The Only Magazine Dedicated to the Effects of Weather and Climate on Roofing

ROOFING ELEMENTS METAL ROOFING MAGAZINE SPECIAL SECTION

www.roofingelementsmagazine.com SUMMER 2025 • Vol. 5, Issue 2

ARMA TECH REPORT

FALL PROTECTION DURING ROOF CLEANING

AWARD-WINNING ASPHALT ROOFS

ROOF TARPING SAFETY



3 NWIR Update

Changing the Narrative About Women In the Roofing Industry

4 Joe Knows

How the Pros Do Pipe Flashing

- 6 Supplier News
- 8 Safety Basics for Construction Workers
- Storm Season Roof Tarping Safety Guidance from OSHA

ROLOSHIELD

10 Fall Protection During Roof Cleaning

12 Award Winners ARMA Recognizes Excellence In Roofing

14 Technical Report Storage and Application of Asphalt Roofing Shingles in Hot Weather

ON THE COVER:

Urban Grind Roofing LLC - Grand Pinnacle Project won Gold from the Asphalt Roofing Manufacturers Association's 2025 Excellence in Asphalt Roofing Awards. PHOTO COURTESY OF ARMAJURBAN GRIND ROOFING LLC.

SE LEVIS PRIME SA ON YOUR NEXT ROOFING PROJECT

DING COMPONEN

Call to place your order today! (877) 838-0393

400 Burkholder Drive, Ephrata, PA 17522 (877) 838-0393 www.levisbuildingcomponents.com **NWIRUPDATE**

BY KATIE BODIFORD, CAE EXECUTIVE DIRECTOR, NATIONAL WOMEN IN ROOFING

CHANGING THE NARRATIVE WOMEN IN THE ROOFING INDUSTRY

hen I was walking around the show floor at the SkillsUSA competition last year, I met a young woman

that had just completed her project for the roofing portion of the competition. A softspoken yet vibrant high schooler, she carried a confidence many young women lack at that age. I asked her why she had chosen to go into the trades for a profession. Her response? "Why not?" We both grinned and I asked her where she had first been introduced to that potential career path.

She told me the story of growing up the daughter of a mason. She mentioned that she liked the idea of working with her hands but then said, "I was always told I could be whatever I wanted if I just tried hard enough." It was such a simple, yet powerful, concept.

Having spent the past couple decades in the construction and building material space, I'm never surprised to hear about a woman succeeding in this industry. What does boggle my mind is when I mention that I run National Women in Roofing (NWIR) and the first response is usually, "Women? In Roofing?" It's then that I kick into gear.

In an industry historically dominated by men, NWIR is leading the charge toward a more inclusive, innovative, and resilient roofing workforce. Founded to support and advance the careers of women in all aspects of roofing, we are transforming the industry by fostering community, mentorship, education, and advocacy.

And, as the roofing industry faces labor



shortages, attracting and retaining diverse talent is more important than ever. NWIR opens the door for women of all ages to see roofing as a viable, rewarding career helping to fill vital roles and bring fresh perspectives to the table.

One major way that NWIR helps women in the roofing industry is through a robust education program. Through mentorship programs and matching, leadership training—both at the local and national levels—and technical education, NWIR invests heavily in the growth of its members. This empowers women to rise through the ranks, develop useful new skills, and take on leadership roles within their companies and the industry at large.

As NWIR continues to grow, so does its impact. The organization isn't just supporting women; it's reshaping the industry to be stronger, smarter, and more sustainable. "We're excited to tackle several project areas this year in hopes of introducing the next generation of young women to the trades. Girls' camps, the roofing portion of SkillsUSA as well as working with the charity Dress for Success. NWIR is always looking for ways to open doors while also doing good for their communities," said Christee Roberson of Graham Roofing and current NWIR Chair.

Anyone that has been in the roofing industry for some time knows it's impossible to overlook the impact that women are having in creating a stronger, more diverse workforce. But, we still have a long way to go. This was made clear to me when my high school son's career tech teacher asked students to share what their parents did for a living. When my son Jacob said, "My Mom runs the National Women in Roofing association," the female instructor balked and said "Women in roofing? Nah, that's a man's job." Needless to say, it only strengthened my resolve in creating opportunities for young women to find their way into the trades.

I think I'm going to take a play from the playbook of the young woman I met at the roofing competition. The next time someone questions women in roofing, I'll simply respond, "Why not?"

Whether you're a contractor, supplier, or executive, investing in the advancement of women through NWIR is a powerful step toward a more successful future. For more information, visit nationalwomeninroofing. org.



PIPE FLASHING HOW THE PROS DO IT Part 1 of a 5-part flashing series

hen thinking of pipes, the first thing that probably comes to mind is plumbing inside wall cavities of a building or home. However, pipes are also commonly found protruding from a rooftop—penetrations made through

the roof to allow pipes to vent noxious gases and odors from equipment in the building or home into the air. Pipes can also help bring air in and out of a building or home to keep it properly ventilated.

Pipes are vital to a building's health, but it is also critically vital to properly flash or waterproof the pipe penetration to prevent moisture and water incursion into the structure. As many home or building owners are painfully aware, unwanted or uncontrolled moisture can cause damage to people and/or property, and lead to mold growth that requires expensive and time-consuming remediation efforts.

STEPS TO FLASH A PIPE

Using CertainTeed SmartFlash ONE; CertainTeed Flintlastic SA Cap; and CertainTeed Flintlastic SA NailBase:

1. First, get your field membrane in place, cutting a hole to accommodate the pipe.

2. When you're ready to flash in, start by roughing up the pipe.

3. Then, prepare the polyester fabric reinforcement. Wrap the fabric around the pipe, measuring with a 2" overlap.

4. Once you have that cut, cut "fingers" into the bottom half of the fabric. This will allow the fabric to radiate around the pipe.

5. Next, we need our target patch, which will sit on top of the fingers. You'll take 6" on each side, overlapped by 2" in the middle. Simply cut out fabric to accommodate the pipe.

6. You can tape off the edges and pipe approximately 1" beyond the reinforcement. This allows for a clean finish. Now we're ready for resin.



7. SmartFlash ONE is thick and can be applied easily with a brush or roller without dripping. First, apply the resin around the pipe and onto the base at approximately 30 wet mils thick.

8. Then, lightly press in your finger flashings.

9. Now fully cover the fabric with resin, making sure to put resin in the 2" overlap. You should not see any fabric.

10. Next, press in your target patch. Again, fully coating the surface and overlapping area with resin.

11. For full warranty coverage up to 20 years, give this between 2 to 4 hours to dry and then come back with a final coat that is approximately 30 wet mils thick.

12. While not required for warranty, but if desired for aesthetics, broadcast CertainTeed color-matched granules into the wet resin.

Joe Thompson is a key member of the CertainTeed Commercial Roofing Technical Services team and leads installer training courses, which are held throughout the U.S.



I always use CertainTeed. They have good reps, and they are good at standing behind the few problems we've ever had. I trust the product too, but the thing I'm most impressed with is the representatives.

Alford Roofing, Melbourne, KY

Built on service. Strengthened on trust.

From reliable products with powerful warranties to an intuitive digital toolkit and expert support, we're here to help you grow your business and deliver exceptional results.

www.certainteed.com/credentialing-program





0



Leslie Quintanilla of Houston, pictured at the center holding the \$2,500 check, has been awarded the scholarship to attend Texas Technical Trade School. Also pictured are staff members, with S-5!'s Partner Development Manager, Kim Reichert, standing to the left of Leslie.

S-5! & NATIONAL WOMEN IN ROOFING AWARD SCHOLARSHIP TO HOUSTON NATIVE

S-5!, the global leader in metal roof attachment solutions, in partnership with National Women in Roofing (NWIR), have announced Leslie Quintanilla of Houston as the recipient of their \$2500 scholarship. This support will help her in her pursuit of an HVAC certification at Texas Technical Trade School.

With three years of hands-on experience in the construction industry, Quintanilla has developed a deep appreciation for the skilled trades. Her desire for continued growth and professional development has inspired her to further her education in HVAC—a field she considers essential to her long-term career goals.

The NWIR & S-5! Scholarship was created to support women seeking educational opportunities in the skilled trades. Through this initiative, S-5! and NWIR aim to provide financial assistance and mentorship to help women on their journey toward successful careers in the trades, ultimately contributing to the overall advancement of the construction industry.

Part of S-5!'s core vision is to educate and participate in the industry as contributors, thought provokers and leaders—to be catalysts for positive change and growth, impacting the community through service, leadership and charitable giving. NWIR is a volunteer-driven organization dedicated to supporting and advancing the careers of women.

S-5! and NWIR identified Quintanilla as a candidate who aligns with their shared vision. In addition to the financial award from S-5!, she will receive a oneyear NWIR membership and personalized career mentorship to support her educational and professional aspirations.

RICOWI ANNOUNCES FORMATION OF WILDFIRE RESISTANT ROOFING COMMITTEE

RICOWI, Inc. (Roofing Industry Committee on Weather Issues, Inc.; https://ricowi.com) has announced the formation of the Wildfire Resistant Roofing Committee, with the initiative receiving key contributions from Wade Shepherd of Westlake Royal Building Products. The committee, which is co-chaired by Shepherd and Robin Anderson, also from Westlake Royal Building Products, aims to address the critical need for roofing systems that can withstand the increasing threat of wildfires.

The committee was officially introduced at the RICOWI spring conference in Orlando on March 6, 2025, where it received a positive reception and support for its mission. The committee will focus on analyzing the performance of various roofing materials and designs in the face of wildfires, and how building codes can be adapted to improve the resilience of roofing systems across the United States.

Improving the resilience of roofs to wildfires is not only a matter of public safety but also a significant concern for the insurance industry. As wildfires become more frequent and intense, insurance companies have faced the challenge of insuring homes in high-risk regions. By developing best practices and materials in roofing systems that better withstand wildfires, the potential for damage is reduced, which can lead to more stable insurance markets in these high-risk areas. This stability could help insurers avoid nonrenewing policyholders or from raising premiums to unsustainable levels, thus keeping insurance accessible and affordable for homeowners.

The Wildfire Resistant Roofing Committee's mission is to ensure that the best practices and materials in roofing designs not only lead to safer homes and businesses but also support the insurance industry's capacity to offer coverage at reasonable costs. This symbiotic relationship between construction practices and insurance viability is key to fostering resilient communities in wildfire-prone regions.

RICOWI invites all interested parties, including those from the insurance industry, to join this important initiative. Together, we can make a difference in improving the safety and insurability of homes and businesses in areas affected by wildfires.



STORM GUARD ROOFING AND CONSTRUCTION VOLUNTEER WITH HANDSON NASHVILLE

Storm Guard Roofing and Construction, a leader in exterior restoration services, has announced the success of its recent charitable initiative through the Storm Guard Cares program. During their national conference held in Nashville from Jan. 27 to Jan. 30, Storm Guard took time to give back to the local community by volunteering with HandsOn Nashville.

Storm Guard team members came together to support HandsOn Nashville's mission of connecting volunteers with meaningful service opportunities. Through this initiative, Storm Guard owners and their teams from across the country packed bags for those experiencing homelessness-aimed at improving the community, reinforcing their commitment to service beyond the roofing and restoration industry. "Our company is built on the core values of doing the right thing and giving back," said Derrick Hemmelgarn, Director of Marketing at Storm Guard. "The Storm Guard Cares program is an extension of that commitment, and we are honored to have partnered with HandsOn Nashville to make a positive impact during our time in the city."

HandsOn Nashville, a nonprofit organization dedicated to mobilizing volunteers to meet critical needs, welcomed the Storm Guard team's support. Their efforts contributed to various local projects, enhancing the organization's ability to serve the Nashville community effectively.

"Through the generous efforts of almost 100 volunteers, Storm Guard created 400 first aid kits that will be donated to Shower the People, an organization serving the unhoused community of Nashville," shared Volunteer Project Manager, Colin Buesser. Storm Guard's commitment to service will leave an indelible mark on Nashville's underserved communities, and the kits will make an immediate impact on countless individuals experiencing homelessness. HandsOn is thrilled to have partnered with StormGuard and appreciates beyond words the investment of time, effort, and care that has been poured into our community."

Storm Guard remains dedicated to strengthening communities across the

country through volunteerism and corporate social responsibility. The company looks forward to continuing its philanthropic efforts through the Storm Guard Cares program in the years to come.



Self-adhering. High-temp. Go ahead and turn up the heat.

Premium performance you can count on job after job.





Maximum protection against extreme heat, wind-driven rain and ice dams. Ultra HT Wind & Water Seal[®] is engineered to roll out smooth, lay flat and protect your project from the harshest environments. Suitable for both commercial and residential projects, count on Ultra HT for complete piece of mind on your next project!

Ultra HT Wind & Water Seal[®] Features:

- Durable cross-laminated, cool white, non-slip surface
- · Self-adhering and self-sealing around fasteners
- High temperature rated to 250°F
- Suitable for vertical applications under metal wall panels

BUILDING PRODUCTS CORP.

Request a free sample at mfmbp.com or call 800.882.7663.

7

SAFETYUPDATE

SAFETY BASICS

eing a construction worker is one of the most dangerous and potentially fatal jobs. There are roughly 150,000 construction jobsite injuries each year, and one in five deaths among US workers is in the construction industry. But despite bulky safety gear and protocols that is meant to keep construction workers safe, they're still prone to accidents that could cause serious injuries or even be fatal. Here are a few tips to stay safe on the job, and keep your family safe, while you're working in the industry:

UTILIZE SAFETY GEAR AND EQUIPMENT

Suiting up is one of the most important steps before beginning a job. Safety gloves, hard hats, safety goggles, ear plugs, and other necessities should always be worn. Take the few extra minutes to ensure you have on injury preventing gear to keep yourself safe. Be sure to utilize safety technology as well.

The clothes you wear can also be part of your gear. Wear durable clothes that can protect your body from potential hazards. Reflective vests can ensure you're visible if you're working at night or on the side of the road, long sleeved shirts and long pants that cover every inch of your body can protect you from cuts and scrapes, etc. Don't just protect the obvious areas of your body (eyes, head, hands) but keep your entire body safe from danger.

UPDATE YOUR GEAR

Tools are used daily as a construction worker, and after constant use, they're likely to need replacing. Be sure to recognize what tools are worn and which aren't working as they should be and get them replaced. Not only can this make the job go more smoothly but can also decrease your risk of potential injury. Take the time at the beginning or end of the day to assess the condition of your tools and update them when necessary.

TAKE YOUR TIME, DON'T TAKE SHORTCUTS

While your end goal might be to move on to the next job, rushing can not only mean you do a botched job and end up having to come back later but can also put you ask risk. Taking shortcuts can lead to accidents that can put you in a dangerous situation, expose you to hazards, and get you hurt. Take a few extra minutes to be sure the job is done right and safely – you'll end up thanking yourself later.

With experience and wisdom often comes ways to save time and still achieve quality work, however sometimes when it comes to safety, shortcuts are dangerous. Stick to the fundamentals. So, climbing a ladder as you were taught early on, or using a harness when working at higher heights can make a major difference in safety. Following the basics is tried and true.

RECOGNIZE FATIGUE

When working in places with no controlled temperature for hours, it's important to recognize when you need to take a step back from the job. Take a minute or two away from the job to cool yourself down (or warm yourself up). Staying hydrated and fueled up throughout the day can ensure you're in the best physical condition to handle a job. You know yourself best, and if you begin to feel light-headed, over-heated or tired, remove yourself from a potentially dangerous situation until you feel better.

ASSESS BEFORE BEGINNING

Not all jobs are the same, so evaluating the situation before beginning can save you trouble in the long run. Take a few minutes to assess the work area for potential hazards such as slippery surfaces, exposure to dangerous chemicals or wires, temperature changes, etc. Rushing to get into a job to get it done can not only put yourself at risk but can give you more work to do in the end. Inspect the entire area such as cords, equipment, etc. to notice any defects that may be a hazard. By taking a look at what the job requires, you can avoid dangers and will be able to determine what gear you'll need.

AD+D INSURANCE COVERAGE

AD+D coverage, otherwise known as Accidental Death + Dismemberment insurance is important to protect your family financially if something happens to you. If you're the sole, or only person working in your household, this is especially important for your family to be able to pay bills, cover medical costs, and other expenses. Whether your accident is fatal, or you're stuck in bed recovering or months, the right AD+D insurance can give you and your family peace of mind.

Tip: When you do go shopping for AD+D coverage, make sure you look at the types of accidents covered because not all policies cover all types of accidents.

ROOF TARPING (BLUE ROOF) SAFETY

OSHA FACT SHEET 3926

Reinforced plastic tarps, commonly called "Blue Roofs," provide temporary protection for the roofs of homes and other buildings damaged during severe weather such as a hurricane or tornado. When employees access roofs to install these tarps, they are at risk of falls, electrocutions and other hazards. OSHA recommends the following steps to help keep workers safe.

IDENTIFY THE HAZARDS

ALWAYS avoid electrical hazards!

• Look for downed overhead power lines; treat all power lines as "live."

• WARNING: Generator use can cause "backfeed" — energizing lines that are no longer receiving power from the electrical grid.

• Contact the utility company to ensure lines are de-energized.

• Do not use a metal ladder near power lines or in close proximity to energized electrical equipment.

ASSESS the roof condition/stability prior to allowing employees to start work.

• Do not allow employees to work on top of a damaged roof until after the strength and structural integrity of the roof has been determined.

SELECT the fall protection system(s) employees will use while installing the tarp.

• For low-slope roofs, (a roof with a slope of less than or equal to 4 inches of vertical rise for every 12 inches horizontal length) use conventional fall protection (fall arrest, guardrails, or safety nets) with or without a warning line system; a warning line system with a monitor; or a monitor alone on small roofs (50 ft. or less in width).

• Do not stand on steep roofs (greater than 4 in 12 vertical to horizontal) without using conventional fall protection systems.

Note: Using a rope grab as part of a fall protection system is one example, among others, of equipment that can be used to reduce

the risk of falling. All components of the system, including the harness, rope and rope grab, any connectors and the anchor point must meet applicable OSHA requirements.

INSTALLING THE TARP

• Never install a tarp during a storm while it is windy or raining.

• Use proper protective equipment, such as hard hats and eye protection and/ or other control measures such as chutes and barricaded areas when removing roof debris. This ensures employees on the ground are not exposed to hazards from falling objects.

• Use a roof rake or brush from ground level for debris. If using a ladder, ensure the use of proper safety techniques to prevent falls.

• Whenever possible, avoid getting on the roof when tasks can be done from ladders or other stable platforms.

• When accessing the roof, lean the ladder at a safe angle that is at a 4:1 ratio (one foot away from the building at the bottom for each four feet of ladder length to the roof eave), and make sure the ladder extends three feet above the roof edge.

• Watch for tripping hazards including vent stacks, satellite dishes, lightning arresting components and cables and cleats holding down the tarp.

• Do not walk on a tarp. A tarped roof will be very slippery, especially when wet.

• Watch your step — skylights and other openings that have been tarped over will not be obvious to someone walking on the roof.

WORKERS' RIGHTS

Workers have the right to:

• Working conditions that do not pose a risk of serious harm.

• Receive information and training (in a language and vocabulary the worker understands) about workplace hazards, methods to prevent them and the OSHA standards that apply to their workplace.

• Review records of work-related injuries and illnesses.

• File a complaint asking OSHA to inspect their workplace if they believe there is a serious hazard or that their employer is not following OSHA's rules. OSHA will keep all identities confidential.

• Exercise their rights under the law without retaliation, including reporting an injury or raising health and safety concerns with their employer or OSHA. If a worker has been retaliated against for using their rights, they must file a complaint with OSHA as soon as possible, but no later than 30 days.

For additional information, see OSHA's Workers page [www.osha.gov/workers].

HOW TO CONTACT OSHA

Under the Occupational Safety and Health Act of 1970, employers are responsible for providing safe and healthful workplaces for their employees. OSHA's role is to ensure these conditions for America's working men and women by setting and enforcing standards, and providing training, education and assistance. For more information, visit www.osha.gov or call OSHA at 1-800-321-OSHA (6742), TTY 1-877-889-5627.

FALL PROTECTION REQUIREMENTS FOR ROOF CLEANING

oof cleaning is necessary preventative maintenance for every building. Unfortunately, it exposes workers to one of the most dangerous hazards found in the workplace: falls from heights. Falls are the third leading cause of fatality in the general industry, and according to the U.S. Bureau of Labor Statistics (BLS), the number of fall fatalities has steadily increased since 2020. Additionally, failing to meet general fall protection requirements has been OSHA's most cited violation for the past fourteen consecutive years.

However, much can be done to fight this problem and turn this trend around. This article will discuss OSHA's minimum requirements for protecting workers on rooftops, which fall protection solutions are most effective, and how to determine which solution will best protect workers.

OSHA FALL PROTECTION REQUIREMENTS FOR ROOFTOP WORKERS

OSHA 1910.28 offers guidance for building owners and employers on what sort of fall protection is required for workers. Rooftop fall protection requirements are primarily determined by two factors: the frequency of the work performed and the proximity to the edge of the roof. (Note: these requirements apply to any walking working surface, but this article will continue referring to rooftops for conciseness.)

OSHA differentiates the frequency of work by infrequent and temporary and regular and routine. Infrequent and temporary work refers to tasks that last two hours or less. Some examples of this type of work include emergency maintenance, fall hazard assessments, or visual inspections. All other tasks are considered regular and routine, or jobs that are part of a daily, weekly, or regular schedule.

A worker's proximity to the roof's edge is the other factor in determining what type of fall protection is required by OSHA. Regular and routine work performed within 15ft of the roof's edge requires active or passive fall protection systems. There is an exception that allows Warning Line (see Graphic A) for infrequent and temporary work performed within 6 feet of the roof's edge.

Less fall protection is required once workers are greater than 15 feet from the roof's edge. At that distance, Warning Line is



Personal fall arrest systems are the other form of active fall protection.

deemed acceptable for regular and routine work. At the same time, no fall protection is required for infrequent and temporary work as long as a safety monitor or other administrative controls are in place.

SELECTING THE MOST EFFECTIVE FALL PROTECTION SOLUTIONS

As stated previously, regular and routine work performed within 15 feet of the roof's edge will require active or passive fall protection systems. Understanding the difference between these solutions and their effectiveness can help determine the most feasible solution for your facility.

Passive fall protection systems are defined as systems requiring no user input to work. They are generally considered more effective than active fall protection systems as they are virtually impossible to misuse or for workers to neglect their use willingly. Guardrail is the most common example of a passive fall protection system. Its effectiveness lies in its simplicity. A building equipped with perimeter guardrail would eliminate almost every fall hazard along the roof's edge. And suppose a building owner is concerned with penetrating roof membrane and the potential damage that could occur. In that case, there are many guardrail options now with non-penetrating ballasted plates that comply with OSHA guidelines.



A warning-line fall protection system. Courtesy of Diversified Fall Protection.

Guardrail does not have to be installed entirely around the perimeter of the roof to be effective. Many organizations create strategic "corridors" comprised of guardrail as a physical barricade to control the navigation path of their workers during roof access. Even with guardrail present, workers should stay as far from the roof's edge as possible.

Active fall protection systems are defined as systems that require active user input. These systems will require an anchorage, body harness, and connection device for each user required to use them. If possible, active fall restraint equipment should be used. An example is a fixed-length lanyard attached to an anchorage shorter than the distance from the anchorage to the roof's edge. These systems help prevent a fall because workers cannot physically reach the roof's edge, thus protecting them from the fall hazard. However, if a worker decides to disconnect from their anchor, not only would they be in violation of OSHA requirements, but they would be at risk of falling with no means of protection.

Personal fall arrest systems are the other form of active fall protection. However, it is important to acknowledge that fall arrest equipment is less effective in keeping workers safe from injury because they do not prevent a fall; it simply mitigates the injury incurred from falling. These also require an anchorage and body harness but utilize a shock-absorbing connection device, such as a lanyard or self-retracting lifeline (SRL). Lanyards and Class 1 SRLs are only permitted when the worker is provided with an overhead anchorage or an anchor point at least as high as the dorsal d-ring on their body harness. If the anchorage is located below the user's dorsal d-ring or, more commonly, at their foot level, only a Class 2 SRL is permitted.

Foot-level anchorages should be avoided unless they are the only feasible option available. Falls that occur with foot-level anchorages, as opposed to overhead anchorages, are subject to increased freefall, generating greater fall forces. Class 2 SRLs are designed and tested to the latest ANSI Z359.14 standard and rated to absorb those additional forces. Standard shock-absorbing lanyards or Class 1 SRLs do not have the capability to absorb the user's fall forces and simultaneously the additional forces incurred from encountering the roof's edge. Class 2 SRLs contain an additional shock-pack located between the SRL block and the user's snaphook connection specifically designed to absorb that additional force, preventing the lifeline from severing during fall arrest.

CONCLUSION

To recap, passive fall protection systems are more effective than active fall protection systems because they prevent users from being exposed to a fall, and don't require them to be specially trained to be protected. Active fall restraint systems hold similar effectiveness but are more vulnerable to user neglect or misuse. Active fall arrest solutions are the least effective form of fall protection as they do not prevent a fall from occurring but are effective at mitigating anticipated injuries. However, if users fail to don their harness properly or are provided the incorrect connection device for their application, they can be subject to unanticipated injuries. With all pieces of fall protection equipment, it is essential for employers to train workers to follow the manufacturer's instructions.

While safety leadership should be well-versed in OSHA minimum requirements to protect rooftop maintenance workers, staying current on regulatory updates, ANSI Z359 general consensus guidelines, and industry best practices can be challenging. It is always recommended to consult with fall protection equipment manufacturers, like Diversified Fall Protection, to ensure the latest technology is provided to workers to give them the best chance of working safely at heights.

Providing fall protection is a team effort where building owners, employers, frontline workers, vendors, and equipment manufacturers must work together to provide effective solutions for anyone performing elevated work. Together, we can prevent falls from occurring—and save lives.

Philip Jacklin is Continuing Education Program Manager for Diversified Fall Protection. He is an AIA continuing ed provider,

QSSP certified, OSHA-30 trained, and has been a partner to the fall protection industry since 2018. Philip has a background in worker advocacy, team leadership, and fostering camaraderie among peers. He enjoys playing music, writing, and spending time in the sunshine with his family in Virginia Beach, VA.



EXCELLENCE IN ASPHALT

ARMA ANNOUNCES WINNERS OF THE 2025 EXCELLENCE IN ASPHALT ROOFING AWARDS PROGRAM

Asphalt Roofing he Manufacturers Association (ARMA) has announced the winners of the 2025 Excellence in Asphalt Roofing Awards. From restoring a historic Queen Anne Victorian home to revitalizing a community amphitheater, this year's projects showcase the versatility, performance, and beauty of asphalt roofing systems.

"We received 92 exceptional submissions this year, with two projects earning bronze medals—a testament to the innovation and dedication within our industry," said Reed Hitchcock, ARMA Executive Vice President. "Each winning project tells a compelling story of resilience, craftsmanship, and the transformative power of asphalt roofing."

The awards recognize outstanding lowand steep-slope asphalt roofing projects across North America, judged in four key categories: Why Asphalt, Project Challenges, Distinction, and Beauty.

Top-scoring projects are awarded Gold, Silver, or Bronze medals, with additional honors available in Best-in-Class categories, such as In the Neighborhood, Commercial/Mixed Use, Craftsmanship, and Technical Difficulty.

GOLD AWARD WINNER:

Urban Grind Roofing LLC – Grand Pinnacle Project – Cornelius (Cornelius, North Carolina)

• Project Overview: When the homeowners' roof began to fail, they turned to



Urban Grind Roofing LLC – Grand Pinnacle Project – Cornelius (Cornelius, North Carolina)

Urban Grind Roofing LLC for a durable replacement. After a comprehensive consultation, they chose CertainTeed's Grand Manor[®] Shingles in Brownstone, known for their luxurious, slate-like appearance. The project featured expert craftsmanship due to the roof's challenging 16/12 pitch. The team removed the old roof and installed 34 custom-fabricated metal valleys and crickets to prevent dead valleys. Asphalt shingles were ideal for this complex job, offering versatility and performance. CertainTeed's Grand Manor® Shingles provide Class 4 impact resistance, Class A fire resistance, algae protection, and wind resistance up to 130 mph. Their lightweight nature facilitated installation, and their striking appearance significantly enhanced the home's design. Urban Grind Roofing LLC transformed the roof into a stunning, reliable system, proving that a well-installed asphalt roof can offer peace of mind and style for years to come.

SILVER AWARD WINNER:

GPD Flatroofing Ltd. - Penn-co



GPD Flatroofing Ltd. – Penn-co Office Steinbach (Steinbach, Manitoba)

Office Steinbach (Steinbach, Manitoba)

• Project Overview: The Penn-co Office headquarters in Steinbach, Manitoba, now boasts a state-of-the-art roofing system expertly completed by GPD Flatroofing Ltd. The building features a complex roof with varying heights and elegant entrance canopies. To meet architectural and environmental demands, the contractor utilized high-performance Polyglass materials and a heat-welded asphalt application, ensuring strength and durability to withstand Manitoba's harsh winters. This innovative system allowed for yearround installation, even in colder temperatures, thanks to its staggered base and cap layers that provided overlapping seams. This robust design accommodates thermal expansion and contraction while providing long-term protection and ease of maintenance. Despite facing challenges such as high upstands and numerous structural penetrations, the team's attention to detail led to a successful execution. The completed roof showcases technical excellence and enhances the building's

architectural appeal, exemplifying how asphalt roofing can achieve functionality and aesthetic value.



Cool Roofs – The Grand Manor on Johnson Road (Germantown, Tennessee)

BRONZE AWARD WINNERS:

Cool Roofs – The Grand Manor on Johnson Road (Germantown, Tennessee)

• Project Overview: Cool Roofs transformed The Grand Manor on Johnson Road in Germantown, Tennessee, with CertainTeed's Grand Manor® Shingles in Weathered Wood, enhancing the home's beauty and providing lasting protection. The project faced challenges in preserving the property's landscaping, driveway, and swimming pool. To safeguard these features, Cool Roofs implemented a jobsite protection system and used a lift machine, along with two dedicated on-site managers overseeing every phase of the project. Initially considering slate or shake roofing, the homeowner chose asphalt shingles for their traditional charm, lighter weight, and impressive weather resistance. The multi-layered design added visual appeal while requiring less structural reinforcement. With custom-fabricated metalwork for valleys and transitions, this installation exemplifies roofing excellence, combining durability and enhanced curb appeal.

Stonebridge Roofing, Energy & Exteriors – The Bailey House (Fernandina Beach, Florida)

• Project Overview: Stonebridge Roofing, Energy & Exteriors meticulously restored The Bailey House, an 8,000-square-foot Queen Anne Victorian built in 1895, located in Fernandina



Stonebridge Roofing, Energy & Exteriors – The Bailey House (Fernandina Beach, Florida)

Beach's historic district. This iconic residence required special permitting to meet rigorous historical preservation standards, adding complexity to the project. The roof restoration involved navigating a steep-pitched roof while protecting delicate stained-glass windows and custom copper flashings for chimney crickets. Limited site access made material loading and debris removal particularly laborintensive, further showcasing the team's dedication and expertise. For this landmark property, the roofers installed GAF Timberline[®] HDZ[™] Shingles in Slate ideal for their durability and aesthetic compatibility. These shingles deliver high wind resistance and modern technology, preserving the home's heritage. The Bailey House restoration meets the highest standards, resulting in a historically preserved, weather-resistant roofing system designed to last for generations, praised by the community and industry alike.

BEST-IN-CLASS AWARD WINNER: CRAFTSMANSHIP CATEGORY

Elevated Roofing and Siding – Stubbs Park Amphitheater (Centerville, Ohio)

• Project Overview: As part of the comprehensive renovation of Stubbs Park in Centerville, Ohio, Elevated Roofing and Siding provided a transformative roofing solution for the amphitheater, balancing functionality, durability, and aesthetic



Elevated Roofing and Siding – Stubbs Park Amphitheater (Centerville, Ohio)



appeal. This project addressed the aging roof while integrating upgrades to sound, lighting, and accessibility systems. The curved, angular design of the amphitheater posed unique challenges, which were met with precision and creativity. Owens Corning TruDefinition® Duration® Shingles in Driftwood were selected for their flexibility and weather resistance, essential for Ohio's unpredictable climate. These shingles conform to the complex geometry while minimizing structural strain and harmonizing with the park's surroundings. The roofing system safeguards against heavy rain and snow, ensuring long-term protection with minimal maintenance. Extraordinary craftsmanship and innovative problem-solving resulted in a striking roof that embodies the park's vision of a welcoming community space, making the Stubbs Park Amphitheater a cultural centerpiece.

ARMA honored the winners at the 2025 International Roofing Expo and awarded a monetary prize (Gold – \$2,000; Silver – \$1,000; Bronze – \$500), an official ARMA certificate, promotions on ARMA's website and social media platforms, authorityboosting materials, and national and local trade media exposure.

TECH BULLETIN

STORAGE AND APPLICATION OF ASPHALT ROOFING SHINGLES IN HOT WEATHER

By The Asphalt Roofing Manufacturers Association (ARMA)

Editor's Note: The Asphalt Roofing Manufacturers Association (ARMA) has prepared many technical reports to aid roofers in the proper installation of various asphalt roofing systems. ARMA [https://www.asphaltroofing.org/] has granted Roofing Elements Magazine permission to publish this report for the benefit of roofers.

INTRODUCTION

sphalt shingles have been successfully used in various climate zones around the world, including in desert and tropical regions, for over one hundred years. Improved application efficiency and enhanced long-term shingle performance can be achieved by following the recommendations outlined below for hot weather storage and application.

STORING SHINGLES PRIOR TO USE

It is recommended to store shingles in a cool, dry place. Always follow the manufacturer's precautions about stacking bundles and pallets; stacking bundles too high or doublestacking pallets can indent or deform the shingles over time, particularly in warm weather or when shingles are exposed to direct sunlight. If higher stacking is necessary, use racks or bins so that the weight of the bundles on the upper pallets does not bear down on the bundles below.

Systematically rotate all stock so the material stored the longest will be the first used. (i.e., first in, first out).

Although after installation asphalt shingles are designed to withstand direct exposure to the hot summer sun, before installation it is best not to store the products in direct sunlight for any extended length of time. Extended storage in direct sunlight may also cause weathering and weakening of the packag-



As roof temperatures vary, pressure settings of pneumatic tools should be adjusted to avoid overdriving or underdriving fasteners.

ing materials, making handling the bundles awkward before installation.

REMOVING SHINGLES FROM BUNDLES

Although shingles have a release film to prevent them from sticking to each other in the package, direct sun can cause the sealant to become more aggressive, making the shingles more challenging to separate and remove from the bundle. It is important to follow the manufacturer's recommendations when removing shingles from a warm bundle.

PLACING SHINGLES ON A ROOF PRIOR TO APPLICATION

Shingles should be kept in bundles or handled in pairs and

*DISCLAIMER OF LIABILITY: This document was prepared by the Asphalt Roofing Manufacturers Association and is disseminated for informational purposes only. Nothing contained herein is intended to revoke or change the requirements or specifications of the individual roofing material manufacturers or local, state and federal building officials that have jurisdiction in your area. Any question, or inquiry, as to the requirements or specifications of a manufacturer, should be directed to the roofing manufacturer concerned. THE USER IS RESPONSIBLE FOR ASSURING COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

Nothing contained herein shall be interpreted as a warranty by ARMA, either express or implied, including but not limited to the implied warranties of merchantability, fitness for a particular purpose or non-infringement. IN NO EVENT SHALL ARMA BE LIABLE FOR ANY DAMAGES WHATSOEVER, including special, indirect, consequential or incidental damages or damages for loss of profits, revenue, use or data, whether claimed in contract, tort or otherwise. Where exclusion of implied warranties is not allowed, ARMA's liability shall be limited to the minimum scope and period permitted by law.

stacked squarely to maintain shingle sealant alignment with the release tape until applied. Asphalt shingles become more flexible in hot weather, so avoid rough handling that may tear the shingles or break the laminating adhesive bond on multi-layer shingles.

Keep bundles as flat as possible while loading them onto the roof. Do not drape shingles or bundles over the hips or ridges. Keep shingles in their packaging until ready to be applied.

DURING APPLICATION

Many roof installations use self-adhered water protection membranes, either at the eaves or other critical roof areas. The adhesive underside of these membranes will be more aggressive in hot weather, so extra care may be required when installing the membranes. In hot weather applications, the asphalt coating on the shingles will soften. Wear soft-soled footwear to minimize foot slippage possibilities and scuffing of the shingles. On steeper roofs, and areas with the greatest amount of foot traffic, such as valleys, use reasonable care to minimize scuffing.

For comfort reasons as well as the safety reasons noted above, on forecasted hot and sunny days, it is advisable to install shingles early in the day before the temperature reaches its maximum. One should also plan the roof installation to "work around the sun," i.e., work on the west–and south-facing slopes in the morning and the east-and north-facing slopes later in the day. Many professional roofing contractors have learned that kneeling or sitting on a pad can protect their bodies from the hot roof surface and reduce shingle scuffing.

In hot weather, shingle pieces trimmed for hips, ridges, rakes, and valleys can quickly adhere to shingles already applied if left on the roof with their sealant strip facedown. Use good housekeeping practices to minimize shingle debris on the roof.

As roof temperatures vary, pressure settings of pneumatic tools should be adjusted to avoid overdriving or underdriving fasteners.

Most asphalt shingles are manufactured with a thermally activated asphaltic sealant, which bonds them together once they are applied to the roof and exposed to a sufficient period of heat from sunlight.

If existing shingled roofs require repairs or other rooftop work during hot, sunny weather, the shingles will be susceptible to the same scuffing as noted above. Because the shingle sealant bond on existing roofs is likely to be fully activated, shingle removal or repair will be difficult without causing shingle tearing and damage at the sealant interface. In such cases, waiting until the shingles are cooler may be best before attempting shingle repair. If waiting is not feasible, spraying a light mist of water on the shingle surface can help it cool and potentially facilitate the separation of the sealant bond. Caution: A wet roof surface can be slippery, so take the appropriate precautions.



Keep shingles in packaging until they are ready to be applied.