



Enhanced Limited Warranty Registration Information

119 E Olin Ave

City of Madison
21160 Stoneridge Ct
Lakeville, MN 55044

11/08/24

Subject: Your GAF System Plus™ Limited Warranty

Thank you for choosing GAF Roofing Products to protect your property.

GV Builders Inc, a GAF Factory Certified Contractor, has registered your GAF System Plus™ Limited Warranty, and addendum(s) if applicable, on your behalf. We hope you enjoy the peace of mind that comes from protecting the roof that protects your property.

Please keep this document in a safe place, as you will need it in the unlikely event that you need to make a claim, or if you should sell your property and would like to transfer your warranty to the new owner.

As a customer who has chosen a premium product, a top contractor, and excellent protection, your opinion means a lot to us. We are constantly striving to provide you with the best product and experience. Please take a moment to leave a review by just scanning the QR Code displayed below or by clicking this link.

<https://rwr.gaf.com/410157465>

As a customer who has chosen a premium product, a top contractor, and excellent protection, your opinion means a lot to us. We are constantly striving to provide you with the best product and experience. Please take a moment to leave a review by just scanning the QR Code displayed below or by clicking this link.

Sincerely

Certified Contractor Services



GAF Enhanced Limited Warranty Registration Information

Warranty: System Plus™

Products Installed:

Installation Date: 11/07/2024

Installed: Steep Slope 170 Squares
Property: MADISON WATER UTILITY
Address: 119 East Olin Avenue
Madison, WI 53713

Timberline HDZ®,
StainGuard Plus™,
Shingle-Mate™,
Pro-Start®,
Seal-A-Ridge®,

Contractor: GV Builders Inc
Address: 21160 Stoneridge Ct
Lakeville, MN 55044
Phone: 952217-7277

410157465

Warranty Registration #





System Plus Limited Warranty



The Legal Stuff

What Is Covered/Excluded. This *System Plus Limited Warranty* covers certain GAF roofing products installed on your roof (the "GAF Products") including GAF Asphaltic Shingles, GAF Ridge Cap Shingles, GAF Starter Strip Shingles, GAF Leak Barrier Products, GAF Roof Deck Protection Products, GAF Cobra® Attic Ventilation Products, GAF Master Flow® Attic Exhaust Ventilation Products, and GAF Master Flow™ Pivot™ Pipe Boot Flashing in the unlikely event that they contain a manufacturing defect. Note: This limited warranty does not cover low-slope membranes, other Master Flow® Products, or GAF ThermoCal® Ventilated Nail Base Roof Insulation. Please go to gaf.com for a copy of the limited warranties covering these products.

How Long Your Warranty Lasts

GAF Shingles	Manufacturing Defect Coverage		Wind Warranty Coverage		Algae Warranty Coverage	
	Limited Warranty Term	Smart Choice® Protection Period**	Limited Warranty Term	Wind Speed Coverage (mph / km/h)	Limited Warranty Term	Smart Choice® Protection Period**
LayerLock®-labeled Timberline® Shingles	Lifetime†	50 Years	15 Years	WindProven™ Limited Wind Warranty***: No maximum wind speed. For all other installations: With Special Installation****: 130 / 209 Without Special Installation****: 110 / 175	StainGuard Plus PRO™: 30 Years StainGuard Plus™: 25 Years	StainGuard Plus PRO™ and StainGuard Plus™: 15* / 10 Years
All Other GAF Lifetime† Shingles	Lifetime†	50 Years	15 Years	With Special Installation****: 130 / 209 Without Special Installation****: 110 / 175	StainGuard Plus™: 25 Years StainGuard®: 10 Years	StainGuard Plus™: 15* / 10 Years StainGuard®: 1 Year
Marquis WeatherMax®	30 Years	20 Years	5 Years	80 / 130	No coverage	No coverage
Royal Sovereign®	25 Years	20 Years	5 Years	60 / 96	StainGuard®: 10 Years	StainGuard®: 1 Year
GAF Ridge Cap Shingles	Manufacturing Defect Coverage		Wind Warranty Coverage		Algae Warranty Coverage	
			Limited Warranty Term	Wind Speed Coverage (mph / km/h)	Limited Warranty Term	Smart Choice® Protection Period**
	TimberTex®, Ridglass®, TimberCrest®	Limited Warranty Term and Smart Choice® Protection Period** lasts as long as the warranty for manufacturing defects for the type of shingle installed in the field of the roof.	15 Years	With Special Installation****: 130 / 209 Without Special Installation****: 110 / 175	StainGuard Plus™: 25 Years	StainGuard Plus™: 15* / 10 Years
	Seal-A-Ridge®, Seal-A-Ridge® AS		5 Years	90 / 144		
	Z® Ridge		5 Years	With Special Installation****: 90 / 144 Without Special Installation****: 70 / 112		
GAF Starter Strip Shingles	Manufacturing Defect Coverage		Wind Warranty Coverage		Algae Warranty Coverage	
					Limited Warranty Term	Smart Choice® Protection Period**
	StarterMatch®	Limited Warranty Term and Smart Choice® Protection Period** lasts as long as the warranty for manufacturing defects for the type of shingle installed in the field of the roof.	No coverage		StainGuard Plus™: 25 Years	StainGuard Plus™: 15* / 10 Years
All Other GAF Starter Strip Shingles	No coverage				No coverage	
Other GAF Accessories	Manufacturing Defect Coverage		Wind Warranty Coverage		Algae Warranty Coverage	
GAF Leak Barrier Products GAF Roof Deck Protection Products GAF Cobra® Attic Ventilation Products GAF Master Flow® Non-Powered Attic Exhaust Ventilation Products	Limited Warranty Term and Smart Choice® Protection Period** lasts as long as the warranty for manufacturing defects for the type of shingle installed in the field of the roof.		No coverage		No coverage	
GAF Master Flow® Powered Attic Exhaust Ventilation Products	Limited Warranty Term and Smart Choice® Protection Period** lasts as long as the warranty for manufacturing defects for the type of shingle installed in the field of the roof, except that Motorized, Solar, and Electronic Components and Wi-Fi connectivity (if applicable) are covered for the warranty term stated in the <i>GAF Master Flow® Powered Attic Exhaust Ventilation Products Limited Warranty Addendum</i> .		No coverage		No coverage	

† **Definition of Lifetime:** The word "Lifetime" means as long as you, the original owner(s) [or the second owner(s) if coverage was properly transferred within the first 20 years], own the property where the shingles and/or accessories are installed. The Lifetime warranty term and 50-year non-prorated period are applicable only to shingles and accessories installed on a single-family detached residence owned by individuals. For any other type of owner or building, such as a corporation, governmental entity, religious entity, condominium or homeowner association, school, apartment building, office building, or multi-use structure, the length of the warranty is 40 years and the non-prorated period is 20 years.

* **15-year Smart Choice® Protection Period** for StainGuard Plus PRO™ or StainGuard Plus™ Algae Protection Limited Warranty applies only if you install both StainGuard Plus PRO™- or StainGuard Plus™-labeled shingles and StainGuard Plus™-labeled ridge cap shingles. For all other installations, the Smart Choice® Protection Period is 10-years.

** **Smart Choice® Protection Period:** refers to the crucial period of time following installation of the GAF Products during which the coverage provided for in this limited warranty is non-prorated. After the Smart Choice® Protection Period specified above, the remedy provided for in this warranty may be different than that provided for during the Smart Choice® Protection Period, and any remedy will be reduced to reflect the use you have received from your GAF Products. The amount of use will be calculated by dividing the number of months which have elapsed since installation to the date of claim by the number of months in the warranty term. For a Lifetime† warranty, GAF's contribution in years 51 and beyond is 20%. After the non-prorated period, GAF's maximum liability for any roof shall NOT exceed three times the reasonable cost of replacement GAF Products before any reduction for use.

*** **WindProven™ Limited Wind Warranty** requires installation of LayerLock®-labeled shingles using 4 nails per shingle, and at least four (4) qualifying accessories.

**** **Special Installation:** Your GAF LayerLock®-labeled shingles will be covered up to the maximum wind speed above **ONLY** if installed using **4 nails** per shingle **and** you have GAF Starter Strip Products installed at the eaves **and** rakes. Special Installation for all other GAF Shingles requires use of **6 nails** per shingle **and** GAF Starter Strip Products installed at the eaves **and** rakes. Your GAF Ridge Cap Shingles will be covered up to the maximum wind speed above **ONLY** if your ridge cap shingles are installed in strict accordance with the "Maximum Wind Speed Coverage Under Limited Warranty" section of the applicable ridge cap shingle application instructions.



System Plus Limited Warranty



Who Is Covered by This Limited Warranty; Transferability

You are covered by this limited warranty if you live in the United States or Canada and are the original property owner (i.e., not a builder or installer) or the first subsequent owner if this warranty was properly transferred.

This limited warranty may be transferred **only once**. The second owner must notify GAF in writing within **one year** after the property transfer for warranty coverage to be transferred. (Other than this one transfer, this warranty may **not** be transferred or assigned, directly or indirectly.) If the transfer takes place within the first 20 years after installation, the second owner is entitled to the same coverage as the original owner. If the transfer takes place afterwards, the length of this warranty shall be reduced to the two-year period after the ownership changes. If there is a defect during this two-year period, GAF's reimbursement to the second owner will be based only on the reasonable cost of replacement GAF Products, reduced by the amount of use that has been received from the GAF Products from the date of installation through the date of claim.

Manufacturing Defects: What Is Covered/Sole and Exclusive Remedy

GAF Warranty Company, LLC, a subsidiary of GAF, warrants that your GAF Products will remain free from manufacturing defects that adversely affect their performance during the applicable warranty term listed above. **Note:** Wind Warranty and Algae Warranty are covered separately below. For coverage related to Master Flow® Powered Attic Exhaust Ventilation Products, refer to your *Master Flow® Powered Attic Exhaust Ventilation Products Limited Warranty Addendum* (if applicable).

(1) During the Smart Choice® Protection Period: GAF will pay you the full reasonable cost of labor to repair or re-cover any defective GAF Product(s) (excluding non-GAF accessories, metal work, or flashing) and will provide replacement GAF Products or the reasonable cost of obtaining replacement GAF Products, at GAF's option. The cost of labor to tear off some or all of your GAF Products is included if necessary to repair your roof. GAF will not pay costs to dispose of any roof products.

(2) After the Smart Choice® Protection Period: The repair or re-cover cost, replacement GAF Products, or reimbursement provided to you will be reduced to reflect the use you have received from your GAF Products. The amount of use will be calculated by dividing the number of months which have elapsed since installation to the date of claim by the number of months in the warranty term. For a Lifetime¹ warranty, GAF's contribution in years 51 and beyond is 20%. After the non-prorated period, GAF's maximum liability for any roof shall NOT exceed three times the reasonable cost of replacement GAF Products before any reduction for use.

WindProven™ Limited Wind Warranty: What Is Covered/Sole and Exclusive Remedy

This limited warranty is **specifically conditioned** on your meeting all eligibility requirements, including installation of **LayerLock®-labeled** shingles, GAF Ridge Cap Shingles, GAF Starter Strip Shingles, and a GAF Roof Deck Protection Product, plus your choice of either a GAF Leak Barrier Product or GAF Attic Ventilation Product, and your **LayerLock®-labeled** shingles being fastened and installed **strictly** in accordance with GAF's application instructions. For installations which do not meet these eligibility requirements, see **Wind Warranty** section below. The limited warranty applies only to your **LayerLock®-labeled** shingles and does not apply to any GAF Accessory Products. GAF warrants to you that your **LayerLock®-labeled** shingles will not fail to seal, blow off, or sustain damage from winds (including gusts) after they should have sealed but did not due to a manufacturing defect. If your **LayerLock®-labeled** shingles do fail to seal, blow off, or suffer wind damage, GAF will reimburse you for the reasonable costs of replacing the blown-off or damaged shingles and hand-sealing any unsealed shingles. Costs related to underlayment, metal work, and flashings are not included. GAF's **maximum** liability under this paragraph is to reimburse you for the cost of hand-sealing all of the **LayerLock®-labeled** shingles on your roof.

Wind Warranty: What Is Covered/Sole and Exclusive Remedy

This limited warranty is **specifically conditioned** on your shingles, ridge cap shingles, and starter strip shingles being fastened and installed **strictly** in accordance with GAF's application instructions. This limited warranty does not apply to starter strip shingles. GAF warrants to you that your GAF shingles or ridge cap shingles will not fail to seal, blow off, or sustain damage from winds (including gusts) up to the applicable wind speed listed above after they should have sealed but did not due to a manufacturing defect. If your shingles or ridge cap shingles do fail to seal, blow off, or suffer wind damage, GAF will reimburse you for the reasonable costs of replacing the blown-off or damaged shingles or ridge cap shingles and hand-sealing any unsealed shingles or ridge cap shingles. Costs related to metal work and flashings are not included. GAF's **maximum** liability under this paragraph is to reimburse you for the cost of hand-sealing all of the shingles and ridge cap shingles on your roof.

Note: All self-sealing shingles and ridge cap shingles, including GAF's, must be exposed to warm, sunny conditions for several days before they completely seal. Before sealing occurs, shingles and ridge cap shingles are vulnerable to blow-offs and wind damage. Shingles and ridge cap shingles installed in fall or winter may not seal until the following spring. Shingles or ridge cap shingles that are not exposed to direct sunlight or adequate surface temperatures or that are not fastened or installed properly may never seal. Failures to seal, blow-offs, and wind damage under these circumstances result from the nature

of self-sealing shingles and ridge cap shingles, not a manufacturing defect, and are not covered under this limited warranty.

Algae Warranty: What Is Covered/Sole and Exclusive Remedy

This limited warranty applies only to shingles, ridge cap shingles, and starter strip shingles sold in packages bearing the **StainGuard Plus PRO™**, **StainGuard Plus™**, or **StainGuard®** logos. GAF warrants to you that blue-green algae (also known as cyanobacteria) will not cause a pronounced discoloration of your **StainGuard Plus PRO™**, **StainGuard Plus™**, or **StainGuard®-labeled** shingles, ridge cap shingles, or starter strip shingles for the warranty term listed above. If your **StainGuard Plus PRO™**, **StainGuard Plus™**, or **StainGuard®-labeled** shingles, ridge cap shingles, or starter strip shingles exhibit a pronounced discoloration caused by blue-green algae during the Smart Choice® Protection Period listed above, GAF's contribution will be either the reasonable cost of commercially cleaning your shingles, ridge cap shingles, or starter strip shingles or, at GAF's sole option, replacing discolored Shingles, Ridge Cap Shingles or, Starter Strip Shingles. The **maximum** cost to GAF shall be the lesser of the original cost of the affected Shingles, Ridge Cap Shingles, or Starter Strip Shingles, or the cost to clean the affected shingles, ridge cap shingles, or starter strip shingles. During the **remainder** of the limited warranty period, GAF's contribution to you will be reduced to reflect the amount of use you have received from your shingles, ridge cap shingles, or starter strip shingles since they were installed. The amount of use will be calculated by dividing the number of months which have elapsed since installation to the date of claim by the number of months in the Algae Warranty term.

Note: Preventing pronounced algae-related discoloration of your shingles, ridge cap shingles, and starter strip shingles is achieved through formulations or through unique blends of granules.

What Is Not Covered

Even if your GAF Products were not properly installed according to GAF's application instructions or to standard good roofing practices, this limited warranty remains in effect. However, GAF will **NOT** be liable for and this warranty does **NOT** apply to:

- (1) Damage resulting from anything other than an inherent manufacturing defect in the GAF Products, such as:
 - (a) improper fastening of your shingles or accessories or application not in strict accordance with GAF's printed application instructions, if the improper installation was the cause of the damage.
 - (b) settlement, movement, structural damage, or defects in the building, walls, foundation, or the roof base over which the shingles or accessories were applied.
 - (c) inadequate ventilation.
- (2) Damage resulting from causes beyond normal wear and tear, such as:
 - (a) acts of nature, such as hail, fire, or winds (including gusts) over the applicable wind speed listed above except there is no maximum wind speed restriction for shingles covered by the *WindProven™ Limited Wind Warranty*.
 - (b) impact of traffic on the roof or foreign objects, including damage caused by objects blown onto the roof by wind.
 - (c) improper storage or handling of the GAF Products.
- (3) Ice damming, except for leaks in the area of your roof covered by a GAF Leak Barrier which are caused by a manufacturing defect in your GAF Leak Barrier.
- (4) Shading or variations in the color of your GAF Products chipping, fading, or peeling paint on your Master Flow® Attic Exhaust Vent, or Master Flow™ Pivot™ Pipe Boot Flashing or discoloration or contamination caused by fungus, mold, lichen, algae (except for blue-green algae if your shingles, ridge cap shingles, or starter strip shingles labeled with the StainGuard Plus PRO™, StainGuard Plus™, or StainGuard® logos), or other contaminants, including that caused by organic materials on the roof.
- (5) Labor costs, except as specifically provided for above, disposal costs, and costs relating to underlayments (unless your claim involves a manufacturing defect in a GAF Underlayment), metal work, and flashings.
- (6) Damage to the interior or exterior of the building, including, but not limited to, mold growth.

Other Limitations Concerning Coverage

Decisions as to the extent of repair, re-cover, or cleaning required, and the reasonable cost of such work, will be made solely by GAF. GAF reserves the right to arrange directly for your GAF Products to be repaired, re-covered, or cleaned instead of reimbursing you for such work. The remedy under this warranty is available only for that portion of your GAF Products actually exhibiting manufacturing defects or algae discoloration at the time your claim is settled. Any replacement GAF Products will be warranted only for the remainder of the original warranty period. GAF reserves the right to discontinue or modify its shingles or accessories, including the colors available, so any replacement GAF Products may not be an exact match for the GAF Products on your roof. Even if GAF does not modify a color, replacement GAF Products may not match your original GAF Products due to normal



System Plus Limited Warranty



weathering, manufacturing variations, or other factors. In the event that GAF is unable to provide replacement products, GAF reserves the right to provide the cash value of those replacement products.

Claims: What You Must Do

You must notify GAF about any claim within **30 days** after you notice a problem. You may report a claim online at gaf.com/contact, by calling GAF at 1-800-458-1860, sending an email to warrantyclaims@gaf.com, or by sending a notice in writing to: GAF, Warranty Claims Department, 1 Campus Drive, Parsippany, NJ 07054, USA. You will then be provided with complete details about submitting your claim. You may be required to send to GAF, at your expense, photographs and sample products for testing. Within a reasonable time after proper notification, GAF will evaluate your claim and resolve it in accordance with the terms of this limited warranty. If you repair or replace your GAF Products before you notify GAF about your claim **or** before GAF has completed its evaluation of your claim, your claim may be denied. If you need to repair or replace your GAF Products before your claim is resolved, you **MUST** provide GAF with reasonable notice. **NOTE: Notice to your contractor, dealer, or home builder is NOT notice to GAF.** You should retain this document for your records in the unlikely event that you need to file a claim.

Sole and Exclusive Warranty

THIS LIMITED WARRANTY IS EXCLUSIVE AND REPLACES ALL OTHER WARRANTIES, CONDITIONS, REPRESENTATIONS AND GUARANTEES, WHETHER EXPRESS OR IMPLIED, WHETHER BY STATUTE, AT LAW OR IN EQUITY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. This limited warranty is your exclusive warranty from GAF and represents the SOLE REMEDY available to any owner of GAF Products. GAF makes NO OTHER REPRESENTATIONS, CONDITIONS, GUARANTEES, OR WARRANTIES of any kind other than that stated herein. GAF WILL NOT BE LIABLE IN ANY EVENT FOR CONSEQUENTIAL, PUNITIVE, SPECIAL, INCIDENTAL, OR OTHER SIMILAR DAMAGES OF ANY KIND, including DAMAGE TO THE INTERIOR OR EXTERIOR OF ANY BUILDING, whether any claim against it is based upon breach of this warranty, negligence, strict liability in tort, or for any other cause. This limited warranty gives you specific legal rights, and you may also have other rights which vary from jurisdiction to jurisdiction. Some jurisdictions do not allow limitations on or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you. New Jersey state residents are encouraged to review their rights under the agreement, as provided under the New Jersey Truth-In-Consumer Contract Warranty and Notice Act ("TCCWNA").

The United Nations Convention on Contracts for the International Sale of Goods shall **NOT** apply either to the sale of the GAF Products or to this limited warranty.

Modification of Warranty

This limited warranty may not be changed or modified except in writing, signed by an officer of GAF. No one (other than an officer of GAF) has the authority to assume any additional or other liability or responsibility for GAF in connection with your GAF Products except as described in this limited warranty.

Effectiveness

This limited warranty will not take effect unless all eligibility requirements have been satisfied, this warranty is registered to you, and your roofing contractor has been paid in full.



MADISON WATER UTILITY VEHICLE STORAGE BUILDING

O&M Manual for EPDM AND Sheet Metal Work

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Section:

- 1· Contact information for Maly Roofing Company and Firestone Building Products (roof leak warranty emergency contact)
- 2· Firestone Building Owner's Manual. Manufacturer's installation and operation instructions including start-up, break-in, shutdown, seasonal, emergency and special operation procedures. Manufacturer's maintenance instructions including procedures and instructions for problem corrections, preventive maintenance, testing, alignment, adjustment and repair
- 3· Equipment warranties including terms and conditions and date of inception (substantial completion) and date of expiration – Firestone Building Products Red Shield Roof System Warranty and Firestone Metal Paint Finish Limited Warranty #700372872 – Madison Water Utility Olin Avenue
- 4· Warranty Drawing
- 5· Overburden Warranty
- 6· Subcontract Article 5 – Workmanship and Materials Warranty
- 7· Roofing and Sheet Metal Closing Documents

CONTACT INFORMATION AND EMERGENCY CONTACT

Roof leaks – see Firestone Building Owners Manual page 15.

(Red Shield, Red Shield Platinum and Asphalt Standard Warranties)

There is no good time for a roof leak. Big or small, a leaky roof is inconvenient and has the potential to interrupt your business if it is not repaired quickly and properly.

Should you experience a leak:

Check for the obvious: clogged roof drains, loose counter-flashings, broken skylights, open grills or vents, broken water pipes.

Note the conditions resulting in the leaks; heavy or light rain, wind direction, temperature and the time of day that the leak occurs are all important clues to tracing roof leaks. Note whether the leak stops shortly after each rain or continues to drip until the roof is dry. If you are prepared with the facts, the diagnosis and repair of the leak can proceed in a timely manner.

Remove all overburden materials to expose the membrane for inspection and possible repair. Please note that with the exception of Firestone-approved ballast or pavers that are considered integral to the roofing system, the cost of removing overburden is not covered under a Firestone warranty. Overburden removal is available for certain accessory products, such as Firestone SkyScape™ Vegetative Roofing Systems, when issued with a Firestone Red Shield Warranty. Please see our website for additional information.

Contact Firestone Building Products Warranty Claims as soon as possible, but understand that not all water leaks are attributable to the roof. Rooftop equipment, interior plumbing, exterior cladding, windows and condensation may be the source of the moisture intrusion.

For a roof leak contact: Firestone Building Products 1-800-830-5612 (24/7)

Warranty Number: 700372872

Project Number: 3480157

Start Date: 10/30/2019

INSTALLER: Maly Roofing Contractors, Inc. 608-249-7663 608-249-7555 FAX



Firestone

FIRESTONE BUILDING PRODUCTS ROOFING SYSTEM

OWNER'S MANUAL



Congratulations on your purchase of a Firestone Building Products Roofing System!

PROTECT YOUR INVESTMENT

Your building's roof is your first line of defense in controlling energy consumption and battling harsh weather. It is a valuable asset and as such should be properly maintained. Firestone Building Products recommends periodic maintenance and inspection of all roofing systems so that any detrimental conditions may be remedied promptly. Whether you purchased a Red Shield™, Red Shield™ Platinum, Standard, or a Material Warranty, this Owner's Manual contains a number of important recommendations to assist you in maintaining a watertight roof for many years.

Effective 04/29/2019.
Subject to change without notice.
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INSPECTIONS

Firestone Building Products recommends that all roofing systems be inspected twice annually (usually in the spring and fall) as well as after any severe weather events. Although inspections may be performed by any qualified person selected by the building owner, Firestone recommends that at least one inspection per year be conducted by the Firestone-licensed applicator that installed your roof.

You should keep a record of all inspection and maintenance activities on your roof, including photos and invoices associated with such work, the date of each activity and the names & affiliations of the parties performing the activities. An example Roof Access Log is included at the conclusion of this Manual for your use.

Please note that the cost of periodic inspections and maintenance is not included in a Firestone warranty.

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Roof Traffic

All roofing systems are subjected to some amount of traffic. While certain traffic may be necessary to service rooftop equipment, roofs may also be occasionally subjected to unauthorized foot traffic. Because traffic can damage the roofing system, periodic inspections are essential to ensure any damage is identified and addressed quickly.

Your roofing professional will inspect roof access points, walkways and “natural” pathways, and areas surrounding rooftop mechanical equipment to determine whether your roof has been damaged by authorized or unauthorized traffic. Potential damage may include excessive wear on the membrane in high traffic areas, cuts and punctures due to dropped screws and tools and crushed or compressed roof insulation. Your roofing professional will determine whether repairs are required in order to maintain a watertight roof.

Please remember that your Firestone Building Products Roofing System is designed to be a waterproofing membrane, not a traffic surface or amenity space. Damage sustained as a result of roof traffic and other types of physical damage is not included within warranty coverage. The installation of protective walkways is recommended, and will limit damage to your roofing system.

Drainage

Proper drainage is essential to prevent the accumulation of water on the roof which can lead to areas of “ponding water,” unsightly algae, and even structural compromise in extreme cases.

Ponding water can exacerbate problems for all roofing systems. A small cut or puncture in a roofing membrane may cause minor damage on a well-drained roof surface, but the same puncture located in an area of standing water may allow significant water infiltration, causing damage to the roof insulation, roof deck, and building contents. Consequential damages are excluded under the Terms, Conditions & Limitations of a Firestone warranty.

All roofs should be designed and maintained to provide consistent and effective paths for water to completely drain off and away from the roof surface within 24 to 48 hours, and all drain areas must remain clear. Effective drainage must also accommodate build-ups of snow and ice that typically occur during the winter months. Removal of accumulated leaves and other debris often improves drainage.



Note that while ponding water increases the likelihood of water infiltration should damage to the membrane occur, the presence of ponding water does not void your warranty. Ponding water also contributes to fall hazards, so exercise caution and observe sound safety practices when accessing and servicing your roof.

Wind Damage

Wind storms may damage roofing systems in several ways. High winds can exert a great force on the roofing system attachments that prevent the roofing system from separating from the roof deck and the building structural elements. Wind forces can also damage exposed sheet metal, such as gutters and downspouts. In addition, the force of wind-borne debris may cause punctures or cutting of the roofing membrane. Severe wind storms may even dislodge rooftop units, causing extensive damage.

Your roof should be inspected as soon as possible after any significant wind event. Your roofing professional will inspect the membrane, rooftop equipment, and edge metal to determine the extent of any damage to the roofing system. They will also recommend repairs or replacement as needed.

Roofing Membrane Seams

Firestone Building Products roofing membrane seams are designed to provide many years of watertight performance. Typically, field seams do not need to be inspected during the normal warranty period unless damage is suspected. In many cases, the total service life of a roof may be extended by renovating the field seams with a new layer of seaming material after the warranty term has expired.

Base Attachments

Typically, Firestone Building Products base attachments do not need to be inspected during the warranty period unless damage is suspected. After the normal warranty period, it may be advisable to completely renovate the base attachments.



Contaminants

Although Firestone Building Products roofing membranes provide outstanding resistance to natural weathering, their durability can be adversely affected by contact with acids, oils, fats, chemicals, and organic solvents. Because exposure to these types of contaminants may cause roofing membranes to lose strength and resiliency, periodic inspections are essential to ensure any damage is identified and addressed quickly.

Your roofing professional will look for membrane swelling, splitting, or cracking, and may recommend preventative actions such as installing a redundant layer of membrane in areas of concern, or the installation of grease traps. They will also recommend repairs or replacements as required.

General

Even with periodic inspection and maintenance, roofing systems may require repair from time to time. Although a roof repair is typically conducted as a response to some type of damage to the roof, a proactive approach to roof repair and renovation can improve the performance and extend the service life of the roofing system.

In most cases, a properly installed and maintained roof constructed with high quality products will last beyond the specified warranty period.



MAINTENANCE

The majority of leaks that occur on Firestone Building Products roofs are caused by external factors or conditions relating to building maintenance, and are not covered by the terms of the Firestone Building Products warranty. Firestone Building Products has adopted a proactive policy to inform and educate building owners about the importance of inspections and routine maintenance.

Single Ply Roofing Systems

Single Ply membranes, such as Firestone RubberGard™ EPDM and UltraPly™ TPO membranes, do not normally require surface maintenance other than periodic inspection for excessive wear, contaminants, cuts, or punctures. Occasionally, approved liquid roof coatings, such as Firestone AcryliTop™ PC-100 roof coating, are applied to the surface of black EPDM membranes to provide a lighter surface color. Such coatings do not need to be maintained to guarantee the performance of the underlying EPDM roofing membrane, but some maintenance and recoating may be necessary in order to maintain a uniform surface appearance and reflectivity.





Asphalt Roofing Systems

Other than periodic inspection for excessive wear, contaminants, cuts, or punctures, Firestone asphalt roofing membranes do not require maintenance to perform as designed or to keep the warranty in good standing.

Smooth-surfaced Firestone Building Products APP Membranes

Smooth-surfaced membranes should be coated with an approved liquid coating, such as Firestone AcryliTop PC-100 roof coating to maximize the service life of the membrane. If a coating is not applied as part of the initial roof installation, it should be applied to properly prepared membrane by a Firestone-licensed applicator within the first five years after the roof is installed to help protect the membrane from surface crazing and cracking. In addition, this coating should be maintained as needed to recover any areas that have blistered, peeled or worn through as a result of normal exposure to the elements.

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Granule-surfaced Firestone Building Products APP and SBS Membranes

If areas of granular loss due to roof traffic are discovered during inspection, new granules should be broadcast into hot asphalt or emulsion to protect the surface of the membrane. The application of an approved liquid coating, such as Firestone's AcryliTop PC-100 roof coating, to granule-surfaced APP or SBS membranes provides additional protection from the environment. If this coating is not applied as part of the initial roof installation, it may be applied later to properly prepared membrane by a Firestone-licensed applicator to help protect the membrane and/or to increase reflectivity. If installed, this coating should be maintained as needed to recover any areas of the coating that have blistered, peeled or worn through as a result of normal exposure to the elements.

Gravel-surfaced Firestone Building Products BUR Membranes

If areas of gravel loss are discovered during inspection, gravel must be reinstalled into hot asphalt to protect the surface of the membrane. Coatings on smooth surface BUR membranes (such as flashings) must be maintained as needed to re-coat any areas that have blistered, peeled or worn through as a result of normal exposure to the elements.

Metalwork & Sealants

All metalwork, including counter-flashings, drains, skylights, equipment curbs and supports, and any other rooftop accessories functioning in conjunction with the Firestone Building Products roofing membrane, should be properly maintained at all times. Particular attention should be paid to sealants at joints in metalwork and flashings. If cracking or shrinkage is observed, the sealant should be removed and replaced with new sealant. In addition, roof sealants such as Firestone Building Products Pourable Sealer and General Purpose Sealant are considered maintenance items and are not covered under your Firestone warranty and must be maintained per Firestone Building Products technical recommendations.

UNA-CLAD™ Paint Finish

Although UNA-CLAD factory-applied paint finishes are extremely durable, a periodic cleaning to remove build-ups of resins and other residue helps to extend finish life for roofing panels and metal trim. In coastal or heavy industrial areas, cleaning should take place on a regular

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basis due to exposed salt spray and heavy pollutants. A variety of methods for removal of surface deposits are available. Simple washing with plain water using hoses or pressure spray equipment is usually adequate. When heavy deposits of dirt or other contaminants dull surfaces, stronger methods may be needed.

Two precautions should be observed: (1) Do not use wire brushes, abrasives, or similar cleaning tools which mechanically abrade the finish surface, and (2) Certain cleaning agents listed below should be tested in an inconspicuous area before use on a large scale.

Group A: Hot or Cold Detergent Solutions

A 5% solution in water of commonly used commercial and industrial detergents will not have deleterious effects on fluoropolymer surfaces. Use a cloth or sponge for application, followed by an adequate rinse of water.

Group B: Solvents

Most organic solvents are flammable and/or toxic, and must be handled accordingly. Always refer to the solvent manufacturer's Safety Data Sheets (SDS) and utilize proper safety practices. Keep solvents away from open flames, sparks and electrical motors and use adequate ventilation, protective clothing and goggles. Solvents that may be used to remove non-water soluble deposits such as tar, grease, oil and paint include:

- » Isopropyl Alcohol (Rubbing Alcohol)

(Alcohol has no permanent effect on fluoropolymer surfaces.)

Group C: Petroleum Solvents and Turpentine

- » VM&P Naphtha
- » Mineral Spirits

(The above solvents have no permanent effect on fluoropolymer surfaces.)



Group D: Aromatic and Chlorinated Solvents

» MILDEW

In areas subject to high humidity levels, dirt and spore deposits can permit mildew growth. The following solution is recommended to remove mildew when necessary:

1/3 cup dry powdered laundry detergent (such as Tide®)

1 quart sodium hypochlorite 5% solution (such as Clorox®)

3 quarts water

» RUST STAINS

Hydrochloric acid, citric acid or muriatic acid, diluted with ten volumes of water, may assist in removing rust stains from fluoropolymer surfaces. Limit contact with finished surface to five minutes. Oxalic acid solutions or acetic acid (vinegar) may also be used. Flush all surfaces with copious amounts of water after use. Caution: Acid solutions are corrosive and toxic.

Graffiti

Graffiti presents a special problem because of the many possible agents used, especially aerosol paints. It is best to try a mild detergent and water first. If necessary, try the less active solvents from Groups B and C. If none of these are sufficient, it may be necessary to resort to touchup painting, repainting or replacement.

General

Snow

There may be concerns related to increased weight from snow and ice accumulations on rooftop surfaces on the building's load structure. Firestone Building Products appreciates the fact that the continued safe environment is the primary focus for all building owners, property managers, and tenants. Along these lines, Firestone Building Products understands that there may be the need to remove accumulations of snow and ice from roof surfaces during the winter.

While the Firestone Building Products Warranty does not provide for the removal of snow and ice accumulations, such actions by others will not impact continued, uninterrupted coverage when performed appropriately. However, Firestone strongly recommends the method of snow and ice removal and the selection of utilized tools

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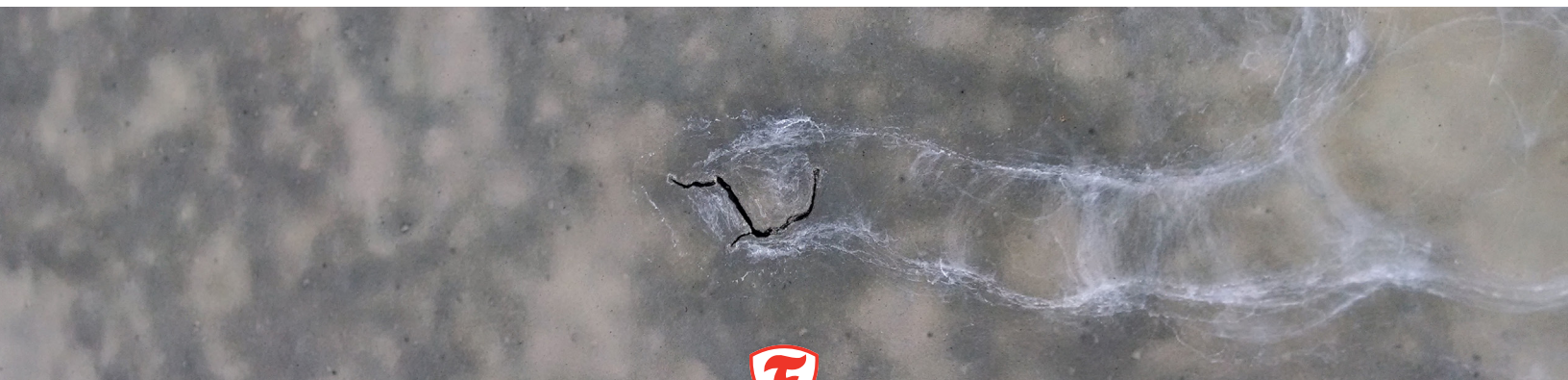
be carefully considered. At all times, safe conditions need to be reviewed prior to accessing the roof and all removal efforts should attempt to avoid direct contact with the roofing membrane surface.

In the event that the membrane is cut, scored or otherwise damaged during snow and ice removal activities, the affected area(s) must be repaired by a Firestone-licensed applicator in accordance with Firestone technical recommendations. If significant repairs are required to a Red Shield warranted roof, the contractor should submit a Post Warranty Alteration form to keep the warranty in good standing: firestonebpco.com/us-en/resources/warranties.

Hail

While leaks and damages traceable to hail stone impacts are excluded from a standard Firestone warranty, coverage may continue despite the occurrence of a hail storm. It is the responsibility of the Building Owner—ideally in conjunction with a design professional and/or Firestone-licensed applicator—to determine whether the roofing system has been adversely affected and what repairs or replacements may be necessary.

In many cases, it is possible to identify visible hail damage and perform repairs to restore the roof's watertight integrity. However, there are no current testing methods that can identify latent damage to a roofing membrane, the insulation, or the building structure. Such damage may not manifest itself for a lengthy period of time. Firestone is willing to test any submitted material samples for potential hail stone impact damage. However, Firestone's test results, and any conclusions that may be drawn from them, are specific to the submitted sample(s). That is, Firestone's test results neither rule out damage to other areas, nor predict where future damage may occur. It will remain the responsibility of others to determine what areas of the roofing system require repair or replacement.





REQUEST AN EVALUATION

Roofing contractors, consultants and manufacturers agree that the longest lasting roofs are regularly inspected and maintained. If you are due for your semi-annual inspection or think you need an in-depth roof analysis, a reputable, local roofing professional is within reach.

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REPORT A WARRANTY CLAIM

Roof Leak

(Red Shield, Red Shield Platinum and Asphalt Standard Warranties)

There is no good time for a roof leak. Big or small, a leaky roof is inconvenient and has the potential to interrupt your business if it is not repaired quickly and properly.

Should you experience a leak:

- » Check for the obvious: clogged roof drains, loose counter-flashings, broken skylights, open grills or vents, broken water pipes.
- » Note the conditions resulting in the leaks; heavy or light rain, wind direction, temperature and the time of day that the leak occurs are all important clues to tracing roof leaks. Note whether the leak stops shortly after each rain or continues to drip until the roof is dry. If you are prepared with the facts, the diagnosis and repair of the leak can proceed in a timely manner.
- » Remove all overburden materials to expose the membrane for inspection and possible repair. Please note that with the exception of Firestone-approved ballast or pavers that are considered integral to the roofing system, the cost of removing overburden is not covered under a Firestone warranty. Overburden removal is available for certain accessory products, such as Firestone SkyScape™ Vegetative Roofing Systems, when issued with a Firestone Red Shield Warranty. Please see our website for additional information.
- » Contact Firestone Building Products Warranty Claims as soon as possible, but understand that not all water leaks are attributable to the roof. Rooftop equipment, interior plumbing, exterior cladding, windows and condensation may be the source of the moisture intrusion.

REPORT A LEAK



800-830-5612

AVAILABLE 24 HOURS A DAY, 7 DAYS A WEEK



[firestonebpco.com/us-en/resources/
building-owners-toolbox](https://firestonebpco.com/us-en/resources/building-owners-toolbox)



There are two methods for building owners to report leaks:

- » Call our Leak Hotline at 800-830-5612 (Available 24 hours a day, 7 days a week)
- » Visit our website to complete a web form at: firestonebpco.com/us-en/resources/building-owners-toolbox

Please have the following information:

- » Project Number (Building Owner's name, Building/Project Name, and full physical address if Project Number is not available)
- » Name, telephone and fax number or e-mail address of person reporting the leak
- » Name and telephone number for the on-site contact person
- » Description of the leak (i.e., where inside the building the leak is occurring, when it started, etc.)
- » Any other information required for the contractor to access the site and roof (security, landlord, obtain a key, etc.), and the location of all leaks from inside the building (over hallway, reception desk, etc.)

Upon receipt of your leak report, Firestone Building Products will issue a service work order to the installing contractor. You will receive confirmation from Firestone that the installing contractor was contacted. The contractor, in accordance with the terms and conditions of Firestone's license agreement, will contact you to arrange to investigate the leak and make warranted or non-warranted repairs to return the roof to a watertight condition.

Once you receive your leak confirmation, Firestone encourages you to reach out to your contractor for scheduling. Firestone requests contractors respond to reported roof leaks within 48 hours. However, extenuating circumstances such as inclement weather or states of emergency may make this impossible. In such circumstances, the building owner may, at its option and at its sole expense, perform emergency repairs to the roofing system without voiding the Firestone warranty provided the repair materials and methods are consistent with accepted industry practices. Such emergency repairs must be limited to the immediate leak area.

Firestone typically authorizes original installing contractors to perform all emergency repair work provided that the applicator remains in good standing and the roof is located within a reasonable travel distance from the contractor's office or shop. In most cases, Firestone's purchase order will authorize a maximum 2 hours of travel each way to and from the roof.

REPORT A LEAK



800-830-5612

AVAILABLE 24 HOURS A DAY, 7 DAYS A WEEK



firestonebpco.com/us-en/resources/building-owners-toolbox



Material Only Warranties

Please refer to your specific warranty for instructions on how to submit a claim for a material only warranty, such as a roofing membrane warranty or a paint finish warranty.



TRANSFER OF OWNERSHIP

Most Firestone warranties are transferable. To submit a transfer request, please visit our website and complete a Warranty Transfer Form.

An administrative fee will be issued to the new building owner to complete the transfer. Please DO NOT SEND payment until you have received an invoice. The transfer will be effective upon full payment. No inspection is required to complete the transfer process. However, owners are encouraged to have their roofs inspected by a licensed Firestone applicator prior to submitting a transfer request. A schedule of administrative fees is available on the Firestone website.

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POST WARRANTY ALTERATIONS

(Red Shield, Red Shield Platinum and Asphalt Standard Warranties.)

Changes made to the Firestone roofing system following Firestone's final inspection for warranty must be reported to ensure the warranty remains in full force and effect. Alterations to the roof, including, but not limited to, new roof curbs, pipe penetrations, roof-mounted accessories and equipment, and tie-ins to building additions must be performed by a Firestone-licensed applicator and reported to Firestone Building Products.

To update an existing Firestone warranty, the Firestone-licensed applicator who completes the repairs must submit the Post Warranty Alteration Form through our website: firestonebpco.com/us-en/resources/warranties.

Firestone recommends that all post warranty alterations be performed by the installing contractor, as that contractor will be familiar with the specific project. However, should the installing contractor be unavailable or unable to negotiate an agreeable cost for the post warranty work, the building owner has the option of contracting with another eligible Firestone applicator.

Regardless of the contractor selected to complete the post warranty work, Firestone Building Products must be notified in writing to keep the warranty in good standing and for the post warranty work to be included within existing warranty coverage. Failure to report post warranty alterations may jeopardize the warranty on the specified project.

Firestone reserves the right to require a Post Warranty Alteration (PWA) Inspection. The purpose of the PWA Inspection is to verify new membrane flashings or other membrane-related alterations comply with Firestone's written repair recommendations. The charge for a required inspection is \$750.00, payable to Firestone Building Products. No payments will be accepted prior to the issuance of a Firestone invoice. The invoice will be directed to the owner listed on the warranty unless a third party is responsible for payment and separate billing information has been provided.

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WARRANTY EXPIRATION

When your roof approaches the end of its warranty period, you can choose to replace or recover your roof, add a coating to your roof, or maintain your non-warranted roof until replacement is required.

A roof replacement or “tear-off” involves removing the existing roof assembly down to the exposed structural deck. In a roof re-cover, a new membrane or system is installed over the existing roof assembly, leaving most or all of the current system intact (this option depends upon the condition of the existing roofing system components, such as insulation).

You should consider the existing roof condition, building codes and standards, material compatibility, sustainability, performance criteria, and warranty needs when deciding how to move forward with an aging roof. Firestone Building Products is here to help you carefully analyze your roofing needs and determine the best solutions that will last for years to come.

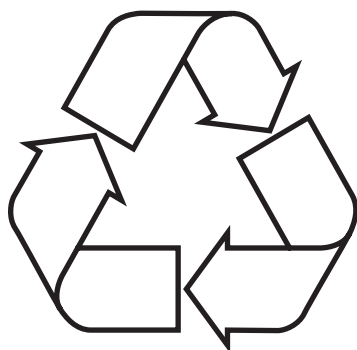


ENVIRONMENTAL CONTRIBUTION OPPORTUNITY

As a leading global manufacturer of commercial roofing systems, Firestone Building Products understands the importance of protecting the environment. To help preserve the earth's natural resources for future generations, we proudly manufacture a variety of roofing systems and insulation products that are recyclable or contain recycled content.

Recycle Your Roof

In addition to providing energy saving roof solutions, Firestone Building Products wants to assist in your eco-friendly efforts at the end of your roof's life cycle. We invite you to take advantage of our strategic industry recycling partnership before you begin your next tear-off project.



Since 2006, Firestone Building Products has worked closely with other industry leaders to help create the EPDM Roofing Association's roof recycling program. Today, this easy-to-use EPDM roof recycling program extends throughout the United States and into Canada. The program is available for low-slope ballasted and mechanically attached commercial tear-offs and offers jobsite collection and transportation of roof materials and polyiso insulation directly to a recycling center. Recycling can offer savings over traditional waste disposal fees and qualifies for LEED® Certification¹ credits.

Roofing professionals interested in receiving a free quote should contact Nationwide Foam at 888-820-2760 or complete the Request a Quote form on the Nationwide Foam website. Any size reroof project is eligible.



EDUCATIONAL OPPORTUNITIES

As a building owner or manager, it is not enough to surround yourself with knowledgeable consultants, talented architects and exceptional licensed contractors. It is also important to arm yourself with as much information as you can about the latest building solutions available.

Building Products University

Firestone Building Products is not only your source for quality products, but quality information as well.

Firestone Building Products University (BPU) covers a wide spectrum of important roof, wall and specialty issues to help you make more informed decisions. BPU seminars and workshops combine classroom activities, product demonstrations, in-depth discussions and question-answer periods. Qualified instructors have years of direct experience and include local or regional Firestone Building Products experts.

For more information about educational opportunities, please contact your Firestone sales representative.



FIRESTONE BUILDING PRODUCTS WEBSITE

Industry Links

Firestone Building Products is an active participant in numerous industry associations that provide excellent insight into commercial building products.

Whether you're looking for conferences, continuing education courses, webinars, white papers or other educational resources, these industry associations have a wealth of information to enhance your industry knowledge. Please visit our website.



firestonebpco.com

Bulletins

Firestone Building Products is dedicated to helping you stay informed regarding the latest product and technical information from our company as well as interesting news and developments in the commercial roofing industry.

Marketing Bulletins

Check out our Marketing Bulletins featuring news about current product enhancements, vital company information and roofing industry developments that impact you.

New Product Bulletins

Be among the first to see Firestone's new product introductions and innovations with our New Product Bulletins.

Technical Bulletins

Find the information you need about product advancements, such as updated application guides or new FM ratings, in our Technical Bulletins.

Warranty Services Bulletins

Get the latest warranty product information with our Warranty Services Bulletins.

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FAQS

How quickly will my roof be repaired? (Red Shield, Red Shield Platinum and Asphalt Standard Warranties)

Response times vary depending on contractors' workloads, inclement weather, safety factors and site scheduling or access limitations. If you have not been contacted by your assigned repair contractor within 48 hours after you receive your leak confirmation from Firestone, please reach out to the contractor and request an estimated time of arrival. If you are unable to reach your assigned contractor, please contact Firestone Warranty Services by calling 800-830-5612 and reference your Service Order Number.

Who will make the repairs?

During the first two years of the Red Shield, Red Shield Platinum or Asphalt Standard Warranty, Firestone refers leak requests to the original installing contractor provided they are located within 2 hours of the project location and remain in good standing. If the original installer is unable to respond for any reason, another Firestone-licensed applicator will be assigned to investigate and repair your roof.

Can I coordinate directly with my Firestone-licensed applicator instead of reporting the leak directly to Firestone Warranty Services?

Firestone encourages you to maintain a good relationship with your installing contractor and you are welcome to coordinate scheduling with them directly PROVIDED THAT you notify Firestone Warranty Services of the leak PRIOR TO notifying the installing contractor. Per the Terms of a Red Shield, Red Shield Platinum or Asphalt Standard Warranty, failure by a building owner to report roof leaks directly to Firestone Warranty Services (even during the period covered by the contractor's obligation) may void your warranty coverage.

What if I want to use a different contractor? (Red Shield, Red Shield Platinum and Asphalt Standard Warranties)

You may choose to use a different Firestone-licensed applicator once the installing contractor's 2 year obligation has expired. However, your installing contractor has the added benefit of being familiar with your roof. Should you wish to use a different contractor, please follow these steps:

- » Contact Warranty Services at 800-830-5612 to request a new contractor. You will be asked to complete a Contractor Substitution Letter. The preferred contractor must meet certain criteria and be approved by Warranty Services,

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but most licensed applicators in good standing will be eligible. If you need assistance selecting a new contractor, please use the Find a Contractor search tool on our website: firestonebpco.com. Please contact your local authorized Firestone Sales Representative to receive recommendations for contractors in your area.

- » The new preferred contractor must accept “ownership” of the project by completing their portion of the Contractor Substitution Letter. A letter will be sent to the installing contractor notifying them that project has been assigned to a new preferred contractor at your request. Firestone will assign a new preferred contractor at no cost to you once during the warranty period. Subsequent substitutions will be made for an administrative fee.

What if my contractor is out of business?

If the original installing contractor is not an option for any reason, another Firestone-licensed applicator will be assigned to investigate and repair reported roof leaks for your building.

My contractor says they cannot repair the roof until it stops raining. Is this true?

Most sealants and tapes will not be effective on wet surfaces, so it may be necessary to wait for the precipitation to end before making permanent repairs.

Apparently the leak is at an HVAC unit. Now what?

If a leak is traced to a non-Firestone item such as an HVAC unit, you will need to complete repairs through your mechanical contractor or other tradesperson. Please note that the licensed applicator will most likely send you an invoice for their investigation time.

The leak was caused by a puncture in the roofing membrane. Now what?

Cuts or punctures in the roofing membrane may be caused by mechanical work on the roof, unauthorized persons on the roof, etc. If the source of the leak is found to be outside of the scope of the Firestone Building Products warranty, the Firestone-licensed applicator will make emergency repairs to temporarily stop the leak. Please note that the licensed applicator will most likely send you an invoice for the investigation, the temporary repair and the permanent repair made at a later date.

Examples of typical non-warranted emergency repairs include:

- » Membrane cuts and punctures
- » Caulking or re-sealing of non-Firestone building components
- » Sheet metal flashings



- » Mechanical unit housings
- » Non-Firestone (or non-warranted) skylights and roof hatches
- » Window and door sills
- » Metal mansards and fascia
- » Flashing of roof openings made by other trades
- » Repair of roof components damaged by wind storms or other natural events in excess of warranty coverage
- » Repairs to roofing membrane and flashing damaged by contaminants such as oil or grease

What if there are new penetrations on my roof from a new tenant finish-out, etc.?

You must report any changes made to the roof following Firestone's final warranty inspection to keep your Firestone Red Shield warranty in full effect. Any alterations to the roof, including, but not limited to, roof curbs, pipe penetrations, roof-mounted accessories and equipment, and tie-ins to building additions must be performed by a Firestone-licensed applicator and reported to Firestone Building Products.

Any leaks that result from roof modifications that are not completed by a Firestone-licensed applicator, not completed according to Firestone requirements, or not properly reported to Firestone are not covered under your Red Shield Warranty.

What if I am selling my building or I am a new owner?

To transfer ownership of the Firestone warranty, please visit [our website](#) and complete a Warranty Transfer Form.

A schedule of administrative fees is available on the Firestone website. Please DO NOT SEND payment until you have received an invoice. The transfer will be effective upon full payment. No inspection is required to complete the transfer process. However, you are encouraged to engage a Firestone-licensed applicator to perform an inspection of the roof prior to the transfer.

Is a leak at the ceiling always a roof leak?

No. Leaks may also come from rooftop units, condensation, plumbing pipes, and many other sources. If your initial investigation points to the roof as the cause of the leak, please report it to Firestone Building Products.



Is damage to interior finishes or personal belongings covered under the warranty?

No. Your warranty strictly covers Firestone Building Products materials and possibly installation labor, depending on the type of warranty issued. Consequential damages are excluded under the Terms, Conditions & Limitations of a Firestone warranty.

What if I see something happening on my roof that doesn't look right?

If you have concerns about your roof and there is no leak, please contact your installing contractor or another Firestone-licensed applicator. Only contact Firestone Building Products if the roof is believed to be leaking, or may reasonably be expected to leak the next time it rains.

Should I worry about storms and recent hail events?

If you experience a leak following a weather event, please report the leak to Firestone Building Products. Otherwise, it would be prudent for you or your contractor to walk the roof to remove any wind-blown debris, be sure drains are clear, and look for signs of damage. Please coordinate directly with your contractor to remedy any damage that does not involve a leak. Always observe proper safety protocols when inspecting and maintaining your roof.



EXAMPLE ROOF ACCESS LOG

[illegible]

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Firestone

Firestone Building Products

REPORT A LEAK

800-830-5612

FIRESTONE WARRANTY SERVICES

800-428-4442

Firestone doesn't just cover your roof. We cover you.

With extensive services, support and innovative products, nobody covers you better™.

For more information about Firestone Building Products' roofing systems and services, please visit firestonebpc.com.

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FIRESTONE WARRANTY CONTRACT SUMMARY



Warranty No: 700372872
Project No: 3480157
Start Date: 10/30/2019

Building Identification: Madison Water Utility - Olin
Building Address: 119 E Olin Ave, Madison, WI 53713-1431
Building Owner: City of Madison
Roofing Contractor: MALY ROOFING COMPANY INC, 40000484

Main Roof

Firestone Red Shield - Metal - 20 Year - 55 mph
Metal Paint Finish - Metal - 35 Year

Square Footage: 16,150

Square Footage: 16,150

**THIS WARRANTY INSTRUMENT CONSISTS OF MULTIPLE PAGES, ALL OF WHICH ARE PART OF THIS DOCUMENT.
ADDITIONAL REQUIREMENTS ARE DEFINED ON SUBSEQUENT PAGES.**

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1002.001.2015

Firestone
Firestone Building Products

FIRESTONE WARRANTY GENERAL TERMS, CONDITIONS AND LIMITATIONS



Warranty No: 700372872
Project No: 3480157
Start Date: 10/30/2019

Building Identification: Madison Water Utility - Olin
Building Address: 119 E Olin Ave, Madison, WI 53713-1431
Building Owner: City of Madison
Roofing Contractor: MALY ROOFING COMPANY INC, 40000484

Subject to the terms, conditions, and limitations set forth herein, Firestone Building Products Company, LLC ("Firestone"), an Indiana limited liability company, provides the Building Owner ("Owner") named above with this Limited Warranty for the Firestone provided System(s) or Material(s) set forth herein. This Warranty consists of multiple pages, all of which comprise the express terms and conditions of the warranty herein. Additional requirements, terms, conditions, exceptions, and limitations are defined in subsequent pages. In the event that any inconsistencies exist between the General Terms, Conditions and Limitations listed below and the Terms, Conditions and Limitations in subsequent pages, the subsequent pages will prevail.

GENERAL TERMS, CONDITIONS AND LIMITATIONS

Payment Required. Firestone shall have no obligation under this Limited Warranty unless and until Firestone and the licensed applicator have been paid in full for all materials, supplies, services, approved written change orders, warranty costs and other costs which are included in, or incidental to, the System or Materials. In the event that repairs not covered by this Limited Warranty are necessary in the future, Firestone reserves the right to suspend this Limited Warranty until such repairs have been completed and the licensed applicator and/or Firestone has been paid in full for such repairs.

Exclusions. Firestone shall have no obligation under this Limited Warranty, or any other liability, now or in the future if a claim or damage is caused by: Natural forces, disasters, or acts of God including, but not limited to, fires, hurricanes, tornadoes, wind-blown debris, lightning, earthquakes, volcanic activity, atomic radiation, insects or animals; Act(s), conduct or omission(s) by any person, or act(s) of war, terrorism or vandalism, which damage the System or Material or which impair the System or Material's ability to perform properly; Failure by the Owner to use reasonable care in maintaining the System or Material, said maintenance to include, but not be limited to, those items listed in the current version of the Firestone Owner's Manual available at <http://firestonebpco.com/> in the Building Owner's Toolbox; Deterioration, defects or failure of building components, including, but not limited to, the substrates, structural elements, walls, mortar, HVAC units, skylights, foundation settlement, etc.; Construction generated moisture, condensation or infiltration of moisture in, from, through, or around the walls, copings, rooftop hardware or equipment, skylights, building structure or underlying or surrounding materials; Acid, oil, harmful chemicals, or the reaction between them; Alterations or repairs to the System or Materials that are not completed in accordance with Firestone's published specifications, not completed by a Firestone licensed applicator, and/or completed without proper notice to Firestone; The design of the system: Firestone does not undertake any analysis of the architecture or engineering required to evaluate what type of System, Installation or Material is appropriate for a building and makes no warranty express or implied as to the suitability of its Products for any particular structure; such a determination is the responsibility of the architect, engineer or design professional; Improper selection of materials for the assembly or the failure to accurately calculate wind uplift and/or applicable design loads; Deterioration to metal materials and accessories caused by marine salt water, atmosphere, or by regular spray of either salt or fresh water; Failure of any non-Firestone brand materials used in the Firestone System or Installation not specifically accepted in writing by Firestone to be included in coverage; Change in building use or purpose; Failure by the Firestone licensed applicator or any additional contractor or subcontractor to follow Firestone's recommended installation instructions or approved specifications or drawings for the layout, design, and installation of the System or Materials. It shall be the Firestone licensed applicator's sole and exclusive responsibility to strictly follow Firestone's recommended installation instructions or approved specifications or drawings for the layout, design, and installation of the System or Materials; or Failure to correct all installation deficiencies listed in any Firestone inspection report.

Overburden. Owner shall be responsible for the costs associated with the removal and replacement, as well as any damage caused by the removal and replacement, of any overburden, superstrata or overlays, either permanent or temporary, which include but are not limited to: structures or assemblies added after installation, fixtures or utilities on or through the System or Material, support platforms or bases for Photovoltaic (PV) Arrays (aka - Solar Panels), Garden Roofs, Decks, Patios or any other obstacles that impede access, clear observation, investigation, and repair of the System or Materials, excluding ballast or pavers accepted by Firestone or overburden specifically included in subsequent pages of this Warranty.

Term. The term of this Limited Warranty shall be for the period set forth above and in subsequent pages of this document and shall not be extended under any circumstances without Firestone approval.

Access. During the term of this Limited Warranty, Firestone's designated representative or employees shall have free access to the Installation location for inspection, audit, or repair purposes during regular business hours. In the event that access is limited due to security or other restrictions, Owner shall reimburse Firestone for all reasonable cost incurred during inspection and/or repair of the System or Material that are due to delays associated with said restrictions.

Waiver. Firestone's failure to enforce any of the terms or conditions stated herein shall not be construed as a waiver of such provision or of any other terms and conditions of this Limited Warranty.

Disputes. Any dispute, controversy or claim between the Owner and Firestone concerning this Limited Warranty or relating to any material supplied or specifically required by Firestone shall be settled by mediation. The Owner hereby releases Firestone from all liability to Owner's insurance carrier or to anyone claiming under or through Owner by reason of subrogation or otherwise. In the event that the Owner and Firestone do not resolve the dispute, controversy or claim in mediation, the Owner and Firestone agree that neither party will commence or prosecute any suit, proceeding, or claim other than in the courts of Hamilton County in the state of Indiana or the United States District Court, Southern District of Indiana, Indianapolis Division. Each party irrevocably consents to the jurisdiction and venue of the above-identified courts.

Governing Law. This Limited Warranty shall be governed by and construed in accordance with the laws of the State of Indiana without regard to its rules on conflict of laws.

Severability. If any portion of this Limited Warranty is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall nevertheless continue in full force.

FIRESTONE DOES NOT WARRANT PRODUCTS INCORPORATED OR UTILIZED IN THIS INSTALLATION THAT WERE NOT FURNISHED BY FIRESTONE. FIRESTONE SPECIFICALLY DISCLAIMS LIABILITY UNDER ANY THEORY OF LAW ARISING OUT OF THE INSTALLATION OF, PERFORMANCE OF, OR DAMAGES SUSTAINED BY OR CAUSED BY, PRODUCTS NOT FURNISHED BY FIRESTONE. THIS LIMITED WARRANTY SUPERSEDES AND IS IN LIEU OF ALL OTHER WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND FIRESTONE HEREBY DISCLAIMS ALL SUCH WARRANTIES. THIS LIMITED WARRANTY SHALL BE THE OWNER'S SOLE AND EXCLUSIVE REMEDY AGAINST FIRESTONE, AND FIRESTONE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR DAMAGES TO THE BUILDING OR ITS CONTENTS, SUBSTRATES OR THE ROOF DECK. THIS LIMITED WARRANTY CANNOT BE AMENDED, ALTERED OR MODIFIED IN ANY WAY EXCEPT IN WRITING SIGNED BY AN AUTHORIZED OFFICER OF FIRESTONE. NO OTHER PERSON HAS ANY AUTHORITY TO BIND FIRESTONE WITH ANY REPRESENTATION OR WARRANTY WHETHER ORAL OR WRITTEN.

**THIS WARRANTY INSTRUMENT CONSISTS OF MULTIPLE PAGES, ALL OF WHICH ARE PART OF THIS DOCUMENT.
ADDITIONAL REQUIREMENTS ARE DEFINED ON SUBSEQUENT PAGES.**

200 4th Avenue South, Nashville, TN 37201
1-800-428-4442
www.firestonebpco.com

Firestone
Firestone Building Products

Page 2 of 5
1001.001.2015

FIRESTONE RED SHIELD ROOF SYSTEM LIMITED WARRANTY



Warranty No: 700372872
Project No: 3480157
Start Date: 10/30/2019

Building Identification: Madison Water Utility - Olin
Building Address: 119 E Olin Ave, Madison, WI 53713-1431
Building Owner: City of Madison
Roofing Contractor: MALY ROOFING COMPANY INC, 40000484

Main Roof

Firestone Red Shield - Metal - 20 Year - 55 mph

Square Footage: 16,150

For the warranty period indicated above, Firestone Building Products Company, LLC ("Firestone"), an Indiana limited liability company, warrants to the Building Owner ("Owner") named above that Firestone will, subject to the Terms, Conditions and Limitations set forth below, provide labor and material to repair any leak in the Firestone Roofing System ("System") caused by deterioration in the Firestone brand material due to normal weathering or any manufacturing or workmanship defect in the membrane within the scope of this warranty during the period specified above.

TERMS, CONDITIONS AND LIMITATIONS

Products Covered. The System shall mean only the Firestone brand roofing membranes, Firestone brand roofing insulations, Firestone brand roofing metal, and other Firestone brand roofing accessories when installed in accordance with Firestone technical specifications by a Firestone-licensed applicator. Any materials not manufactured or supplied by Firestone are not covered under this warranty.

Notice. In the event any leak should occur in the System, the Owner must give notice in writing or by telephone to Firestone within thirty (30) days of any occurrence of a leak. By so notifying Firestone, the Owner authorizes Firestone or its designee to investigate the cause of the leak at its option.

Investigation. Should the investigation reveal that the leak is excluded under the Terms, Conditions and Limitations, the Owner shall be responsible for payment of the investigation costs. Failure by Owner to pay for these costs shall render this Limited Warranty null and void. The Owner is responsible for completing repairs not covered by the Limited Warranty to be made at the Owner's expense that will permit this Limited Warranty to remain in effect for the un-expired portion of its term. Failure by the Owner to properly make these repairs in a reasonable manner using a Firestone-licensed applicator and within 60 days shall render this Limited Warranty null and void.

No Dollar Limit (NDL). If upon investigation, Firestone determines that the leak is not excluded under the Terms, Conditions and Limitations set forth in this Limited Warranty, the Owner's sole and exclusive remedy and Firestone's total liability shall be limited to the repair of the leak. There is no dollar limit placed on warranted leak repairs to the extent such repairs are covered by this Limited Warranty.

Exclusions. Firestone shall have no obligation under this Limited Warranty, or any other liability, now or in the future if a claim or damage is caused by:

Hail

Winds of peak gust speed at or in excess of 55 mph calculated at ten(10) meters above ground using available meteorological data: (All associated building components, including but not limited to the deck substrate, joists, columns and foundation, must also meet wind speed design requirements);

Roof traffic or storage of materials or equipment on the roof not specifically accepted in writing by Firestone.

Damage to the roof incurred during breach, rupture or failure of any building envelope component during a flood or wind event not covered under warranty; or, Failure to give proper notice as set forth in paragraph above.

Transfer. This Limited Warranty shall be transferable and assignable subject to Owner's payment of the current transfer fee set by Firestone.

Alteration. Owner shall obtain Firestone's written approval before making any alterations to the roof system or installing any structures, fixtures, or utilities on or through the roof. This includes modification of the Firestone roof system to serve as a support platform for Photovoltaic (PV) Arrays (aka - Solar Panels), Garden Roofs, Decks, Patios, and areas intended for public access. Roof modification approval typically requires owner sponsored enhancement of the roof system to meet additional performance requirements to ensure service life following the proposed modification. Firestone is the sole judge of whether or not enhancements to the roof system are required. Failure to obtain Firestone approval for a roof modification will result in invalidation of this warranty.

FIRESTONE BUILDING PRODUCTS COMPANY, LLC
By: Michael Huber

Authorized
Signature:

Title: Director of Warranty Services

THIS WARRANTY INSTRUMENT CONSISTS OF MULTIPLE PAGES, ALL OF WHICH ARE PART OF THIS DOCUMENT.
ADDITIONAL REQUIREMENTS ARE DEFINED ON SUBSEQUENT PAGES.

Page 3 of 5

1003.001.2015

Firestone
Firestone Building Products



FIRESTONE METAL PAINT FINISH LIMITED WARRANTY

Warranty No: 700372872

Project No: 3480157

Start Date: 10/30/2019

Building Identification: Madison Water Utility - Olin

Building Address: 119 E Olin Ave, Madison, WI 53713-1431

Building Owner: City of Madison

Roofing Contractor: MALY ROOFING COMPANY INC, 40000484

Main Roof

Metal Paint Finish - Metal - 35 Year

Square Footage: 16,150

For the warranty period indicated above, Firestone Building Products Company, LLC ("Firestone"), an Indiana limited liability company, warrants to the Building Owner ("Owner") named above that Firestone will, subject to the Terms, Conditions and Limitations set forth below, refinish any exterior paint finish ("Finish") on the UNA-CLAD brand coil-coated metal ("UNA-CLAD Metal") supplied by Firestone as part of the Firestone Project listed above which exhibits any of the following exterior surface conditions measured at the values listed below by Group:

- 1) Peeling, checking or cracking, except for crazing or cracking that may occur on formed edges or bends of the metal roofing panels and trim
- 2) Chalking in excess of a numerical rating, Vertical and Non-Vertical, listed below, when measured in accordance with ASTM D 4214 "Standard Methods of Evaluating Degree of Chalking of Exterior Paints," for a term not to exceed thirty (30) years
- 3) Fade or change in color in excess of the Vertical rating listed below in color difference units, as measured on exposed surfaces which have been cleaned of external deposits and chalk and the corresponding values measured on the original or unexposed painted surfaces when tested in accordance with ASTM D 2244 3.7.1 and 3.8.4, "Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates," for a term not to exceed thirty (30) years.

TERMS, CONDITIONS AND LIMITATIONS

Warranty Period of:

Group 1: Adhesion - 35 years, Chalk - 30 years at 8, Fade - 30 years at 5:

Almond, Bone White, Cityscape, Colonial Red, Hartford Green, Hemlock Green, Mansard Brown, Medium Bronze, Patina Green, Regal Blue, Sandstone, Sherwood Green, Sierra Tan, Sky Blue, Slate Gray, Stone White, Terra Cotta, Tropical Patina, Champagne Metallic, Classic Copper, Silver Metallic

Group 2: Adhesion 35 years, Chalk - 30 years at 8, Fade - 30 years at 7:

Charcoal Gray, Dark Bronze, Dark Ivy, Extra Dark Bronze, Teal

Group 3: Adhesion - 35 years, Chalk - 20 years at 8, Fade - 20 years at 9:

Brandywine, Matte Black, Regal Red, Electric Blue, Award Blue

Products Covered. This Limited Warranty is limited exclusively to metal roofing panels and trim fabricated from UNA-CLAD Metal and installed in accordance with Firestone technical specifications by a Firestone-licensed applicator. Any materials not manufactured or supplied by Firestone are not covered under this warranty.

Notice. In the event any peeling, checking, cracking, chalking, fading or excessive color change are observed by the Owner, the Owner must give notice in writing or by telephone to Firestone within thirty (30) days of any such observation. By so notifying Firestone, the Owner authorizes Firestone or its designee to investigate the condition of the paint finish at its option.

Investigation. Should the investigation reveal that the surface condition is excluded under the Terms, Conditions and Limitations, the Owner shall be responsible for payment of the investigation costs. Failure by Owner to pay for these costs shall render this Limited Warranty null and void. The Owner is responsible for completing repairs not covered by the Limited Warranty to be made at the Owner's expense that will permit this Limited Warranty to remain in effect for the un-expired portion of its term. Failure by the Owner to properly make these repairs in a reasonable manner using a Firestone-licensed applicator and within 60 days shall render this Limited Warranty null and void.

Limitations. If upon investigation, Firestone determines that the condition of the paint finish is not excluded under the Terms, Conditions and Limitations set forth in this Limited Warranty, the Owner's sole and exclusive remedy and Firestone's total liability shall be limited to the refinishing of the UNA-CLAD Metal as determined by Firestone to require refinishing. Any and all refinishing work so performed by Firestone in compliance with this warranty shall be performed by using any standard finishing practices and materials.

Exclusions. Firestone shall have no obligation under this Limited Warranty, or any other liability, now or in the future if a claim or damage is caused by:

Hail;

Winds;

Roof traffic or storage of materials or equipment on the roof not specifically accepted in writing by Firestone.

Standing water or the continuous spray of water;

Any installation within 1500 feet of a saltwater environment;

Surface temperatures that exceed 200 degrees Fahrenheit;

Airborne sand abrasion;

Metal shavings;

Any failure caused by the attachment or mounting of any item or device to or near the metal roofing panels and trim;

improper handling during fabrication and installation, including but not limited to, improper equipment fabrication, storage, transportation, erection, placement or

failure to immediately remove strippable protective film coatings; or

Failure to give proper notice as set forth in paragraph above.

Transfer. This Limited Warranty shall be transferable and assignable subject to Owner's payment of the current transfer fee set by Firestone.

Alteration. Owner shall obtain Firestone's written approval before making any alterations to the roof system or installing any structures, fixtures, or utilities on or through the roof. This includes modification of the Firestone roof system to serve as a support platform for Photovoltaic (PV) Arrays (aka - Solar Panels), Garden Roofs, Decks, Patios, and areas intended for public access. Roof modification approval typically requires owner sponsored enhancement of the roof system to meet additional performance requirements to ensure service life following the proposed modification. Firestone is the sole judge of whether or not enhancements to the

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1008.001.2015

Firestone
Firestone Building Products

FIRESTONE METAL PAINT FINISH LIMITED WARRANTY



Warranty No: 700372872
Project No: 3480157
Start Date: 10/30/2019

Building Identification: Madison Water Utility - Olin
Building Address: 119 E Olin Ave, Madison, WI 53713-1431
Building Owner: City of Madison
Roofing Contractor: MALY ROOFING COMPANY INC, 40000484

roof system are required. Failure to obtain Firestone approval for a roof modification will result in invalidation of this warranty.

FIRESTONE BUILDING PRODUCTS COMPANY, LLC
By: Michael Huber

Authorized
Signature: 

Title: Director of Warranty Services

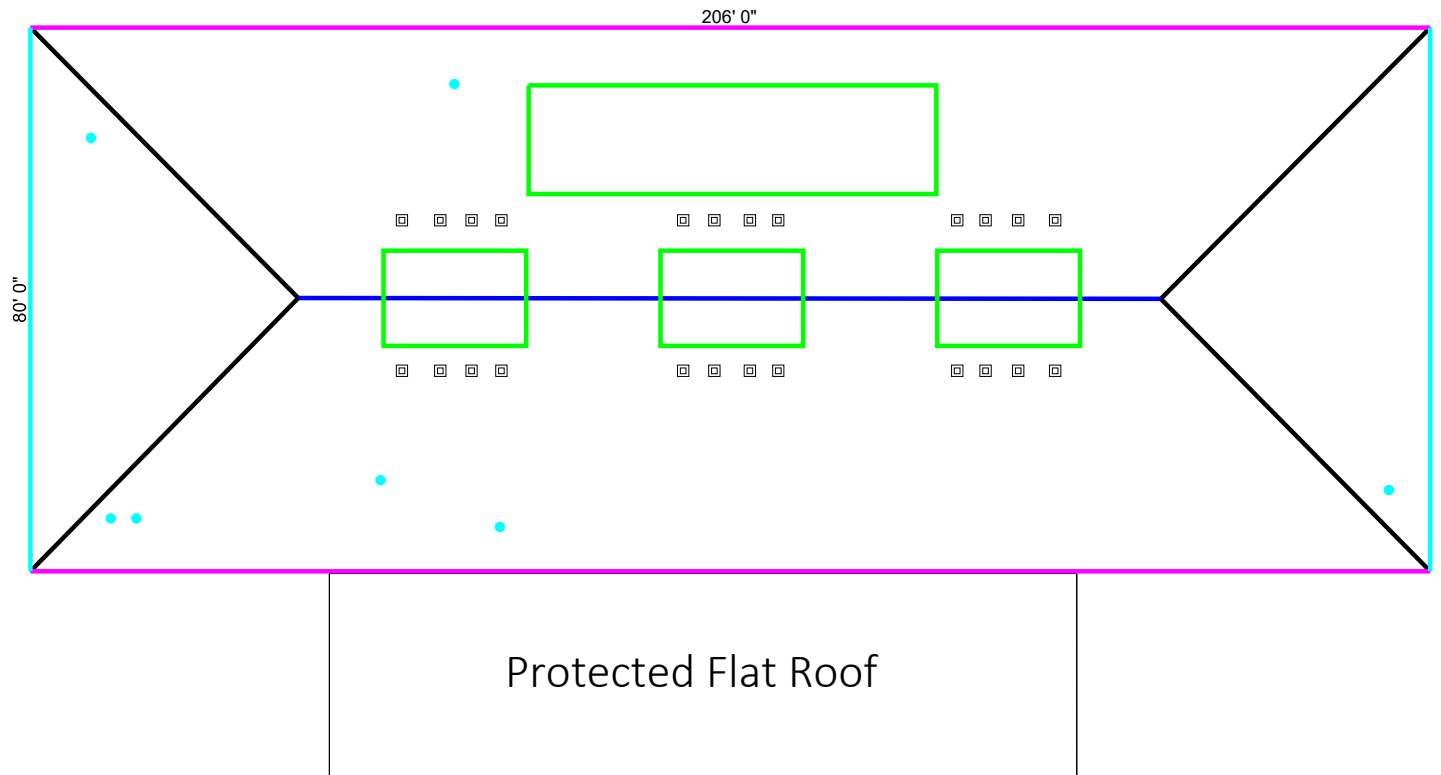
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1008.001.2015

Firestone
Firestone Building Products

Drawing Report

Madison Water Utility - Base Bid



-  Hips
-  Ridge (14-R-1)
-  Eave (14-E-2)
-  Gable/Rake (14-RK-1)
-  Side Wall Flashing (14-P-2A/B)
-  Field Wrap (14-P-1)
-  Roof Vent

Overburden Waiver

THIS FORM MAY ONLY BE SIGNED BY THE BUILDING OWNER

Project Name: Madison Water Utility **Firestone Project #:** 3480157

Roofing Contractor: Maly Roofing Company, Inc. **License No:** 40000484

Description of Overburden (Vegetative System, Photovoltaic (PV) system, etc.): Photovoltaic System

Overburden is defined as any above-membrane material, temporary or permanent, which requires removal prior to investigation or repair of a suspected roof leak (excluding stone or pavers used as ballast in a Firestone Ballasted Roofing System Assembly). This document must be signed and submitted for a Firestone warranty to be issued (if Overburden is added prior to the issuance of the warranty) or remain in good standing (if Overburden is added after the issuance of the Firestone warranty).

1. I agree to remove and replace any Overburden, at my expense, in order to provide access to the warranted Firestone roof system for the investigation or repair of a suspected roof leak.
2. Should damage occur to the roof system during the installation, removal, or replacement of the Overburden, I agree to pay the repair costs necessary to restore the roof system to a warrantable condition as determined by Firestone.
3. All electricity connected with a PV system will be rendered safe (no electricity to, from, or within the PV system), at my expense, prior to investigation and repair of a suspected roof leak.
4. I understand the Firestone Warranty does not include removal, replacement, or repair of the Overburden material, and that Firestone is not responsible or liable for the appearance or performance of any new Overburden materials which are installed following the investigation or repair of a suspected roof leak. I further understand that Firestone is not responsible for any loss which I may incur resulting from rendering safe all electricity connected with a PV system.

Name: _____

Building Owner

Building Owner Signature: _____

Date: _____

This Overburden Waiver supersedes all previous versions. Only the documents, processes, and policies contained in this version will be accepted by Firestone.

SUBMIT THIS FORM TO:

**Firestone Building Products Company
ATTN: Technical Services
200 4th Avenue South
Nashville, TN 37201**

03/19/2018



4202 Robertson Road
Madison, WI 53714
(608) 249-7663
Fax (608) 249-7555

1/15/2020

Workmanship Roofing Warranty

City of Madison
Engineering Division
210 Martin Luther King Jr. Blvd., Rm 115
Madison WI 53703

Re: Madison Water Utility – Olin, 119 E Olin Ave, Madison WI 53713-1431

Maly Roofing Company, shall guarantee that all equipment and all parts thereof, material, and or workmanship performed by Maly Roofing Company shall be first class and free from defects. The roof installation work done by Maly Roofing Company for this project, will be covered under the existing Firestone Building Products warranty as we are a Master Contractor with Firestone Roofing Company. The same roofing products were used to flash penetrations into this existing roof system.

Maly Roofing will, without undue delay or expense to the Owner, make good or repair any part of the work which shall fail or develop unfitness for the purpose for which it is intended within one year from October 30, 2019. This repair will be made assuming maintenance has been performed at regularly scheduled intervals as necessary and does not cover normal wear conditions anticipated for the product nor does it cover any damage caused by acts of God.

Sincerely,

Pamela Keiner
President
Maly Roofing Company, Inc.



4202 Robertson Road
Madison, WI 53714

Phone (608) 249-7663
Fax (608) 249-7555

All submitted items in this
document are approved.

Jeff B. Bell
8/13/19

Madison Water Utility

Attn: Jeff Belshaw

119 East Olin Ave.
Madison, WI 53713

July 30, 2019

Re: Madison Water Utility Vehicle Storage Building Roof Replacement
Olin Ave.

Subject: Roofing and Sheet Metal Submittal

Underlayment: "Clad-Gard SA-N" manufactured by Firestone Building Products.

Metal Roof Panels: 22ga Pre-finished Steel, "UC-14" Panels, 16" OC, Embossed, Concealed Fastener, manufactured by Firestone Building Products.

Snow Rail System: Snow rail system, "S5! Color-Gard" as manufactured by Metal Roof Innovations, Ltd.

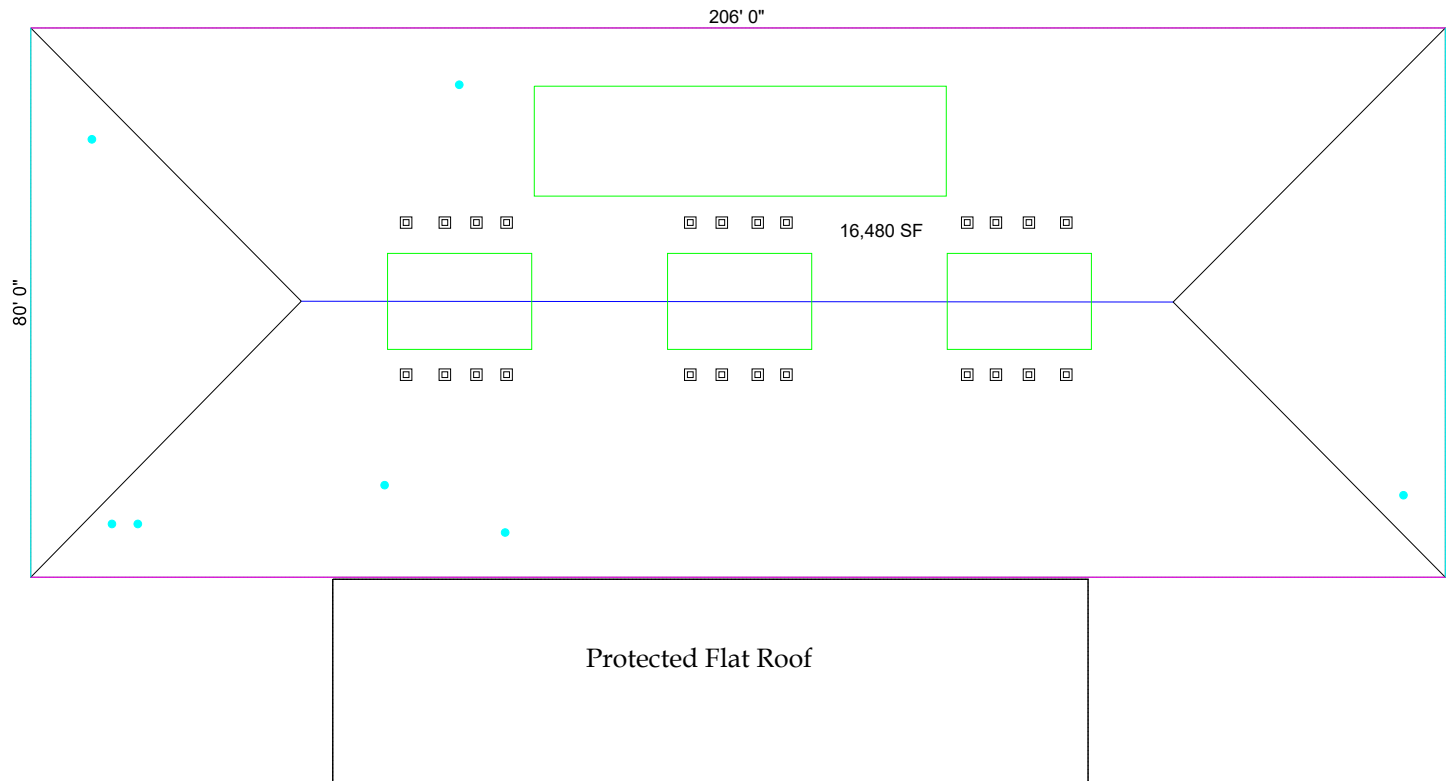
Sheet Metal: 24ga. pre-finished steel, "Una-Clad" as manufactured by Firestone Metals. Standard color per A/E.

Warranty: 20 Year Manufacturer's Warranty from Firestone Building Products.

Submitted by,
Megan Homburg
Maly Roofing Company Inc.

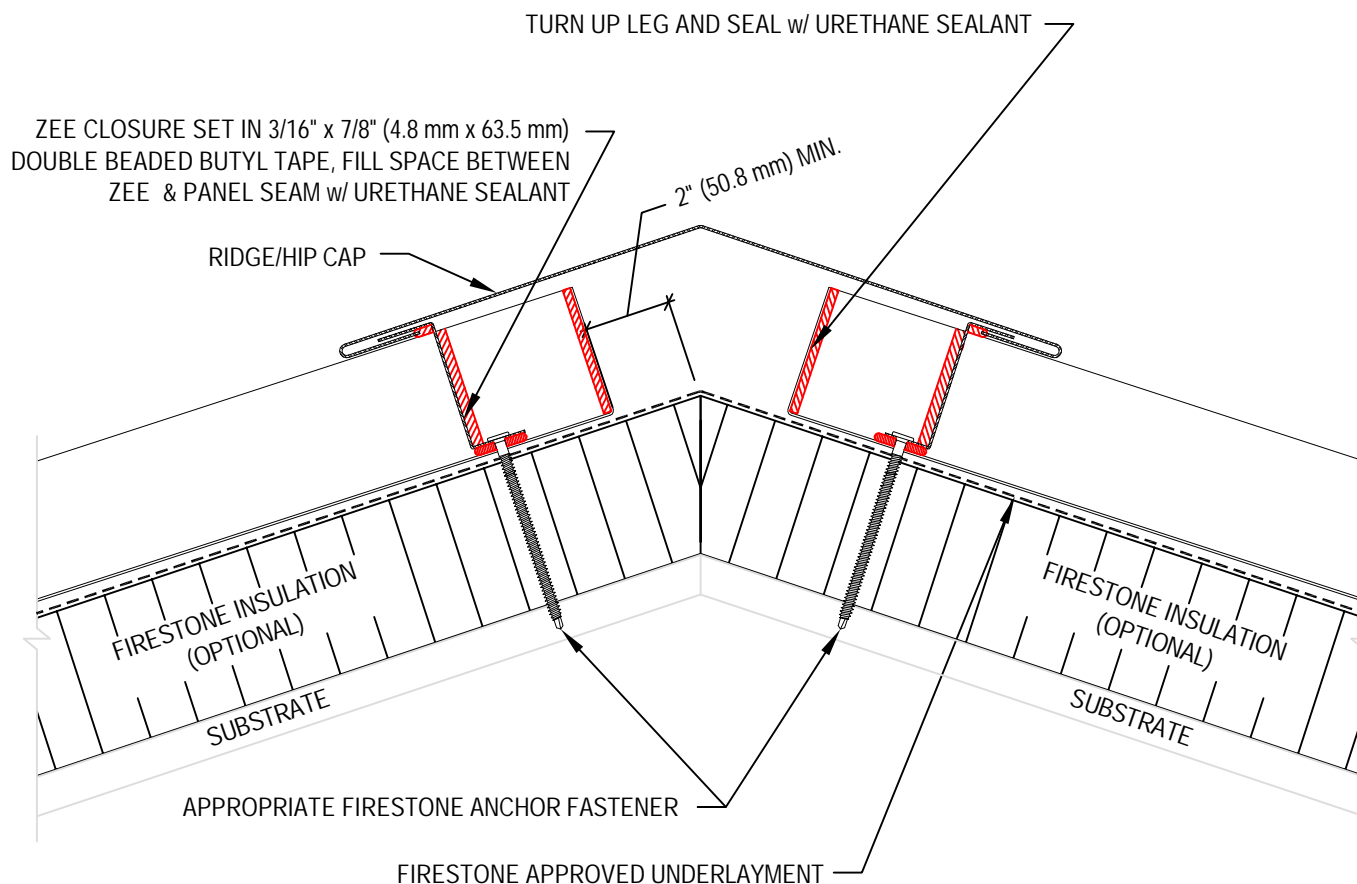
Drawing Report

Madison Water Utility - Base Bid



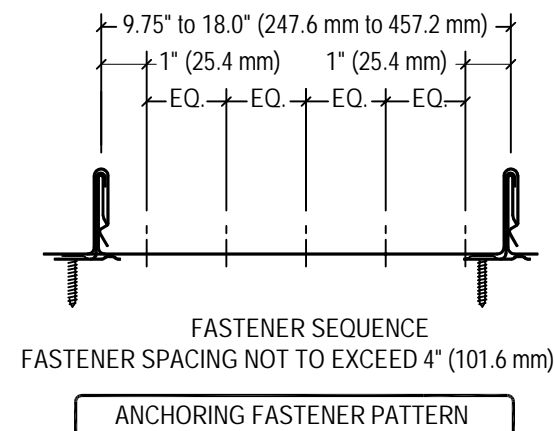
Key

- Hips
- Ridge
- Eave
- Gable/Rake
- Side Wall Flashing
- Field Wrap
- ☐ Roof Vent



NOTES:

1. REFER TO FIRESTONE WEBSITE FOR MOST CURRENT INFORMATION.
2. REFER TO TECHNICAL INFORMATION SHEETS FOR FASCIA SIZES, ACCESSORIES, AND FINISHES AVAILABLE.
3. REFER TO THE FIRESTONE TECHNICAL DATABASE FOR FASTENER/METAL COMPATIBILITY.
4. FIELD NOTCH ZEE CLOSURES. SET ZEE CLOSURE IN BUTYL TAPE AND SEAL AROUND REMAINING EDGES OF ZEE WITH URETHANE SEALANT.
5. APPLICATION DETAILS ARE FOR ILLUSTRATION PURPOSES ONLY AND MAY NOT BE APPROPRIATE FOR ALL BUILDING DESIGNS AND CONDITIONS.

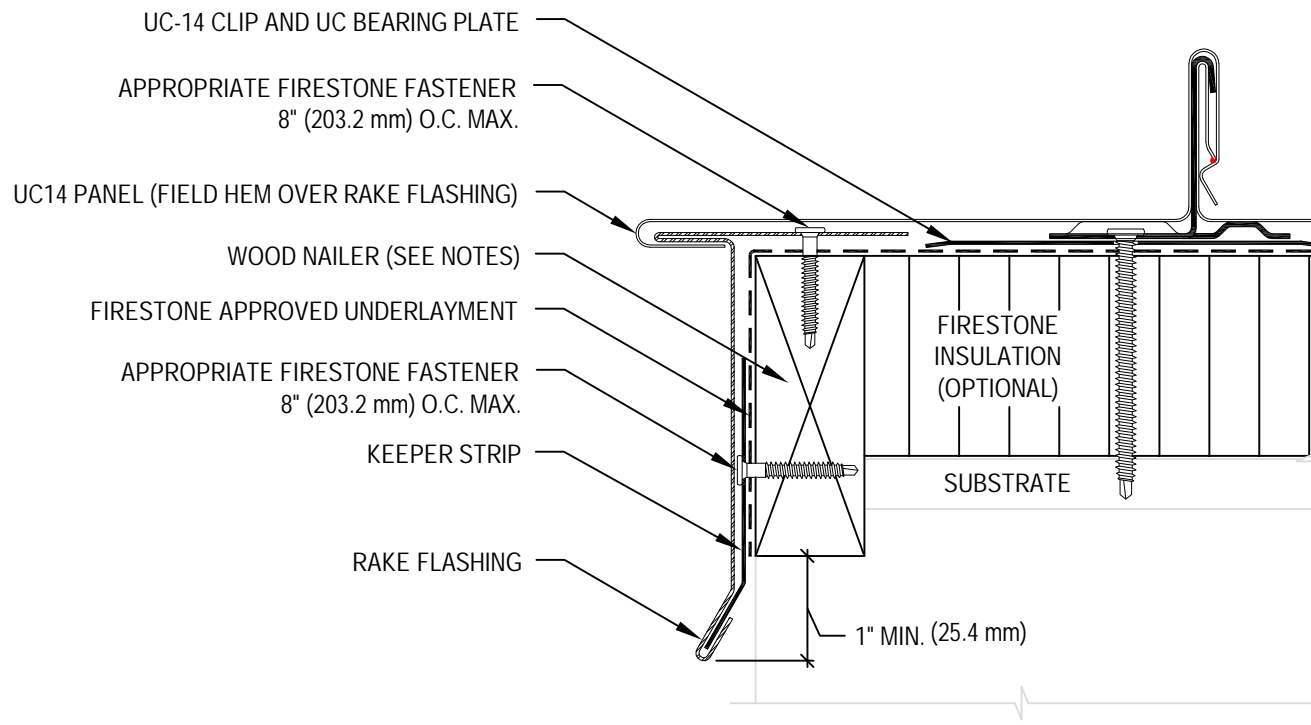


FOR WARRANTY PERIODS GREATER THAN 20 YEARS REFER TO METAL QUICK SPECS FOR MINIMUM REQUIREMENTS.

MAXIMUM WARRANTY: **20 YEARS**

NOTES:

1. REFER TO FIRESTONE WEBSITE FOR MOST CURRENT INFORMATION.
2. REFER TO TECHNICAL INFORMATION SHEETS FOR FASCIA SIZES, ACCESSORIES, AND FINISHES AVAILABLE.
3. WOOD NAILER MUST BE INSTALLED TO MEET APPLICABLE BUILDING CODES OR 200 LBS PER LINEAR FOOT MINIMUM IN ANY GIVEN DIRECTION.
4. REFER TO THE FIRESTONE TECHNICAL DATABASE FOR FASTENER/METAL COMPATIBILITY.
5. APPLICATION DETAILS ARE FOR ILLUSTRATION PURPOSES ONLY AND MAY NOT BE APPROPRIATE FOR ALL BUILDING DESIGNS AND CONDITIONS.



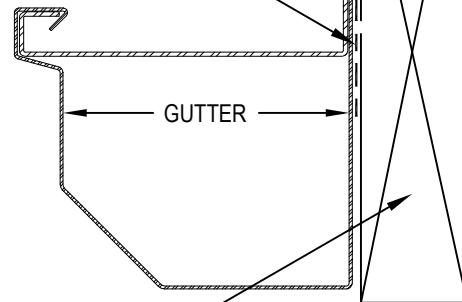
FOR WARRANTY PERIODS GREATER THAN 20 YEARS REFER TO METAL QUICK SPECS FOR MINIMUM REQUIREMENTS.

MAXIMUM WARRANTY: 20 YEARS

MIN. 6" (152.4 mm) WIDE APPROVED
UNDERLAYMENT
APPROPRIATE FIRESTONE FASTENER
8" (203.2 mm) O.C. MAX.

TAB & FOLD PANEL END
APPROPRIATE FIRESTONE FASTENER
8" (203.2 mm) O.C. MAX.

EAVE STARTER FLASHING
APPROVED UNDERLAYMENT



WOOD NAILER (SEE NOTES)

NOTES:

1. REFER TO FIRESTONE WEBSITE FOR MOST CURRENT INFORMATION.
2. REFER TO TECHNICAL INFORMATION SHEETS FOR FASCIA SIZES, ACCESSORIES, AND FINISHES AVAILABLE.
3. WOOD NAILER MUST BE INSTALLED TO MEET APPLICABLE BUILDING CODES OR 200 LBS PER LINEAR FOOT MINIMUM IN ANY GIVEN DIRECTION.
4. ROUND ALL METAL CORNERS AND PLACE BACK OF GUTTER STRAP 1/4" (6.4 mm) BELOW TOP OF WOOD NAILER
5. REFER TO THE FIRESTONE TECHNICAL DATABASE FOR FASTENER COMPATIBILITY WITH METAL.
6. REFER TO THE FIRESTONE TECHNICAL DATABASE FOR HEM LENGTH AND REQUIRED DISTANCE BETWEEN THE PANEL AND CLEAT.
7. APPLICATION DETAILS ARE FOR ILLUSTRATION PURPOSES ONLY AND MAY NOT BE APPROPRIATE FOR ALL BUILDING DESIGNS AND CONDITIONS.

MAXIMUM WARRANTY: **20 YEARS**

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SLIDING EAVE AT GUTTER

UNA-CLAD®

ACCEPTABLE SYSTEMS: UC14-RS

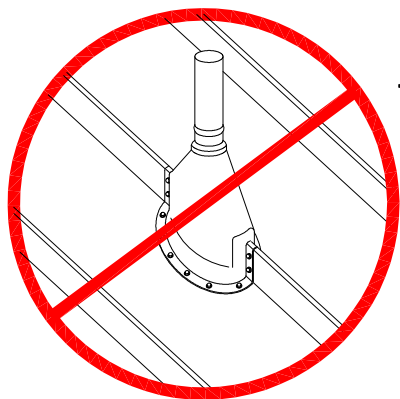
ISSUE / REVISION
DATE:

8/15/2008

NOT TO SCALE

DETAIL NO.

14-E-2



**UNDER NO CIRCUMSTANCES
CAN THE PIPE PENETRATE OR
COME WITHIN 4" (101.6 mm)
PANEL SEAM.**

CONTINUOUS BEAD OF
URETHANE SEALANT

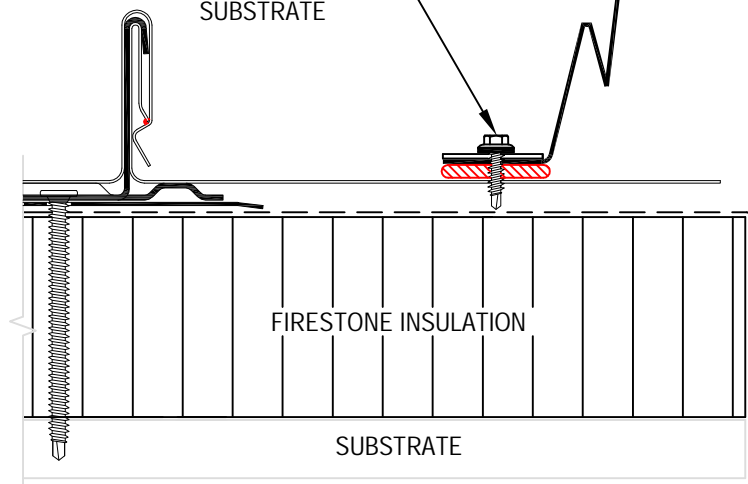
CONTINUOUS BEAD
OF URETHANE SEALANT

FIELD FABRICATED
METAL HOOD BY
OTHERS (OPTIONAL)

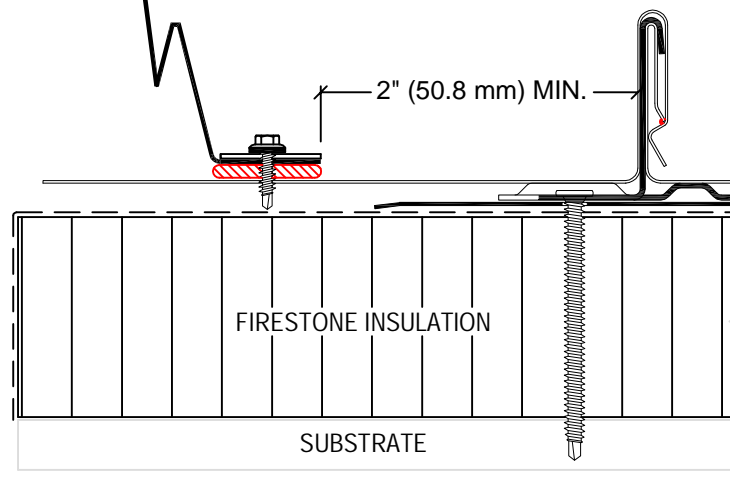
STAINLESS STEEL
CLAMPING RING
(SEE NOTES)

PRE-MOLDED PIPE FLASHING w/ ALUMINUM BASE

APPROPRIATE FIRESTONE
GASKETED FASTENER 3.0" (76.8 mm)
O.C. MAX. ;MUST NOT PENETRATE
SUBSTRATE



ROUND PENETRATION



NOTES:

1. REFER TO FIRESTONE WEBSITE FOR MOST CURRENT INFORMATION.
2. REMOVE ALL EXISTING FLASHINGS, LEADS, ETC. PIPE SURFACE MUST BE FREE OF ALL RUST, GREASE, INSULATION, ETC.
3. PIPE MUST BE ANCHORED TO ENSURE STABILITY.
4. PRE-MOLDED PIPE FLASHING MAY BE CUT TO HEIGHT, BUT NO LOWER THAN REINFORCING RING (NO WRINKLES OR FOLDS UNDER CLAMPING RING).
5. APPLY LAP SEALANT BETWEEN PENETRATION AND PRE-MOLDED PIPE FLASHING PRIOR TO INSTALLATION OF CLAMPING RING.
6. REFER TO THE FIRESTONE TECHNICAL DATABASE FOR FASTENER/METAL COMPATIBILITY.
7. DO NOT USE WHEN SERVICE LINE TEMP. EXCEEDS 180°F. REFER TO 3-P-4.
8. PIPE SHOULD EXTEND A MINIMUM OF 8" (203.2 mm) ABOVE ROOF SURFACE.
9. WHERE SNOW AND ICE ARE COMMON, FIRESTONE APPROVED ICE/SNOW-DAM PROTECTION IS RECOMMENDED UP-SLOPE OF PENETRATIONS

MAXIMUM WARRANTY: 20 YEARS

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PENETRATION WITH PIPE FLASHING

UNA-CLAD®

ACCEPTABLE SYSTEMS: UC-14 RS

ISSUE / REVISION
DATE:

09/09/2013

NOT TO SCALE

DETAIL NO.

14-P-1

TECHNICAL INFORMATION SHEET

CLAD-GARD™ SA Metal Underlayment

Item Description

CLAD-GARD SA - N (NORTH)

CLAD-GARD SA - S (SOUTH)

Item Number

W6810RCGNR

W6810RCGST

NOTE: Clad-Gard SA - North is heat resistant up to 230 °F without degradation of material.
Clad-Gard SA – South is heat resistant up to 250 °F without degradation of material.



Product Information

Description:

Firestone CLAD-GARD SA Metal Underlayment consists of a Styrene-Butadiene-Styrene (SBS) rubber modified, self adhesive asphalt blend with a woven slip resistant traction film on the top surface and an opaque release film on the bottom surface. Firestone CLAD-GARD SA Metal Underlayment is designed for use as an underlayment with Firestone UNA-CLAD™ metal roofing assemblies. CLAD-GARD SA underlayment is also suitable for use under mechanically attached tile and shingles. This underlayment reseals around nails in accordance with ASTM D 1970.

Method of Application:

CLAD-GARD SA Metal Underlayment can be installed over Firestone ISO 95+™ GL insulation, HailGuard™ Composite insulation, ISOGARD™ HD Cover Board, Resista™ insulation, plywood or OSB. CLAD-GARD SA underlayment must be fully supported. Contact your Firestone Roof System Advisor for details.

1. Start at the lowest part of the roof deck, and install valley conditions first.
2. Lay the underlayment flat in place with the print side up.
3. Cut the CLAD-GARD SA underlayment to a length that can be easily managed. Allow for 3" (76 mm) side laps and 6" (152 mm) end laps.
4. Peel half of the release liner off the roll diagonally. Install by applying heavy, even hand pressure or brooming from the center of the sheet towards the outer edges. Remove the remaining release liner from the other half of the roll, and apply pressure in the same manner. Hand roll the laps to ensure adhesion.
5. In very steep slope applications, back nailing may be recommended. When back nailing, be sure that all nails are covered by the next overlapping sheet.

Storage:

- All material should be stored out of the weather in a clean, dry area in its original unopened packaging at a minimum of 50 °F (10 °C) and a maximum of 140 °F (60 °C).
- If material must be stored temporarily on the roof prior to application, it must be elevated from the roof surface on a pallet, stored on end, and protected from the weather with a light colored, opaque tarp in a neat, safe manner that does not exceed the allowable load limit of the storage area.

Shelf Life:

2 Years

Coverage:

182 ft² (16.0 m²)

NOTE: deduct applicable laps

TECHNICAL INFORMATION SHEET

CLAD-GARD™ SA Metal Underlayment

Precautions:

- Review Safety Data Sheet (SDS).
- Take care when transporting and handling Firestone CLAD-GARD SA rolls to avoid punctures and other types of physical damage.
- Isolate waste products, petroleum products, grease, oil (mineral and vegetable) and animal fats from all Firestone CLAD-GARD SA membranes.

LEED® Information:

Post Consumer Recycled Content: 0%

Post Industrial Recycled Content: 0%

Manufacturing Location: Quebec, Canada

*NOTE: LEED® is a registered trademark of the U.S. Green Building Council.



Packaging:

Roll Size: 3' (914 mm) roll width x 67' (20.4 m) roll length

Roll Weight: 46.7 lb (21.2 kg)

Rolls per Pallet: 25, Pallets per Truckload: 26

Typical Properties

Property	ASTM Standard	Nominal Values
Thickness:		40 mil (1.0 mm)
Dimension:		67 ft x 3 ft (20.4 m x 914 mm)
Roll Weight:		45.5 lb (20.6 kg)
Top Face:		Woven Polyethylene
Under Face:		Silicone Release Film
Maximum Load:	ASTM D 1970	64 / 88 lb/in (11.3 MD / 15.4 XD kN/m)
Elongation at Break:	ASTM D 1970	52 MD / 24 XD (%)
Static Puncture (N):	ASTM D 5602	90lb (400 N)
Peel Strength:	ASTM D 903	17.5 lb/in (3050 N/m)
Tear Resistance:	ASTM D 5601	84 / 90 lb (375 MD / 400 XD)
Cold Bending	ASTM D 1970	-22 °F (-30 °C)
Water Vapor Permeance:	ASTM D 1970	< 0.09 ng/Pa.s.m ² (< 0.016 perm)
Water Transmission:	ASTM E 96	No Wetness

Please contact Quality Building Services Technical Department at 1-800-428-4511 for further information.

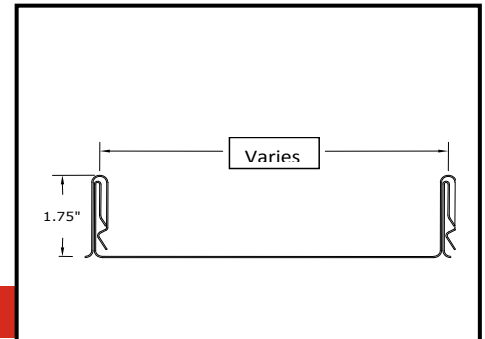
This sheet is meant to highlight Firestone products and specifications and is subject to change without notice. Firestone takes responsibility for furnishing quality materials which meet published Firestone product specifications or other technical documents, subject to normal roof manufacturing tolerances. Neither Firestone nor its representatives practice architecture. Firestone offers no opinion on and expressly disclaims any responsibility for the soundness of any structure. Firestone accepts no liability for structural failure or resultant damages. Consult a competent structural engineer prior to installation if the structural soundness or structural ability to properly support a planned installation is in question. No Firestone representative is authorized to vary this disclaimer.

TECHNICAL INFORMATION SHEET

UNA-CLAD™ UC-14

Item Description

Standing Seam Panel For Architectural Metal Roofing



Product Information

Description:

Firestone UNA-CLAD UC-14 Roofing Panel is a factory formed continuous interlocking, concealed clip, architectural standing seam metal roof panel with a proven seam design that snaps together for ease of installation. An optional thermally-applied pre-assembly in-seam sealant is available. The minimum slope requirement for a Firestone Red Shield™ Warranty is 3:12. For warranty requirements for slopes between 3:12 and 1:12, please contact your Building Systems Advisor.

Method of Application:

1. Firestone UC-14 panels must be installed in a sequential order.
2. Application of a Firestone underlayment prior to panel installation is recommended.
3. A smooth, solid substrate of plywood, OBS, or a rigid insulation board mechanically attached to a steel deck is recommended for the Firestone UC-14 metal roof panel.

NOTE: Install assembly according to Firestone Metal Design and Application Guides found on the Firestone website. Follow approved installation details.

Storage:

- Firestone metal panels should be stored in a well ventilated, dry place where no moisture can contact them. Moisture (From rain, snow, condensation, etc.) trapped between layers of material may cause water stains or white rust, which can affect the service life of the material and will detract for the appearance.
- If outdoor storage cannot be avoided, protect the panels with a ventilated canvas or waterproof paper cover. Do not use plastic, which can cause condensation. Keep the material off the ground in an inclined position with an insulator such as wood. Protective film may degrade or become brittle with long term exposure to direct sunlight.

Precautions:

- Oil canning is not a cause for rejection. Heavier gauges, narrower widths, striations, and embossing minimize oil canning.
- Firestone recommends a minimum bend radius of 2T. Anything less than a 2T bend radius can cause crazing to the material.
- Sealant for end laps and lap joints shall be non-drying, non-toxic, and non-shrinking with a serviceable temperature of -60 to 212 °F (-51 to 100 °C).
- Quality, long-life butyl sealants work best as a gasket sandwiched between two pieces of metal. Non-acetic cured silicone color matching sealants are recommended when voids must be filled. Sealants are not a substitute for proper assembly and workmanship.
- Exercise caution when lifting, moving, transporting, storing or handling Firestone metal to avoid possible physical damage.
- Refer to Safety Data Sheets (SDS) for safety information.
- Immediately remove protective film after installation.

TECHNICAL INFORMATION SHEET

UNA-CLAD™ UC-14

Manufacturing Location:

Anoka, MN



Product Data

Tapered Panels:	No
Radius Panels:	No
Stiffening Ribs:	Optional
Striations:	Optional
Sealant:	Optional In-Seam, Thermally Applied
Standard Panel Surface:	Smooth
Optional Panel Surface:	Stucco Embossed
Clip:	UC-14 Clip

Product Size

Panel Width:	8" (203.2 mm) – 24" (609.6 mm)
Optimal Panel Width:	18" (457.2 mm)
Seam Height:	1.75" (44.5 mm)
Minimum Panel Length:	36" (914.4 mm)
Maximum Panel Length:	600" (15.24 m)

Technical Information

Up lift Resistance:	UL 580 Class 90
Air Infiltration:	ASTM E 1680
Uniform Static Air Pressure :	ASTM E 1592
Water Penetration:	ASTM E 1646
Fire Rating:	UL Class A Rated Assemblies, UL 263 and UL 790
Hail Impact Rating:	Class 4, UL 2218
Miami-Dade County & Florida Building Code:	Approved

NOTE: Testing is not applicable for all combinations of substrates, materials, and dimensions. All construction assemblies must be installed in accordance with the tested assembly. Please refer to the Metal Code Approval Guide on the Firestone website for tested assemblies and code listings.

Please contact your Building Systems Advisor for warranty requirements and additional Information.

TECHNICAL INFORMATION SHEET

UNA-CLAD™ UC-14

Typical Properties

Material and Thickness	Metal Specification:	Available Finishes
Aluminum	Base Metal: Aluminum	Anodized Kynar 500®/Hylar 5000® Unpainted/Mill Finish
0.032" (0.81 mm)	Minimum Yield: 21 KSI (145 MPa) Thermal Expansion: 12.6×10^{-6} in/in/ °F (22.2 m/m.K x 10^{-6}) Mod. Of Elasticity: 10.0×10^3 x KSI (68.9 MPa)	
Galvanized Steel	Base Metal: AISI-G90 Galvanized steel	Kynar 500®/Hylar 5000® Unpainted G90
26 ga. (0.48 mm) 24 ga. (0.64 mm) 22 ga. (0.79 mm)	Minimum Yield: 33 to 45 KSI (227 to 310 MPa) Thermal Expansion: 06.7×10^{-6} in/in/ °F (13.9 m/m.K x 10^{-6}) Mod. Of Elasticity: 29.0×10^6 x KSI (200 GPa)	
Galvalume® Steel	Base Metal: AZ-55 Hot Dipped Galvalume	Acrylume® – Clear Acrylic Coated Kynar 500®/Hylar 5000®
26 ga. (0.48 mm) 24 ga. (0.64 mm) 22 ga. (0.79 mm)	Minimum Yield: 50 KSI (345 MPa) Thermal Expansion: 06.7×10^{-6} in/in/ °F (13.9 m/m.K x 10^{-6}) Mod. Of Elasticity: 29.0×10^6 x KSI (200 GPa)	
Copper	AGSC minimum copper content of 99.9% copper, silver counting as copper, cold rolled from ingots of 122 alloy.	Natural
16 ga. (0.56 mm) 20 ga. (0.69 mm)	Thermal Expansion: 9.3×10^{-6} in/in/ °F (16.5 m/m.K x 10^{-6}) AGSC copper meets and/ or exceeds ASTM B370 specification.	

NOTE: For standard color selection, consult the current UNA-CLAD Color Selection Guide. Custom color services are available upon request. Consult the current base metal Sheet & Coil TIS for additional information on the base metal and coating. Not all materials and thicknesses are available from all locations.

Please contact Quality Building Services Technical Department at 1-800-428-4511 for further information.

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TECHNICAL INFORMATION SHEET

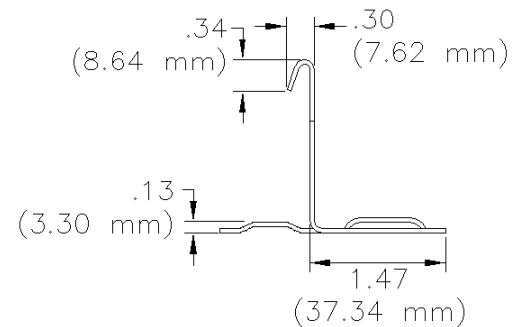
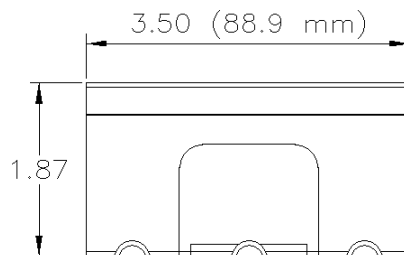
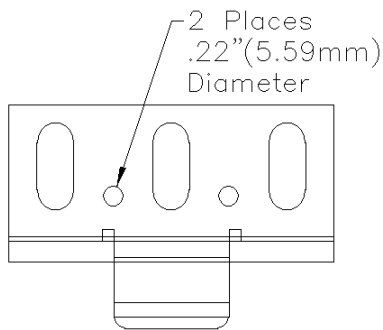
UC-14 Clip

Item Description

Galvanized Steel
Stainless Steel

Item Number

W6810C1417G
W6810C1417S



Product Information

Description:

Firestone UNA-CLAD UC-14 Clips are specially designed to be used in the attachment of the Firestone UNA-CLAD UC-14 Standing Seam Roof Panel. The design of the clip allows unlimited thermal movement of the panel.

Method of Application:

1. Position the clips flush against the vertical seam.
2. Ensure clip is parallel with vertical seam.
3. Attach clips to roof deck using the appropriate Firestone fastener.
4. Position adjacent panel flush against installed clip.

Note: Install assembly according to Firestone Metal Design and Application Guides found on the Firestone website. Follow approved installation details

Storage:

Store in unopened original containers protected from the weather.

Precautions:

- Do not over drive or under drive fastener.
- Clips are designed to anchor UC-14 standing seam roof panels only.
- Can not be used with fasteners larger than No. 12.
- Eye protection must be worn during the installation of fasteners.

LEED® Information:

Post Consumer Recycled Content: 0%

Post Industrial Recycled Content: 0%

Manufacturing Location: Anoka, MN • College Park, GA • Las Vegas, NV • Warren, MI



TECHNICAL INFORMATION SHEET

UC-14 Clip

Packaging:

250 Clips per carton

Typical Properties

<u>Property</u>	<u>Detail</u>
Material:	G-90 Galvanized Steel or 300 Series Stainless Steel
Material Thickness:	18 ga.; 0.050" (1.27 mm)
Base:	3.75" (95.25 mm) x 1.15" (29.21 mm)
Tab:	3.50" (88.90 mm) x 1.875" (47.63 mm)
Hole Diameter:	0.22" (5.59 mm)

Please contact your Firestone Building System Advisor at 1-800-428-4511 for further information.

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S-5! Snow Retention Systems for Metal Roofs

1. MANUFACTURER

S-5!® Attachment Solutions
 Metal Roof Innovations, LTD.
 8655 Table Butte Road
 Colorado Springs, CO 80908

Technical Assistance:
 888-825-3432
 Support@S-5.com
 Fax: 719-495-0045

Internet Home Page: www.S-5.com

CSI Masterformat Category:
 07 72 53 Snow Guards



2. PRODUCT DESCRIPTION

BASIC USE:

Snow retention systems are designed to retain snow and ice on roofs, reducing the probability and severity of property damage to the roof components (i.e. gutters, adjacent roofs), damage to objects below the roof (i.e. landscape, vehicles, etc.) or potential injury or death to pedestrians.

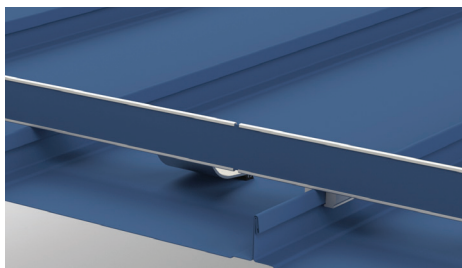
ADVANTAGES:

- Hundreds of independent laboratory tests have been performed on S-5! snow retention system attachment clamps across all major roof profiles and manufacturers. No other attachment solution is as lab tested, time tested or durable, with documented strength measured in tons.
- S-5! snow retention systems maintain the sleek aesthetics of metal roofs and compliment the design with matching color coatings or insert strips.
- S-5! snow retention systems do not penetrate the standing seam metal roof panel nor void the roof manufacturer's warranty. The systems utilize round-point setscrews to securely grip the metal roof panel seam without penetrating the weathering membranes. The round-point setscrews mechanically attach to the roof by tightening the setscrews with an industrial-grade screw gun to "dimple" the seam material into a mechanical interlock with the clamp.

PRODUCT TYPES:

COLORGARD®

ColorGard is the most versatile bar-type snow retention system for all applications. In order to be an indistinguishable element of the roof system, ColorGard utilizes a strip of the actual roof material as an insert to provide a perfect color-match for the life of the roof.

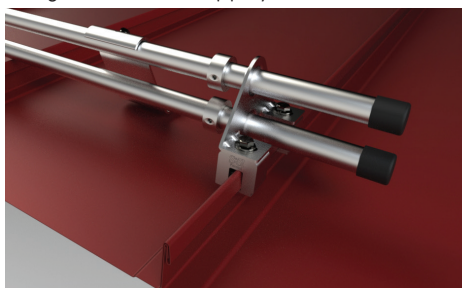


System Components:

- S-5! standard clamps; tested for specific metal roof manufacturer's system and configuration. Find specific metal roof manufacturer product and profile test data at www.S-5.com/LoadTable
- ColorGard® Punched or Unpunched Crossmember
- ColorGard® Crossmember Splice
- VersaClip™ clamp-attachment
- SnoClip™ II or III (depending upon seam height) or SnapClip™ II or III (depending upon seam height)

DUALGARD™

DualGard™ is the most versatile 1 inch two-pipe snow retention system for all standing seam roof applications. DualGard utilizes two patented S-5! Mini clamps for extra strength versus other two-pipe systems.

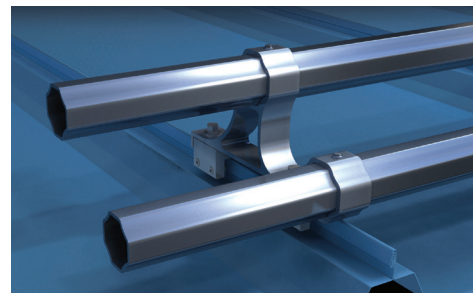


System Components:

- S-5! mini clamps; tested for specific metal roof manufacturer's system and configuration. Find specific metal roof manufacturer product and profile test data at www.S-5.com/LoadTable
- DualGard™ Brackets
- DualGard™ 1 inch o.d. aluminum pipe
- DualClip™ II or III (depending upon seam height)
- DualGard™ Splice
- DualGard™ Collar
- DualGard™ End Caps

X-GARD™

X-Gard™ is a robust 2 inch pipe snow retention system available in a one- or two-pipe configuration designed to be attached to standing seam metal roofs involving extreme conditions and/or spanning distances up to 48 inches.

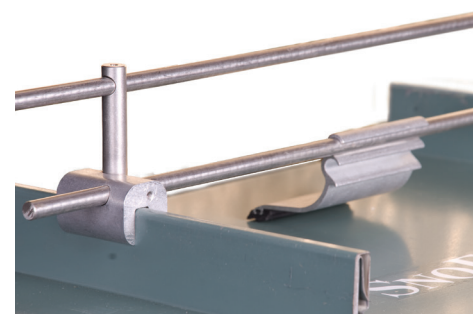


System Components:

- S-5! standard clamps; tested for specific metal roof manufacturer's system and configuration. Find specific metal roof manufacturer product and profile test data at www.S-5.com/LoadTable
- X-Gard™ 1.0 or 2.0 Brackets
- NEX® 2.0 Pipe OR optional 1.9 Round Pipe*
- X-Clip III™
- X-Gard™ End Caps
- X-Gard™ Splice

SNORAIL™ & SNOFENCE™

SnoRail™ (one rod) and SnoFence™ (two rods) are rail-type snow retention systems designed to be attached to standing seam metal roofs. They offer a sleek, stylish design for traditional standing seam roofing. Brass versions of the components are available for sheet copper roofing.



System Components:

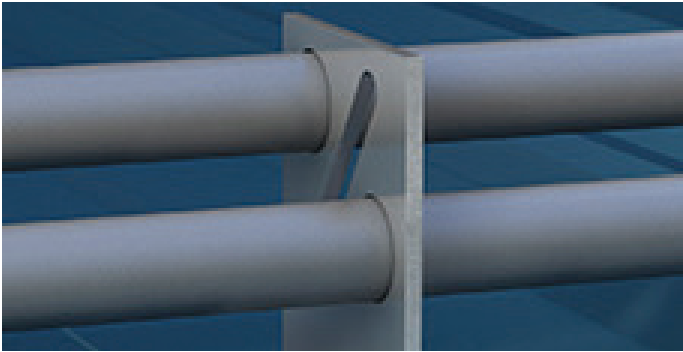
- S-5-ASF or S-5-AE seam clamps
- SnoPost™ or SnoPost E™
- Stainless Steel SnoRod™**
- Aluminum Coupling
- SnoClip™ II or III (depending upon seam height)
- SnapClip™ II or III (depending upon seam height)

*Optional; Not supplied by S-5!

**Mandatory; Not supplied by S-5!

VERSAGARD™

VersaGard™ is a versatile and economical 1 inch two-pipe snow retention system designed to be attached to exposed-fastened or face fastened metal roofs. VersaGard features a unique and patented “well” built into its base with a factory applied self-adhesive butyl sealant for leak-free attachment that will not crack or split. Upon removal of the protective seal, the bracket is also fastened with gasketed fasteners for a lifetime of worry-free performance.



System Components:

- VersaGard Bracket
- DualGard™ 1 inch o.d. aluminum pipe
- DualClip™ II or III (depending on seam height)
- DualGard™ Splice
- DualGard™ Collar
- DualGard™ End Caps

3. COMPOSITION & MATERIALS

S-5!® snow retention systems are made of mill-finished, aircraft quality aluminum. All associated hardware is stainless steel.

S-5! snow retention systems attached with aluminum S-5! clamps are completely compatible with painted or unpainted G-90 galvanized steel, bare or painted Aluminized, Galvalume®, Zinalume®, Zinalume® Plus, Acrylume®, Galvalume® Plus, Galfan® and Galvannealed steel, aluminum (painted, bare, or anodized), titanium-zinc (VM & Rheinzink®), and stainless steel metal roofs.

S-5! snow retention system may also be attached with brass S-5! clamps to provide metallurgical compatibility with copper roofs.

All S-5! snow retention systems can accept powder coated finishes to match the metal roof color if desired.*

4. TECHNICAL DATA

S-5! products are manufactured to meet or exceed the following standards:

- Aluminum Association (AA) - Aluminum Standards and Data, 2003 Edition.
- ASTM International (ASTM):
 - A484/A484M-16 – Standard Specifications for General Requirements for Stainless Steel Bars, Billets, and Forgings.
 - A554-16 – Standard Specification for Welded Stainless Steel Mechanical Tubing
 - A555/A555M-16 – Standard Specification for General Requirements for Stainless Steel Wire and Wire Rods
 - B221-04a - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
 - B85-03 - Standard Specification for Aluminum-Alloy Die Castings.
 - F836M-02 (2015) – Standard Specification for Style 1 Stainless Steel Metric Nuts (Metric).
 - F880-12 – Standard Specification for Stainless Steel Socket, Square Head, and Slotted Headless-Set Screws

ENVIRONMENTAL CONSIDERATIONS:

Where possible, S-5! products include a high percentage of recycled material, which lowers the environmental footprint. Additionally, S-5! products offer service lives equal

to the roof itself, and are 100% recyclable at the end of their extended service life, which may reduce the solid waste stream.

5. INSTALLATION

Detailed installation instructions can be obtained from manufacturer's website: www.S-5.com

Store materials protected from harmful weather, damage, or abuse. Verify that site conditions are acceptable before proceeding.

Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

6. LIMITATIONS

Any loads imposed on the S-5! clamps will be transferred to the roof panels to which they are attached. Roof panels must be adequately fastened to building structure to resist these loads. For critical installations, contact the roof panel manufacturer for specific test data of ultimate tensile load on specific panel materials and seam types. When relying upon tested load values, setscrew tensions should be verified and factors of safety should be used as appropriate.

S-5! snow retention systems are tested for specific design snow loads, roof configurations, and metal roof manufacturers. For X-Gard™, DualGard™ and ColorGard systems, use the calculator located on the S-5! website (www.S-5.com/Calculator) to correctly place, configure, and provide the proper number of the snow retention devices in conjunction with the third-party test information for each metal roof manufacturer and profile. Always install S-5! systems in strict accordance with manufacturer's published installation instructions.

7. COST & AVAILABILITY

Contact manufacturer-authorized distributors listed at www.S-5.com/Distributors for the most current product prices and product availability.

8. WARRANTY

Free 25-Year Limited Warranty:

All S-5! products and components are warranted to be free from defects in material and workmanship.

An optional ColorGard System Limited Lifetime Warranty is available on ColorGard snow retention systems. For additional details, visit the manufacturer website at www.S-5-ColorGard.com

9. MAINTENANCE

Maintenance is not normally required. Under extreme conditions, periodic inspection is advised and minor SnoClip adjustments may be necessary. If cleaning is desired, systems can be washed with mild soap and water with a clean water rinse.

10. TECHNICAL SERVICES

Technical assistance, including more detailed information, product literature, test results, project lists, assistance in preparing project specifications and arrangements for application supervision, is available by contacting S-5! or the nearest S-5! distributor.

☐ APPROVED

PROJECT NAME _____

APPROVED BY _____

PRODUCT SELECTED _____

(PLACE STAMP HERE)

*Optional; Not supplied by S-5!

**Mandatory; Not supplied by S-5!

TECHNICAL INFORMATION SHEET

Una-Clad Kynar 500®/Hylar 5000® Pre-Finished Galvanized Steel Architectural Sheet & Coil

Item Description

22, 24, and 26 gauge



Product Information

Description:

Firestone UNA-CLAD PVDF Coated Galvanized Steel Architectural Sheet & Coil is AISI-G90 extra smooth, minimum spangle, tension leveled, hot-dipped galvanized steel that is primed and coated on one side with UNA-CLAD full strength Hylar 5000/Kynar 500 (contains a minimum of 70% Hylar/Kynar polyvinylidene fluoride (PVDF) resins) premium fluoropolymer coating system of 1.0 (± 0.1) mil total dry film thickness. This coating is AAMA 621-02 compliant. For additional protection a wash coat of 0.3 – 0.4 mil dry film thickness is applied to the reverse side. An optional strippable protection film is applied for protection during fabrication and installation. Firestone UNA-CLAD PVDF Coated Galvanized Steel Architectural Sheet & Coil is for general sheet metal use in building applications and can be utilized for fascia panels, soffits, gravel stops, copings, and roofing such as flat seam, standing seam, batten seam, and mansards.

Method of Application:

1. Install in accordance with recognized sheet metal practices.
2. UNA-CLAD can be cut, formed, and fastened using conventional hand or power tools.
3. For best results cutting tool edges should be kept sharp, clean, properly dressed, and closely aligned.
4. Fabrication and erection can be accomplished with strippable plastic film in place. Film should be removed from areas of concealed or joined pieces.

Storage:

- Firestone metal sheet and coil should be stored in a well ventilated, dry place where no moisture can contact them. Moisture (from rain, snow, condensation, etc.) trapped between layers of material may cause water stains or white rust, which can affect the service life of the material and will detract from its appearance.
- If outdoor storage cannot be avoided, protect the sheet and coil with a ventilated canvas or waterproof paper cover. Do not use plastic, which can cause condensation. Keep the material off the ground in an inclined position with an insulator such as wood.
- Maximum 2,000 lb of sheets per pallet.

LEED® Information:

Post Consumer Recycled Content: 7.3%
Post Industrial Recycled Content: 23%
Kynar 500/Hylar 5000 Paint Finish: AAMA 621-02
Manufacturing Location: Anoka, MN
*NOTE: LEED® is a registered trademark of the U.S. Green Building Council.



TECHNICAL INFORMATION SHEET

Una-Clad Kynar 500®/Hylar 5000® Pre-Finished Galvanized Steel Architectural Sheet & Coil

Precautions:

- Protective film may degrade or become brittle with exposure to direct sunlight. Therefore, it must be removed immediately.
- The performance of this material in the field depends substantially on the integrity of the paint film and on the underlying
 - coating of zinc being intact. Therefore, this UNA-CLAD product should not be used in areas of high abrasion or where it is subject to mechanical damage.
- Product is pre-finished material; care must be exercised during fabrication and erection to avoid surface damage.
- Firestone recommends a minimum bend radius of 2T. Anything less than a 2T bend radius can cause crazing to the material.
- Attention should be paid to good house-keeping practices.
- Tools must be clean and properly dressed.
- Avoid dragging sheets over surfaces which may scratch or mar the finish.
- For general sheet metal use in building applications.
- Do not cut with power saws or abrasive blades.

Product Data

Property	Value	
Color	Standard Colors and Premium Print Patterns; See current UNA-CLAD color chart	
Finish	Extra Smooth Matte, Low to Medium Gloss	
Optional Finish	Extra Low Gloss*, High Gloss* and Stucco Embossed (Mechanical Finish)*	
Wash Coat	Polyester	
Gauge	Weight lb/ft ²	Weight kg/m ²
26 ga	0.775	3.78
24 ga	1.000	4.89
22 ga	1.406	6.87
Gauge	Split Coil Dimensions	Sheet Dimensions
26 ga	4.0" (0.1 m) – 48" (1.2 m)*	48" (1.2 m) x 96" (2.4 m), 120" (3.1 m) & 144" (3.7 m)*
24 ga	4.0" (0.1 m) – 48" (1.2 m)*	48" (1.2 m) x 96" (2.4 m), 120" (3.1 m) & 144" (3.7 m)*
22 ga	4.0" (0.1 m) – 48" (1.2 m)*	48" (1.2 m) x 96" (2.4 m), 120" (3.1 m) & 144" (3.7 m)*
NOTE: *May not be available in all colors, gauges, or widths. Additional lead times may apply. Contact your Firestone Building System Advisor for additional information.		

Typical Properties of Base Material

Property	Value
Base Metal	AISI G90 – Hot dipped galvanized steel sheet, commercial weight, meeting ASTM A653/A653M-10 CS Type B for Zinc coated (galvanized) steel sheets & coil
Minimum Yield	33 to 45 KSI (227 to 310 MPa)
Co-efficient of Thermal Expansion	06.7×10^{-6} in/in/F° (13.9 m/m.K $\times 10^{-6}$)
Modules of Elasticity	29.0×10^6 x KSI (200 GPa)
Specification	ASTM E111-4

TECHNICAL INFORMATION SHEET

Una-Clad Kynar 500®/Hylar 5000® Pre-Finished Galvanized Steel Architectural Sheet & Coil

Typical Properties of Fluoropolymer Coating

Property	ASTM Standard	Value
Abrasion Resistance	ASTM D 968, Method A	Coefficient of sand abrasion 65±10 Liters
Accelerated Weathering	ASTM D 4587 Condition B or ASTM G 23 Method 1 or 2, type EH apparatus Hours: 5000 ASTM D 4587 Condition B or ASTM G 53, Method 1 or 2, type EH apparatus or ASTM G154 Hours: 5000 ASTM D 4587 Condition B or ASTM G 23 Method 1 or 2, type EH apparatus or ASTM G151 Hours: 2000 ASTM D 3361 Hours: 1000	Chalk: Rating of 8 or better per ASTM D 4214 Color: ≤2ΔE color change per ASTM D 2244 Chalk: Rating of 8 or better per ASTM D 4214 Color: ≤2ΔE color change per ASTM D 2244 Chalk: Rating of 8 or better per ASTM D 4214 Color: ≤2ΔE color change per ASTM D 2244 Acceptable – No cracking, peeling, blistering, loss of adhesion of the protective coating, or corrosion of the base metal Chalk: Rating of 8 or better per ASTM D 4214, Method A (ASTM D 659) Color: <5ΔE Hunter Units per ASTM D 2244
Adhesion	ASTM D 3359, Method B	No loss of adhesion
Chalk Resistance	ASTM D 659	No Chalk; Rating 9-10
Chemical/Acid Pollution Resistance	ASTM D 1308, Procedure 7.2	Pass; No color change
Cyclic Salt Fog	ASTM D 5894 Hours: 3000	Scribe: Rating of 8, 1/32" creepage from scribe per ASTM D 1654, procedure A Field: Rating of 10, no blistering per ASTM D 1654, Procedure B
Formability	ASTM D 522	No cracking, no loss of adhesion to the point of metal Rupture
Specular Gloss	ASTM D 523	25-35 at 60 degrees
Hardness	ASTM D 3363	HB to 2H
Humidity Resistance	ASTM D 2247 Hours: 2000 ASTM D 1735 Hours: 1000	Rating of 10; No blistering No blistering, no loss of adhesion
Impact Resistance	ASTM D 2794	Reverse & Direct Impact: No cracking & no loss of adhesion
Salt Spray Resistance	ASTM B 117 Hours: 2000	Scribe: Rating of 7, 1/16" creepage Field: Rating of 10
Tunnel Test	ASTM E84	Class A Coating
UV Exposure	ASTM G 154 Hours: 2016	Chalk: Rating of 8 or better per ASTM D 4214, Method A (ASTM D 659) Color: <5ΔE Hunter Units per ASTM D 2244
Wet Adhesion	Water Immersion Hours: 1500	No loss of adhesion

Please contact Quality Building Services Technical Department at 1-800-428-4511 for further information.

This sheet is meant to highlight Firestone products and specifications and is subject to change without notice. Firestone takes responsibility for furnishing quality materials which meet published Firestone product specifications or other technical documents, subject to normal roof manufacturing tolerances. Neither Firestone nor its representatives practice architecture. Firestone offers no opinion on and expressly disclaims any responsibility for the soundness

TECHNICAL INFORMATION SHEET

Una-Clad Kynar 500®/Hylar 5000® Pre-Finished Galvanized Steel Architectural Sheet & Coil

of any structure. Firestone accepts no liability for structural failure or resultant damages. Consult a competent structural engineer prior to installation if the structural soundness or structural ability to properly support a planned installation is in question. No Firestone representative is authorized to vary this disclaimer.

RED SHIELD



WARRANTY

RED SHIELD ROOFING SYSTEM LIMITED WARRANTY

Warranty No:

FBPCO #

Square Footage:

s.f.

Building Owner:

Building Identification:

Building Address:

Warranty Period Of:

Roofing Contractor:

SAMPLE

For the warranty period indicated above, Firestone Building Products Company, LLC (Firestone), an Indiana limited liability company, warrants to the Building Owner (Owner) named above that Firestone will, subject to the Terms, Conditions and Limitations set forth below, repair any leak in the Firestone Roofing System (System).

TERMS, CONDITIONS AND LIMITATIONS

- Products Covered.** The System shall mean only the Firestone brand roofing membranes, Firestone brand roofing insulations, Firestone brand roofing metal, and other Firestone brand roofing accessories when installed in accordance with Firestone technical specifications by a Firestone-licensed applicator.
- Notice.** In the event any leak should occur in the System, the Owner must give notice in writing or by telephone to Firestone within thirty (30) days of any occurrence of a leak. Written notice may be sent to Firestone at the street address or fax number shown on the reverse side of this Limited Warranty. Evidence of this notice shall be the receipt by Owner of a Firestone Leak Notification Acknowledgement. By so notifying Firestone, the Owner authorizes Firestone or its designee to investigate the cause of the leak.
- Investigation.** If upon investigation, Firestone determines that the leak is not excluded under the Terms, Conditions and Limitations set forth in this Red Shield Roofing System Limited Warranty (the Limited Warranty), the Owner's sole and exclusive remedy and Firestone's total liability shall be limited to the repair of the leak. Should the investigation reveal that the leak is excluded under the Terms, Conditions and Limitations, the Owner shall be responsible for payment of the investigation costs. Failure by Owner to pay for these costs shall render this Limited Warranty null and void. Firestone will advise the Owner of the type and/or extent of repairs required to be made at the Owner's expense that will permit this Limited Warranty to remain in effect for the unexpired portion of its term. Failure by the Owner to properly make these repairs in a reasonable manner using a Firestone-licensed applicator and within 60 days shall render this Limited Warranty null and void.
- No Dollar Limit (NDL).** There is no dollar limit placed on warranted leak repairs to the extent such repairs are covered by this Limited Warranty.
- Disputes.** Any dispute, controversy or claim between the Owner and Firestone concerning this Limited Warranty shall be settled by mediation. In the event that the Owner and Firestone do not resolve the dispute, controversy or claim in mediation, the Owner and Firestone agree that neither party will commence or prosecute any suit, proceeding, or claim other than in the courts of Hamilton County in the state of Indiana or the United States District Court, Southern District of Indiana, Indianapolis Division. Each party irrevocably consents to the jurisdiction and venue of the above-identified courts.
- Payment Required.** Firestone shall have no obligation under this Limited Warranty unless and until Firestone and the licensed applicator have been paid in full for all materials, supplies, services, approved written change orders, warranty costs and other costs which are included in, or incidental to, the System. In the event that repairs not covered by this Limited Warranty are necessary in the future, Firestone reserves the right to suspend this Limited Warranty until such repairs have been completed and the licensed applicator and/or Firestone has been paid in full for such repairs.
- Exclusions.** Firestone shall have no obligation under this Limited Warranty, or any other liability, now or in the future if a leak or damage is caused by: (a) Natural forces, disasters, or acts of God including, but not limited to, fires, hurricanes, tornadoes, hail, wind-blown debris, lightning, earthquakes, volcanic activity, atomic radiation, insects or animals; (b) Winds of peak gust speed at or in excess of 55 MPH calculated at ten(10) meters above ground using available meteorological data; (c) Act(s), conduct or omission(s) by any person, or act(s) of war, terrorism or vandalism, which damage the System or which impair the System's ability to resist leaks; (d) Failure by the Owner to use reasonable care in maintaining the System, said maintenance to include, but not be limited to, those items listed on the reverse side of this Limited Warranty entitled Building Envelope Care and Maintenance Guide; (e) Deterioration or failure of building components, including, but not limited to, the roof substrate, walls, mortar, HVAC units, skylights etc.; (f) Construction generated moisture, condensation or infiltration of moisture in, from, through, or around the walls, copings, rooftop hardware or equipment, skylights, building structure or underlying or surrounding materials; (g) Acid, oil, harmful chemicals, or the reaction between them; (h) Alterations or repairs to the System that are not completed in accordance with Firestone's published specifications, not completed by an approved contractor, and/or not completed with proper notice to Firestone; (i) The design of the roofing system: Firestone does not undertake any analysis of the architecture or engineering required to evaluate what type of System is appropriate for a building and makes no warranty express or implied as to the suitability of its Products for any particular structure; such a determination is the responsibility of the architect, engineer or design professional; (j) Improper selection of materials for the roof assembly or the failure to accurately calculate wind uplift and/or roof loads; (k) Deterioration to metal roofing materials and accessories caused by marine salt water, atmosphere, or by regular spray of either salt or fresh water; or, (l) Change in building use or purpose.
- Transfer.** This Limited Warranty shall be transferable subject to Owner's payment of the current transfer fee set by Firestone.
- ☐ **Term.** The term of this Limited Warranty shall be for the period set forth above and such term shall not be extended under any circumstances.
- Roof Access.** During the term of this Limited Warranty, Firestone's designated representative or employees shall have free access to the roof during regular business hours. In the event that roof access is limited due to security or other restrictions, Owner shall reimburse Firestone for all reasonable cost incurred during inspection and/or repair of the System that are due to delays associated with said restrictions. Owner shall be responsible for the damage caused by, removal and replacement of any overburdens, superstrata or overlays, either permanent or temporary, excluding accepted stone ballast or pavers, as necessary to expose the system for inspection and/or repair.
- Waiver.** Firestone's failure to enforce any of the terms or conditions stated herein shall not be construed as a waiver of such provision or of any other terms and conditions of this Limited Warranty.
- Governing Law.** This Limited Warranty shall be governed by and construed in accordance with the laws of the State of Indiana without regard to that State's rules on conflict of laws.
- Severability.** If any portion of this Limited Warranty is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall nevertheless continue in full force.

FIRESTONE DOES NOT WARRANT PRODUCTS INCORPORATED OR UTILIZED IN THIS INSTALLATION THAT WERE NOT FURNISHED BY FIRESTONE. FIRESTONE SPECIFICALLY DISCLAIMS LIABILITY UNDER ANY THEORY OF LAW ARISING OUT OF THE INSTALLATION OF, PERFORMANCE OF, OR DAMAGES SUSTAINED BY OR CAUSED BY, PRODUCTS NOT FURNISHED BY FIRESTONE.

THIS LIMITED WARRANTY SUPERSEDES AND IS IN LIEU OF ALL OTHER WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND FIRESTONE HEREBY DISCLAIMS ALL SUCH WARRANTIES. THIS LIMITED WARRANTY SHALL BE THE OWNER'S SOLE AND EXCLUSIVE REMEDY AGAINST FIRESTONE, AND FIRESTONE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR DAMAGES TO THE BUILDING OR ITS CONTENTS OR THE ROOF DECK. THIS LIMITED WARRANTY CANNOT BE AMENDED, ALTERED OR MODIFIED IN ANY WAY EXCEPT IN WRITING SIGNED BY AN AUTHORIZED OFFICER OF FIRESTONE. NO OTHER PERSON HAS ANY AUTHORITY TO BIND FIRESTONE WITH ANY REPRESENTATION OR WARRANTY WHETHER ORAL OR WRITTEN.

FIRESTONE BUILDING PRODUCTS COMPANY, LLC

By:

Authorized

Signature: _____

Title: _____

SAMPLE

021215

Firestone

BUILDING ENVELOPE CARE AND MAINTENANCE GUIDE **(For Red Shield Warranted Roofing Systems)**

Congratulations on your purchase of a Firestone Roofing System. Your roof is a valuable asset that should be properly maintained. **Firestone Building Products recommends that all roofs and roofing systems receive periodic inspections and maintenance to ensure that they perform as designed.**

1. The roof should be inspected at least twice yearly and after any severe storms. A record of all inspection and maintenance activities should be maintained, including a listing of the date and time of each activity as well as the identification of the parties performing the activity.
2. Proper maintenance and good roofing practice require that ponded water (defined as water standing on the roof forty-eight hours after it stops raining) not be allowed on the roof. Roofs should have slope to drain, and all drain areas must remain clean. Bag and remove all debris from the roof since such debris can be quickly swept into drains by rain. This will allow for proper water run-off and avoid overloading the roof.
3. The Firestone Roofing System should not be exposed to acids, solvents, greases, oil, fats, chemicals and the like. If the Firestone Roofing System is in contact with any such materials, these contaminants should be removed immediately and any damaged areas should be inspected by a Firestone Licensed Applicator and repaired if necessary.
4. The Firestone Roofing System is designed to be a waterproofing membrane and not a traffic surface. Roof traffic other than periodic traffic to maintain rooftop equipment and conduct periodic inspections should be prohibited. In any areas where periodic roof traffic may be required to service rooftop equipment or to facilitate inspection of the roof, protective walkways should be installed by a Firestone Licensed Applicator as needed to protect the roof surface from damage.
5. Firestone recommends periodic maintenance for some roofing membranes:
 - a. **Smooth-surfaced Firestone APP membranes** should be coated with an approved liquid coating, such as Firestone Aluminum Roof Coating or Firestone AcryliTop applied in accordance with Firestone specifications, in order to maximize the service life of the membrane. If this coating is not applied as part of the initial roofing installation, it should be applied within the first five years after the roof is installed to help protect the membrane from surface crazing and cracking. In addition, this coating should be maintained as needed to re-coat any areas that have blistered, peeled or worn through.
 - b. **Granule-surfaced Firestone APP and SBS membranes** do not normally need surface maintenance other than periodic inspection for contaminants, cuts or punctures. If areas of granular loss are discovered during inspection, these areas should be coated with Firestone AcryliTop or other Firestone-approved coating applied in accordance with Firestone specifications.
 - c. **Gravel-surfaced Firestone BUR membranes** do not normally need surface maintenance other than periodic inspection for contaminants or damage. If areas of gravel loss are discovered during inspection, gravel shall be reinstalled into hot asphalt to protect the surface of the membrane. Coatings on smooth surface BUR membranes shall be maintained as needed to re-coat any areas that have blistered, peeled or worn through.
 - d. **Firestone EPDM and TPO roofing membranes** do not normally need surface maintenance other than periodic inspection for contaminants, cuts or punctures. Occasionally, approved liquid roof coatings, such as Firestone AcryliTop, are applied to the surface of EPDM membranes in order to provide a lighter surface color. Such coatings do not need to be maintained to assure the performance of the underlying EPDM roof membrane, but some maintenance and re-coating may be necessary in order to maintain a uniform surface appearance.
 - e. **Firestone Una-Clad metal roofing panels and trim** do not normally need surface maintenance other than periodic inspection for contaminants or damage. In addition, periodic cleaning of the surface may be needed to remove dirt and maintain the aesthetic appearance of the coated metal. Simple washing with plain water using hoses or pressure spray equipment is usually adequate. If cleaning with agents other than water is contemplated, several precautions should be observed: (1) do not use wire brushes, abrasives, or similar cleaning tools which will mechanically abrade the coating surface, and (2) cleaning agents should be tested in an inconspicuous area before use on a large scale.
6. All metal work, including counter-flashings, drains, skylights, equipment curbs and supports, and other Firestone brand rooftop accessories should be properly maintained at all times. Particular attention should be paid to sealants at joints in metal work and flashings. If cracking or shrinkage is observed, the joint sealant should be removed and replaced with new sealant.
7. Any alterations to the roof, including but not limited to roof curbs, pipe penetrations, roof-mounted accessories, and tie-ins to building additions must be performed by a licensed Firestone Licensed Applicator and reported to Firestone. Additional information and reporting forms for roof alterations are available at www.firestonebpco.com.
8. Should you experience a leak:
 - (a) Check for the obvious: clogged roof drains, loose counterflashings, broken skylights, open grills or vents, broken water pipes.
 - (b) Note conditions resulting in leakage. Heavy or light rain, wind direction, temperature and time of day that the leak occurs are all-important clues to tracing roof leaks. Note whether the leak stops shortly after each rain or continues to drip until the roof is dry. If you are prepared with the facts, the diagnosis and repair of the leak can proceed more rapidly.
 - (c) Contact Firestone Warranty Claims at 1-800-830-5612 as soon as possible...but please don't call until you are reasonably sure that the Firestone Roofing System is the cause of the leak.

Firestone feels that the preceding requirements will assist you, the building owner, in maintaining a watertight roof for many years. Your roof is an investment, and maintenance is essential to maximize your return on this important investment.

Firestone
BUILDING PRODUCTS
NOBODY COVERS YOU BETTER.®

250 West 96th Street – Indianapolis, IN 46260
1-800-428-4442 * 1-317-575-7000 * FAX 1-317-575-7100
www.firestonebp.com

FIRESTONE METAL PAINT FINISH LIMITED WARRANTY



Warranty No:
Project No:
Start Date:

SAMPLE

Building Identification:
Building Address:
Building Owner:
Roofing Contractor:

Name of Roof Area
Paint Finish – 35 Years

Square Footage: XXXXX

For the warranty period indicated above, Firestone Building Products Company, LLC ("Firestone"), an Indiana limited liability company, warrants to the Building Owner ("Owner") named above that Firestone will, subject to the Terms, Conditions and Limitations set forth below, refinish any exterior paint finish ("Finish") on the UNA-CLAD brand coil-coated metal ("UNA-CLAD Metal") supplied by Firestone as part of the Firestone Project listed above that exhibits any of the following exterior surface conditions measured at the values listed below by Group:

- 1) Loss of Adhesion, including, but not limited to, peeling, checking or cracking, except for crazing or cracking that may occur on formed edges or bends of metal roofing panels and trim, for a term not to exceed thirty-five (35) years.
- 2) Chalking in excess of a numerical rating, Vertical and Non-Vertical, listed below, when measured in accordance with ASTM D 4214 "Standard Methods of Evaluating Degree of Chalking of Exterior Paints," for a term not to exceed thirty (30) years.
- 3) Fade or change in color in excess of the Vertical rating listed below in color difference units, as measured on exposed surfaces which have been cleaned of external deposits and chalk and the corresponding values measured on the original or unexposed painted surfaces when tested in accordance with ASTM D 2244 3.7.1 and 3.8.4, "Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates," for a term not to exceed thirty (30) years.

TERMS, CONDITIONS AND LIMITATIONS

Warranty Period of:

Group 1: Adhesion – 35 years, Chalk – 30 years at 8, Fade – 30 years at 5:

Almond, Bone White, Cityscape, Colonial Red, Hartford Green, Hemlock Green, Mansard Brown, Medium Bronze, Patina Green, Regal Blue, Sandstone, Sherwood Green, Sierra Tan, Sky Blue, Slate Gray, Stone White, Terra Cotta, Tropical Patina, Burnished Slate

Group 2: Adhesion – 35 years, Chalk – 30 years at 8, Fade – 30 years at 7:

Charcoal Gray, Dark Bronze, Dark Ivy, Extra Dark Bronze, Teal

Group 3: Adhesion – 35 years, Chalk – 20 years at 8, Fade – 20 years at 9:

Brandywine, Matte Black, Regal Red, Electric Blue, Award Blue

Group 4: Adhesion – 30 years, Fade - 30 years at 8:

Premium Pattern Colors

Group 5: Adhesion – 20 years, Chalk – 20 years at 8

Champagne Metallic, Classic Copper, Silver Metallic, Weathered Zinc, *Vintage

**Note: Vintage finish not warranted in industrial or marine applications.*

Products Covered. This Metal Paint Finish Limited Warranty ("Limited Warranty") is limited exclusively to metal roofing panels and trim fabricated from UNA-CLAD Metal and installed in accordance with Firestone technical specifications by a Firestone-licensed applicator. Any materials not manufactured or supplied by Firestone are not covered under this Limited Warranty.

Notice. In the event that any peeling, checking, cracking, chalking, fading or excessive color change are observed by the Owner, the Owner must give notice to Firestone in writing or by telephone within thirty (30) days of any such observation. By so notifying Firestone, the Owner authorizes Firestone or its designee to investigate the condition of the Finish at its option.

Investigation. Should the investigation reveal that the surface condition is excluded under the Terms, Conditions and Limitations set forth in this Limited Warranty, the Owner shall be responsible for payment of the investigation costs. Failure by Owner to pay these costs shall render this Limited Warranty null and void. The Owner is responsible for completing repairs not covered by this Limited Warranty to be made at the Owner's expense that will permit this Limited Warranty to remain in effect for the unexpired portion of its term. Failure by the Owner to properly make these repairs in a reasonable manner using a Firestone-licensed applicator and within sixty (60) days shall render this Limited Warranty null and void.

Limitations. If upon investigation, Firestone determines that the condition of the Finish is not excluded under the Terms, Conditions and Limitations set forth in this Limited Warranty, the Owner's sole and exclusive remedy and Firestone's total liability shall be limited to the refinishing of the UNA-CLAD Metal determined by Firestone to require refinishing. Any and all refinishing work so performed by Firestone in compliance with this Limited Warranty shall be performed using any standard finishing practices and materials. Firestone's obligations over the life of this Limited Warranty are limited to the Owner's original purchase price of the UNA-CLAD Metal.

THIS WARRANTY INSTRUMENT CONSISTS OF MULTIPLE PAGES, ALL OF WHICH ARE PART OF THIS DOCUMENT.
ADDITIONAL REQUIREMENTS ARE DEFINED ON SUBSEQUENT PAGES.

Firestone
Firestone Building Products

1008.001.2019

FIRESTONE METAL PAINT FINISH LIMITED WARRANTY



Warranty No:
Project No:
Start Date:

SAMPLE

Building Identification:
Building Address:
Building Owner:
Roofing Contractor:

Exclusions. Firestone shall have no obligation under this Limited Warranty, or any other liability, now or in the future if a claim or damage is caused by: Hail; Winds; Roof traffic or storage of materials or equipment on the roof not specifically accepted in writing by Firestone; Standing water or the continuous spray of either salt or fresh water; Any installation within 1,000 feet of a saltwater environment; Surface temperatures that exceed 200°F; Airborne sand abrasion; Metal shavings; Any failure caused by the attachment or mounting of any item or device to or near the metal roofing panels and trim; Improper handling during fabrication and installation, including but not limited to, improper equipment fabrication, storage, transportation, erection, placement or failure to immediately remove strippable protective film coatings; or, Failure to give proper notice as set forth in paragraph above.

Transfer. This Limited Warranty shall be transferable and assignable subject to Owner's payment of the current transfer fee set by Firestone.

Alteration. Owner shall notify Firestone in writing upon making any alterations to the System or Materials, or installing any structures, fixtures, or utilities on or through the System after installation, including, but not limited to, Photovoltaic (PV) Arrays, Garden Roofs, Decks, Patios, and areas intended for public access. Failure to obtain Firestone's approval for a roof modification, or failure to provide required documentation, shall render this Limited Warranty null and void.

FIRESTONE BUILDING PRODUCTS COMPANY, LLC
By:

Authorized
Signature:

SAMPLE

Title:

THIS WARRANTY INSTRUMENT CONSISTS OF MULTIPLE PAGES, ALL OF WHICH ARE PART OF THIS DOCUMENT.
ADDITIONAL REQUIREMENTS ARE DEFINED ON SUBSEQUENT PAGES.

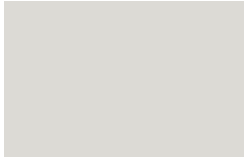
Firestone
Firestone Building Products

1008.001.2019

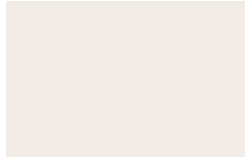


UNA-CLAD™ METAL

COLOR SELECTION



Stone White



Bone White



Almond



Sandstone



Sierra Tan



Slate Gray



Aged Zinc*



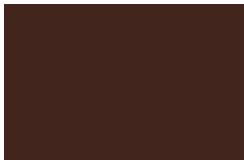
Cityscape



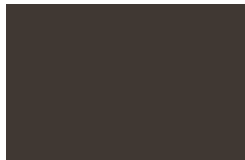
Charcoal Gray



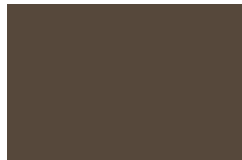
Matte Black



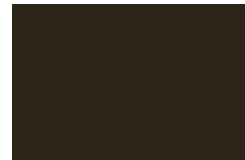
Mansard Brown



Burnished Slate*



Medium Bronze



Dark Bronze



Extra Dark Bronze



Brandywine



Regal Red



Colonial Red



Terra Cotta



Hartford Green



Award Blue*



Regal Blue



Sky Blue



Electric Blue*



Teal



Sherwood Green



Dark Ivy



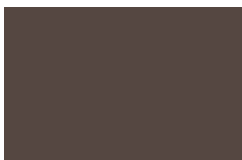
Patina Green



Helmlock Green



Tropical Patina



Vintage*[@]



Silver Metallic*



Classic Copper*



Champagne Metallic*

Colors shown are as close to actual painted steel as allowed by the printing process. Contact your local Sales Rep for actual metal samples.
SRI numbers available by request.

* = Denotes premium color. @ = 20-year finish warranty.

Firestone

firestonebpco.com