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ROOFING ELEMENTS

METAL ROOFING MAGAZINE SPECIAL SECTION

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**TECHNICAL
BULLETIN**
LOW-SLOPE
ASPHALT
ROOFING
RECYCLING

**SOLAR
ATTACHMENT
OPTIONS**

**FIRE-RESISTANT
ROOFING**

ARMA ROOF AWARDS
OUTSTANDING ASPHALT ROOFS

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A view of the Double Dome, an award-winning roofing project from Priddy Roofing and Exteriors. Photo courtesy of ARMA/Priddy Roofing and Exteriors.



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MFM EARNS CLASS A FIRE RATING FOR ULTRA HT WIND & WATER SEAL® IN W.U.I. AREAS

MFM Building Products [www.mfmbp.com], a manufacturer of a full envelope of waterproofing and weather barrier products for the building industry, recently achieved a listing for the company's Ultra HT Wind & Water Seal® underlayment from the California State Fire Marshall for use in Wildland Urban Interface (W.U.I.) areas.

W.U.I. is the zone of transition between unoccupied land and human development. It is the line, area or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. This area is considered the most critical area of wildfire risk.

Ultra HT is a 45-mil, self-adhered roofing underlayment for use in steep-slope roofing and re-roofing installations. The product features a durable cross-laminated polyethylene top film with a traction coating for excellent walkability. The specially formulated mastic is rated to 250°F for high temperature roofing applications.

Ultra HT has met the standards for use in W.U.I. areas when used in conjunction with Class A asphalt shingles. Listing No. 8180-2433:0001. Category: 8181 Non-Wood Roof Covering/Assemblies. Approval: Class A listed roof covering assembly according to the applicable requirements in ASTM E108.

This rating is in addition to previous fire approvals that include UL 790 and ASTM E108/ICC-ES AC188. The product also carries additional approvals for general roofing.

COMPLETE ROOFING'S CHAD CONLEY NAMED A TOP ROOFING EXPERT

Complete Roofing has announced that its CEO and Co-Founder, Chad Conley, has been named one of Fixr's 26 Top Experts in the Roofing Industry for 2026. The recognition, published by Fixr.com—one of the nation's leading home improvement and remodeling resources—highlights Conley's sustained contributions to the roofing profession and his commitment to raising standards across the industry.

This marks the second consecutive year Conley has earned the distinction, placing him among a select group of professionals recognized for their achievements, leadership, and dedication to advancing the roofing trade.

"I'm honored that Fixr has recognized me again this year," said Conley. "But this reflects the work of the entire team at Complete Roofing, who fight every day to make sure homeowners get the quality repairs they deserve. Without them, I'm not standing here accepting this."

A United States Marine Corps veteran, Conley served with distinction from 2002 to 2008 in support of the Global War on Terrorism. Upon completing his service, Conley channeled that same discipline and commitment into co-founding Complete Roofing in 2008. Under his leadership, the company has grown into a trusted name in residential insurance restoration roofing across Metro Atlanta and Central Georgia, specializing in storm damage claims, roof replacements, and gutter systems.

As a passionate consumer advocate, Conley is committed to ensuring that homeowners receive the highest quality roof replacements achievable within



Chad Conley, CEO and Co-Founder, Complete Roofing.

their insurance coverage. His approach combines deep technical knowledge with a willingness to challenge the status quo on behalf of property owners navigating complex insurance claims.

POLYGLASS USA RECEIVES CLASS A CAL FIRE RATING

Polyglass U.S.A., Inc. has received California State Fire Marshal (CAL FIRE) Building Materials Listing (BML) approval for select roofing systems designed for use in wildfire-prone areas.

The approval includes both steep-slope and low-slope roofing assemblies that meet California Wildland-Urban Interface (WUI) requirements. These systems have been evaluated for fire resistance and are now listed as compliant for use in applicable regions.

The approved assemblies incorporate Polyglass underlayments and membranes designed to contribute to fire-resistant roof performance. Products included in the listings are intended for use in residential and light commercial applications where compliance with CAL FIRE standards is required.

For steep-slope applications, assemblies using self-adhered underlayments have been approved for use beneath various roof coverings, including metal and asphalt shingles. These systems meet Class A fire classification requirements when installed as specified.

For low-slope roofing, approved assemblies include configurations utilizing SBS-modified bitumen membranes. These systems meet applicable fire-resistance criteria for commercial roofing applications under California code requirements.

The CAL FIRE BML approval confirms that the listed roofing systems meet established testing standards for fire performance in designated wildfire exposure zones. This designation allows the approved systems to be specified in projects requiring compliance with California WUI building codes. ●

TECH BULLETIN

LOW-SLOPE ASPHALT ROOFING RECYCLING

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.*

WHAT IS LOW-SLOPE ASPHALT ROOFING?

Many commercial and industrial buildings in North America are covered with durable asphalt roofing membranes: either traditional multi-layer built-up roof assemblies (BUR) or modified bitumen roof membranes (MB), which are typically installed with two plies. Although low-slope asphalt roof membranes provide a very long service life, at some point they will need to be replaced. When removed, the asphalt and components can be recycled or re-purposed to avoid ending up in landfills.

WHAT ARE THE COMPONENTS OF LOW-SLOPE ASPHALT ROOFING MATERIALS?

Built-up roofing is usually made with oxidized asphalt similar to the asphalt used to manufacture shingles. Modified bitumen roofing materials are manufactured using a softer grade of asphalt



modified with a polymer. Both BUR and MB roofing systems generally contain more asphalt than asphalt shingles. Low-slope asphalt roofing materials are made using two primary types of reinforcements: fiberglass mat and/or polyester fabric.

WHAT ARE THE BENEFITS OF RECYCLING LOW-SLOPE ASPHALT ROOFING?

The primary benefit of recycling low-slope asphalt roofing is that the material contains a relatively large percentage of asphalt, a high-value raw material. This recycled asphalt is particularly useful in road construction, where asphalt binder is a significant cost component. Aside from the economic benefit, some asphalt pavement specifications prescribe polymer modification as a way to enhance pavement durability and mitigate fracture and rutting issues. Building owners would benefit by avoiding roof removal disposal costs. Low-slope asphalt roof recycling can create jobs for recycling locations, reduce costs for paving or other uses, and allow building owners to make a positive environmental contribution.

WHAT IS THE STATUS OF LOW-SLOPE ASPHALT ROOFING RECYCLING?

Low-slope asphalt roofing recycling is currently not prevalent in North America but is more established in Europe. Initially, low-slope products there were recycled into roads, an excellent option given the high asphalt and moderate mineral content. Some European roofing manufacturers have developed other methods that provide product circularity, or the recycling of 'old' asphalt roofing into new MB roofing products.

WHAT ARE THE CHALLENGES TO RECYCLING OR RE-PURPOSING LOW-SLOPE ASPHALT ROOFING MATERIAL?

Unlike asphalt shingles, BUR and MB roofing assemblies exist in a wide range of system configurations. Some are mechanically attached to the substrate, some are fully embedded in asphalt or otherwise solidly fused together, and various insulations and coverboards could be used beneath the membrane itself. An asphalt membrane is one contiguous material over possibly many hundreds of square feet.

In the roof replacement process, low-slope roof membranes are routinely separated during removal into manageable pieces; the entire roof is not removed in

***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.

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one huge sheet. Those pieces are disposed of in a dump truck or in dumpsters along with all the other roofing components such as fasteners and insulation. For the BUR and MB materials to be recycled, contractors would need to exercise care with material separation, with the high-value asphalt membrane pieces being sent to a separate disposal container.

Once received at the recycling facility, materials are typically collected in a staging pile prior to further processing. The large low-slope pieces may require a few size reduction steps to achieve the 'finished' particulate sizing needed for use in pavement or other end uses. The relative softness of the polymer-modified asphalt in MB waste roofing can require processing at lower temperatures or in smaller batches to avoid gumming up the size-reduction equipment. Processing MB pieces in conjunction with relatively harder asphalt shingles can also aid in process efficiency.

WHAT OTHER OPTIONS MIGHT BE AVAILABLE FOR RECYCLING LOW-SLOPE ASPHALT ROOFING BESIDES ITS USE IN PAVEMENT?

In addition to use in pavement, waste BUR and MB membranes have the potential to be used as:

- an ingredient in cold patch formulations designed for pothole repair,
- an additive in the manufacture of new roll roofing products,
- aggregate for the base layer in road construction, and
- a dust-suppression road covering for gravel/dirt utility roads.

HOW CAN PROFESSIONAL ROOFING CONTRACTORS AND RECYCLERS HELP IN THE RECYCLING PROCESS?

Recyclers could align themselves with roofing manufacturers and local commercial roofing contractors to determine the supply availability of low-slope asphalt roofing materials. Professional

contractors can help by separating the asphalt roof components from other removed roof debris. Contractors could also promote the recycling option to building owners when discussing roof

replacement, thus working together to make an informed decision regarding tear-off material diversion from landfills. ●



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SOLAR ATTACHMENTS

CHOOSE THE RIGHT APPROACH FOR YOUR ROOF SYSTEM

BY LINDA SCHMID

Solar installations are becoming a more frequent component of roofing projects. Whether for a retrofit or new construction, roofers are increasingly expected to understand not just how to install a roof, but how to integrate a solar array without compromising performance. While panels and inverters tend to get the attention, the attachment method is a big part of what determines long-term success. Every attachment decision affects three critical areas: how loads are transferred, how water is managed, and how the roof system accommodates movement.

For roofers working across multiple roof types—asphalt shingles, metal, single-ply, tile, and others—the challenge is choosing an attachment strategy that works with the roof rather than against it. At a basic level, solar attachment is about creating a reliable load path into the structure, maintaining the roof's ability to shed water, and allowing the system to perform as designed over time.

THE LOAD PATH

Every solar array adds weight and introduces wind uplift forces, and those forces must be transferred through the attachment system into the building structure in a predictable way. On most roof types, this means anchoring into rafters, trusses, or structural decking rather than relying on the roofing material alone.

Mary Jean Wasley of AceClamp emphasizes the importance of a consistent load path that does not introduce new failure points into the roof system. Different roof systems approach this differently. Asphalt shingle and single-ply systems (TPO, PVC, or EPDM) and through-fastened metal roofs typically rely on flashed, through-fastened mounts secured into framing members, while tile roofs often use stand off systems or replacement tiles designed to bridge above the roof surface. Other metal roofs, particularly standing seam profiles, may allow for clamp-based systems that avoid penetrations entirely.

PENETRATING VS. NON-PENETRATING SYSTEMS

Most roof types require solar array attachment types that rely on roof penetrations. When properly detailed, those penetrations can be durable and watertight. Asphalt, single-ply, and tile systems, as well as through-fastened metal roofing all depend on flashed mounts that tie into the structure below, but the effectiveness of those mounts depends heavily on how well they are integrated into the roofing system.



Universal PV Asphalt Solar Clamp.
PHOTO COURTESY OF ACECLAMP.

Standing seam metal roofs are a notable exception, as certain profiles can accommodate clamp systems that attach directly to the seams without penetrating the panel surface. These systems rely on mechanical engagement with the seam and must be matched to the specific panel profile to perform as intended. Some clamps, like those from AceClamp, are adjustable for various standing seam profiles. Self-locking technology is not only labor saving but also enables clamps to withstand high winds, vibrations and thermal expansion of roof panels.

FLASHING AND SEALANT

Even when penetrations are required, the long-term success of the installation depends far more on flashing than on sealant. Across all roof types, a reliable installation follows a layered approach in which the underlayment provides backup protection, flashing directs water away from the penetration, and sealant acts only as a secondary safeguard. Don Peronace of AceClamp points out that relying on sealant as the primary defense is one of the most common causes of failure. On

RESOURCES

- AceClamp, <https://www.aceclamp.com>
- National Roofing Contractors Association (NRCA) <https://www.nrca.net>
- Metal Construction Association (MCA) <https://metalconstruction.org>
- Solar Energy Industries Association (SEIA) <https://seia.org>

asphalt shingle roofs, integrating flashed mounts with the shingle courses so water is directed around the penetration is best practice. On single-ply systems, it may involve welded or mechanically attached flashing components designed specifically for the membrane type. Tile systems require careful detailing to preserve drainage paths beneath the tiles while still securing the attachment to the structure below.

RAIL VS. RAIL-LESS

Another key decision in choosing your solar array attachment system is whether to use a railed or rail-less system. Railed systems use horizontal rails attached to the roof, providing flexibility in panel layout and making it easier to accommodate irregularities in the roof surface. This flexibility can simplify installation but comes with the tradeoff of additional components, added weight, and more attachment points. Rail-less systems attach panels directly to mounting hardware, reducing material and often improving installation efficiency when conditions are predictable. The choice between these systems typically comes down to how much adjustability is needed in the field versus how much simplicity and speed are desired during installation.

ACCOUNTING FOR MOVEMENT

Movement is another factor that cannot be overlooked. All roofing systems experience some degree of movement, whether from thermal expansion, structural loading, or environmental conditions. Metal roofs, in particular, can expand and contract significantly, while single-ply membranes can flex and shift. Solar arrays, however, are relatively rigid, which means the attachment system must accommodate differences in movement between the roof and the array. Attachment systems should not restrict the natural movement of the roof. On standing seam systems, properly designed clamp attachments can secure the array without locking the panel in place, while on other roof types, careful spacing and hardware selection help reduce stress at connection points.

MATERIAL COMPATIBILITY MATTERS

Material compatibility also plays a critical role in long-term performance. Solar mounting systems often combine aluminum rails, steel fasteners, coated panels, and various flashing materials, and if those components are not compatible, galvanic corrosion can develop over time according to Wasley. This is particularly important on metal roofs but is also relevant for fasteners and flashing used on other systems. It is important

to use components designed to work together, especially in environments where moisture, salt air, or agricultural conditions can accelerate corrosion.

COMMON INSTALLATION PITFALLS

Despite the variety of systems available, many installation issues trace back to a relatively small number of common mistakes. Attachments that miss structural members or rely on decking alone can compromise load transfer. Over-reliance on sealant instead of properly integrated flashing can lead to leaks. Poor placement of penetrations in areas where water concentrates increases the likelihood of failure, and failure to account for roof movement can introduce long-term stress into the system. In addition, using incompatible materials can create corrosion problems that may not appear until years after installation. Most of these issues can be avoided through proper planning and coordination between roofing and solar installation teams.



Non-penetrating Solar Clamp. PHOTO COURTESY OF ACECLAMP.

CHOOSING THE RIGHT SYSTEM

Choosing the right attachment method ultimately comes down to understanding the roof system and how the solar array will interact with it. Roofers should evaluate the roof profile and determine which attachment methods are appropriate, confirm that loads will transfer effectively into the structure, and ensure that any penetrations are properly flashed and integrated into the roofing system. It is equally important to verify that the attachment method allows the roof to perform as designed, including accommodating movement, and that all materials used are compatible with each other and with the building's environment.

As solar continues to expand across all types of roofing, contractors who understand these attachment principles will be better equipped to deliver durable, high-performing installations. The panels may generate the energy, but the attachment system has an impact on whether the roof continues to perform its primary function—protecting the building—over the long term. ●



FIRE PERFORMANCE

Fire is one of the most serious threats facing commercial facilities today, and optimal roofing materials can help stave off flame spread. Here's how to evaluate your roof for fire performance.

By Ryan Van Wert, Technical Services Manager, FiberTite® Roof Systems, Seaman Corp.

Commercial buildings—often home to critical operations for businesses everywhere—face constant exposure to environmental threats. Among them, fire remains one of the most destructive and difficult to predict.

Across the United States, rooftop fires are an increasing concern¹, driven by factors ranging from severe weather events and nearby wildfires to electrical failures and equipment. While many facility managers focus fire protection efforts on interior systems, one of the most effective opportunities to limit flame spread begins above it all: the roof.

Today's commercial building owners have more roofing options than ever before—but not all roof systems perform the same when exposed to fire. Material composition, system design and fire testing standards all play a role

in determining how a roof will respond in real-world fire conditions. This article examines common exterior fire threats, how commercial roofing systems are evaluated for fire performance, and why material selection can make a critical difference when it matters most.

COMMON EXTERIOR FIRE THREATS TO COMMERCIAL ROOFS

Many of the most common fire threats to commercial roofs originate not from extraordinary events, but from routine building systems and conditions that exist on nearly every facility, including:

Exhaust systems. Commercial and industrial exhaust systems often rely on ductwork that penetrates the roof assembly. Mechanical or operational failures can create ignition sources, while discharged contaminants may

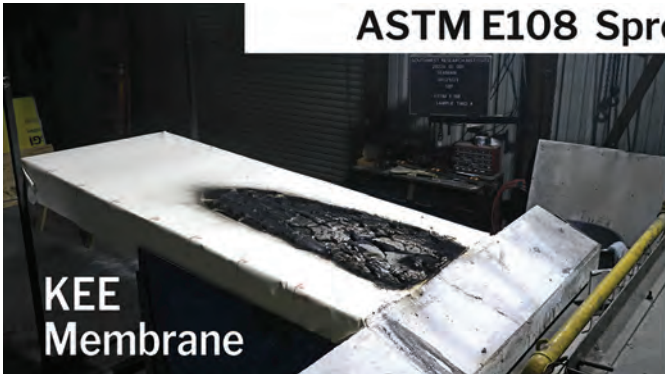
increase fire risk at the roof surface. For example, commercial kitchen exhaust systems can deposit flammable fats or oils onto roofing materials.

Electrical systems. Rooftops commonly house electrical equipment such as HVAC units and rooftop solar panels. Electrical failures—including arc faults, ground faults and short circuits—can serve as ignition sources, particularly when combined with combustible roof components or accumulated debris.

Severe weather events. Certain weather-related events can introduce fire risk to commercial roofs. Lightning strikes during severe storms may directly ignite rooftop materials, while nearby wildfires can generate wind-borne embers. Even when a facility is outside the immediate fire

¹ <https://www.nfpa.org/education-and-research/research/nfpa-research/fire-statistical-reports/warehouse-structure-fires>

ASTM E108 Spread of Flame Test



PHOTOS COURTESY OF FIBERTITE ROOF SYSTEMS

zone, embers landing on the roof can initiate ignition.

Maintenance and repair. Routine maintenance and repair work can unintentionally introduce fire hazards. Hot work, such as arc welding or cutting, may produce sparks or molten metal, while construction trades working on adjacent building systems during installation or renovation can increase the likelihood of accidental ignition.

Excessive debris. Debris buildup on a rooftop can act as fuel during a fire event, even if it is not the initial ignition source. Materials such as dead leaves can ignite quickly, accelerating flame spread and increasing overall fire severity.

RISKS ASSOCIATED WITH COMMERCIAL ROOFTOP FIRES

Commercial rooftop fires pose a few different risks than interior building fires, since commercial roofs typically lack fire detection mechanisms. This means that a fire may go unnoticed and has the chance to spread, slowing fire department response and increasing potential consequences. Rooftops are also not typically equipped with automatic sprinkler systems that can quench flames. Further, wind can accelerate the spread of fire across a roof's surface.

Rooftop fires also pose unique chal-

lenges for emergency responders. Firefighters must access the roof by climbing the structure, and in severe cases, rapid flame spread can compromise structural integrity, leading to risk of collapse and forcing response from a distance.

These are all reasons to remain vigilant about minimizing rooftop fire risk. Facility managers and building owners can enhance the fire readiness of commercial properties by choosing a roof system that demonstrates proven performance under fire.

EXAMINING COMMON TESTING STANDARDS FOR FIRE PERFORMANCE

Two primary test methods are used to evaluate commercial roof systems under fire conditions originating outside the building: ASTM E108 and UL 790. Both test methods are referenced in the International Building Code (IBC), and both involve three primary fire tests:

- **Intermittent Flame test.** This test evaluates the resistance of the roof covering when exposed to intermittent fire conditions. It is required if the roof is installed on a combustible deck.
- **Spread of Flame test.** This test simulates burning embers that have landed on the roof and is required for both combustible and noncombustible decks.
- **Burning Brand test.** This test determines the roof's ability to resist

TPO VS. KEE: REAL-WORLD PERFORMANCE

A recent case study illustrates the performance differences between TPO and KEE. Prolec® GE Waukesha, a prominent power transformer manufacturer supporting critical electrical infrastructure, experienced it firsthand on the evening of Feb. 11, 2023.

That night, a fire broke out at an industrial salvage yard near the company's Goldsboro, North Carolina, facility. The salvage yard housed thousands of wooden railroad ties across more than 20 acres. The ties had been coated with creosote for preservation—and once a fire broke out, this flammable coating accelerated the blaze. As flames intensified, embers launched into the air, many of them landing on the Prolec GE facility rooftop. Portions of the roof included both TPO and a KEE-based roof system (in this case, a FiberTite® roof system).

More than 150 burn holes developed in the TPO section; the KEE portion, by contrast, remained intact. Twenty to 30 soot marks were evident and showed no penetration of the KEE membrane, attributable to the membrane's self-extinguishing properties. Following cleaning and inspection, the KEE portion maintained its full manufacturer's warranty, while the TPO portion of the roof required full replacement.

ignition, fire spread and burn-through. The test is performed by placing a burning brand on the surface of the roof covering and is required for combustible decks.

Based on a roof material's performance under these testing materials, a roof system may be classified under one of three categories:

- **Class A** is the highest fire-resistance rating. A Class A rating is typically a requirement for buildings that may be more at risk for fires or governed by local building codes (for example, a building located in a wildfire zone). Class A systems have been shown to withstand severe fire exposure, offer a high degree of fire protection to the roof deck and do not pose a flying brand hazard.
- **Class B** exhibits moderate fire performance, resisting flame spread up to 8 feet over the designated test time. This rating is applicable to roof coverings expected to stand up to moderate fire exposure. Similar to Class A roof systems, those rated as Class B should not present a flying brand hazard.
- **Class C** designates limited protection against fire. The roof system must resist flame spread up to 13 feet over the designated test time. This classification is intended for light fire exposure, offers minimal fire protection for the roof deck and provides no flying brand hazard.

Roofs rated Class A can be assumed to represent the highest level of protection available—however, despite its stringency, this rating does not necessarily tell the full story of fire performance. Consider that ASTM E108 and UL 790 testing protocols evaluate roof systems as complete assemblies, which include the membrane, insulation, fasteners and other components, each of which can contribute to differing performance under real-world conditions. And even with a Class A rating, there is no requirement that the system *not* burn—only that it burns slowly enough



to limit flame spread within a desired distance during the test duration.

The truth is that material composition can make a significant difference in the event of a real fire. For example, single-ply roof membranes typically used in commercial roof systems are made from a variety of different membranes, including thermoplastic polyolefin (TPO), ethylene propylene diene monomer (EPDM), polyvinyl chloride (PVC) or ketone ethylene ester (KEE). These materials do not all demonstrate comparable fire performance—in fact, some may contribute to flame spread more than others.

Consider TPO. It is a common choice due to its low initial cost, but inherent fire performance is lacking. Independent testing results involving ASTM E108 have shown that TPO membranes can contribute to significant flame spread across a roof. Elsewhere, in an NFPA 701 vertical burn test, one TPO specimen, approximately 5 inches wide by 48 inches tall, exhibited melting and dripping behavior while burning for more than 38 minutes before fully consuming the sample itself.

Conversely, some high-performance roof membranes have demonstrated self-extinguishing properties in similar burn tests and are also proven to minimize flame spread and damage severity in similar roof system tests, supporting increased operational security and risk mitigation. KEE roofs, for example, do not sustain flames, helping to limit fire spread across the

roof. In terms of ignition resistance and flame spread, KEE is the top performer among single-ply membranes, whereas EPDM and TPO rely more on system design to meet high fire ratings.

CONCLUSION

Ultimately, commercial rooftop fires have the potential to wreak havoc on buildings everywhere, and building owners, operators and roofing professionals should seek to minimize the risks. Selecting and specifying high-performance roof materials that can minimize flame spread in the event of a fire can be an effective means to best prepare commercial building envelopes—it can make a major difference. ●

Ryan Van Wert is the Technical Services Manager for Seaman Corporation's FiberTite Roof Systems (www.fibertite.com). He has been in the commercial roofing industry since 2017, following a career in structural design. He holds a master's degree in civil engineering, with a focus on structural engineering, from Norwich University and a bachelor's degree in construction management from Central Michigan University. Ryan has extensive experience in the construction industry, including expertise in building inspections, mold inspections and energy audits, bringing a broad range of technical capabilities to his role.



WASTE MANAGEMENT

Properly disposing of waste materials is important for all contractors to stay legally compliant, safe and provide overall efficiency on a project. Contractors must understand the regulations and best practices for handling a wide variety of waste materials. Let's look at a few ways contractors can dispose of waste properly while staying legally compliant.

ESTABLISH A PLAN

The first step all contractors must take when it comes to waste disposal is to create a plan. The waste management plan for the job site must include the expected types of waste, how to handle materials, the proper disposal of the different materials and the roles of those on the crew when it comes time to dispose of waste. The waste management plan must also include proper procedures for reporting of waste removal from the site. A well-designed plan will ensure that all individuals working on the job site are aware of their responsibilities and will help maintain compliance with all safety regulations.

IMPLEMENT WASTE SEGREGATION

Effective waste disposal begins with proper segregation of materials. Contractors must designate certain areas for different styles of waste. These often include recyclables, organic waste, non-recyclable material and hazardous waste. Proper labeling and providing in depth instructions to workers on how to dispose of the different materials will significantly improve the waste management process. Beginning with segregation of materials helps prevent any cross contamination between materials, allows for debris to go to the proper place for disposal and helps protect the environment.

UTILIZE RECYCLING AND REUSE OPPORTUNITIES

Recycling and reusing materials on job sites not only helps with the environment but can reduce costs for the job at hand. Contractors must identify recyclable materials such as wood, concrete, metal or plastics and have these items set aside in a designated area during the job. Contractors can partner with local recycling facilities for proper disposal of these materials. Additionally, any materials that can be reused such as boards, or concrete, must be set aside in a separately designated area. Even if you can't use these materials on the current job, you

can save them for future projects. Recycling materials is a great process to promote within your business due to the number of clients who want to be as green as possible.

DISPOSE OF HAZARDOUS MATERIALS PROPERLY

Handling and disposing of hazardous materials on job sites requires special attention by those involved. Hazardous materials like paint, asbestos, certain chemicals, freon and solvents require special handling due to legal requirements, protecting workers and environment. Contractors handling these materials must ensure this waste is secured, labeled and transported by licensed hazardous waste removers. All hazardous materials are required to be labeled according to EPA and DOT regulations. These labels must be clearly visible, durable and weather resistant. These labels list the material in the container, the generator's information, accumulation date and the DOT shipping name. It is also important to provide those working with these dangerous materials the proper PPE, gloves, foot and eye protection, hard hats, respirators, ear plugs and full body suits when necessary, so they remain safe during the process. Maintain detailed records of all hazardous materials on the site, according to EPA regulations on how they are being stored and how they are being disposed to eliminate any issue with the EPA or other legal authorities.

Waste management is the responsibility of all people working on the job. Understanding the regulations, recycling strategies and ensuring the safe handling of hazardous waste materials is crucial to keep everyone on the job site safe as well as the environment. By prioritizing these waste disposal steps, contractors can be sure they remain in compliance, are environmentally friendly and can help reduce costs for the project. Staying informed on waste disposal practices is important for all contractors as many laws tend to change on how to be the most efficient and environmentally friendly when it comes to waste management on job sites. ●

Chris Picciano is the President of Area Disposal in Phoenix, Arizona. Area Disposal specializes in making trash disposal easier by offering cost effective dumpster services throughout the Greater Phoenix areas for contractors, homeowners, commercial building owners and much more.

OUTSTANDING ASPHALT

ARMA ANNOUNCES WINNERS OF THE 2026 EXCELLENCE IN ASPHALT ROOFING AWARDS PROGRAM

The Asphalt Roofing Manufacturers Association (ARMA, asphaltroofing.org) has announced the winners of the 2026 Excellence in Asphalt Roofing Awards. From a historic Portland home to a major national museum, this year's winning projects demonstrate the beauty, affordability, and reliability of asphalt roofing across the country.

"We received an impressive range of submissions, with each winner showcasing creativity, precision, and technical skill," stated Reed Hitchcock, ARMA Executive Vice President. "These projects reflect the innovation and craftsmanship that define the asphalt roofing industry, and we look forward to celebrating the winners at the International Roofing Expo in Las Vegas."

The awards recognize outstanding low- and 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: HER Roofing Co. Inc.
– The Settlemier House



GOLD AWARD WINNER:

**HER Roofing Co. Inc. -
The Settlemier House (Portland, Oregon)**

• **Project Overview:** HER Roofing Co. Inc. played a pivotal role in the restoration of the historic 1892 Settlemier House by delivering a solution that balanced preservation and performance. The project included a full shake tear-off and re-roof of a steep-slope system, highlighted by a technically challenging cone roof. Malarkey Legacy® Shingles with Scotchgard™ in Black Oak were selected for fire resistance and historically appropriate appearance. The team installed vertical plywood over 50 feet in the air, custom-fabricated curved wooden gutters, and returned the original copper spire to the top.



**SILVER AWARD WINNER:
Wedge Roofing - California Mid-Century Gothic (Sebastopol, California)**

• **Project Overview:** Wedge Roofing restored a mid-century hyperbolic paraboloid roof rising from a 6/12 pitch to vertical across roughly 6,000 square feet. Owens Corning TruDefinition® Duration® Shingles in Brownwood followed the roof's compound curves, allowing secure fastening on near-vertical surfaces and preserving the sculptural form. The team rebuilt the ridge with



Silver Award Winner: Wedge Roofing – California Mid-Century Gothic

Douglas fir decking and structural plywood, integrated solar-powered and fixed Velux skylights, and installed shingles over steep slopes. Two-ply modified bitumen and silicone-coated flat areas completed the system. The project resolved decades-old leaks and preserved the church's iconic profile.



**BRONZE AWARD WINNER:
Priddy Roofing and Exteriors -
The Double Dome (Mercer,
Pennsylvania)**

• **Project Overview:** Priddy Roofing and Exteriors replaced a roof consisting of 238 unique facets across two interconnected geodesic domes. Owens Corning TruDefinition® Duration® Shingles in Williamsburg Gray provided the flexibility to follow the compound curves while maintaining strong fastening and sealant adhesion. The team installed the roof one facet at a time, with each course measured, cut, aligned, hand-sealed, and hand-nailed. Custom flashings accommodated triangular and irregularly shaped windows, while a perimeter intake and site-built circular ridge vent



Bronze Award Winner: Priddy Roofing and Exteriors – The Double Dome

restored ventilation. The completed roof demonstrates that asphalt shingles can achieve reliability and striking visual impact, even on the most challenging architectural forms.

**BEST-IN-CLASS AWARD WINNER:
COMMERCIAL/MIXED USE CATEGORY
KPost Roofing & Waterproofing – National
Medal of Honor Museum (Arlington,
Texas)**

• **Project Overview:** The National Medal of Honor Museum, designed by Rafael Viñoly Architects, is a tribute to courage and sacrifice, featuring bold architecture and complex geometries. KPost Roofing & Waterproofing installed a high-performing low-slope roofing system, seamlessly integrating a SOPREMA SBS-modified bitumen roof system, adhesives, and sealants to ensure durability, flexibility, and long-term protection. The system withstands extreme weather while preserving the museum’s aesthetic and safeguarding exhibits. The final result enhances function and design, delivering a roof



Best-in-Class Award Winner: Commercial/Mixed Use Category - KPost Roofing & Waterproofing – National Medal of Honor Museum.

that protects the museum and stands as a lasting tribute to the heroes it commemorates.

ARMA honored the winners at the 2026 International Roofing Expo in Las Vegas, Nevada. Information about applying to the 2027 Excellence in Asphalt Roofing Awards Program will be available this August. ●

SYNTHETIC SOLUTION

AUTHENTIC LOOK WITH MODERN SAFETY STANDARDS

In a remarkable feat of historical preservation and architectural innovation, a once-modest shepherd's dwelling in Warsaw, Poland, has found a new lease on life over 5,000 miles away in Edwards, Colorado. Kevin Milbery, a local resident and history enthusiast, spearheaded the ambitious project to relocate and restore the nearly century-old huts, turning them into a testament to the endurance and transportability of heritage.

Two major factors needed to be addressed for this project: maintaining the historical importance of the structures and addressing Colorado's dynamic climate, known for its large daily and seasonal temperature swings. Rocky Valley Contractors, a local family-owned business based in the Vail Valley, took on the restoration project under the guidance of Roy Valenzuela. The original cedar shake roof posed a significant challenge due to local building codes in Eagle County, which prohibit materials prone to fire risks. Looking for a solution that addressed both the fire risks and the historical authenticity, Rocky Valley turned to BRAVA Roof Tile. Brava's synthetic cedar shake roofing emerged as the perfect solution, offering the authentic appearance of natural wood while meeting safety standards.

"That's what homeowners are looking for," admits Valenzuela. "They don't want to miss that shake look ... but they're not allowed to go back to wood."

Valenzuela and his team's choice was influenced by the product's ability to mimic the textures and shades of old-growth cedar, crucial for maintaining the home's rustic charm. The synthetic roofing tiles not only enhanced the home's aesthetic but also provided superior performance against the elements of Colorado's often harsh climate. This installation secured the building's structural integrity, ensuring that the shepherd's original carvings and the home's legacy could be preserved for future generations.

"With a natural shake roof," Valenzuela continues, "you always have to do something every other year, go back to do some maintenance. You use composite (synthetic) — you do it once, and that's it. You're done. You're set for the next 20-plus years."

The successful integration of BRAVA's synthetic roofing tiles



PHOTOS COURTESY OF BRAVA ROOF TILE.

into this project underscores the product's role in the seamless fusion of traditional aesthetics with cutting-edge material science, offering a blueprint for similar heritage preservation projects worldwide. The rich, deep shades present in old-growth cedar have been expertly captured in BRAVA's synthetic shake roofing tiles, making them even more accessible to a wide range of projects and customer preferences. BRAVA roofing tile products also undergo extensive testing in order to provide the highest levels of performance. They carry third-party certifications for the highest levels of wind, fire, and hail, as well as a 50-year limited warranty. This makes the decision even easier for homeowners and contractors alike.

"We feel like we almost are museum keepers rather than house owners," notes Milbery. "We feel very fortunate." ●