** has made available several lock products designed to help protect job-site equipment. BOLT Locks use specially crafted tumblers to memorize a vehicle's ignition key upon insertion, resulting in a uniquely programmed lock. BOLT Locks' Receiver Lock is designed to lock a ball-mount receiver onto a vehicle's hitch and is available in 1/2-inch and 5/8-inch sizes. BOLT Locks' Off-Vehicle Coupler Lock reportedly serves as a visible theft deterrent when placed on a trailer's coupler to prevent a trailer from being secured to another vehicle. The BOLT Locks cable lock features a 6-foot-long, 1/4-inch-thick vinyl-coated coiled cable and can secure a generator, tools or accessories to a trailer for protection during transport or storage. The BOLT Locks padlock can be used to lock an enclosed trailer door, a toolbox or a gate.

[boltlock.com](http://boltlock.com)



## Drainage systems install easily

**Petersen** has introduced PAC-CLAD PAC-Tite Water Drainage Systems, which include gutters, downspouts and scuppers. PAC-Tite Gold Gutters reportedly install easily and feature a 2-inch-wide external wind strap every 6 feet and gutter hangers every 24 inches on center. The unique, heavy aluminum gutter hanger is designed to eliminate the need for drilling and riveting and allows full thermal movement of the gutter. The PAC-Tite Industrial Downspout has an open-face design said to simplify clearing out debris. The downspout includes three attachment straps per 12-foot section and is available in a variety of standard sizes or can be fabricated to meet specific job requirements. The PAC-Tite Water Drainage Systems line also includes a variety of custom-designed scuppers and collector boxes.

[pac-clad.com](http://pac-clad.com)

### Impact driver is lightweight

**DEWALT**® has added the 20V MAX 1/4-Inch 3-Speed Impact Driver (DCF850) to its ATOMIC Compact Series.™ Measuring less than 4 inches long, the impact driver is short and lightweight for user comfort in tight spaces. With a brushless motor said to deliver 30% more maximum torque at 1,825 inch-pounds and 3,250 revolutions per minute, the impact driver powers through heavy applications like larger fasteners. Three LED lights provide illumination, and a variable speed trigger allows for precision and control.

[dewalt.com](http://dewalt.com)



### Hard hat liners are disposable

**NoSweat**® has introduced its NoSweat Hard Hat Liners. Featuring Sweat-Lock™ technology, the disposable liners are designed to instantly absorb sweat to prevent odors, stains and acne and keep a user's eyes clear. Made with soft, lightweight hypoallergenic materials, NoSweat Hard Hat Liners are said to eliminate the need to stop and wipe sweat with a towel, shirt sleeve or hand. The liners are available in packs of three, six, 12 and 25.

[nosweatco.com](http://nosweatco.com)



### Ladder accessory installs without tools

**Werner**® has made available its Extension Ladder WalkThru,™ a ladder accessory that allows a user to make an ergonomic transition from extension ladder to roof. The accessory reportedly enables a user to step directly from a ladder onto a roof without stepping out to the side. Lightweight and strong, the Extension Ladder WalkThru is designed to work seamlessly with Werner ladders to ensure a proper fit. The accessory is secured to a Werner extension ladder using a dual-clamping system that locks onto the side rails with no tools required. When properly installed, the Extension Ladder WalkThru provides a 3-foot extension above the top support of a ladder for safe access to an elevated surface.

[wernerco.com](http://wernerco.com)





## Make lemonade out of lemons

During the supply chain shortage, invest time in developing your workforce

by Reid Ribble

*This month, I invited Jared Ribble, NRCA's director of Qualified Trainer and ProCertification® programs, to serve as a guest columnist.*

“The more concerned we become over the things we can’t control, the less we will do with the things we can control.” – John Wooden

On Sept. 22, NRCA hosted a Telephone Town Hall, which gave roofing manufacturers an opportunity to explain the reasons behind the supply chain shortage and what we can expect moving forward. While listening to the town hall, two things became immediately clear to me: Taking raw materials and manufacturing them into roofing products is an intricate process, and the supply chain is out of contractors’ control.

However, there are things you can control, such as workforce development, and now is the perfect time to take action. Those who do will find themselves in the best position to thrive when materials are finally delivered to job sites.

Take a moment for a short math equation. Divide your company’s annual gross profit by the number of installers you employ. The result will tell you how much gross profit each individual installer earns for your company.



It's a large number, correct? By strengthening your workforce development, you can build a pipeline of talented workers funneled directly into your company and increase profit.

To begin, forge relationships with local high schools, trade schools and Skills-USA. You also could offer to guest teach as many classes as your schedule allows, and if your local trade school doesn't offer a roofing curriculum, connect the school with NRCA, the Roofing Alliance or National Center for Construction Education & Research. They have developed a roofing curriculum for trade schools and universities and help them institute it within their

course offerings. This puts you in prime position to recruit the best of the workers coming

through trade schools. The more the students see you, the more they trust you and will want to work for you.

Another part of workforce development is maintaining a training program. A 2019 study of the roofing industry commissioned by the Roofing Alliance showed workers 35 and younger want to work for a company that offers ongoing training. While your company is waiting for materials to be delivered, put effort into being intentional about your company's training program.

Training with intention is dedicating someone on your staff to be responsible for implementing specific learning objectives for individual workers. This person should coordinate with human resources and foremen to identify which installers need skills development and put plans in place to establish and meet objectives.

NRCA calls these folks Qualified Trainers and offers a two-day conference to teach them how to be great at training. NRCA also offers tools like Training for Roof Application Careers, which teaches the concepts of installing roof systems. And NRCA's hands-on training plans provide a structure for trainees to practice the skills they learned. With at least one person to champion your training efforts, you will see the quality of workmanship become more consistent. Your workers will be safer, and because you are giving them

what they want, you will retain them. Put a dollar amount to fewer callbacks, lower insurance rates and worker retention.

In the same 2019 Roofing Alliance study, surveyed installers said they want certifications and to be recognized for their quality craftsmanship. They want their experience and training to matter for something, and NRCA ProCertification provides that recognition. NRCA ProCertification is a benchmark your employees can strive toward, and you'll show them your company offers a clear career path. Training within your company helps retain your workers, but training toward the greater goal of becoming certified gives installers and foremen career paths for their futures.

Executing part of the strategies presented might yield positive results. But when your company puts into practice all three concepts in an intentionally crafted workforce development strategy, you can yield the greatest financial benefits and be in the best position to capitalize when materials are finally delivered.

Don't get distracted by what you cannot control; rather, get busy doing what you can control. Before you know it, materials will be on job sites, and your workforce will be ready. 🚀🔧

---

REID RIBBLE is NRCA's CEO.

 @NRCA\_CEO

## Angi joins NRCA's One Voice initiative

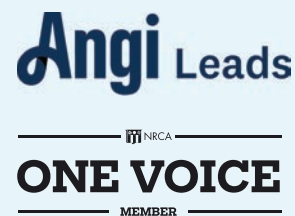
NRCA has announced Angi, Denver, has joined its One Voice initiative as a partner member.

Angi is a comprehensive solution for consumers' home needs, including repairs, renovations, products and financing. Angi has been a member of NRCA since 2013 and partners with NRCA to provide special offers for NRCA members who join Angi Leads. Angi has helped millions of homeowners with their projects, including roofing projects, and by joining the One Voice initiative, Angi hopes to play a larger role in addressing industrywide issues.

NRCA's One Voice initiative is a transformational approach to addressing the roofing industry's most critical issues and concerns—with one voice—to secure its future.

NRCA invites manufacturers, distributors, architects, engineers, consultants and service providers to fully engage with NRCA, as partners, and actively address the industry's most pressing issues, including workforce certification; effecting change in Washington, D.C.; building codes and insurance; and increasing professionalism in all industry sectors.

For more information about NRCA and its One Voice initiative, including a list of the 44 current One Voice member partners, visit [nrca.net/onevoice](http://nrca.net/onevoice).



## Study shows construction industry is implementing hybrid work

Since the COVID-19 pandemic began, companies throughout the U.S. have implemented hybrid working models—part in-person and part remote. New data shows the construction industry also has been adopting this trend, according to constructiondive.com.

Construction tech company OpenSpace, San Francisco, surveyed its customers about their working models and found before the pandemic, 52% of respondents said their field teams had never worked remotely; now, 92% say they will allow occasional or frequent remote work. Additionally, 95% noted technology was very or critically important in their decisions to continue allowing remote work.

Eighty percent of survey respondents—which included general contrac-

tors, subcontractors and developers—say they were just as productive or more productive when working remotely. Many companies reported seeing various benefits by adopting a hybrid work model for field teams, including saving time and money by decreasing travel to and from sites (72%); improving work-life balance (72%); and allowing teams to put their best people on more jobs than typically would be possible, likely because of reduced travel times (20%).



Want to learn more? To view OpenSpace's industry survey, go to [professionalroofing.net](https://professionalroofing.net).



## Ask Us When is Silicone Roof Coating the best choice?



Sometimes a roof is worn out. Sometimes nagging leaks require a different solution. Mule-Hide 100% Silicone Roof Coating can address simple maintenance problems or rehab a roof with a fully warranted roofing system. **What's in your bid?**

[mulehide.com](https://mulehide.com) | 800-786-1492

Single-Ply • Mod Bit • Coatings • Accessories

## NRCA launches new installer certification

Experienced installers who demonstrate substantial skills and knowledge of architectural metal flashings and accessories installation now



can apply to become NRCA ProCertified® Architectural Metal Flashings and Accessories Installers.

NRCA ProCertification® is NRCA's national certification initiative to create a competent, sustainable and high-performing roofing industry workforce. Certifications now available include:

- NRCA ProCertified Architectural Metal Flashings and Accessories Installer
- NRCA ProCertified Asphalt Shingle Systems Installer
- NRCA ProCertified Clay and Concrete Tile Systems Installer
- NRCA ProCertified EPDM Systems Installer
- NRCA ProCertified Thermoplastic Systems Installer
- NRCA ProCertified Roofing Foreman

Learn more about NRCA ProCertification at [nrca.net/procertification](https://nrca.net/procertification).

## Diane Hendricks again tops *Forbes*' list

Diane Hendricks, co-founder and chairman of One Voice member ABC Supply Co. Inc., Beloit, Wis., has topped the list of



Hendricks

America's Richest Self-made Women in *Forbes* magazine for a fourth consecutive year.

Worth \$11 billion, Hendricks chairs one of the largest wholesale distributors of roofing, siding and windows in the U.S.; ABC Supply has more than 800 branch locations and more than \$12 billion in sales.

According to *Forbes* magazine, Hendricks started the company in 1982 with her late husband, Ken, and has led the company since his death in 2007. Under her leadership, ABC Supply made the two biggest acquisitions in its history—buying rival Bradco in 2010 and building materials distributor L&W Supply in 2016.

Hendricks has spent millions supporting local economic development, rebuilding entire blocks in Beloit and bringing several new businesses into the state.

## Supply chain crisis Telephone Town Hall recording is available

A recording of NRCA's Sept. 22 Telephone Town Hall addressing the supply chain crisis now is available.

The Telephone Town Hall was moderated by NRCA Chairman of the Board Rod Petrick, president of Ridgeworth Roofing Co. Inc., Frankfort, Ill., and leaders of significant industry manufacturers offered updates regarding the current supply chain crisis. Additionally, participants' questions were answered by the panelists, including John Altmeyer, executive chairman of GAF Commercial Roofing, Parsippany, N.J.; Trent Cotney, CEO of Cotney Attorneys & Consultants, Tampa, Fla.; Jamie Gentoso, president of Firestone Building

Products, Nashville, Tenn.; Josh Kelly, senior vice president of OMG® Roofing Products, Agawam, Mass.; Nick Shears, president of Carlisle Construction Materials, Carlisle, Pa.; Joe Smith, president of Johns Manville Roofing Systems, Denver; and Brian Whelan, executive vice president of SIKA North America, Lyndhurst, N.J.

Topics included panelists' expectations regarding when the supply chain crisis will end, supply sources, transportation issues, specific material shortages and volume of orders, among other topics.

More than 3,600 listeners tuned in to the Telephone Town Hall, with 2,473 attendees listening via phones and 1,183 attendees listening via the livestream link. The town hall recording is available at [nrca.net/resources/supply-chain-shortage](http://nrca.net/resources/supply-chain-shortage).

# Take Airflow Efficiency Through The Roof

## It's all in the Curves



**NEW**  
Deep Drawn Model

### The Code Compliant Choice

### Advanced Model 477

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

### Seamless Galvalume® Hood

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

# DryerJack®



888-443-7937

DryerJack.com



## Less is more

Product shortages and high demand warrant alternative approaches

by Mark S. Graham

**R**enowned architect Ludwig Mies van der Rohe coined the phrase “less is more” to describe his building design philosophy. Although the phrase is subject to interpretation, it generally is understood as an expression of van der Rohe’s minimalist theory and is believed to mean having essential things is better than having too many superfluous things.

With the material and product shortages the U.S. roofing industry is experiencing, this concept warrants further consideration.

### Insulation requirements

Energy code requirements and sustainability incentive programs have resulted in a demand for more energy-efficient roof systems. For example, for reroofing projects, it is not unusual to replace an existing, aged roof system that has an R-10 insulation value with a new roof system that has an energy code-mandated minimum R-20, R-25, R-30 or R-35 insulation value. Such increases in insulation value necessitate using not only greater amounts of and thicker insulation—usually in multiple layers—but also longer insulation fasteners, more layers of insulation adhesives, additional thicknesses of wood blocking and nailers, and additional material handling and installation labor.



A comparison of minimum-required R-values based on the International Energy Conservation Code®s various editions is shown in the figure.

A 2014 NRCA study shows most building owners do not realize an economic benefit from installing new roof systems with insulation values higher than R-15 or R-20. This means the costs of additional insulation outweigh any possible savings in reducing heating and cooling costs from the added insulation during the anticipated life of a building's roof system. Currently, with insulation and installation costs being

significantly higher than in 2014 when the study was conducted and energy costs having only marginally increased, this difference is more pronounced.

Knowing this and that lead times for delivery of high-thermal insulation currently range from four to 13 months, consideration should be given to only using insulation R-values that will provide building owners with a realistic payback in reduced energy costs. These insulation levels will vary based on local climate conditions and energy costs but generally will be R-15 in Climate Zones 1 and 2, R-20 in Climate Zones 3 through 7 and R-25 in Climate Zone 8.

In addition to saving building owners unnecessary costs of installing excess thermal insulation, optimizing insulation usage will make additional amounts of thermal insulation available for other roofing projects, which can help reduce product availability lead times.

For example, a truckload of 2.6-inch-thick polyisocyanurate insulation will cover about 6,900 square feet of roof surface in a two-layer, R-30 low-slope roof system configuration. A truckload of 1.8-inch-thick polyisocyanurate insulation will cover about 10,000 square feet of roof surface in a two-layer, R-20 configuration.

To read NRCA's Industry Issue Update addressing roofing material shortages and price volatility; NRCA's 2014 insulation payback study; and information about the code's modifications and alternative materials, design and methods of construction provisions, go to [professionalroofing.net](http://professionalroofing.net).



The R-20 configuration covers about 45% more surface area as the same volume (a truckload) as the R-30 configuration.

Such optimization may result in using R-value levels lower than energy code-prescribed minimums. If such an optimized R-value design and installation is being considered, I recommend the roof system designer (if there is one), building owner and roofing contractor obtain code acceptance from the code authority having jurisdiction. Code provisions give code officials the authority to grant modifications for individual cases where there are impractical difficulties in carrying out one or more code provisions. Long delivery lead times and the lack of adequate roofing materials and products to carry out roofing work are clear examples of impractical difficulties code officials can consider.

### Final thoughts

NRCA expects the widespread high demand and unprecedented shortages of roofing materials and products to continue through 2022 and possibly longer. During this period, alternative approaches must be considered to meet building owners' roofing needs.

NRCA recently issued an Industry Issue Update: Roofing Material Shortages and Price Volatility that explains the current high demand, roofing material shortages and price volatility to building owners, facility managers, general contractors and construction managers involved with roof system purchasing decisions.

NRCA welcomes hearing your specific experiences. You can direct any questions to NRCA's Technical Services Section at (847) 299-9070, option 4, or at [nrcatechnical@nrca.net](mailto:nrcatechnical@nrca.net). 📞🌐

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

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

Climate Zone	Edition of International Energy Conservation Code®							
	IECC 2000	IECC 2003	IECC 2006	IECC 2009	IECC 2012 <sup>1</sup>	IECC 2015 <sup>1</sup>	IECC 2018 <sup>1</sup>	IECC 2021 <sup>1</sup>
0	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>	Group R: R-25ci All others: R-20ci
1	AHJ prescribed <sup>3</sup>	R-12ci	R-15ci	R-15ci	R-20ci	R-20ci	R-20ci	
2		R-14ci		R-20ci		R-25ci	R-25ci	
3		R-10ci				R-25ci	R-25ci	
4		R-12ci	R-20ci	R-25ci		R-30ci	R-30ci	
5		R-15ci		R-30ci	R-30ci			
6		R-11ci		R-30ci	R-30ci			
7		R-15ci	R-25ci	R-25ci	R-30ci	R-35ci	R-35ci	
8		R-15ci	R-25ci	R-25ci	R-30ci	R-35ci	R-35ci	

<sup>1</sup> Also applies to roof system replacement

<sup>2</sup> Climate Zone 0 did not apply before IECC 2021

<sup>3</sup> With IECC 2000, minimum R-values were not provided in the model code; they were prescribed by the authority having jurisdiction at the time of adoption.

ci = continuous insulation

Comparison of IECC's minimum prescriptive R-values for commercial buildings based on the insulation component R-value method

## Employers can use digital check-ins for efficient time tracking

When a construction company's accounting department needs clarification regarding a worker's timecard, time can be wasted as staff tries to get in touch with workers, and questions about timecards may cause employees to become defensive, according to forconstructionpros.com.

Kyle Peacock, CEO of San Francisco-based Peacock Construction, says prioritizing efficient time tracking can help save time and make timecard conversations easier.

Some construction companies are using QR code-based digital check-in apps because they offer greater accuracy for tracking hours worked and aligning time worked with specific projects. Digital check-in records can help employers spot trends in absenteeism or how quickly an apprentice is mastering a skill. These check-in records also can provide benchmarks regarding the average time it takes to complete certain tasks, which can help with future project bidding, and can provide evidence in claims and litigation.

When companies combine a digital check-in app's data with the daily log, it can outline issues and offer insight into the information

superintendents and general contractors must know to protect their companies and employees. Using such technology daily during an extended period of time can help identify monthly and annual trends.

## Bulletin updates foreign lumber guidance

The North Carolina Department of Insurance has issued an updated bulletin providing guidance for identifying and using wood species imported from outside of North America. The department has administrative authority over North Carolina's building code.

As explained in *Professional Roofing's* September column "Considering substitutions," NCDOI previously issued an alert warning European lumber may not meet the state's residential building code requirements. The primary concern cited was the lower wood density or specific gravity of European lumber may affect the performance of fasteners, resulting in reduced resistance capacities.

The alert was issued as substitutions increasingly have become commonplace during ongoing shortages of building materials and products.

The bulletin is available at [ncosfm.gov/media/2406/open](https://ncosfm.gov/media/2406/open).

## Solar energy could account for 40% of U.S. electricity by 2035

On Sept. 8, the Biden administration released a report showing the U.S. can get 40% of its electricity from solar energy by 2035, according to reuters.com.

The Solar Futures Study outlines how solar energy can help decarbonize the U.S. power grid and help achieve a Biden administration goal of net-zero emissions in the electricity sector by 2035.

The report explains several steps the U.S. should take to achieve the 40% target, including installing 30 gigawatts per year of solar capacity between now and 2025 and 60 GW per year between 2025 and 2030. It also calls for implementing tools to expand transmission of solar energy, such as storage, microgrids and forecasting to help maintain the "reliability and performance of a renewable-dominant grid."

The administration has been increasing efforts to expand renewable energy. In August, the Interior Department announced it would begin a

process to ensure easier access to vast federal lands for solar and wind energy. Research firm Rystad Energy, Oslo, Norway, reports President Biden's goal to decarbonize the power sector by 2035 would require an area bigger than the Netherlands for the solar industry alone.

The U.S. solar industry says the report emphasizes the need for "significant policy" support. More than 700 companies sent a letter to Congress in September seeking a long-term extension of a solar investment tax credit, which reportedly would "ease project financing challenges" and include standalone energy storage.



To read the U.S. solar industry's letter to Congress, go to [professionalroofing.net](https://professionalroofing.net).

**www.METALDECKSUPPLY.COM**  
**YOUR ONE-STOP METAL DECK SHOP!**



**METAL DECK SUPPLY**

50 YEARS 1970 – 2020

**METAL DECK REPLACEMENT?**  
**WE HAVE IT IN STOCK NOW!**

- ✓ Largest Inventory in Stock
- ✓ Knowledgeable Staff
- ✓ For Immediate Use
- ✓ Pick Up or Delivery
- ✓ Variety of Deck In Stock
- ✓ 15 Locations to Serve You

**CONTACT US TODAY FOR THE BEST SERVICE AND LEAD TIME**  
**ORDERS CAN BE READY IN 2 HOURS FOR "TOUCH-FREE" PICKUP**

**VISIT OUR WEBSITE FOR OUR METAL DECK 101 VIDEOS**  
**IN ENGLISH & SPANISH**

PROUD MEMBER



**800.894.7741 | SALES@METALDECKSUPPLY.COM**



# YOUR COMMERCIAL ROOF SHOULD



**Resist cracking under pressure**  
from very severe hail.

When you need the ultimate in impact resistance, DensDeck® StormX™ Prime Roof Board is the only gypsum cover board approved for use in single-ply FM-classified Very Severe Hail assemblies.\*

\*Consult RoofNav for VSH assemblies with DensDeck StormX Prime Roof Board.  
©2021 Georgia-Pacific. All rights reserved. Unless otherwise noted, all trademarks are owned by or licensed to GP Gypsum LLC.





## Ready to work

Hiring refugees can help roofing industry employers meet their workforce needs

by Duane L. Musser

As workforce development challenges plague roofing industry employers, NRCA continues exploring innovative ways to help members address their workforce needs. One strategy to consider is hiring refugees who come to the U.S. from throughout the world for resettlement.

### Who are refugees?

The federal government and private sector organizations have been working cooperatively to resettle refugees for decades. Defined by international law as individuals who are “unable to return to [their] home country due to a well-founded fear of persecution based on race, religion, nationality, political opinion or social group,” a majority of refugees arriving in the U.S. come from areas of conflict. A recent example is the thousands of Afghan refugees who fled the Taliban’s resurgence in August. Refugees are subject to the highest-level security checks and an extensive vetting process that takes two years on average before they are admitted to the U.S. for resettlement. Refugees are authorized to work in the U.S. upon arrival and are eligible for permanent residency within one year of arrival and citizenship five years after arrival.

Refugees can bring enormous value to companies, especially when



On Oct. 7, Switchboard, an online resource hub for refugee service providers in the U.S., presented a webinar, "Who are Refugees and How Do They Arrive in the United States? Understanding the Refugee Resettlement Process." To listen to a recording of the webinar, visit [switchboardta.org/resources](http://switchboardta.org/resources).

employers are struggling to fill open positions. Refugees tend to be hardworking and highly motivated, bring diverse skills and views that can boost creativity and innovation, and often can fill gaps in local labor markets. Data from the Department of Homeland Security indicates 77% of refugees are of working age. Experience has shown with the proper support during their transition and resettlement, refugees can become loyal and resilient employees.

### Employer resources

Roofing industry employers interested in exploring opportunities to hire

refugees can begin by reviewing the U.S. Employers' Guide to Hiring Refugees. The document is published by Lutheran Immigration and Refugee Services, which has been resettling refugees since 1939, and the Tent Partnership for Refugees, which was formed in 2015 to help mobilize the private sector to improve the lives and livelihoods

To view a map of Office of Refugee Resettlement resources and contacts; access the U.S. Employers' Guide to Hiring Refugees; learn about the vetting process for refugees; and visit the ORR website, go to [professionalroofing.net](http://professionalroofing.net).

of refugees in the U.S.

The guide covers everything an employer needs to

know to hire refugees through the resettlement process. It describes how refugees

are vetted by the State Department before they enter the U.S. and then assigned to one of nine private resettlement agencies that partner with the federal government to provide resettlement services, including assistance in finding employment. The guide also explains how employers that hire refugees may qualify for federal tax credits through the Work Opportunity Tax Credit.

Another resource for employers is the federal Office of Refugee Resettlement, which works with private resettlement agencies to help refugees find jobs and integrate into their new communities. The ORR website provides an overview of the U.S. Refugee Resettlement Program. The resettlement agencies have staff dedicated to assisting employers in the hiring process as they work to match refugees with suitable employment based on refugees' skills. Employers interested in hiring refugees should visit the ORR website or contact a local resettlement agency office.

The U.S. Employers' Guide to Hiring Refugees also notes that while hiring refugees has many advantages, there can be challenges for employers if barriers such as cultural differences, limited English proficiency and potentially outdated employment skills are not adequately understood and addressed. Employers may need to make modest investments to facilitate the recruitment and retention of refugees to yield the benefits of a diverse workforce. The staff at private resettlement agencies have experience providing the necessary support and tools for employers to successfully transition refugees into their new careers.

### Meaningful work

Providing an opportunity for a refugee to establish a meaningful career in the roofing industry can be rewarding on many levels. Newfound employment often is more than just a job for refugees; it's an important marker of community involvement and a step toward successful assimilation.

### PRIVATE RESETTLEMENT AGENCIES

Following are nine private resettlement agencies with offices in the U.S. Employers can find a local office with staff who can assist with employment services in their state or region:

- Church World Service
- Episcopal Migration Ministries
- Ethiopian Community Development Council Inc.
- HIAS (Hebrew Immigrant Aid Society)
- International Rescue Committee
- Lutheran Immigration and Refugee Services
- United States Conference of Catholic Bishops/Migration and Refugee Services
- U.S. Committee for Refugees and Immigrants
- World Relief

According to Hamdi Ulukaya, founder of the Tent Partnership for Refugees, "the minute a refugee has a job, that's the minute they stop being a refugee."

The federal government recently raised the admission cap to 125,000 refugees for 2022, meaning there will be ample opportunity for employers to onboard refugees in the near future. NRCA urges members to consider this unique way to supplement their workforce development strategies and stands ready to assist those who wish to pursue this worthwhile endeavor. 🌟🌟

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

## DOL announces measures to address heat-related illness

To combat the hazards associated with extreme heat exposure indoors and outdoors, the Department of Labor is taking enhanced and expanded efforts to address heat-related illness, according to [osha.gov](https://www.osha.gov).



Although heat illness is largely preventable, thousands of workers are sickened each year by workplace heat exposure. Despite widespread underreporting, 43 workers died from heat illness in 2019, and at least 2,410 others suffered serious injuries and illnesses.

Increasing heat precipitated by climate change can cause lost productivity and work hours resulting in large wage losses for workers. The Atlantic Council's Adrienne Arsht-Rockefeller Foundation Resilience Center estimates the economic loss from heat to be at least \$100 billion annually, which could double by 2030 and quintuple by 2050 under a higher emissions scenario.

The Occupational Safety and Health Administration is implementing an enforcement initiative regarding heat-related hazards, developing a National Emphasis Program for heat inspections and launching a rulemaking process to develop a workplace heat standard. OSHA also is forming a National Advisory Committee on Occupational Safety and Health Heat Injury and Illness Prevention Work Group to provide better understanding of challenges and identify and share best practices to protect workers.

Recently, OSHA implemented an intervention and enforcement initiative to prevent and protect workers from heat-related illnesses and deaths while they are working in hazardous hot environments. The initiative prioritizes heat-related interventions and inspections of work activities on days when the heat index exceeds 80 F.

The OSHA initiative applies to indoor and outdoor work sites in general industry, construction, agriculture and maritime where potential heat-related hazards exist.

On days when a recognized heat temperature can result in increased risks of heat-related illnesses, OSHA will increase enforcement efforts.

OSHA encourages employers to implement intervention methods on heat priority days proactively.

NRCA will be active as the OSHA rulemaking process moves forward and encourage the agency to take advantage of the significant efforts already underway in the ANSI A10.50 heat stress standard development process. Heat stress is a complicated health hazard that must be addressed in a comprehensive manner to reduce worker injuries and deaths.



To access NRCA's sample Heat Illness Prevention Program, go to [professionalroofing.net](https://professionalroofing.net).

## New York City DOB inspectors issue 1,499 stop-work orders

In a recent safety sweep, New York City's Department of Buildings inspectors issued 3,600 violations to contractors and 1,499 stop-work orders, according to [constructiondive.com](https://www.constructiondive.com).

Some orders were issued to different permitted jobs located at the same address. The DOB rescinded many of those orders and work resumed after the contractors corrected the unsafe conditions.

The boost in inspections was in response to seven construction-related deaths in New York City during the first half of 2021, including two fatalities from falls in May. DOB Commissioner Melanie E. La Rocca initiated the sweeps of about 7,500 building construction sites beginning June 1.

City inspectors reportedly checked to ensure workers were using safety harnesses, controlled access zones, guardrails and other fall-prevention systems, as well as determined whether sites complied with general safety plans. COVID-19 health and safety protocols were not part of the safety sweep.

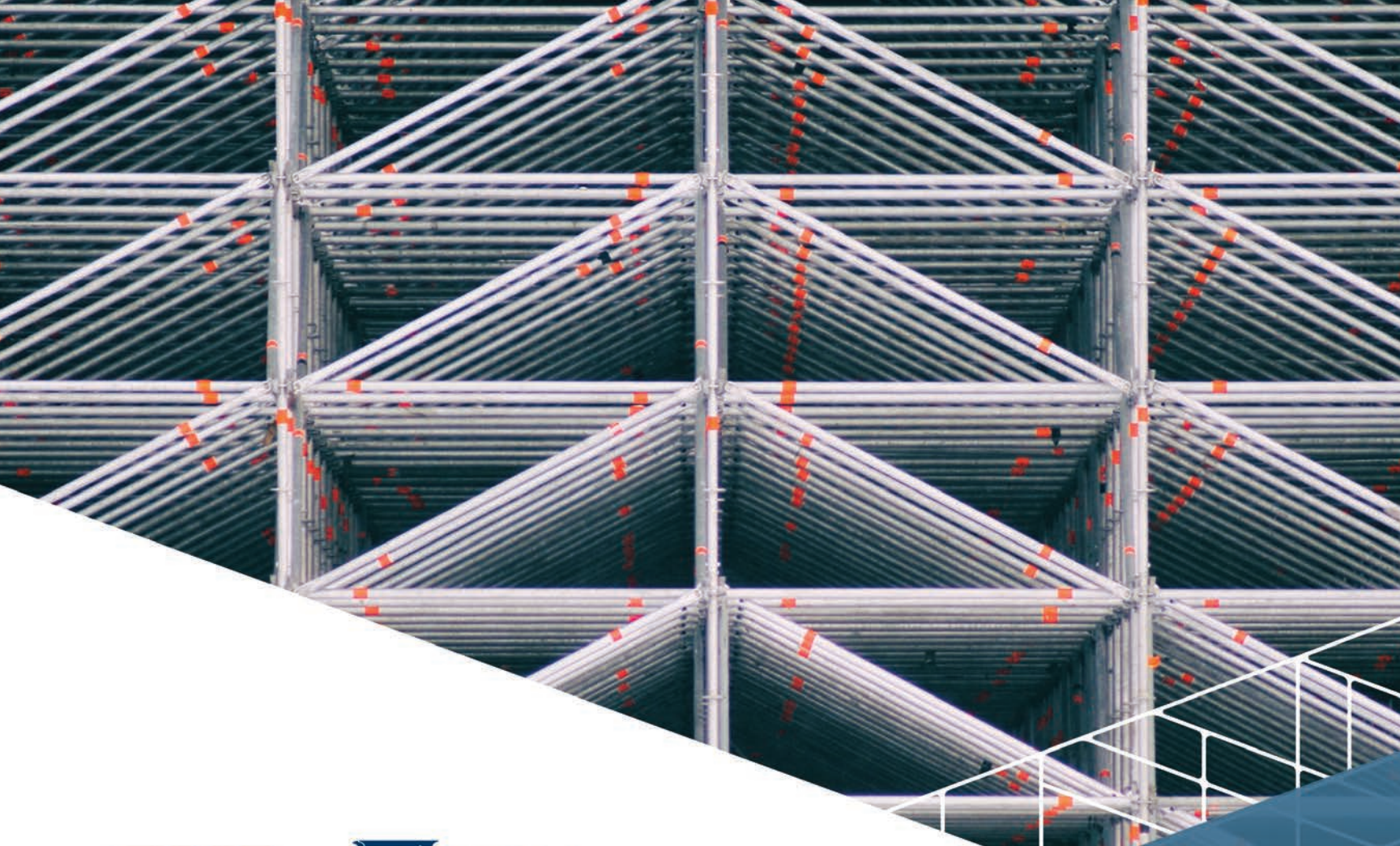
Falls on work sites are an issue nationwide, and in New York City, construction falls have led to 37 fatalities and 1,029 injuries on construction sites since 2015. In addition to issuing stop-work orders during the sweep, DOB inspectors handed out safety cards



reminding workers to wear safety harnesses properly, look out for slipping and tripping hazards, and install guardrails or hole coverings in appropriate situations.

Although the sweep focused on construction falls, inspectors uncovered other violations, such as failure to have the required site-safety personnel on location, failure to provide workers with a pre-shift safety meeting, and contractors with expired registration and insurance.

New York City's DOB has increased penalties for the most serious safety violations, hired hundreds of additional inspectors, implemented a first-of-its-kind safety training program for the city's construction workforce and increased the frequency of unannounced construction safety inspections of large work sites in the city.



NRCA

# Simple rules keep little slips from becoming big falls.

CNA Risk Control experts know that roofing fatalities occur at nearly twice the rate of other construction trades. That's why as part of our fall protection program, we recommend a 100% tie off with fall exposures over six feet. It's a guideline that helps limit injuries to bruises and scrapes, and helps our clients avoid financial disaster.

Learn more about how our risk control programs help NRCA members operate more safely. Contact your independent agent or visit [cna.com/nrca](https://cna.com/nrca).

The examples provided in this material are for illustrative purposes only and any similarity to actual individuals, entities, places or situations is unintentional and purely coincidental. In addition, the examples are not intended to establish any standards of care, to serve as legal advice appropriate for any particular factual situations, or to provide an acknowledgment that any given factual situation is covered under any CNA insurance policy. Please remember that only the relevant insurance policy can provide the actual terms, coverages, amounts, conditions and exclusions for an insured. All products and services may not be available in all states and may be subject to change without notice. "CNA" is a registered trademark of CNA Financial Corporation. Certain CNA Financial Corporation subsidiaries use the "CNA" trademark in connection with insurance underwriting and claims activities. Copyright © 2019 CNA. All rights reserved. C20190709 19-0103-IND



# *A COMPENDIUM* **OF CHANGES:**

*PART TWO* / BY MARK S. GRAHAM

BE AWARE  
OF BUILDING  
CODES THAT  
REFERENCE  
**ROOF SYSTEM  
INSTALLATIONS**



**T**he International Code Council® promulgates a comprehensive set of 14 model building codes that serve as the basis for most jurisdictions' construction codes. ICC's codes are updated and published on a three-year cycle with the most current editions having a 2021 edition date.

In the April issue, I discussed the roofing-related changes incorporated into the *International Building Code,® 2021 Edition*; *International Existing Building Code,® 2021 Edition*; and *International Fire Code,® 2021 Edition*. Here, I will provide an overview of the roofing-related changes incorporated into the *International Energy Conservation Code,® 2021 Edition*; *International Plumbing Code,® 2021 Edition*; and *International Residential Code® for One- and Two-Family Dwellings, 2021 Edition*.

## IECC 2021

IECC 2021 contains two sets of provisions: commercial and residential.

IECC's commercial provisions apply to all buildings except residential buildings three stories or less in height. IECC's residential provisions apply to detached one- and two-family dwellings as well as Group R-2, R-3 and R-4 buildings three stories or less in height. IECC's commercial provisions apply to residential buildings four stories or greater in height.

IECC's commercial provisions are designated having a "[CE]" in chapter numbering and a "C" in section numbering. Residential provisions are designated having an "[RE]" in chapter numbering and an "R" in section numbering.

### IECC's commercial provisions

IECC 2021's roofing-related provisions applicable to commercial buildings occur in Chapter 3[CE]—General Requirements, Chapter 4[CE]—Commercial Energy Efficiency and Chapter 5[CE]—Existing Buildings.

In Chapter 3[CE], the climate zone map has been revised. Climate Zone 0 has been added, and the climate zones in the continental U.S. have shifted slightly northward. Figure C301.1—Climate Zones provides a climate zone map. ICC reports about 10% of counties' and parishes' climate zones have changed. Table C301.1—Climate Zones, Moisture Regimes, and Warm Humid Designations by State, County and Territory provides a list of climate zones. Counties and parishes in this table with a revision bar in the margin indicate climate zone changes from IECC 2018.

In Chapter 4[CE]—Commercial Energy Efficiency, Section C401.2—Application, the explanation of compliance options has been reformatted and reworded. There are two compliance options: a prescriptive option, which requires compliance with Sections C402 through C406 and Section C408, and a total building

performance option, which requires compliance with Section C407.

An alternative compliance option also is available: complying with ANSI/ASHRAE/IESNA 90.1-19, “Energy Standard for Buildings Except Low-Rise Residential Buildings.”

Repairs to roof systems and reroofing are addressed in Chapter 5[CE]—Existing Buildings.

Table C402.1.3—Opaque Thermal Envelope Insulation Component Minimum Requirements, R-value Method, provides minimum R-values for building components, including roof assemblies, applicable when using IECC’s

In Section 402.1.4—Assembly U-factor, C-factor or F-factor-based Method, a new section has been added to the prescriptive compliance option allowing the U-factor method to be used for roof/ceiling assemblies. Section C402.1.4.1—Roof/Ceiling Assembly now provides specific requirements for using above-deck tapered insulation, suspended ceilings and above-deck insulation in two or more layers with joints staggered.

In Section C402.2—Specific Building Thermal Envelope Insulation Requirements, changes have been made to the prescriptive compliance option’s R-value method. Section C402.2.1.1—Tapered, Above-Deck Insulation

Based on Thickness now allows the R-value of tapered insulation systems to be calculated on the average R-value method. The minimum thickness at a low point is 1 inch.

Section C402.2.1.3—Suspended Ceilings stipulates insulation, such as batt insulation, installed on removeable ceiling tiles is not permitted to be considered toward the minimum required R-value.

Section C402.2.1.4—Joints Staggered requires above-deck thermal insulation to be installed in two or more layers with edge joints staggered between each layer except where roof insulation tapers at gutter edges, roof drains and scuppers.

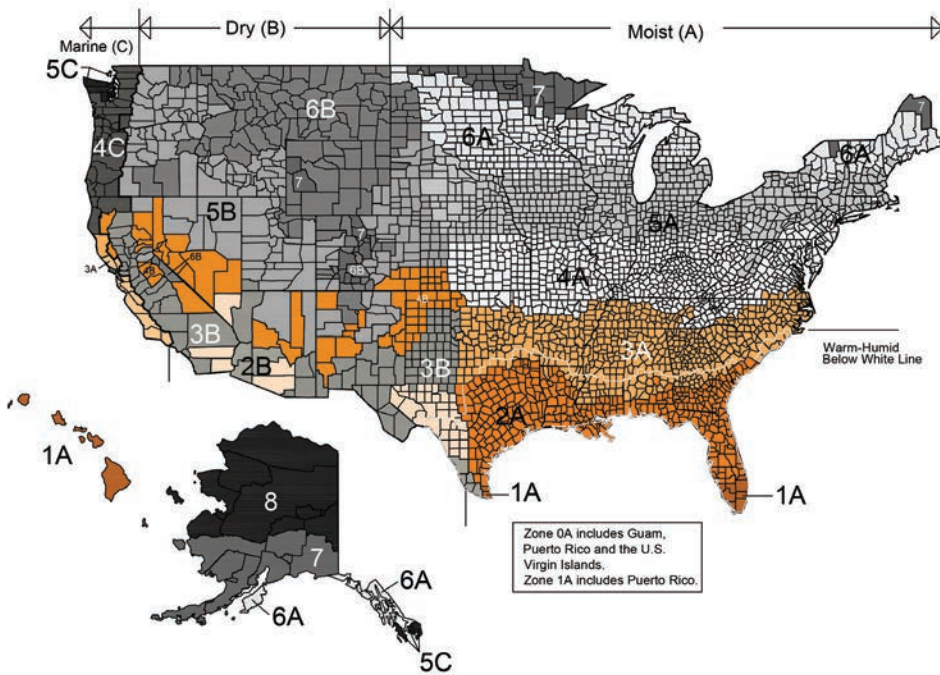
There are no changes in IECC 2021’s requirements for roof reflectance and solar emittance.

Regarding air retarders (IECC refers to them as air barriers), in Section C402.5.1.2—Air Barrier Compliance, the applicability of IECC 2021’s air retarder requirements have changed somewhat. The code’s air retarder requirements are required in all occupancies except

Groups R and I are exempted in Climate Zones 0B, 1, 2B, 3B, 3C, 4B, 4C, 5B and 5C in specifically defined circumstances. In IECC 2018, the air retarder requirements applied to all buildings except in Climate Zone 2B.

In Section C402.5.1.4—Assemblies, ASTM D8052, “Standard Test Method for Quantification of Air Leakage in Low-Sloped Membrane Roof Assemblies,” has been added as an additional test method for determining the air leakage of building assemblies.

Section C402.5.1.5—Building Envelope Performance Verification provides new requirements for performance verification of installed air retarders. Separate guidance



IECC 2021’s climate zone map

prescriptive compliance option. For roof components designated as “attic and other,” the minimum required R-values have increased to R-49 in Climate Zones 4 and 5 and R-60 in Climate Zones 7 and 8. In Climate Zone 8 for roof components designated as “metal buildings,” the minimum required R-values have increased to R-25 and R-11 layers and an additional R-11 layer, which includes a liner system.

Similar increases (those being reductions in U-factors) are incorporated into IECC 2021’s maximum U-factor table, Table C402.1.4—Opaque Thermal Envelope Assembly Maximum Requirements, U-factor Method.

is provided for construction document review, inspection of accessible components and final commissioning.

Section 402.5.3—Building Thermal Envelope Testing provides new requirements for testing a building envelope’s air retarder effectiveness.

Roof system repairs and reroofing are addressed in IECC 2021’s Chapter 5[RE]-Existing Buildings. In Section C503.2.1—Roof Replacement, a requirement is added indicating a roof assembly’s R-value shall not be decreased or U-factor increased because of roof system replacement. Because this section already requires insulation levels identical to IECC 2021’s for new construction, it appears this added requirement is intended to address existing buildings with insulation levels exceeding the code’s current requirements.

### IECC’s residential provisions

IECC 2021’s roofing-related provisions applicable to residential buildings occur in Chapter 3[RE]—General Requirements, Chapter 4[RE]—Residential Energy Efficiency and Chapter 5[RE]—Existing Buildings.

In Chapter 3[RE]—General Requirements, the same changes made to the climate zones in Chapter 3[CE]—General Requirements also apply.

In Chapter 4[RE]—Residential Energy Efficiency, Section R401.2—Application, the explanation of the permissible compliance paths has been reformatted and reworded.

There are four compliance options:

- A prescriptive option, which requires compliance with Sections R401 through R404
- A total building performance option, which requires compliance with Section R405
- An Energy Rating Index option, which requires compliance with Section R406
- A tropical climate region option, which requires compliance with Section R407

Repairs to roof systems and reroofing are addressed in Chapter 5[RE]—Existing Buildings.

For the prescriptive compliance path, clarifying language has been added in Section R402.1.4—R-value Computation addressing R-value calculation methods and in Section R402.2.3—Eave Baffle addressing continuous vent baffle installation.

There are no roofing-specific revisions to IECC 2021’s total building performance, Energy Rating Index option and tropical climate region options. Similarly, there are no revisions to IECC 2021’s requirements for roof system

repairs and reroofing in IECC 2021’s Chapter 5[RE]-Existing Buildings.

### IPC 2021

IPC 2021 provides minimum requirements for buildings’ plumbing systems, including roof drains. Roof drains, drain piping, parapet wall scuppers, gutters and other secondary roof drains are addressed in IPC 2021’s Chapter 11—Storm Drainage.

Section 1102.6—Roof Drains now requires roof drains, other than siphonic roof drains, to be tested and rated for flow rate according to ASME A112.6.4, “Roof, Deck, and Balcony Drains,” or ASPE/IAPMO Z1034, “Test Method for Evaluating Roof Drain Performance.” Roof drain manufacturers should publish flow rate data for their specific roof drain models and sizes.

In Section 1106.2—Size of Storm Drain Piping and Section 1106.2.1—Rainfall Rate Conversion Method, a method has been added for converting rainfall intensity to flow rate for code-compliant drain piping sizing.

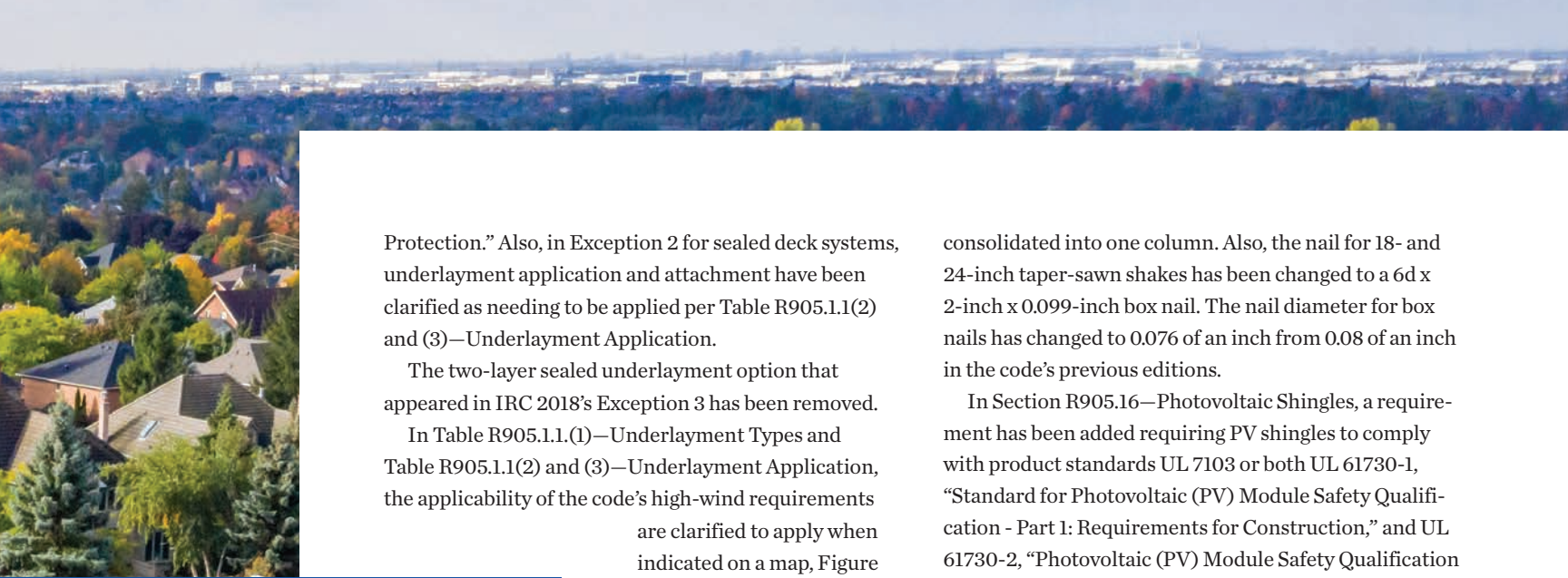
### IRC 2021

IRC 2021 applies to detached one- and two-family dwellings and townhouses not more than three stories in height with separate means of egress.

Most of IRC 2021’s roofing-related content is contained in Chapter 9—Roof Assemblies.

In Section R902—Fire Classification, new fire testing requirements have been added for rooftop-mounted photovoltaic products. Building-integrated PV products, such as PV shingles, are required to be tested, listed and labeled using UL 7103, “Outline of Investigation for Building-integrated Photovoltaic Roof Coverings.” Roof-mounted PV panel systems are required to be tested, labeled and identified using UL 2703, “Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-plate Photovoltaic Modules and Panels.” Both UL 7103 and UL 2703 provide for fire classification of roof-mounted PV systems as Class A, B or C.

In Section R905.1.1—Underlayment, the requirements for underlayment used in steep-slope roof systems have been revised. Self-adhering polymer-modified bitumen underlayment now is required to be labeled indicating compliance with ASTM D1970, “Specification for Self-adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam



 To read part one of this article, go to [professionalroofing.net](http://professionalroofing.net).



Protection.” Also, in Exception 2 for sealed deck systems, underlayment application and attachment have been clarified as needing to be applied per Table R905.1.1(2) and (3)—Underlayment Application.

The two-layer sealed underlayment option that appeared in IRC 2018’s Exception 3 has been removed.

In Table R905.1.1.(1)—Underlayment Types and Table R905.1.1(2) and (3)—Underlayment Application, the applicability of the code’s high-wind requirements are clarified to apply when indicated on a map, Figure R301.2.1.1—Regions Where Wind Design is Required. This map indicates wind design is required where the design wind speed is 130 mph or greater along the Atlantic

coastline from Florida to North Carolina and along the Gulf of Mexico. Wind design also is required along Alaska’s coastline where the design wind speed is 140 mph or greater.

In Section R905.3—Clay and Concrete Tile, the deck requirements have been revised to only allow spaced lumber sheathing in Seismic Design Categories A, B or C. Previously, the code permitted the use of tile over spaced lumber sheathing in all areas, including Seismic Design Category D.

In Section R905.4—Metal Roof Shingles, a requirement for wind resistance testing has been added. Metal roof shingles now are required to be tested for wind resistance according to one of the following standards:

- ASTM D3161, “Standard Test Method for Wind Resistance of Steep Slope Roofing Products (Fan-Induced Method)”
- FM 4474, “Standard for Evaluating the Simulated Wind Uplift Resistance of Roof Assemblies”
- UL 580, “Standard for Tests for Uplift Resistance of Roof Assemblies”
- UL 1897, “Standard for Safety, Uplift Tests for Roof Covering Systems”

Metal roof shingles tested using ASTM D3161 are required to comply with the classifications in Table R905.4.4.1—Classification of Steep Slope Metal Roof Shingles Tested in Accordance with ASTM D3161 and have package labeling indicating the tested classification.

Table R905.7.5(2)—Nail Requirements for Wood Shakes and Wood Shingles has been reformatted with the nail type, minimum length and shank diameter now

consolidated into one column. Also, the nail for 18- and 24-inch taper-sawn shakes has been changed to a 6d x 2-inch x 0.099-inch box nail. The nail diameter for box nails has changed to 0.076 of an inch from 0.08 of an inch in the code’s previous editions.

In Section R905.16—Photovoltaic Shingles, a requirement has been added requiring PV shingles to comply with product standards UL 7103 or both UL 61730-1, “Standard for Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements for Construction,” and UL 61730-2, “Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing.” PV shingles also are required to be tested for wind resistance and be classified per a new Table R905.16.6—Classification of Photovoltaic Shingles, which requires wind classification Class A, D or F.


In Section R905.17—Building-integrated Photovoltaic Roof Panels Applied Directly to the Roof Deck, a new requirement has been added requiring PV shingles to comply with product standards UL 7103 or both UL 61730-1 and UL 61730-2.

In Section R906—Roof Insulation, NFPA 276, “Standard Method of Fire Test for Determining the Heat Release Rate of Roofing Assemblies with Combustible Above-Deck Roofing Components,” has been added and FM 4450, “Approval Standard for Class 1 Insulated Steel Roof Decks,” has been removed as an allowable fire test method.

Attic ventilation is addressed in IRC’s Chapter 8—Roof-Ceiling Construction. In Section R806—Roof Ventilation, the requirements for using air-impermeable insulation for dwellings and townhouses in Climate Zones 1, 2 and 3 have been clarified in Section R806.5, Item 5.2, Subitems 5.2.8 through 5.2.10.

## GET THE I-CODES

As jurisdictions begin the process of updating their codes, you should be aware of the roofing-related changes incorporated into the 2021 I-Codes and have a copy of the applicable codes on hand.

You can purchase the 2021 I-Codes in soft cover or loose-leaf format or download them. ICC also offers a web-based version, Digital Codes Premium, which is available by either a monthly or annual subscription. To purchase the I-Codes, go to [code.iccsafe.org](http://code.iccsafe.org). 

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





**NRCA**  
PROCertification®

PROFESSIONALISM. PRECISION. PRIDE.

## NRCA ProCertification® is great for:

### YOUR COMPANY



“Having NRCA ProCertified workers gets my company work, plain and simple. It’s a great way to distinguish our company from the competition. In fact, winning one job paid for my ProCertifications!”

Nick Sabino  
President, Deer Park Roofing  
Cincinnati

### YOUR WORKERS



“I am thrilled with the new level of pride my installers have as a result of becoming ProCertified. Investing in the expertise of our field workers has allowed King of Texas to show our appreciation for them. And we encourage them to keep progressing with our company.”

Kelly Van Winkle  
President/CEO, King of Texas Roofing Company  
Grand Prairie, Texas

### YOUR INDUSTRY



“Improving the image of the roofing industry starts with us. Our workers deserve the respect other trades receive and having an NRCA-certified workforce takes roofing to the next level.”

Peter Horch  
Owner/CEO, Horch Roofing  
Warren, Maine

NOW AVAILABLE!



Get your workers started today!

[nrca.net/procertification](http://nrca.net/procertification)



# AN UPDATED CURRICULUM

NRCA AND NCCER DEVELOP COMPREHENSIVE ROOF SYSTEM INSTALLATION TRAINING

BY AMY STASKA





*“Do you have a curriculum you can recommend for my local trade school so it can start a roofing program?”*

*“We’re starting an apprenticeship program and need a curriculum; do you have something we can use?”*

*“I’ve been working with the community college in my town and they’re willing to let me to teach a class; can I get a plan and materials?”*

**N**RCA has been asked these questions (and many others) from roofing professionals over the years. NRCA staff usually would respond by outlining comprehensive programs and suggesting resources, but developing a complete curriculum had not been feasible.

However, in 2019, the National Center for Construction Education & Research, a nonprofit educational foundation affiliated with the M.E. Rinker Sr. School of Building Construction at the University of Florida, Gainesville, presented a partnership proposal to develop such a curriculum. NCCER is a well-established organization with training for more than 70 trades. Although NCCER had a roofing curriculum, it only addressed asphalt shingle roof systems.

During the past two years, NCCER and NRCA members and staff have met with roofing subject matter experts to create a comprehensive roofing curriculum related to all major roof systems installed in the U.S. A new opportunity for training roofing employees now is in the works.

### **NCCER Roofing Curriculum**

The new materials include textbooks, instructor notes, slide decks and tests for all three parts of the curriculum: Core, Level 1 and Level 2.

Core is relevant to construction in general. Level 1 modules are designed to be completed in about 180 hours and address general roofing topics. These modules primarily are knowledge-based; only a few include performance requirements. Level 2 modules will be system-specific, and each includes performance tasks. The Level 2 curriculum is in final stages of development, but the total hours are estimated to be between 160 and 185 hours, satisfying apprenticeship requirements.

Following are modules within each package:

#### Core

- Basic safety
- Introduction to construction math
- Introduction to hand tools
- Introduction to power tools
- Introduction to construction drawings
- Introduction to basic rigging
- Basic communication skills
- Basic employability skills
- Introduction to material handling

#### Level 1

- Introduction to roofing
- Roofing safety\*
- Fall-protection orientation
- Drawings in roofing
- Introduction to steep-slope roofing
- Introduction to low-slope roofing
- Substrates, decks and roof insulation\*
- Sheet metal in roofing\*
- Rigging practices\*

*\*Denotes included performance requirements*

#### Level 2

- Asphalt shingle roof systems
- Clay and concrete tile
- Wood shakes and shingles
- Slate
- Metal panel and metal shingles
- Thermoplastic roof systems
- EPDM roof systems
- Built-up roof systems
- Polymer-modified bitumen roof systems
- Liquid-applied roof systems

Spray polyurethane foam roof systems  
Service and repair

Natalie Hasty, a team member and NCCER technical writer, says:

“I think one of the most striking things about writing the roofing curriculum is how much history, culture and science has gone into the industry to make it what it is today. Whether we think about roofing on a basic level or hyper-technically, there are years of information and adaptation impacting our perceptions. Even the earliest human beings had to consider a roof over their heads—that’s how rich of a history this craft has.

“Another exciting aspect of learning this trade is how much the knowledge gathered is immediately relevant. There is nothing like getting a visual representation of course fundamentals while driving through a neighborhood or to a grocery store.”

The new, roofing-specific Level 1 curriculum is complete and available, and Level 2 will arrive in Spring 2022.

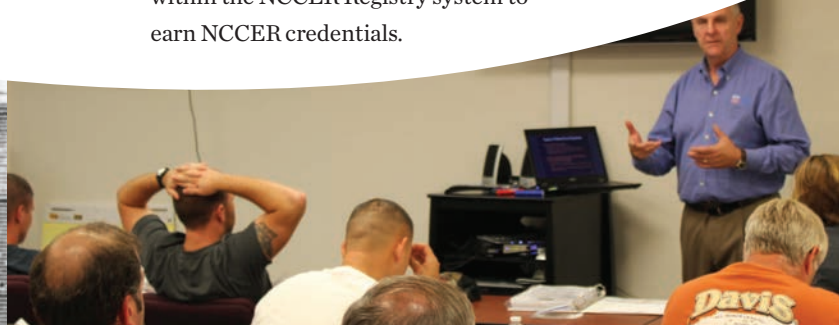
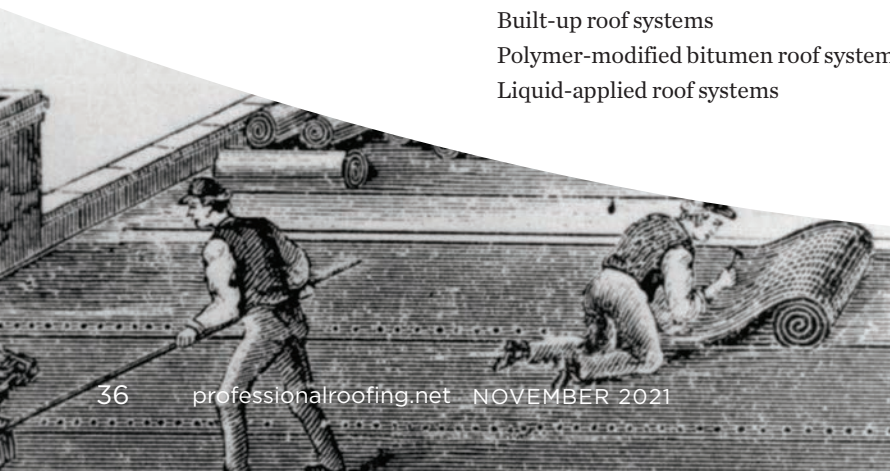
## Performance requirements

Hands-on training is essential for any construction-related program. As mentioned, some Level 1 programs include hands-on performance requirements, as do all Level 2 programs (see the figure). In this case, there are three tasks a trainer should observe from each participant to satisfy module requirements. These may be completed in a shop, training center or on a job site.

## Who can teach the curriculum?

Anyone can teach the NCCER curriculum. Access is unrestricted and can be purchased from Pearson, an education publishing company that coincidentally grew out of a British construction company formed in the 1840s.

Although anyone can purchase the curriculum and teach it, participants must complete their training within the NCCER Registry system to earn NCCER credentials.



## The NCCER Registry

Two main aspects of the NCCER Registry are benefits and requirements.

### Benefits

When your organization is part of the NCCER Registry, participants' accomplishments will be recorded in a national registry so their training and accomplishments can be verified throughout their careers. Participants will receive credentials—showcased through digital badges—for each module they successfully complete. They also can earn a low- or steep-slope roofer credential when they complete modules required for those designations.

These benefits, though direct to participants, also are good for organizations. Roofing companies can track and tout their employee training, which is helpful for internal record keeping and marketing to potential customers. Trade schools, community colleges and other programs also can lean into this data to demonstrate success stories. High school students, particularly those in technology programs, value accumulated credentials and will be attracted to programs that offer such opportunities.

### Requirements

Organizations that want participants to be part of the NCCER Registry must be Accredited Training Sponsors and have certified Craft Instructors. According to NCCER's website, [nccer.org](http://nccer.org): "A Craft Instructor is an individual who has successfully completed the Instructor Certification Training Program (ICTP) conducted by an NCCER Master Trainer with current credentials and is authorized to teach the NCCER curriculum. Craft Instructors must meet the following qualifications: Experience at a minimum journey or technician level in their area of expertise OR a minimum of three years' experience as

a certified teacher in a vocational/technical construction or maintenance-related training program."

More information about the processes of becoming an Accredited Training Sponsor and Craft Instructor and thereby being part of the NCCER Registry can be found on the NCCER website or by contacting John Esbenshade, NRCA's director of workforce development, at [jesbenshade@nrca.net](mailto:jesbenshade@nrca.net).

## Will this lead to NRCA ProCertification®?

The NCCER curriculum was developed with an installer's career path in mind, beginning with education and ending with certification. The breadth of the curriculum was designed and intended to help prepare an individual to pass NRCA's ProCertification exams.

NRCA's ProCertification exams are not related to the NCCER curriculum; however, individuals will learn and practice the skills necessary to install various roof systems. To be truly proficient, of course, requires practice over time. Organization of the modules assumes a passage of time and skills development.

For example, the asphalt shingles module does not require participants begin with roofing experience beyond completion of the Level 1 curriculum. But one of the course objectives is for participants to be able to "apply underlayment

### Performance Profile Sheet



Craft: Roofing Level Two  
Module: 16206  
Module Title: Thermoplastic Roof Systems

TRAINEE NAME: \_\_\_\_\_  
TRAINING PROGRAM SPONSOR: \_\_\_\_\_  
INSTRUCTOR: \_\_\_\_\_

**Rating Levels:**  
(1) Passed: performed task  
(2) Failed: did not perform task  
Be sure to list the date the testing for each task was completed.

**Recognition:**  
When testing for the NCCER Training Program, record performance testing results and submit them to your Training Program Sponsor through the Registry System.

OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
2	Install a fastener and membrane plate into a substrate.				
2	Clean a membrane lap to prepare for seaming.				
2	Use a hand welder to create a seam.				

Please make sure that both the Candidate/Trainee and Performance Evaluator sign and date this form in the space provided.

**Signatures:**  
I, the undersigned, acknowledge the successful completion of the above performance task(s) under the supervision of an NCCER certified Performance Evaluator.

Candidate/Trainee: \_\_\_\_\_ Date: \_\_\_\_\_

Performance Evaluator: \_\_\_\_\_ Date: \_\_\_\_\_

Copyright © 2022 NCCER. Permission is granted to reproduce this page provided that copies are for local use only and that each copy contains this notice.

An example of hands-on performance requirements from the thermoplastic roof systems module





To order the NCCER curriculum and view a list of roofing subject matter experts who helped develop the program, as well as to learn more about TRAC, go to [professionalroofing.net](http://professionalroofing.net).

and an asphalt shingle covering to a wood deck.” Clearly, some time and practice are required with various skills before this objective can be completed.

To pass an NRCA ProCertification exam, participants must be able to complete these skills according to specific certification requirements and within certain time parameters, so completing the NCCER module is not a guarantee one is prepared to get certified; however, it provides more than the basic information.

## Comparing curricula

Roofing professionals familiar with NRCA’s Training for Roof Application Careers

may wonder how or whether these programs work together. Both are designed for novice installers, but that is where the similarities end. Organizations need to know what they want and how they want to accomplish it.

The NCCER curriculum is to be used within structured, classroom-based settings, such as community colleges, trade schools, high schools and apprenticeship programs. NRCA created TRAC for roofing companies looking to efficiently onboard and retain new and inexperienced workers, which is the reason it is an inexpensive, one-time purchase.

The knowledge aspects of the NCCER curriculum are classroom-based and taught in person by an instructor. The knowledge aspects of TRAC are accomplished online and usually self-paced.

TRAC’s hands-on requirements are meant to be conducted in short sessions in a shop and are not as encompassing as NCCER performance requirements.

NCCER’s goal is for participants to complete an apprentice-level program and become fully equipped roof system installers. TRAC takes a fraction of the time and is intended to take a brand-new employee to a level of conversational competence rather than installation proficiency. To use a swimming analogy, TRAC is designed to help people feel comfortable in the water as they learn basic strokes, and NCCER enables them to be able to join a swim team.

The NCCER curriculum requires a trainer for all aspects of training; TRAC does not. However, TRAC online content will be best accomplished with some level of accountability. Both systems need someone to facilitate and sign off on the hands-on aspects of the programs.

## Dedicated trainers

Regardless of your training program of choice, a company without a dedicated trainer is going to struggle to maintain any level of intentional, quality training. Even TRAC will falter if no one at your company follows up with employees.

If you do not have someone at your company in this role, a good first step is to identify someone who exhibits patience, good communication skills and enjoys interacting with people. A trainer to teach the NCCER curriculum or the hands-on skills in either program must have roofing experience and expertise, but someone who will fill a role of setting up training or tracking it may be an office administrator or human resources professional.

Dedicated does not necessarily mean full-time though NRCA encourages companies to consider the value of a full-time role. Whether a company needs a full-time trainer depends on its curriculum and the volume of employees who will be engaging with it.

An effective way of determining who at your company would be suited to this role is sending one or more of your employees to an NRCA Qualified Trainer conference, a two-day virtual or live course designed to help roofing professionals become effective training professionals. Participants learn how to execute training and maintain the training function at a company.

## A game-changer

NRCA is excited about the training potential in the roofing industry. For too long, “we do on-the-job training” has meant “we hire people and put them on job sites where we hope foremen will keep them busy and teach them something.” Obviously, this is not a good method of training, much less attracting and retaining, a younger workforce. TRAC is one step toward retaining employees in the industry, and the NCCER curriculum is a game-changer for trade schools, apprenticeship programs and other classroom-based settings. 📍🔧

**AMY STASKA** is vice president of NRCA University.

# NOW IS THE TIME TO PREPARE FOR THE FUTURE!

New from NRCA: a flexible, easy-to-manage qualified retirement program through Lincoln Financial Group and Merrill Lynch.

- Reduce your fiduciary liability.
- Save on plan administration and maintenance.
- Benefit from competitive aggregate pricing.

**ACT NOW.  
TIME IS MONEY—  
AND THE CLOCK IS TICKING!**

To get a complimentary evaluation of your existing retirement plan (NRCA members only), visit [nrca.net/retirement](https://nrca.net/retirement) or contact Jack Krapf with the Krapf-Bonfim Group at (478) 471-4105 or [Jack\\_Krapf@ml.com](mailto:Jack_Krapf@ml.com).



Photos courtesy of Tri-Craft Roofing, LLC, Milford, Ohio, and Snably, George Photography, Cincinnati.



The 24,000-square-foot pavilion roof is shaped in a wave.



The roof system includes three Bilco® double-leaf smoke hatches.

The venue accommodates 2,700 people indoors and 7,000 people outdoors.







**PROJECT NAME:** PromoWest Pavilion  
at OVATION

**PROJECT LOCATION:** Newport, Ky.

**PROJECT DURATION:** July-December  
2020

**ROOF SYSTEM TYPE:** TPO

**ROOFING CONTRACTOR:** TruCraft  
Roofing LLC, Milford, Ohio

**ROOFING MANUFACTURERS:** The Bilco  
Co., New Haven, Conn.; Dimensional  
Metals Inc., Reynoldsburg, Ohio;  
Versico Roofing Systems, Carlisle, Pa.



An aerial view of the TPO roof system



by 

---

Christine Elle Hanus

---

# THE SOUND OF ROOFING

---

TruCraft Roofing helps build a new  
concert venue in Kentucky

Located on the Ohio River in Newport, Ky., the PromoWest Pavilion at OVATION is the third indoor/outdoor concert venue in the U.S. Modeled after EXPRESS LIVE! in Columbus, Ohio, and Stage AE in Pittsburgh, the pavilion features state-of-the-art lighting, acoustical systems and an innovative reversible, movable stage.

Built in 2020, the \$40 million venue is structurally divided into three concert spaces—an indoor music hall, indoor club and outdoor amphitheater. The pavilion accommodates 2,700 people indoors and 7,000 outdoors. Up to 400,000 music fans are expected to attend nearly 180 events annually.

The project's general contractor, Turner Construction Co., Cincinnati, selected TruCraft Roofing LLC, Milford, Ohio, to install the venue's TPO roof system, metal wall panels and associated metal accessories.

## Safety first

In July 2020, the TruCraft Roofing team began work on the pavilion. Working with a local steel fabricator, John C. Feinauer Welding Inc., Newport, Ky., workers fastened custom, yellow-colored safety posts on the roof's perimeter with wood planks to use as rails to provide a safe warning-edge system.

"Anytime we had to take anything down from the roof, we would use a full tie-off while working at the roof edges," says Aaron Presar, project manager and estimator for TruCraft Roofing. "Turner Construction takes great pride in the safety of its job sites, and as its roofing contractor for this and many other jobs, we also pride ourselves in creating a safe environment for all employees."

The team also worked with American Scaffolding Inc., Cincinnati, to build stair towers for workers to reach all roof areas safely.

Working on the project during the COVID-19 pandemic presented unique safety challenges.

"COVID-19 was in full swing, and along with a tight job-site location, mobilization was difficult at times," Presar says. "We had to adhere to some additional safety standards, but we had a clear set of rules to follow while on-site, and with proper coordination with Turner Construction and our crane subcontractor, Maxim Crane

Works, we were able to safely load the multiple roof areas throughout the project's duration."

## Installation

On the pavilion's roof that is sloped in a wave design, workers mechanically attached two layers of 2.2-inch-thick Versicore MP-H® polyisocyanurate insulation to the steel deck using Versico Insultite fasteners and plates.

Insulation board joints were staggered between the layers. Next, team members adhered 45-mil-thick VersiWeld® TPO membrane in gray with Versico CAV-GRIP 3V adhesive. To complete the 24,000-square-foot roof system, the team installed three Bilco® double-leaf smoke hatches.

TruCraft Roofing team members also installed 5,000 square feet of Dimensional Metals Inc. 16-inch horizontal metal wall panels on the music

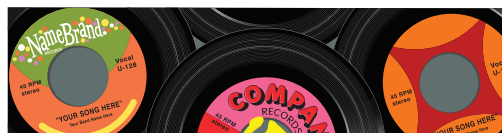
venue and DMI exposed-fastener corrugated WP72 DynaClad® roof panels on two concession stands adjacent to the stage. To complete the project, workers installed roof edge flashings, copings and collector boxes throughout the venue.

## Standing ovation

In December 2020, the TruCraft Roofing team completed work on the PromoWest Pavilion at OVATION project. Although following strict COVID-19 safety restrictions was time-consuming, the team successfully completed the project on time to meet the owner's deadline.

"Working on the music venue's sloped roof was a unique challenge and new experience, but everything laid out well in the end," Presar says. "It was rewarding to work as a team to help build a venue the community—including our team—will get great use out of. In fact, I saw The Killers there in September. It was a rainy night, but the venue looked great. The venue's size made the show seem personal no matter where I stood. It was so cool to see our big 'wave' roof cover the stage." 🎵🎸

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



When artists want to relax and unwind before and after performances, they take breaks in the pavilion's Ovation King Records green room. King Records is the label where James Brown and others recorded songs during the 1950s and 1960s. A mural adorns the walls to honor King Records' legacies Otis Williams, Philip Paul and Bootsy Collins.



To view a video about the PromoWest Pavilion at OVATION, go to [professionalroofing.net](http://professionalroofing.net).



# SAFETY IS NO ACCIDENT.

Keep your employees healthy and safe and your company profitable with NRCA's training programs.

## WANT TO EXPLORE CUSTOM EDUCATION?

NRCA offers customized training programs to meet your company's specific needs and budget. Visit [nrca.net/customeducation](https://nrca.net/customeducation) for more information.



## NRCA UNIVERSITY OFFERS A VARIETY OF SAFETY CLASSES FOR ROOFING PROFESSIONALS ONLINE AND THROUGHOUT THE U.S., INCLUDING:



**New!** One-hour virtual training webinars with NRCA experts that address the latest health and safety topics



**CERTA** Train-the-trainer Authorization and Reauthorization



**OSHA** 10-hour and 30-hour programs



Roofing Industry Fall Protection from A to Z (**RAZ**)

**Coming in 2022:** competent person and EM 385 training, a three-day, in-person program

For more information, visit [nrca.net/course-catalog](https://nrca.net/course-catalog).

# TAKING BACK CONTROL

SUPPLY CHAIN DISRUPTIONS CAN BE MITIGATED BY FAR CLAUSES FOR FEDERAL CONTRACTORS **by** Trent Cotney

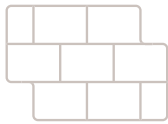
*Editor's note: This article is for general educational purposes only and does not constitute legal advice.*

To say the past year and a half has been “a challenging time” for federal contractors trying to complete projects on schedule would be an extraordinary understatement. During the height of the COVID-19 pandemic, factories shut down, transportation routes closed and material distribution was disrupted throughout the world. This chaos upended everyone’s standard operating procedures, and contractors still are trying to recover.

If your company holds federal contracts and you are experiencing material price increases and delays, you can look to Federal Acquisition Regulation clauses for relief. The language of a few standard FAR clauses—which make up Title 48 of the Code of Federal Regulations—allows for schedule revisions and price adjustments to accommodate circumstances beyond your control. These clauses address force majeure events, which many courts deem as valid during the pandemic.







## Price adjustments

You already have noticed increased prices at supermarkets and gas stations. The same likely is true for your materials and labor. So if you have a fixed-price contract, you may be eligible for price adjustments in some circumstances. The contracting officer may select a fixed-price contract with economic price adjustments built into the contract. These types of contracts only can be used in certain circumstances where the contract amount or incentive is based solely on factors other than cost.

Of particular interest is 48 CFR § 16.203-2—Application, which states the following: “A fixed-price contract with economic price adjustment may be used when (i) there is serious doubt concerning the stability of market or labor conditions that will exist during an extended period of contract performance, and (ii) contingencies that would otherwise be included in the contract price can be identified and covered separately in the contract. Price adjustments based on established prices should normally be restricted to industry-wide contingencies. Price adjustments based on labor and material costs should be limited to contingencies beyond the contractor’s control. For use of economic price adjustment in sealed bid contracts, see 14.408-4.”

This type of provision gives you the opportunity to make price adjustments if labor and material expenses are affected throughout the industry and no fault of your own. Although this language may help, it only applies to new contracts where this contractual vehicle is selected and does not necessarily provide relief in a typical fixed-price contract with no price adjustment opportunity.

To protect yourself from unforeseeable price increases during a project, 48 CFR § 52.249-8—Default provides a fixed-price supply and service clause a contracting officer may add to your contract. It includes the following language: “(c) Except for defaults of subcontractors at any tier, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions,

(7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance the failure to perform must be beyond the control and without the fault or negligence of the Contractor.

“(d) If the failure to perform is caused by the default of a subcontractor at any tier, and if the cause of the default is beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be liable for any excess costs for failure to perform, unless the subcontracted supplies or services were obtainable from other sources in sufficient time for the Contractor to meet the required delivery schedule.”

This language potentially gives you an opportunity to seek compensation for additional costs and/or delays resulting from the materials issue. In particular, the argument that the materials in question were not obtainable from other sources in ample time for you to meet the schedule tracks the language in Subsection d.

For federal contracts, FAR 16.203-4 and 52.216-4 allow for economic price adjustments

when unit prices stipulated in the contract increase or decrease. Usually, the applicable clauses are allowed only in specific situations, such as for work lasting a year or longer. The price change is applicable only for increases of at least 3% and may be limited to a maximum of 10%.

The most pertinent section of FAR 16.203-4 reads as follows: “(c) Adjustments based on actual cost of labor or material. (1) The contracting officer shall, when contracting by negotiation, insert a clause that is substantially the same as the clause at 52.216-4, Economic Price Adjustment – Labor and Material, or an agency-prescribed clause as authorized in subparagraph (c)(2) of this section, in solicitations and contracts when all of the following conditions apply:

- (i) A fixed-price contract is contemplated.
- (ii) There is no major element of design engineering or development work involved.
- (iii) One or more identifiable labor or material cost factors are subject to change.
- (iv) The contracting officer has made the determination specified in 16.203-3.”

FAR 16.203-3 stipulates: “A fixed-price contract with economic price adjustment shall not be used unless the



**FOR AN ARTICLE RELATED  
TO THIS TOPIC, SEE  
“LEGAL EASE,”  
FEBRUARY 2005 ISSUE**



contracting officer determines that it is necessary either to protect the contractor and the Government against significant fluctuations in labor or material costs or to provide for contract price adjustment in the event of changes in the contractor's established prices."

You should make sure to address the issue of material volatility with the contracting officer as soon as possible to determine how to adequately deal with supply chain disruptions. Although pricing remains a concern, material lead time and delays also have plagued federal contractors.

## Material delays

Contractors are reporting wide-ranging supply shortages, which are affecting roofing as well as other industries. In typical circumstances, contractors would be responsible for the inability to secure common materials. But the circumstances surrounding the pandemic are anything but typical. Worldwide supply chain upheaval is affecting every industry, so in many instances, delays can fall under the excusable delay category.

To protect yourself from delays you cannot control, your contracting officer may include this clause, provided in 48 CFR 52.249-14—Excusable Delays: "(a) Except for defaults of subcontractors at any tier, the Contractor shall not be in default because of any failure to perform this contract under its terms if the failure arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of these causes are (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance, the failure to perform must be beyond the control and without the fault or negligence of the Contractor. Default includes failure to make progress in the work so as to endanger performance.

"(b) If the failure to perform is caused by the failure of a subcontractor at any tier to perform or make progress, and if the cause of the failure was beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be deemed to be in default, unless -

- (1) The subcontracted supplies or services were obtainable from other sources.
- (2) The Contracting Officer ordered the Contractor in writing to purchase these supplies or services from the other source; and

(3) The Contractor failed to comply reasonably with this order.

"(c) Upon request of the Contractor, the Contracting Officer shall ascertain the facts and extent of the failure. If the Contracting Officer determines that any failure to perform results from one or more of the causes above, the delivery schedule shall be revised, subject to the rights of the Government under the termination clause of this contract."

These provisions provide you with an argument that increased lead times are a result of excusable delay.

## Contract review

Before performing work on a project, you must scrutinize the contract terms. For instance, bid documents might contain a "no damages for delay" clause that will limit or bar your entitlement to additional compensation for delay-related claims.

The clause is designed to protect the owner from claims made by contractors, as well as contractors from claims made by subcontractors. It prohibits contractors or subcontractors from submitting delay claims to recover financial losses caused by construction delays. Such delays may be caused by several factors, including those controlled by the owner or contractor.

One example of such a provision is: "The Contractor shall not make a claim for delay damages in the performance of this contract resulting from any act or omission to act of the Owner or its representatives and agrees that any such claim shall be fully compensated with an extension of time to complete the work as provided herein as the sole and exclusive remedy."

If you are aware of such a provision before entering into a contract or performing work, you can understand the effects these provisions may have on your work and adjust your bids or work accordingly.

## Final advice

After a contract is executed, relying on existing regulations or contract provisions may provide you with a legal claim or a Request for Equitable Adjustment, but often negotiation and creativity are required to seek relief from the current supply chain crisis. 🌀🔍

---

**TRENT COTNEY** is CEO of Cotney Attorneys & Consultants, Tampa, Fla., and NRCA's general counsel.



## MANUFACTURER NEWS

### Owens Corning featured on “Inside the Blueprint”

**Owens Corning**, Toledo, Ohio, was featured on “Inside the Blueprint” Aug. 22. Airing on Fox Business Network and Bloomberg International, “Inside the Blueprint” creates educational content with partners focused on innovations, technology and solutions for the built environment.

Recorded at Owens Corning’s headquarters in Toledo, the segment highlights the technologies, innovations, research and development of the Owens Corning Total Protection Roofing System.® The segment also shows how a high-performing roof system supports comfort and energy efficiency while contributing to curb appeal. The segment can be viewed at [owenscorning.com](http://owenscorning.com).

### TAMKO® Building Products extends rewards program

**TAMKO Building Products LLC**, Galena, Kan., has extended the purchase window for The Heritage Proline™ Challenge, a rewards program that challenges roofing contractors to try Heritage Proline Titan XT™ and StormFighter IR™ shingles and pays cash back on qualifying purchases. Roofing contractors now can receive cash back rewards on purchases of Titan XT and StormFighter IR shingles made through Dec. 31. Program details are available at [tamko.com/challenge](http://tamko.com/challenge).

In addition, TAMKO Building Products and JobNimbus have partnered to offer new discounts to contractors enrolled in The TAMKO Edge. All roofing contractors enrolled in the program will receive a waived orientation fee, and TAMKO Certified Contractors can access JobNimbus discounts for roofing business tools, including customer account management, marketing emails, project management features, lead and job tracking, task management and workflow automation. Additional information about The TAMKO Edge program is available at [tamko.com/edge](http://tamko.com/edge).

### GAF partners with Good360 for disaster relief

**GAF**, Parsippany, N.J., and Good360, Alexandria, Va., a global leader in product philanthropy and purposeful giving, have expanded their partnership to establish a new community redistribution center to provide disaster relief support in the Gulf region.

The new GAF + Good360 Community Redistribution Center is in Mobile, Ala., and serves as a hub that enables Good360 to rapidly respond to disasters by sourcing highly needed goods and distributing them through a network of diverse nonprofits that support communities in need.



As part of the partnership, GAF is offering its 60,000-square-foot Mobile warehouse rent-free to Good360 to make donated goods available to nonprofits when and where they are needed

most. Although the warehouse will broadly serve those in need, the location is central to many states typically affected by natural disasters, including hurricanes, tornadoes and floods. Having a dedicated hub in the Southeast will enable Good360 and its partners to more quickly and effectively help vulnerable communities rebuild after natural disasters. Good360 and its local partners already have begun using the facility to deploy products, including roof shingles donated by GAF, to areas in Louisiana hit by Hurricane Ida.

“We are incredibly proud to expand our partnership with Good360 to support disaster resiliency in the Gulf region,” says Jim Schnepfer, GAF’s CEO. “A key tenet of our GAF Community Matters social impact program is to help communities prepare for and respond to disasters, which includes helping to build infrastructure and critical resources and providing much-needed products that can be deployed to aid in response and long-term recovery.”

### SOPREMA® to open facility in Texas

**SOPREMA Inc.**, Wadsworth, Ohio, has announced plans to open a 63,000-square-foot multipurpose building envelope supply facility in Carrollton, Texas, in early 2022.

The facility will stock and sell SOPREMA Group-branded building materials and related accessories, including SOPREMA, Chem Link and DERBIGUM. The warehouse will feature a sales counter, product showroom, training classrooms, business offices, and hands-on demonstration and training spaces. This will be SOPREMA’s third such location in the U.S., joining similar facilities in Doral, Fla., and Pompano Beach, Fla.

## DISTRIBUTOR NEWS

### ABC Supply presents Ken Hendricks awards

**ABC Supply Co. Inc.**, Beloit, Wis., presented Ken Hendricks Awards to Joe Ganhadeiro, branch manager for ABC Supply’s Fall River, Mass., location, and Don Willard, branch manager for ABC Supply’s Bethel Heights, Ark., location, during its Founders’ Celebration picnic Sept. 15.

The award is presented annually to associates who exemplify commitment to ABC Supply’s character and seven core values in honor

continued on page 50





## EVENTS

### NOVEMBER

9

#### **CERTA Train-the-trainer**

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

9-11

#### **71st Annual MRCA Conference and Expo**

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

9-12

#### **NRCA's Fall Committee Meetings**

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

16-17

#### **NRCA's Virtual Qualified Trainer Conference**

NRCA  
Online  
Contact: Jared Ribble  
jribble@nrca.net or (847) 493-7526  
nrca.net

### DECEMBER

14-15

#### **NRCA's Virtual Qualified Trainer Conference**

NRCA  
Online  
Contact: Jared Ribble  
jribble@nrca.net or (847) 493-7526  
nrca.net

## NRCA NEW MEMBERS

All America Construction Services, Sunrise, Fla.  
Austinite Roofing & Restoration, Austin, Texas  
Avocet Design & Consulting LLC, Albuquerque  
Biniek Roofing LLC, Mount Holly Springs, Pa.  
Blanchflower Construction Co., Leominster, Mass.  
Bonn Roof Care, Eugene, Ore.  
Building Envelope Contractors Inc., Simi Valley, Calif.  
Calloway Roofing, Orlando, Fla.  
Castillo and Co., Harlingen, Texas  
CC&A Services LLC, Daphne, Ala.  
CD Strong Construction, Western Springs, Ill.  
Cecil Jennings Construction, Athens, Ga.  
Central Roofing and Restoration LLC, Dallas  
Cross Timbers Roofing, North Chesterfield, Va.  
Crown Design Builders, North Miami, Fla.  
Diamond Everley Roofing Contractors, Lawrence, Kan.  
Dynamic National, Centennial, Colo.  
Elite Roofing & Waterproofing Inc., Oakland, Calif.  
Fontenot & Sons Roofers Inc., Marksville, La.  
Fortified Roofing LLC, San Antonio  
Gate17 Architecture, Wall, N.J.  
Go Roof Tune Up Inc., Riverside, Calif.  
Graduate Contracting, Louisville, Ky.  
Grecca Roofing & Construction Inc., San Diego  
Heartland Homes Remodeling & Roofing, Hallsville, Mo.  
J. Alexander Weatherproofing Inc., Orange, Calif.  
JGA Roofing Systems, Waco, Texas  
Keating Roofing and Sheet Metal, Charleston, S.C.  
Kneeland Brothers LLC, Saint Helens, Ore.  
Kosarek Construction Co., West Palm Beach, Fla.  
Legacy Contracting, Louisville, Ky.  
LGW Restoration, Fishers, Ind.  
Little Concepts Inc., d.b.a. Empire Construction, Edmond, Okla.  
Metro Roofing & Construction Co. Inc., Estero, Fla.  
Nester, Wilmington, Del.  
Phoenix Exterior Solutions, Huntersville, N.C.  
Pro Roofing Contractor, Norcross, Ga.  
Pro Specialty Services, Eustis, Fla.  
Rebuild Corp., Wheat Ridge, Colo.  
Roger Saffold, Chicago  
Roof Commander, Tavares, Fla.  
Roof Drain Parts and Supply LLC, Holly Hill, S.C.  
Roofing Innovations, Richmond, Va.  
SEC Roofing & Construction Group, Jacksonville, Fla.  
Shafer's Roofing, Kapola, Hawaii  
Southern California Roof Consultants, Rancho Cucamonga  
Tri-State General Construction Inc., Linden, N.J.  
Trinity Commercial Roofing, Aurora, Colo.  
United Brotherhood of Carpenters and Joiners of America, Washington, D.C.  
USA Property Services LLC, Denver

continued from page 48



Ganhadeiro



Willard

of the company's co-founder. Ganhadeiro is a managing partner, has been inducted into the company's President's Club and is well-known as a respectful man who gives back to his community. Willard is a managing partner, has been inducted into the President's Club and was recognized for leading his team of more than 40 associates with integrity and entrepreneurial spirit.

In addition, ABC Supply has opened branches in Centreville, Md.; Redmond, Ore.; and St. George, Utah. ABC Supply operates more than 800 locations nationwide.

## OTHER NEWS

### AccuLynx partners with Acorn Finance

**AccuLynx**, Beloit, Wis., a cloud-based business management software provider, has partnered with Acorn Finance, Sacramento, Calif., an embedded lending marketplace for home improvement financing, to help roofing contractors grow sales and enhance the customer experience by providing financial products and financing options for homeowners.

Through the partnership, contractors who use AccuLynx software can offer customers reliable financing options for roofing projects. Acorn Finance gives contractors the ability to offer lending solutions to their customers directly from AccuLynx without any fees to the contractor.

### RT3 names Innovator of the Year

#### Roofing Technology

**Think Tank**, a group of professionals focused on technology solutions for the industry, awarded the 2021 Innovator of the Year award to Ken Kelly, president of Kelly Roofing, Bonita Springs, Fla., and an NRCA director. The award recognizes a roofing contractor who contributes to the advancement of the industry.



Kelly

"Ken is a visionary leader who embraced the potential technology could bring to his company and the roofing industry," says Anna Anderson, CEO of Art Unlimited, Angora, Minn., and RT3 board president. "He fully leveraged technology to automate many of the processes in his company, doubling the size of his business without adding additional staff."

A founding board member of RT3, Kelly shares his knowledge to help others in the industry. He has hosted contractors at his company to demonstrate how Kelly Roofing uses technology daily.



TAMPA, FL

MOBILE, AL

NAPLES, FL

### GUARDIAN® PAVER SYSTEM

Severe wind and weather require an outstanding paver system. Hanover's Guardian® Paver System has been designed for the most intense conditions, withstanding high wind speeds and providing superior uplift resistance.

**HANOVER**  
Architectural Products  
www.hanoverpavers.com • 800.426.4242

## THE INDUSTRY ONLINE

ATAS International has made available “Testing and Specifying Metal Roofs in High Wind Areas,” an **online continuing education course**. Available via BNP Media’s Continuing Education Center at [continuingeducation.bnpmmedia.com](http://continuingeducation.bnpmmedia.com), the course teaches users how to identify types of metal roof panels and their performance capabilities; analyze the effects of high winds on building envelopes; and optimize metal roofing specifications for safety and durability.



The Roofing Alliance has shared a **video** to commemorate the organization’s 25th anniversary. Available at [roofingalliance.net](http://roofingalliance.net), the video showcases interviews with past presidents, including Melvin Kruger, Reid Ribble and Tom Saeli.

## UP THE LADDER

ABC Supply Co. Inc. has named **Jeff Leyden** vice president of residential new construction sales.

Mule-Hide Products Co. Inc. has named **Chuck Miller** territory manager for Central California.

OMG® Roofing Products has named **Eric Frazier** market manager. Petersen has named **Mike Weis** vice president, sales and marketing.

**SILICONE THAT LASTS DECADES.  
INTEGRITY THAT LASTS A LIFETIME.  
Don't settle for anything less.**



**PMSILICONE** PROGRESSIVE MATERIALS  
SILICONE ROOFING SYSTEMS  
[PMSILICONE.COM](http://PMSILICONE.COM)

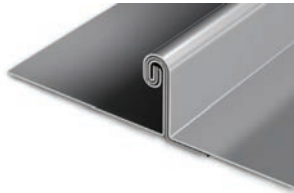
## Increase profits by better managing your construction labor

**Workyard's** construction time tracking helps capture accurate time data using the industry's most precise GPS tracking—saving you payroll costs and providing the data you need to run even more profitable projects. See for yourself and sign up for our free 14-day trial using the QR code.



## TITE-LOC metal roof system: performance and style

PAC-CLAD® | **Petersen's** TITE-LOC metal roof system combines structural performance with architectural aesthetics. TITE-LOC panels are mechanically seamed in the field to 90 or 180 degrees. The PAC-CLAD 70% PVDF finish is covered by a non-prorated 30-year warranty. Panels are available in 46 colors on steel and aluminum. Most colors meet LEED®, ENERGY STAR® and cool roof certification requirements. For more information, visit PAC-CLAD.com or call (800) PAC-CLAD.



## SpeedStand speeds up jobs

Get more done on your jobs with efficient fall protection engineered to save worker labor. Speed-Stands from **Quicksilver Engineering** set up instantly, are spaced 40 feet apart and meet OSHA requirements. The one-piece stands are

made of durable welded steel with rubber pads to protect the roof membrane. To see why SpeedStand has been the industry standard for 18 years, call (800) 460-7579 or visit [qe-1.com](http://qe-1.com).

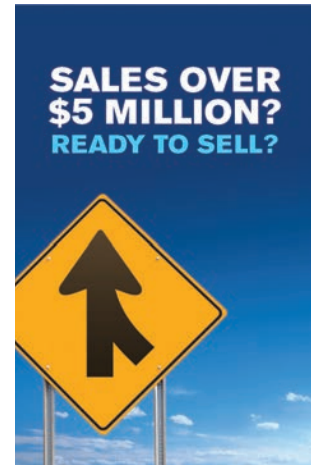
## It's not just what you know but who you know. You need to know Dave.

What is your true value? Would you just like to know what's out there? Do you have estimating software experience? Don't make a career change until you speak with **Dave Peterson**. Dave has helped hundreds of roofing professionals obtain better jobs, get the pay they deserve, get better working conditions and move up the career ladder. If you are considering a change, contact Dave at [dave@onlinepcg.com](mailto:dave@onlinepcg.com) or (800) 269-7319, or visit [onlinepcg.com](http://onlinepcg.com). All information is confidential; fees are paid by the employer.



## 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](mailto:acquisition.pr@gmail.com). All responses will be kept confidential.



## Polystick® XFR is a dual-purpose underlayment

This underlayment features our patent-pending Burn-Shield Technology,™ which offers fire resistance capable of achieving the highest level of fire ratings. **Polystick XFR's** superior protection against fire spread and penetration resistance makes it an ideal underlayment for metal roof systems such as steel and copper and similar materials. Learn more at [polyglass.us/xfr](http://polyglass.us/xfr).



## Advertiser Index—NOVEMBER 2021

*Professional Roofing* would like to take this opportunity to THANK OUR ADVERTISERS, and we encourage you to do the same by letting them know you saw their advertisements in your association publication. Visit [professionalroofing.net](http://professionalroofing.net) for an interactive advertiser index.

Advertiser	Website	Phone number	Page number
A.C.T. Metal Deck Supply 	<a href="http://metaldecksupply.com">metaldecksupply.com</a>	(800) 894-7741	22
Carlisle SynTec 	<a href="http://carlisesyntec.com">carlisesyntec.com</a>	(800) 479-6932	2
CNA 	<a href="http://cna.com/nrca">cna.com/nrca</a>	(312) 822-5356	27
GAF 	<a href="http://gaf.com/rewards">gaf.com/rewards</a>	(877) 423-7663	56
Georgia-Pacific Gypsum 	<a href="http://gp.com">gp.com</a>	(800) 283-5547	23
Hanover Architectural Products	<a href="http://hanoverpavers.com">hanoverpavers.com</a>	(800) 426-4242	50
In-O-Vate	<a href="http://dryerjack.com">dryerjack.com</a>	(561) 743-8696	19
Malarkey Roofing Products 	<a href="http://malarkeyroofing.com">malarkeyroofing.com</a>	(800) 545-1191	9
Mule-Hide Products Co. Inc. 	<a href="http://mulehide.com">mulehide.com</a>	(800) 786-1492	18
NRCA ProCertification®	<a href="http://nrca.net/procertification">nrca.net/procertification</a>	(800) 323-9545	33
NRCA Retirement Program	<a href="http://nrca.net/retirement">nrca.net/retirement</a>	(800) 323-9545	39
NRCA ROOFPAC	<a href="http://nrca.net/advocacy/roofpac">nrca.net/advocacy/roofpac</a>	(800) 338-5765	6
NRCA University	<a href="http://nrca.net/course-catalog">nrca.net/course-catalog</a>	(800) 323-9545	43
Progressive Materials LLC 	<a href="http://pmsilicone.com">pmsilicone.com</a>	(812) 944-7803	51
Versico Roofing Systems 	<a href="http://versico.com">versico.com</a>	(800) 992-7663	55

# STACEY LYTTON



**WHAT IS YOUR POSITION WITHIN YOUR COMPANY?** I am chief operating officer of Horch Roofing, Warren, Maine.

**WHAT IS THE MOST UNUSUAL ROOFING PROJECT OF WHICH YOU HAVE BEEN A PART?** Given our coastal locations, Horch Roofing gets asked to bid and produce roofing work on a fair amount of private islands.



As you can imagine, accessing them is challenging. During a project on Cranberry Island, we had to have

perfect timing to land a barge on a beach, transport materials and workers using an all-terrain forklift, and carry debris off the island onto the barge using large bags.

**WHY DID YOU BECOME INVOLVED IN THE ROOFING INDUSTRY?** I had been in the hospitality industry most of my life. Tired of working nights and weekends with no holiday pay or vacation, I started looking for something that offered daytime work Monday through Friday. I wanted to work for a growing company and be challenged but

also have time for my family. I found what I was looking for, and it just happened to be a roofing company. As many of us in the industry say, roofing just kind of happens to you.

**WHAT WAS YOUR FIRST ROOFING EXPERIENCE?** Volunteering to install a roof system on a Habitat for Humanity® Re-Store, a nonprofit store and donation center. I was assigned to cut starter shingles to stagger the installation pattern and lug them up the ladder to hand them off.

**WHAT IS YOUR ROOFING INDUSTRY INVOLVEMENT?** Horch Roofing is actively involved with NRCA. I'm enrolled in NRCA University's Future Executives Institute and have participated in Roofing Day in D.C. I also am a member of National Women in Roofing and attend trade shows, seminars, conferences and webinars to further my industry and management knowledge.

**WHAT WAS YOUR FIRST JOB?** My family owned an inn when I was younger, so my first job was helping clean the rooms between guests on the weekends.

**WHEN YOU WERE A CHILD, WHAT DID YOU WANT TO BE WHEN YOU GREW UP?** I wanted to be the first female athlete to play Major League Baseball.

**WHAT IS YOUR FAVORITE STRESS RELIEVER?** Reading—I'm a huge historical fiction reader.

**PEOPLE WOULD BE SURPRISED TO KNOW ...** I hate berries of all sorts and I was in the U.S. Army.

**WHAT SONGS ARE YOU LISTENING TO OVER AND OVER?** Our production team has an affinity for Disney songs. Unfortunately, I usually end up with one of them stuck in my head. "You're Welcome" from the movie "Moana" is most contagious.

**MY FAVORITE PART ABOUT WORKING IN THE ROOFING INDUSTRY IS ...** The comradery among roofing professionals

**WHAT'S THE MOST EXCITING/ADVENTUROUS THING YOU'VE DONE?**

Class 5 whitewater rafting on the Penobscot River in Maine



**WHAT'S YOUR FAVORITE ROOFING MATERIAL TO WORK WITH? WHY?** Asphalt

roofing is my favorite material for no extraordinary reason other than I know the products and the installation so well.

**WHAT DO YOU CONSIDER YOUR MOST REWARDING EXPERIENCE?**

My most rewarding experience is watching Horch Roofing and its employees grow as a company and individuals. We have achieved so much together.



**WHAT IS YOUR FAVORITE FOOD?**

Tacos! There are so many different varieties, and I love them all.

**IF YOU COULD MEET ANY HISTORICAL FIGURE, WHOM WOULD YOU MEET? WHY?**

Viktor Emil Frankl was an Austrian neurologist, psychiatrist, philosopher, author and Holocaust survivor. He founded logotherapy, a school of philosophy that describes a search for a life meaning as the central human motivational force.

After reading about his concentration camp experience, his story lingers in the back of my mind. It's a story of daily atrocities and suffering but also one of monumental triumph and self-awareness. He wrote: "When we are no longer able to change a situation, we are challenged to change ourselves."



# INTRODUCING VERSICO'S CAV-PRIME PRIMER

## No More Primer in a Pail!

Available in CAV-PRIME V-150 Primer, CAV-PRIME TPO Primer, and CAV-PRIME Low-VOC EPDM & TPO Primer, Versico's CAV-PRIME system features primer in a pressurized cylinder for faster application and less waste. The CAV-PRIME backpack, applicator attachment, and 3-foot extension gun make applying primer up to 3 time faster than dunking a roller in a pail.



**BUILDING VALUE**

800.992.7663 | [www.versico.com](http://www.versico.com)

# Reinvest in your business like never before



**GAF** Rewards

© 2021 GAF 10/21

## Get there with GAF Rewards

To reinvest in your growing business, join GAF Rewards today. Earn points based on your qualifying GAF purchases and redeem them to reinvest in tools, morale, safety gear, roofing material — whatever matters most to you. And from March 1 through September 30, 2021, earn an extra point at every standard membership tier! Find details and sign up today at [gaf.com/rewards](https://gaf.com/rewards)

A **stañdard** INDUSTRIES COMPANY

We protect what matters most™



GAF Rewards is open to individuals and professional roofing contractor, builder and remodeler companies. U.S. only. Points earned may vary based on membership tier. GAF reserves the right to audit all claims. Cannot be combined with any other promotion or offer unless specified by GAF. Visit [gaf.com/rewards](https://gaf.com/rewards) for complete terms and conditions, special offers and qualifying GAF products.