

GAF Slateline®
Designer Lifetime† Shingles



Slateline® Shingles

Bold shadow lines and tapered cut-outs create the look of slate at a fraction of the cost. Now with GAF Time-Release Algae-Fighting Technology for long-lasting algae-fighting power so strong it allows us to offer a 25-year StainGuard Plus™ Algae Protection Limited Warranty against blue-green algae discoloration.¹

Moravian Academy
422 Heckewelder Place
Bethlehem, PA 18015

Roofing/Gutters and
Downspouts Submittals
04/10/2024



Slateline® Shingles

Benefits:

- **Affordable luxury** — Slateline® Shingles are only a fraction of the cost of traditional slate or wood shakes
- **Sophisticated design** — Artisan-crafted shapes combined with oversized tabs and a dimensional design result in a sophisticated beauty unmatched by typical shingles
- **Custom color palette** — Specially formulated color palette is designed to accentuate the shingle's natural appeal
- **Stays in place** — Dura Grip™ Adhesive seals each shingle tightly and reduces the risk of shingle blow-off. Shingles warranted to withstand winds up to 130 mph (209 km/h).²
- **StainGuard Plus™ Algae Protection Limited Warranty** — Specially engineered capsules release copper over time for long-lasting algae-fighting power. It's protection so strong, it allows us to offer a 25-year limited warranty against blue-green algae discoloration.¹
- **High-performance** — Designed with Advanced Protection® Shingle Technology, which reduces the use of natural resources while providing excellent protection for your home
- **The ultimate peace of mind** — Lifetime¹ limited transferable warranty with Smart Choice® Protection (non-prorated material and installation labor coverage) for the first 10 years
- **Perfect finishing touch** — For the best look, use TimberTex® Premium Ridge Cap Shingles with a StainGuard Plus™ Algae Protection Limited Warranty¹
- **Trusted** — Slateline® Shingles have earned the Good Housekeeping Seal

Product details:

Product/System Specifics

- Fiberglass asphalt construction
- **Dimensions (approx.):** 17" x 40" (432 mm x 1,016 mm)
- **Exposure:** 7 1/2" (190.5 mm)
- **Bundles/Square:** 3
- **Pieces/Square:** 48
- **Nails/Square:** 288⁴
- **Hip/Ridge:** TimberTex^{®3}
- **Starter:** WeatherBlocker™
- **StainGuard Plus™ Algae Protection Limited Warranty¹**

Applicable Standards & Protocols

- UL Listed to ANSI/UL 790 Class A
- Classified by UL in accordance with ICC-ES AC438
- Meets ASTM D7158, Class H
- Meets ASTM D3161, Class F
- Meets ASTM D3018, Type 1
- Meets ASTM D3462⁵
- ICC-ES Evaluation Reports ESR-1475 and ESR-3267
- State of Florida approved
- Miami-Dade County Product Control approved
- Texas Department of Insurance listed
- CSA A123.5⁶

Installation

Detailed installation instructions are provided on the inside of each bundle wrapper of Slateline® Shingles. Installation instructions may also be obtained at gaf.com.

¹ Lifetime refers to the length of warranty coverage provided and means as long as the original individual owner(s) of a single-family detached residence (or eligible second owner(s)) owns the property where the qualifying GAF products are installed. For other owners/structures, Lifetime coverage is not applicable. Lifetime coverage on shingles requires the use of GAF Lifetime Shingles only. See the *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions. Visit gaf.com/LRS for qualifying GAF products. Lifetime coverage on shingles and accessories requires the use of any GAF Lifetime Shingle and at least 3 qualifying GAF Accessories. See the *GAF Roofing System Limited Warranty* for complete coverage and restrictions. For installations not eligible for the *GAF Roofing System Limited Warranty*, see the *GAF Shingle & Accessory Limited Warranty*. Visit gaf.com/LRS for qualifying GAF products.

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

³ 15-year 130 mph wind speed coverage requires special installation and use of GAF Starter Strip Shingles; see *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions.

⁴ Required by some local codes and required for enhanced wind coverage on certain products. These products are not available in all areas. See gaf.com/RidgeCapAvailability for details.

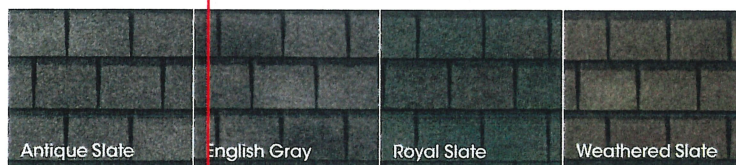
⁵ Required by some local codes and required for enhanced wind coverage on certain products.

⁶ Periodically tested by independent and internal labs to ensure compliance with ASTM D3462 at time of manufacture.

⁷ Refers to products sold in Canada only.

Note: It is difficult to reproduce the color clarity and actual color blends of these products. Before selecting your color, please ask to see several full-size shingles.

Colors:



We protect what matters most™



Tiger Paw™ Premium Roof Deck Protection

Help protect your home and roof system from
damaging moisture with premium roof deck protection

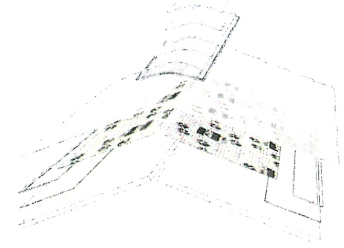


- Provides a critical layer of extra protection between your shingles and roof deck to resist wind-driven rain (or moisture from other sources)
- Offers longer-lasting protection than conventional asphalt felts (which can rot or become brittle over time)
- Avoids wrinkling and buckling for a better-looking finished roof



TigerPaw™
Premium Roof Deck Protection

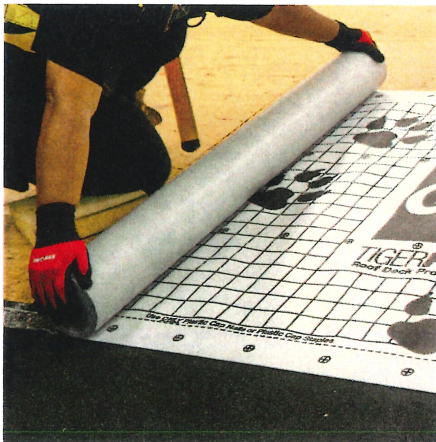
Tiger Paw™ Premium Roof Deck Protection



Benefits:

- Premium non-asphaltic, polypropylene construction for long-lasting protection
- Specially designed walking surface and anti-skid back coating help provide excellent walkability for installers
- Moisture-control design helps reduce damaging moisture on the roof deck unlike typical synthetic non-breathable underlayments¹
- Provides at least 600% (i.e., 7 times) greater tear strength² and 147% higher nail-pull strength³ than conventional #30 asphalt felt
- 48-inch-wide (1.22 m) roll provides 33% more coverage than conventional 36-inch-wide (914 mm) asphalt felts
- Light-gray surface is cooler to work on in hot weather than conventional black felts
- Eligible for up to a Lifetime[†] limited warranty. It's also an eligible accessory product in the Roof Deck Protection Category of GAF residential enhanced warranties.

Installation:



Product Details:

Nominal Specifications:

For use with asphaltic shingles and may also be used with slate, wood, metal, or tile⁴

- Roll size: 10 squares (1,000 sq. ft. [92.9 m²]) (excludes laps)
- Roll length: 250' (76.2 m)
- Roll width: 48" (1.22 m)
- Approx. roll weight: 40 lb. (18 kg)
- UV exposure: UV-stabilized polypropylene construction resists UV degradation for up to 180 days⁵

Code Approvals and Standards:

- Meets or exceeds the physical requirements of ASTM D226, Type II and D4869
- Miami-Dade County Product Control approved
- State of Florida approved
- ICC-ES ESR-3286
- CSA A123.3
- Component of a UL Listed ANSI/UL 790 Class A system when used with UL Class A shingles⁶
- Listed with Texas Department of Insurance as an acceptable alternate roof underlayment

[†] Lifetime refers to the length of warranty coverage provided and means as long as the original individual owner(s) of a single-family detached residence [or eligible second owner(s)] owns the property where the qualifying GAF products are installed. For other owners/structures, Lifetime coverage is not applicable. Lifetime coverage on shingles requires the use of GAF Lifetime Shingles only. See the *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions. Visit gaf.com/LRS for qualifying GAF products. Lifetime coverage on shingles and accessories requires the use of any GAF Lifetime Shingle and at least 3 qualifying GAF Accessories. See the *GAF Roofing System Limited Warranty* for complete coverage and restrictions. For installations not eligible for the *GAF Roofing System Limited Warranty*, see the *GAF Shingle & Accessory Limited Warranty*. Visit gaf.com/LRS for qualifying GAF products.

¹ As per GAF ASTM D570-modified testing.

² GAF trapezoidal tear strength testing per ASTM D4533.

³ GAF nail pull-through testing per ASTM D3462.

⁴ Contact GAF Technical Support at 1-800-766-3411 for acceptable non-asphaltic roofing systems and limited warranty coverage.

⁵ 180-day UV resistance refers to standardized testing conducted to ensure the product will not physically degrade when exposed to UV. It is NOT related to withstanding water, snow, or wind. While Tiger Paw™ Roof Deck Protection is water resistant, it is NOT WATERPROOF. DO NOT USE Tiger Paw™ Roof Deck Protection as a temporary roof to protect property or possessions.

⁶ Refer to UL Online Certification Directory for actual assemblies.

Note: Always use plastic cap nails or staples with plastic caps to install Tiger Paw™ Roof Deck Protection. Do NOT use nails or staples without caps.



To learn more about the Lifetime[†] Roofing System visit gaf.com/Lifetime

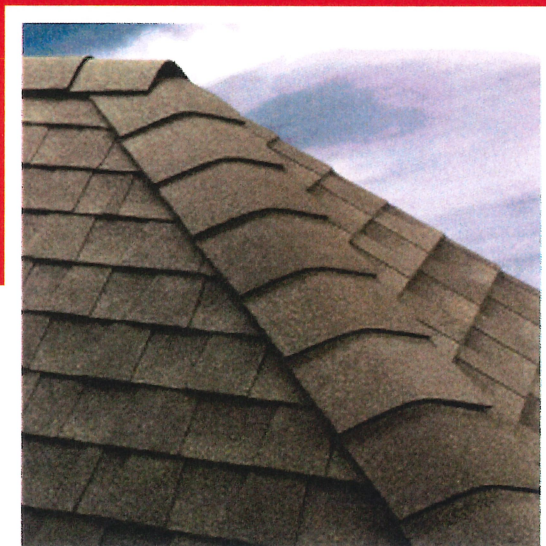


We protect what matters most™



TimberTex[®] Premium Ridge Cap Shingles

Choose the perfect finishing touch for your new roof with premium, dimensional ridge cap shingles.



- Offer double-layer protection against leaks and blow-offs at the hips and ridges
- Provide a high-quality alternative to cut-up strip shingles
- Provide enhanced limited warranty coverage† (vs. using typical 20- or 25-year cut-up 3-tab strip shingles as your ridge cap)



TimberTex® Premium Ridge Cap Shingles

Benefits:

- **Extra-thick, double-layer design** with large 8" (203 mm) exposure provides excellent dimension
- **Accentuate the beauty** of your newly installed GAF shingle roof
- **Manufactured by GAF to complement your GAF shingles** (unlike cut-up 3-tab shingles)
- **Dura Grip™ Self-Seal Adhesive** seals each piece tightly and helps reduce the risk of shingle blow-off
- **25-year StainGuard Plus™ Algae Protection Limited Warranty** against blue-green algae discoloration¹
- **Eligible for up to a Lifetime[†] limited warranty.** They're also an eligible accessory product in the Ridge Cap Shingle Category of GAF residential enhanced warranties.
- **Fewer pieces to install** (vs. typical cut-up 3-tab shingles) saves time on the roof

See the difference:



Before
Cut-up 3-tab strip shingles used at the hips and ridges.



After
A distinct finishing look that also protects against leaks and shingle blow-offs.

Product Details:

Nominal Specifications:

- 12" (305 mm) width
- 8" (203 mm) exposure

Packaging:

- 30 double-layer ridge caps per bundle (10 shingles, each with 3 double-layer ridge caps per shingle)

Coverage:

- 20 lineal ft. (6.1 lm) per bundle
- 5 bundles cover 100 lineal ft. (30.5 lm)
- 150 pieces cover 100 lineal ft. (30.5 lm)

Code Approvals:

- UL Listed to ANSI/UL 790 Class A²
- ASTM D3462³
- ASTM D3018 Type 1
- ASTM D3161 Class A
- ASTM D3161 Class F⁴
- ICC-ES AC438
- CSA A123.5
- ICC Evaluation Reports ESR-1475 and ESR-3267
- Miami-Dade County Product Control Approved
- Florida Building Code Approved

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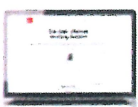
¹ 25-year StainGuard Plus™ Algae Protection Limited Warranty against blue-green algae discoloration is available only on products sold in packages bearing the StainGuard Plus™ logo. See *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions and qualifying products.

² Refer to UL Online Certification Directory for actual assemblies.

³ Periodically tested by independent and internal labs to ensure compliance with ASTM D3462 at the time of manufacture.

⁴ With sealant applied as specified in manufacturer's installation instructions for maximum wind speed coverage.

Note: See gaf.com/RidgeCapAvailability for regional availability.



To learn more about the Lifetime[†] Roofing System visit gaf.com/Lifetime



We protect what matters most™





WeatherWatch[®] Mineral-Surfaced Leak Barrier

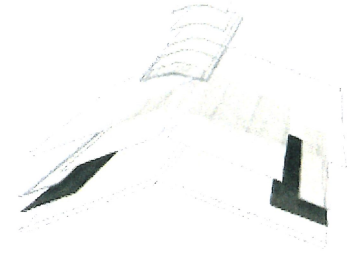
Help protect your home and roof system from
wind-driven rain and damaging ice dams



**Installed
at eaves
and
flashing**

- Helps prevent leaks at the most vulnerable areas of your roof
- Reduces the risk of costly repairs due to wall or ceiling staining from leaks
- Meets most code requirements where local building codes require the use of leak barriers¹

WeatherWatch® Mineral-Surfaced Leak Barrier



Benefits:

- **Excellent protection** at the eaves and rakes, in valleys, and around chimneys and skylights, which guards against leaks caused by wind-driven rain, ice dams, backed-up gutters, and roof settling
- **Self-seals** around fasteners to help avoid leaks
- **Durable** fiberglass-reinforced construction
- **Traditional mineral surfacing** for use with asphalt shingle roof systems
- **Split-back release film** peels off in layers for fast installation
- **Eligible for up to a Lifetime limited warranty** when used on Lifetime Shingle roofs² and it's an eligible component of GAF residential enhanced warranties

In the "North," most building codes require the use of leak barriers at the eaves:³

- Protection against ice dams is required by most building codes¹ at the eaves where the January average temperature is 25°F (-4°C) or lower or where there is a possibility of ice forming in the eaves — i.e., areas labeled "North"³ (see map).
- Ice dams can still occur in areas where the average temperature is above 25°F (-4°C)
- In warmer/Southern climates, leak barriers provide critical protection against wind-driven rain

Meets or exceeds the following requirements of ASTM D1970

Property	Method	Requirement
Thickness (mils)	D5147	Min. 40
Tensile strength MD (lbf/in)	D2523	Min. 25
Tensile strength CMD (lbf/in)	D2523	Min. 25
Elongation at break, modified bitumen Portion - MD and CMD (%)	D2523	Min. 10
Adhesion to plywood at 75°F (24°C) (lbf/ft-width)	D903	Min. 12
Adhesion to plywood at 40°F (4°C) (lbf/ft-width)	D903	Min. 2
Thermal stability (mm)	D1204	Max. 3
Low temperature flexibility -20°F (-29°C)	D1970	Pass
Tear resistance MD (lbf)	D4073	Min. 20
Tear resistance CMD (lbf)	D4073	Min. 20
Moisture vapor permeance (U.S. Perms)	E96 A	Max 0.1
Sealability around nail	D1970	Pass
Waterproof integrity after low temperature flexibility	D1970	Pass
Waterproof integrity of lap seam	D1970	Pass

Product Details:

Nominal Specifications:
For use with asphalt shingles

1.5 square roll:*

- 150 ft² (13.94 sq. m) per roll
- Roll width: 36" (.914 m)
- Roll length: 50' (15.24 m)

2.0 square roll:*

- 200 ft² (18.58 sq. m) per roll
- Roll width: 36" (.914 m)
- Roll length: 66.7' (20.33 m)
- **UV exposure:** Up to 60 days, if necessary
- **Shelf life:** Best if used within 1 year from date of manufacture

*Excludes laps

Code Approvals:

- Meets or exceeds the performance criteria of ASTM D1970
- Miami-Dade County Product Control Approved
- State of Florida approved
- Component of a UL Listed ANSI/UL 790 Class A system when used with UL Class A shingles⁴
- ICC-ES Evaluation Report (ESR-1322)

¹ Check local building codes for requirements in your area.

² Lifetime refers to the length of warranty coverage provided and means as long as the original individual owner(s) of a single-family detached residence (or eligible second owner(s)) owns the property where the qualifying GAF products are installed. For other owners/structures, Lifetime coverage is not applicable. Lifetime coverage on shingles requires the use of GAF Lifetime Shingles only. Lifetime coverage on shingles and accessories requires the use of any GAF Lifetime Shingle and any 3 qualifying GAF Accessories. See *GAF Roofing System Limited Warranty* for complete coverage and restrictions. Visit gaf.com/LRS for qualifying GAF products. For installations not eligible for the *GAF Roofing System Limited Warranty*, see the *GAF Shingle & Accessory Limited Warranty*.

³ Source: International Building Code (IBC) and International Residential Code (IRC)

⁴ Refer to UL Online Certification Directory for actual assemblies



To learn more about the Lifetime Roofing System visit gaf.com/Lifetime

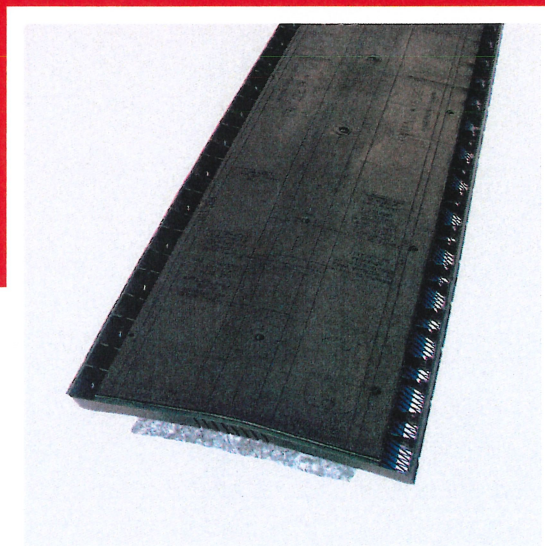


We protect what matters most™



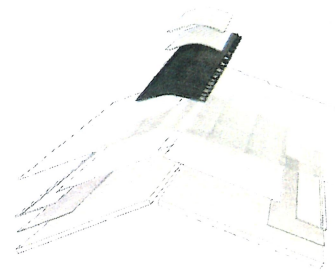
Cobra® SnowCountry® Exhaust Vent for Roof Ridge

Remove excess heat and moisture from your attic and protect your roof system from premature deterioration



- Improve energy efficiency by reducing attic heat and reducing your summer air-conditioning load
- Limit the growth of harmful mold and mildew
- Minimize peeling of paint inside and out

Cobra® SnowCountry® Exhaust Vent for Roof Ridge



Benefits:

- **Allows heat and moisture to escape** at the most effective location—the ridge
- **Shingle-over design** blends into the ridge line
- **Engineered for durability** with high-impact UV-resistant polymers
- **External baffles** with crush-resistant internal structure
- **Snow Guard™ Filter** helps resist snow, pine needle, and insect infiltration while avoiding dust clogging — meets the requirements of ICC Dust Exposure testing¹
- **Unique EasyTear® Sizing Feature** allows you to hand-tear the vent in 3" (76 mm) increments — no cutting and less waste
- **Passes the 110 mph wind-driven rain test²**
- **Eligible for up to a Lifetime[†] limited warranty.** It's also an eligible accessory product in the Attic Ventilation category of GAF residential enhanced warranties.

Balanced Ventilation:

Balanced attic ventilation means there's an equal amount of air entering it as there is exiting it. The amount of exhaust ventilation must **never** exceed the amount of intake ventilation at the soffits or eaves. GAF recommends a minimum of 1 sq. ft. of net free ventilation for every 300 sq. ft. of attic floor space. Always

consult local building codes for specific ventilation requirements.

How Much Do I Need?

Calculate the total square footage of your attic floor space and then review the chart below for how much Cobra® SnowCountry® Exhaust Vent for Roof Ridge is needed:

Total attic sq. footage	Recommended Length of Cobra® SnowCountry® Exhaust Vent (ft.)	Minimum Intake Ventilation (net free area in sq. in.)
1,600	22	396
1,900	26	468
2,200	30	540
2,500	34	612
2,800	38	684
3,100	42	756
3,400	46	828

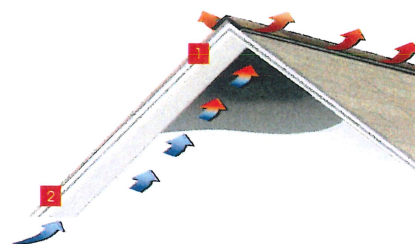
Note: Chart above based on 1/300 rule. Always have a balanced attic ventilation system. In no case should the amount of exhaust ventilation at or near the ridge exceed the amount of intake ventilation at or near the soffit. Visit gaf.com/ventcalculator for more details.

Product details:

- For use in colder climates**
- 11.5" (292 mm) width — for 12" (305 mm) width ridge cap shingles
 - 18 sq. inches per lineal foot (38,100 mm per lineal meter) of net free ventilating area
 - Hand nail installation
 - For roof pitches 3:12 to 16:12

Code Approvals & Standards:

- Miami-Dade County Product Control Approved
- State of Florida Approved
- UL ERI15072-01
- Texas Department of Insurance Product Evaluation RV-29
- CCMC 14083-R
- UL Listed to ANSI/UL 790 Class C³



1. Warm, moist air escapes attic through **Cobra® SnowCountry® Exhaust Vent for Roof Ridge** (installed under ridge cap shingles)
2. Fresh air enters attic through intake vent at the soffit or eave

[†] Lifetime refers to the length of warranty coverage provided and means as long as the original individual owner(s) of a single-family detached residence [or eligible second owner(s)] owns the property where the qualifying GAF products are installed. For other owners/structures, Lifetime coverage is not applicable. Lifetime coverage on shingles requires the use of GAF Lifetime Shingles only. See the *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions. Visit gaf.com/LRS for qualifying GAF products.

¹ Tested in accordance with ICC AC132, Section 4.2.

² Under controlled laboratory testing conducted by GAF

³ Refer to UL Online Certification Directory for actual assemblies



To learn more about the Lifetime[†] Roofing System visit gaf.com/Lifetime



We protect what matters most™





Silver Pledge™ Limited Warranty



The Legal Stuff

What Is Covered/Excluded. This *Silver Pledge™ 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, and GAF-labeled Ultimate Pipe Flashing® with EasySleeve® (manufactured by Lifetime Tool® & Building Products LLC) in the unlikely event that they contain a manufacturing defect. Misapplication of your GAF Products and flashings at valleys, dormers, chimneys, and plumbing vents (the "Covered Flashings") is also covered. Note: This limited warranty does not cover low-slope membranes, Master Flow® Ventilation 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		Misapplication 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 ¹	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™: 25 Years	StainGuard Plus™: 15* / 10 Years	10 Years
Lifetime® Shingles	Lifetime ¹	50 Years	15 Years	With Special Installation****: 130/209 Without Special Installation****: 110/175	StainGuard Plus™: 25 Years	StainGuard Plus™: 15* / 10 Years StainGuard®: 1 Year	10 Years
Marquis WeatherMax®	30 Years	20 Years	15 Years	80/130	No coverage	No coverage	10 Years
Royal Sovereign®	25 Years	20 Years	15 Years	60/96	StainGuard®: 10 Years	StainGuard®: 1 Year	10 Years
GAF Ridge Cap Shingles	Manufacturing Defect Coverage		Wind Warranty Coverage		Algae Warranty Coverage		Misapplication Coverage
	Limited Warranty Term	Smart Choice® Protection Period**	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	10 Years
Seal-A-Ridge®, Seal-A-Ridge® AS	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	90/144	StainGuard Plus™: 25 Years	StainGuard Plus™: 15* / 10 Years	10 Years
Z® Ridge	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****: 90/144 Without Special Installation****: 70/112	StainGuard Plus™: 25 Years	StainGuard Plus™: 15* / 10 Years	10 Years
GAF Starter Strip Shingles	Manufacturing Defect Coverage		Wind Warranty Coverage		Algae Warranty Coverage		Misapplication Coverage
	Limited Warranty Term	Smart Choice® Protection Period**	Limited Warranty Term	Wind Speed Coverage (mph / km/h)	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	10 Years
All Other GAF Starter Strip Shingles	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	No coverage	10 Years
Other GAF Accessories	Manufacturing Defect Coverage		Wind Warranty Coverage		Algae Warranty Coverage		Misapplication Coverage
	Limited Warranty Term	Smart Choice® Protection Period**	Limited Warranty Term	Wind Speed Coverage (mph / km/h)	Limited Warranty Term	Smart Choice® Protection Period**	
GAF Leak Barrier Products GAF Roof Deck Protection Products GAF Cobra® Attic 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		10 Years

¹ **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™** Algae Protection Limited applies only if you install both StainGuard Plus™-labeled shingles and 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 Lifetime¹ warranty, GAF's contribution in years S1 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.

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. 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 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.

(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 flashings other than Covered Flashings), and will provide replacement GAF Products or the reasonable cost of obtaining replacement GAF Products, at GAF's option. The costs of labor to tear off some or all of your GAF Products and disposal are included if necessary to repair your roof.

(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 S1 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.

continued on next page



Silver Pledge™ Limited Warranty



continued from previous page

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

GAF warrants to you that your GAF shingles and 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 or their misapplication. 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 shingles or damaged shingles or ridge cap shingles and hand-sealing any unsealed shingles or ridge cap shingles. Costs relating to metal work and flashings (other than Covered 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.

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™** 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™**- or **StainGuard®-labeled** shingles, ridge cap shingles, or starter strip shingles for the warranty term listed above. If your **StainGuard Plus™-labeled** 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.

Misapplication: What Is Covered/Sole and Exclusive Remedy

If any of your GAF Products or Covered Flashings is found to have an application error that adversely affects performance, GAF will arrange to have your roof repaired or re-covered or, at its sole option, will provide you with replacement GAF product(s) and reimburse you for the full reasonable cost of labor and other materials to repair or re-cover your roof, including Covered Flashings. The costs of labor to tear off some or all of your GAF Products and Covered Flashings and disposal are included if necessary to repair your roof.

If your claim arises out of an application error in your GAF Products or Covered Flashings, which is discovered or discoverable within the first two years after installation, it is the obligation of your Master Elite® Roofing Contractor to make all necessary repairs. In the event that GAF determines your Master Elite® Roofing Contractor is unable or unwilling to perform these repairs, GAF will arrange to have your roof repaired if the issues were caused by application errors within the scope of GAF liability under this limited warranty.

Note: Failure to install adequate ventilation is **NOT** an application error of your GAF Products and is not covered under this Limited Warranty. Due to the design of certain buildings, the replacement of existing flashings may be difficult, costly, or impractical. Please be sure to review these items with your roofing contractor.

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, their misapplication, or the misapplication of Covered Flashings, such as:
 - (a) settlement, movement, structural damage, or defects in the building, walls, foundation, or the roof base over which the shingles or accessories were applied.
 - (b) 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, its misapplication, or the misapplication of Covered Flashings.
- (4) Shading or variations in the color of your GAF Products 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 were labeled with the StainGuard Plus™ or StainGuard® logos), or other contaminants, including that caused by organic materials on the roof.
- (5) Damage caused by, or the cost to repair or replace, products not sold by GAF, including but not limited to metal work and counterflashing.
- (6) Improperly designed or installed gutter or downspout systems.
- (7) Damage to the interior or exterior of the building, including, but not limited to, mold growth.
- (8) Damage to or caused by rooftop air conditioning units (and their flashing), pipe works, brace works, skylights, rooftop satellite dishes or other radio/TV devices, counterflashing, or flashings other than those specifically included above.

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 those GAF Products actually exhibiting manufacturing defects, application errors (including misapplication of Covered Flashings), 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 weathering, manufacturing variations, or other factors.

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 and Covered Flashings except as described in this limited warranty.

Effectiveness

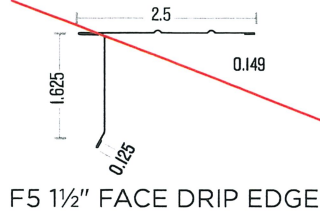
This limited warranty will not take effect unless all eligibility requirements have been satisfied, this warranty is registered to you, and your roofing contractor has been paid in full.

Important Notice:

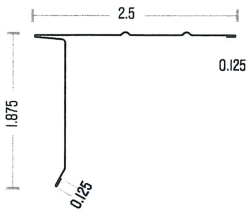
THIS IS A SAMPLE SILVER PLEDGE™ LIMITED WARRANTY. IT IS YOUR CONTRACTOR'S RESPONSIBILITY TO REGISTER YOUR WARRANTY WITHIN 45 DAYS OF INSTALLATION. IF YOU HAVE NOT RECEIVED YOUR WARRANTY FROM GAF WITHIN 60 DAYS, YOU SHOULD CALL GAF AT: 1-888-532-5767, OPTION 5.



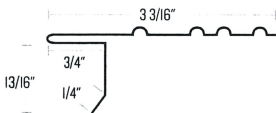
ROOFING ACCESSORIES



THICKNESS	COLOR	SKU	PACKAGING
0.014	WA BK TB BA NC DB	F50150••4	50
0.016	WA BK TB BA NC DB	F50150••6	50



0.016	WA BK TB BA NC DB	F50175••6	50
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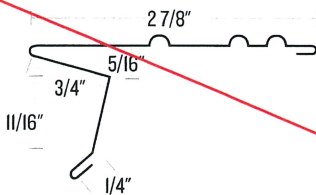
0.016	WA BA	F-5••6	50
0.019	Mill Finish	F-5MFB	50
0.019	WA BA AL AM TB DB GG HC HG LI LM NB PG SB SW BK HB PB	F-5••B	50

0.024	W B	F-5•24	25
16 Oz	Copper	F-5CPB	15

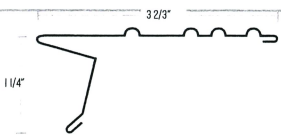
28 Ga	Galvanized	F-5•LB	20
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28 Ga	W B	F-5•SB	20
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29 Ga	White	5761500120	25
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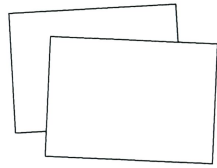


0.0125	Mill Finish	F5OMF2	50
0.0125	W B	F50•A2	50
0.016	WA BA BK	F50••6	50
0.019	Mill Finish	F5OMFB	50
0.019	W B	F50•AB	50
16 Oz	Copper	F50CPB	10



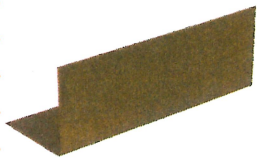
0.0125	W B	F550•2	50
0.016	W B	F550•6	50
0.019	Mill Finish	F55OMF	50

ROOFING ACCESSORIES



STEP FLASHING (FLAT)

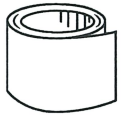
	THICKNESS	WIDTH	LENGTH	COLOR	SKU	PACKAGING
ALUMINIUM	0.019	6"	8"	Mill Finish	STBB68	500
	0.019	5"	7"	Mill Finish	STFLMF	500
	0.019	6"	8"	Mill Finish	STMF68	500
	0.019	7"	10"	Mill Finish	SFM710	500
	0.019	8"	10"	Mill Finish	SFM810	500
	0.019	5"	7"		B K	STFLBB
COPPER	16 Oz	5"	7"	Copper	STFLCP	100
	16 Oz	8"	10"	Copper	SFC810	100



STEP FLASHING PRE-BENT

	THICKNESS	WIDTH	HEIGHT	LENGTH	COLOR	SKU	PKG	
ALUMINIUM	0.011	2"	3"	7"	Mill Finish	SFM237	500	
	0.011	2.5"	2.5"	7"	Mill Finish	SFM227	500	
	0.011	3"	3"	8"	Mill Finish	SFM338	500	
	0.011	3"	4"	7"	Mill Finish	SFM347	500	
	0.011	4"	4"	8"	Mill Finish	SFM448	250	
	0.011	5"	5"	7"	Mill Finish	SFM557	250	
	0.011	5"	5"	8"	Mill Finish	SFM558	250	
	0.011	6"	6"	2"	W B K	SFM662	250	
	0.011	2"	3"	7"	W B K	SF•237	500	
	0.011	2.5"	2.5"	7"	W B K Z	SF•227	500	
	0.011	3"	3"	8"	W B K	SF•338	500	
	0.011	3"	4"	7"	W B K Z	SF•347	500	
	0.011	3"	5"	8"	W B K	SF•358	500	
	0.011	4"	4"	8"	W B K Z	SF•448	500	
	0.011	5"	5"	7"	W B K	SF•557	250	
	0.011	5"	5"	8"	W B K	SF•558	250	
	0.011	6"	6"	2"	W B K	SF•662	250	
	COPPER	16 Oz	2.5"	2.5"	7"	Copper	SFC227	100
		16 Oz	2"	3"	7"	Copper	SFC237	100
		16 Oz	3"	4"	7"	Copper	SFC347	100
16 Oz		4"	8"	2"	Copper	SFC462	25	
16 Oz		5"	5"	8"	Copper	SFC558	50	
STEEL	16 Oz	6"	6"	2"	Copper	SFC662	25	
	30 Ga	4"	4"	7"	Galvanized	SFG447	100	
	30 Ga	5"	5"	7"	Galvanized	SFG557	100	

ROOFING ACCESSORIES



VALLEY FLASHING
CONTINUED

	THICKNESS	WIDTH	COLOR	SKU	PACKAGING	
COPPER	16 Oz	8"	Copper	CPEV08	100 lbs / roll	
	16 Oz	10"	Copper	CPEV10	100 lbs / roll	
	16 Oz	12"	Copper	CPEV12	100 lbs / roll	
	16 Oz	14"	Copper	CPEV14	100 lbs / roll	
	16 Oz	16"	Copper	CPEV16	100 lbs / roll	
	16 Oz	18"	Copper	CPEV18	100 lbs / roll	
	16 Oz	20"	Copper	CPEV20	100 lbs / roll	
	16 Oz	24"	Copper	CPEV24	100 lbs / roll	
	STEEL	32 Ga	6"	Galvanized	70006	50' / roll
		32 Ga	8"	Galvanized	70008	50' / roll
32 Ga		10"	Galvanized	70010	50' / roll	
32 Ga		12"	Galvanized	70012	50' / roll	
32 Ga		14"	Galvanized	70014	50' / roll	
32 Ga		16"	Galvanized	70016	50' / roll	
32 Ga		18"	Galvanized	70020	50' / roll	
32 Ga		24"	Galvanized	70028	50' / roll	

ROOF DRAINAGE SOLUTIONS



ROUND CORRUGATED
DOWNSPOUT

SIZE	THICKNESS	COLOR	SKU	PACKAGING				
3"	0.019	HG BZ AL	DSRCP••3	10				
		ADB BL LI						
		DB HC HB						
		LM MB AMB						
		NC PB RB						
		SW						
		4"			0.024	HG BZ AL	DSRCP••4	10
						ADB BL LI		
						DB HC HB		
						LM MB AMB		
NC PB RB								
SW								
3"	0.019		Mill Finish	DSRCPMF3		10		
4"	0.024		Mill Finish	DSRCPMF4		10		
5"	0.024		Mill Finish	DSRCPMF5		5		
6"	0.024		Mill Finish	DSRCPMF6		5		
3"	16 Oz	Copper	DSRCPCP3	5				
3"	16 Oz	Copper	DSRCFIG3	5				
3"	20 Oz	Copper	DSRCP2C3	5				
4"	16 Oz	Copper	DSRCPCP4	5				
4"	16 Oz	Copper	DSRCFIG4	5				
4"	20 Oz	Copper	DSRCP2C4	5				
5"	16 Oz	Copper	DSRCPCP5	5				
5"	20 Oz	Copper	DSRCP2C5	5				
6"	16 Oz	Copper	DSRCPCP6	3				
3"	24 Ga	Galvanized	DSRCP243	1				
3"	24 Ga	Paint Grip	DSRCPPG3	1				
3"	24 Ga	Stainless	DSRCPSS3	10				
3"	26 Ga	Galvanized	DSRCP263	1				
3"	28 Ga	Galvanized	DSRCP283	1				
3"	30 Ga	Galvanized	DSRCP303	1				
4"	24 Ga	Galvanized	DSRCP244	1				
4"	26 Ga	Galvanized	DSRCP264	1				
4"	26 Ga	Paint Grip	DSRCPPG4	1				

ALUMINUM

COPPER

STEEL

GUTTERS: HALF-ROUND GUTTERS

MATERIALS & PACKAGING:

ALUMINIUM **COPPER** STEEL

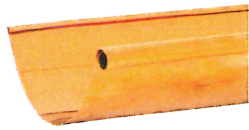
All thicknesses and dimensions are nominal.

Gutters are available in 10', 20' and 30' lengths. Contact Customer Care for nonstandard lengths.

For proper ordering, enter length code (_ _) and color code (• •). For example: K_ _ • • 5 filled out as K10BR5 would be a 5" Aluminum Painted Brown 10' hemback K-style gutter.

Partial carton quantities available for gutter products, additional fee applies.

Note: FreedomGray™ is copper-coated with a unique, patented tin-zinc alloy. It offers all the advantages of copper in a naturally weathering earth tone gray color.



SINGLE BEAD

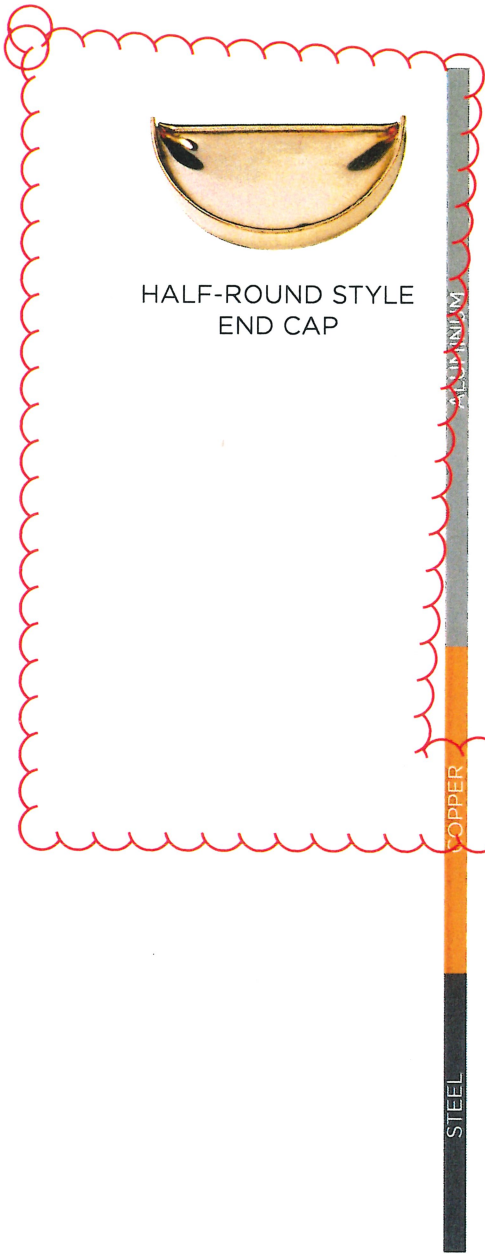
SIZE	THICKNESS	COLOR	SKU	PACKAGING
5"	0.024	Mill Finish	L_ _MF5	10
5"	0.027	HG BR	L_ _••5	10
5"	0.032	32 B3	L_ _••5	10
6"	0.032	Mill Finish	L_ _MF6	10
6"	0.032	HG BR	L_ _••6	10
7"	0.032	HG BR	L10••7	5
8"	0.032	HG BR	L10••8	5
5"	16 Oz	Copper	L_ _CP5	5
5"	16 Oz	FreedomGray™	L_ _FG5	5
5"	20 Oz	Copper	L_ _2C5	5
6"	16 Oz	Copper	L_ _CP6	5
6"	16 Oz	FreedomGray™	L_ _FG6	5
6"	20 Oz	Copper	L_ _C26	5
7"	16 Oz	Copper	L10CP7	5
8"	16 Oz	Copper	L10CP8	5

GUTTER ACCESSORIES: ELBOWS



PLAIN ROUND
ELBOW
CONTINUED

	SIZE	DEGREE	THICKNESS	COLOR	SKU	PACKAGING
COPPER	3"	30° - 0	16 Oz	Copper	PR_CP3	10
		45° - 1				
		60° - 2				
		75° - 3				
		90° - 4				
	3"	30° - 0	16 Oz	Copper	PR_FG3	10
		45° - 1				
		60° - 2				
		75° - 3				
		90° - 4				
	4"	30° - 0	16 Oz	Copper	PR_CP4	10
		45° - 1				
60° - 2						
75° - 3						
90° - 4						
4"	30° - 0	16 Oz	Copper	PR_FG4	10	
	45° - 1					
	60° - 2					
	75° - 3					
	90° - 4					
5"	30° - 0	16 Oz	Copper	PR_CP5	10	
	45° - 1					
	60° - 2					
	75° - 3					
	90° - 4					
6"	30° - 0	16 Oz	Copper	PR_CP6	10	
	45° - 1					
	60° - 2					
	75° - 3					
	90° - 4					
STEEL	3"	30° - 0	26 Ga	Paint Grip	PR6_G3	20
		45° - 1				
		60° - 2				
		75° - 3				
		90° - 4				
	4"	30° - 0	26 Ga	Paint Grip	PR6_G4	20
		45° - 1				
		60° - 2				
		75° - 3				
		90° - 4				
	3"	30° - 0	26 Ga	Galvanized	PR6_P3	20
		45° - 1				
60° - 2						
75° - 3						
90° - 4						
4"	30° - 0	26 Ga	Galvanized	PR6_G4	20	
	45° - 1					
	60° - 2					
	75° - 3					
	90° - 4					
4"	30° - 0	26 Ga	Galvalume	PR_GA4	20	
	45° - 1					
	60° - 2					
	75° - 3					
	90° - 4					



HALF-ROUND STYLE
END CAP

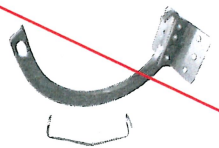
SIDE	SIZE	COLOR	SKU	PACKAGING
-	5"	HG BR	CEN••5	50
-	5"	Mill Finish	CENMF5	50
-	6"	30W 80W AL ADB BL	CEN••6	50
		LI DB GG HC HE		
		MB AMB NC PG BZ		
		LM PB RB SW		
-	6"	Mill Finish	CENMF6	50
-	7"	HG BR	CEN••7	1
-	7"	Mill Finish	CENMF7	1
-	8"	HG BR	CEN••8	1
-	8"	Mill Finish	CENMF8	1
-	5"	Copper	CENC5	50
-	5"	FreedomGray™	CENFG5	50
-	6"	Copper	CENC6	50
-	6"	FreedomGray™	CENFG6	50
-	7"	Copper	CENC7	1
-	8"	Copper	CENC8	1
-	5"	Galvanized	CEN265	50
-	5"	Paint Grip	CEN6G5	50
-	6"	Galvalume	CENGA6	50
-	6"	Galvanized	CEN266	50
-	6"	Paint Grip	CEN6G6	50
-	7"	Galvanized	CEN267	1

ROOF DRAINAGE SOLUTIONS



GEM CIRCLE WITH SPRING CLIP, NUT & BOLT

SIZE	COLOR	SKU	PACKAGING
6"	Mill Finish	CIRMF6	50
5"	Mill Finish	CIRMF5	50
6"	80W BA	CIR••6	50
5"	80W BA	CIR••5	50
6"	Copper	CIRCP6	50
5"	Copper	CIRCP5	50
6"	FreedomGray™	CIRFG6	50
5"	FreedomGray™	CIRFG5	50
6"	WS BS	CIR••6	50
5"	WS BS	CIR••5	50
6"	Galvanized	CIRCS6	50
5"	Galvanized	CIRCS5	50
6"	Mill Finish	CCA106	50
5"	Mill Finish	CCA105	50
6"	80W BA	CBC••6	50
5"	80W BA	CBC••5	50
6"	Copper	CCC106	50
5"	Copper	CCC105	50
6"	Steel	CCSWS6	50
5"	Steel	CCSWS5	50
6"	Steel	CCS106	50
5"	Steel	CCS105	50



#10 COMBINATION CIRCLE & SHANK WITH SPRING CLIP

ROOF DRAINAGE SOLUTIONS

		COLOR	SKU	PACKAGING
 #1 SHANK	ALUMINIUM	Mill Finish	SHMF-1	50
	COPPER	HG BA	SH••-1	50
	COPPER	Copper	SHCP-1	50
	COPPER	FreedomGray™	SHFG-1	50
	STEEL	Galvanized	SHCS-1	50
 #6 SHANK	COPPER	Copper	SHCP-6	50
	STEEL	Galvanized	SHCS-6	50
	STEEL	WS BS	SH••-6	50
 #8 SHANK	STEEL	Galvanized	SH-CM8	50
 #10 SHANK	COPPER	Copper	SHCP10	50
	STEEL	Galvanized	SHCS10	50
	STEEL	WS BA	SH••10	50
 #11 SHANK	ALUMINIUM	HG BA	SH••11	50
	COPPER	Copper	SHCP11	50
	COPPER	FreedomGray™	SHFG11	50
	STEEL	Galvanized	SHCS11	50
 #12 SHANK	ALUMINIUM	Mill Finish	SHMF12	50
	ALUMINIUM	AMB BL DBZ GG	SH••12	50
	ALUMINIUM	NC BA IG HG		
	COPPER	Copper	SHCP12	50
	COPPER	FreedomGray™	SHFG12	50
	STEEL	WS BA	SH••12	50
	STEEL	Galvanized	SHCS12	50

GUTTER ACCESSORIES: END PIECES & SLIP JOINTS



HALF-ROUND
SLIP JOINT

SIZE	THICKNESS	COLOR	SKU	PACKAGING
6"	-	HG BR	SCN••6	50
5"	-	HG BR	SCN••5	50
6"	16 Oz	Copper	SCNCP6	50
5"	16 Oz	Copper	SCNCP5	50
6"	26 Ga	Galvanized	SCN266	50
5"	26 Ga	Galvanized	SCN265	50

ALUMINUM
COPPER
STEEL

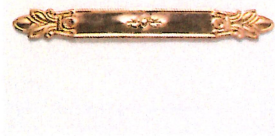
ROOF DRAINAGE SOLUTIONS



SIZE	COLOR	SKU	PACKAGING
-	80W LG BA DB	D••12CB	50
-	Mill Finish	MF12CB	50

#5	Copper	CP12CB	50
#6	Galvanized	GA12CB	50

#6	80W BA	••12CB	50
#6	Paint Grip	PG12CB	50


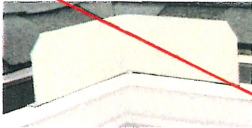




3"	HG DB BR	MET••3	50
4"	HG DB BR	MET••4	50
3"	Copper	METCP3	50
4"	Copper	METCP4	50
3"	Galvanized	METGA3	50
4"	Galvanized	METGA4	50



2" x 3"	30W 80W AL ADB BL LI DB HB HC LM BZ NC MB AMB RB SW PB	OPB••	100
2" x 3"	Copper	OPBC	100

GUTTER GUARDS

	WIDTH	LENGTH	STYLE	COLOR	SKU	PACKAGING
 <p>HALF-ROUND HINGED GUTTER GUARD</p>	5"	3'	Hinged	Mill Finish	GGAR-5	50
	6"	3'	Hinged	Mill Finish	GGAR-6	50
	5"	3'	Hinged	Copper	GGCR-5BX	25
	6"	3'	Hinged	Copper	GGCR-6BX	25
	5"	3'	Hinged	Galvanized	GGGR-5	50
	6"	3'	Hinged	Galvanized	GGGR-6	50
 <p>GUSHER GUARD</p>	-	-	Hinged	White	25074BX	250 pcs / box
	-	-	Hinged	Brown 	2507419BX	250 pcs / box
	-	-	Hinged	White	25074	3 pcs / pack 10 packs / carton
	-	-	Hinged	Brown 	2507419	10

Plytanium® plywood sheathing is ideal for residential and light commercial construction, and provides outstanding performance for walls and roofs. It adds proven performance and durability to new homes, room additions and renovations.

Available Sizes (Sized for 4' x 8')

Square Edge 3'-11⁷/₈" (1.216 m) x 7'-11⁷/₈" (2.435 m)

Building Code Performance Categories, Panel Thickness

- 3/8 CAT, 0.354" (8.99 mm)
- 15/32 CAT (3-ply), 0.451" (11.45 mm)
- 15/32 CAT (4-ply), 0.451" (11.45 mm)
- 19/32 CAT, 0.578" (14.68 mm)
- 23/32 CAT, 0.703" (17.85 mm)

Specifications

Length/Width Tolerance +0, -1/16" (+0, -1.6 mm)

Straightness Tolerance ±1/16" (±1.6 mm)

Squareness Tolerance ±1/8" (±3.2 mm)

Primary Species Southern Yellow Pine

Testing Agency APA®-The Engineered Wood Association

Classifications **Exposure 1** – Plywood suitable for uses not permanently exposed to the weather. Panels classified as Exposure 1 are intended to resist the effects of moisture on structural performance as may occur due to construction delays, or other conditions of similar severity.

Code Fire Classification Class III or C

Flame Spread Rating 76-200, smoke-developed index <450

Building Code Compliance PS 1-09 or PS 2-10

Other Information

Forestry Certification Plytanium plywood panels are made from wood sourced through a system that is third-party certified to the Sustainable Forestry Initiative® procurement standard.



Green Building Programs See our Plytanium plywood *Sustainability Fact Sheet* available at www.builditbetter.com for more information on potential point contributions towards specific green building programs.

NGBS Green Certified Plytanium plywood is Home Innovation NGBS Green Certified for Resource Efficiency and Indoor Environmental Quality. Please visit Homeinnovation.com/Green for more information.



Product Warranty Plytanium® plywood is covered by a Lifetime Limited Warranty. For terms and conditions, please refer to our Lifetime Limited Warranty available at www.builditbetter.com.

International Shipping

To prevent the introduction and spread of plant pests, *ISPM 15: International Standards for Phytosanitary Measures*, requires that internationally shipped solid wood pallets be debarked, treated with heat or fumigated with methyl bromide, and marked with a seal of compliance.

Pallets made with engineered wood, including Plytanium plywood, are exempt from ISPM 15 regulations. This is because the process of manufacturing engineered wood destroys any live organisms in the wood. (Source: "Boxes, Crate and Reel Manufacturing," www.PerformancePanels.com)

Formaldehyde Emissions

Plytanium plywood contains no added urea formaldehyde resins. PS 1 and PS 2 structural panels are exempt from testing by the California Air Resources Board (CARB) in the *Composite Wood Air Toxic Control Measure (ATCM)* and phenolic bonded structural panels are exempt from testing or monitoring by HUD in the *Manufactured Home Construction and Safety Standards*.

Manufacturing Locations

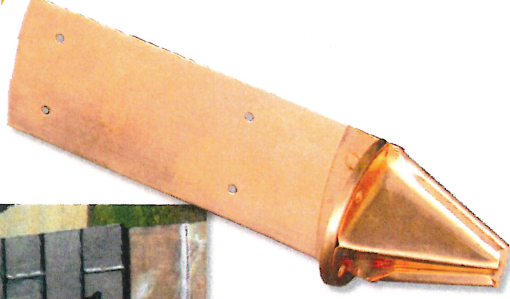
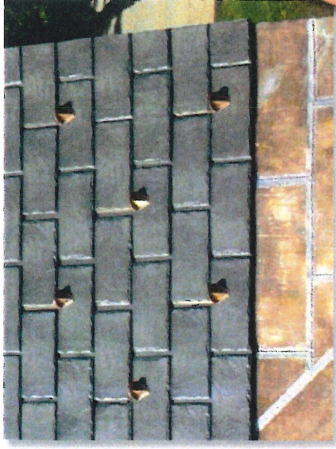
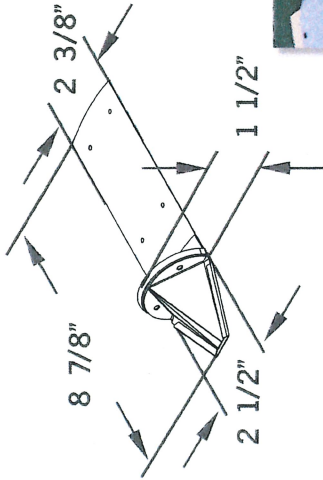
Location	APA Mill Number	Zip Code	Harvest Radius
Camden, TX	515	75934	90 miles
Corrigan, TX	516	75939	90 miles
Dudley, NC	348	28333	80 miles
Emporia, VA	230	23847	40 miles
Gurdon, AR	517	71743	60 miles
Madison, GA	404	30650	100 miles
Prosperity, SC	329	29127	80 miles
Taylorsville, MS	282	39168	50 miles
Warm Springs, GA	324	31830	450 miles



PD40 Pad Style Snow Guard

ALPINE SNOWGUARDS®

Info@alpinesnowguards.com 888-766-4273



Features

- * Made in the USA using recycled materials
- * Riveted "fish head" design means optimum strength with no risk of unfolding
- * Can be mechanically attached through synthetic slate
- * Correct size for most composition shingle applications
- * Allows snow and ice to drop off in small amounts or melt completely
- * Also available with a Fleur-de-lis embellishment in copper, lead coated copper, and mill finish aluminum
- * All of our snow guards are tested extensively in the field by roofing experts

Standard Layout

Synthetic Slate Layout

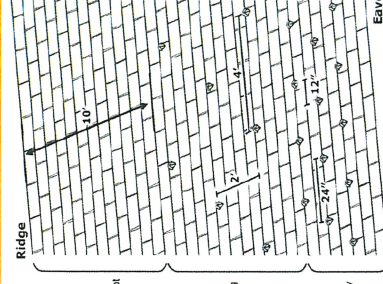
3 X 4 Layout - Less than 75 psf Ground Snow Load and less than 16/12 roof pitch using 12 snow guards per square.
 Top ten feet of rafter does not generally require snow guards except in extreme snow load areas.

2 X 4 Supplemental Pattern

This pattern is for installations using 12 snow guards per square including the standard three-row pattern. Space rows 2' vertically and 4' horizontally to within 18" of the ridge.

Standard Three-Row Pattern- For All Roofs

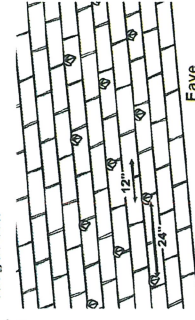
Three rows 24" on center horizontally with the middle row staggered 12".



Shingle Layout

Note: For 6/12 pitch or less, only the three-row pattern is needed

Ridge/Peak



Three-Row Pattern

The three-row pattern uses 17 snow guards for every 10' of eave (eave length, in feet) X 1.7 = qtr. needed).

Standard Three-Row Pattern

24" on center horizontally, 2 courses of shingles vertically, with the second row offset 12"

Contact Alpine SnowGuards for ground snow loads above 75 PSF

Roof Types & Materials

Available Materials:

- * Copper
- * Zinc (Graphite Gray)
- * Aluminum (Mill or Firestone Una Clad Colors)
- * FreedomGray® Z-T Alloy
- * Galvalume®
- * Lead Coated Copper

Roof Types:

- * New Synthetic Slate
- * Existing Synthetic Slate
- * New Composition Shingle
- * Existing Composition Shingle

Ask us about LEED compliance



Made in the USA

[Useful Links](#) > [Product Page](#) [CutSheet](#) [Specifications](#) [Install Instructions \(Synthetic Slate\)](#) [Install Instructions \(Shingle\)](#)



ALPINE SNOWGUARDS®

PAD - STYLE SNOW GUARD & INSERT STRIP COLOR OPTIONS



STOCK COLORS - DOUBLE SIDED



Charcoal Gray



Classic Copper



Colonial Red



Dark Bronze



Hartford Green



Matte Black



Medium Bronze



Sherwood Green



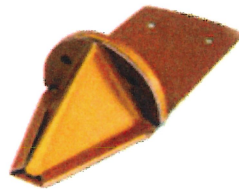
Slate Gray



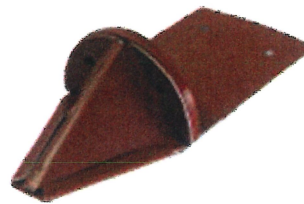
Mansard Brown



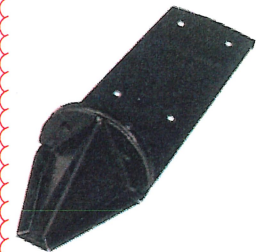
PD40 Medium Bronze



PD30 Classic Copper



PD30 Colonial Red



PD40 Charcoal Gray

proposed color

STOCK COLORS - SINGLE SIDED



Brandywine



Cityscape



Dark Ivy



Hemlock Green



Patina Green



Teal



Terracotta



Tropical Patina

Select color for snow guards

www.alpinesnowguards.com •(P) 888.766.4273 •(F) 888.766.9994
289 Harrel Street · Morrisville, VT 05661



UNA-CLAD TIBTAL
COLOR SELECTION

SPECIFICATIONS

- FRAME W/ CAPFLASHING (CORNERS FULL WELDED)
 S-20 - 14 GAUGE GALVANNEAL STEEL
 S-40 - 14 GAUGE GALVANNEAL STEEL
 S-50 - 11 GAUGE ALUMINUM
 S-90 - 14 GAUGE TYPE 304 STAINLESS STEEL
- PINTLE HINGE
- GASKET (ALL AROUND COVER)
- COVER GAUGE
 S-20 - 14 GAUGE GALVANNEAL STEEL
 S-40 - 11 GAUGE ALUMINUM
 S-50 - 11 GAUGE ALUMINUM
 S-90 - 14 GAUGE TYPE 304 STAINLESS STEEL
- COVER LINER
 S-20 - 22 GAUGE GALVANNEAL STEEL
 S-40 - 18 GAUGE ALUMINUM
 S-50 - 18 GAUGE ALUMINUM
 S-90 - 22 GAUGE TYPE 304 STAINLESS STEEL
- SPRING LIFTING MECHANISM
- 1" RIGID FIBERBOARD INSULATION
- SLAM LATCH
- INSIDE AND OUTSIDE HANDLES W/ PADLOCK HASPS
- ARM GUIDE BRACKET
- 1" THICK FIBERGLASS COVER INSULATION
- HOLD OPEN ARM W/ RED VINYL GRIP
- NEOPRENE GASKET
- LOCK STRIKE & PADLOCK HASP
- BILCLIP® FLASHING SYSTEM

SHOP FINISH:
 STEEL: RED OXIDE PRIMER
 ALUMINUM: MILL FINISH
 HARDWARE: ZINC PLATED/CHROMATE SEALED
 (UNLESS OTHERWISE SPECIFIED)
 STAINLESS STEEL: ELECTROCHEMICAL PASSIVATION
 TYPE 316 S/S HARDWARE

THIS PRODUCT MAY BE INSTALLED ON EITHER A FLAT OR SLOPING ROOF. WHEN INSTALLED ON A SLOPE, THE HINGE SIDE MUST RUN PARALLEL WITH THE SLOPE. IF SLOPE EXCEEDS 30°, ADVISE FACTORY FOR MODIFICATION.

CUSTOMER: Alan Kunsman Roofing

P.O. NO.:

JOB: Moravian Academy

TAG:

SALES REP:

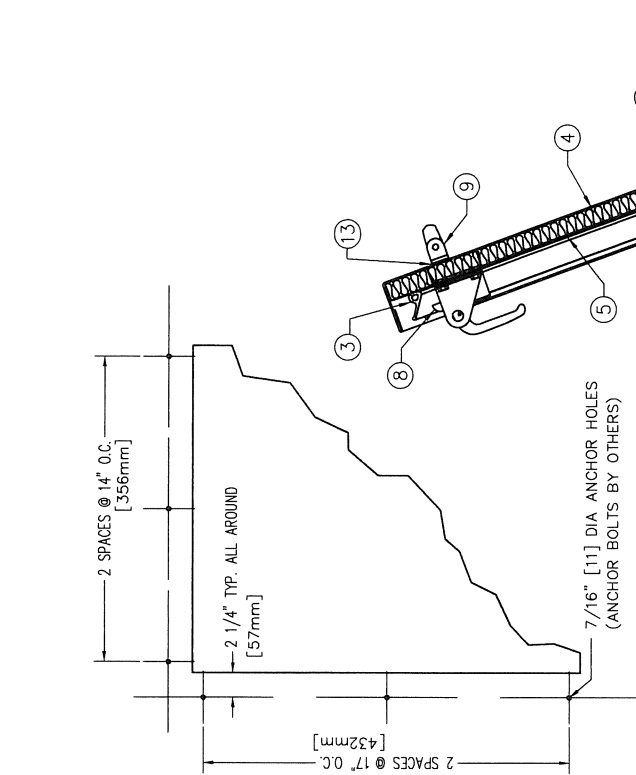
APPROVED BY:

DATE:

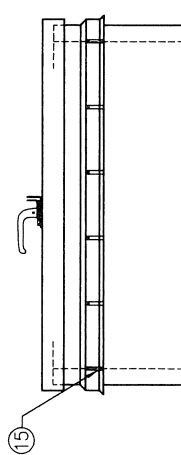
Bilco
 Manufacturers of Doors for Special Services
 THE BILCO COMPANY
 New Haven, Connecticut 06505

SINGLE LEAF ROOF SCUTTLE
TYPE S SIZE 3'-0" x 2'-6"

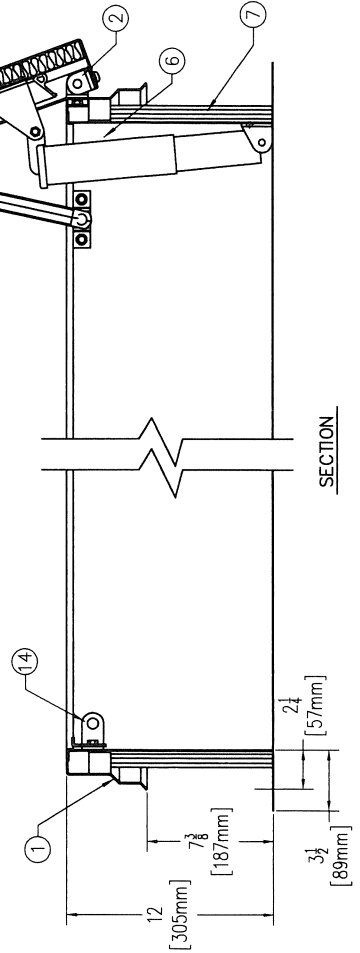
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<input type="checkbox"/>	S-50	ALUM. COVER/ALUM. FRAME		
<input type="checkbox"/>	S-90	S.S. COVER/S.S. FRAME		



ANCHOR HOLE LAYOUT



MIAMI-DADE PRODUCT APPROVED (NOA NO. 20-1104.24)
 MEETING LARGE AND SMALL MISSILE IMPACT REQUIREMENTS
 FLORIDA PRODUCT APPROVAL #FL15110-RS
 TYPE: S-20 AND S-50 ONLY



SECTION

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101.68A

Duration Home[®] Interior Latex Satin

A97 Series



**SHERWIN
WILLIAMS.**

CHARACTERISTICS

Duration Home[®] Interior Latex with Moisture Resistant Technology™ offering quick return to service & durability in moist environments like bathrooms.

Also provides:

- Long lasting beauty
- Washability
- Resistant to stains, scuffs & burnishing
- Anti-Microbial*

Color: Most Colors
To optimize hide and color development, always use the recommended P-Shade primer.

Coverage: 350-400 sq. ft. per gallon
@ 4 mils wet, 1.5 mils dry

Drying Time, @ 77°F, 50% RH:
Touch: 1 Hour
Recoat: 4 Hours

Drying and recoat times are temperature, humidity, and film thickness dependent.

Finish: 15-20 units @ 85°

Tinting with CCE only:

Base: oz. per gallon: Strength:

Ultrawhite	0-6	SherColor
Extra White	0-7	SherColor
Deep Base	4-12	SherColor
Ultradeep Base	10-12	SherColor
Accent Base	12-20	SherColor
Real Red	0-12	SherColor
Bright Yellow	0-12	SherColor

Extra White A97W01251
(may vary by color)

V.O.C.(less exempt solvents):

less than 50 grams per litre; 0.42 lbs. per gallon
As per 40 CFR 59.406

Volume Solids: 37 ±2%

Weight Solids: 49 ±2%

Weight per Gallon: 10.50 lbs

Flash Point: N.A.

Vehicle Type: Styrene Acrylic

Shelf Life: 36 months, unopened

Anti-microbial

This product contains agents which inhibit the growth of mold and mildew on the surface of this paint film.

COMPLIANCE

As of 09/19/2023, Complies with :

OTC	Yes
OTC Phase II	Yes
S.C.A.Q.M.D.	Yes
CARB	Yes
CARB SCM 2007	Yes
CARB SCM 2020	Yes
Canada	Yes
LEED[®] v4 & v4.1 Emissions	Yes
LEED[®] v4 & v4.1 V.O.C.	Yes
EPD-NSF[®] Certified	Yes
MIR-Manufacturer Inventory	Yes
MPI[®]	Yes

APPLICATION

Apply at temperatures above 50°F. No reduction needed.

Brush: Use a nylon-polyester brush.

Roller: Use a high-quality polyester roller cover.

For best final appearance when rolling, finish off in one direction, especially for dark colors. For specific brushes and rollers, please refer to our Brush and Roller Guide.

Spray - Airless:
Pressure 2000 p.s.i.
Tip .015-.019 inch

APPLICATION TIPS

For touching-up, reduce the product by one pint per gallon.

To assure maximum washability and durability, wait at least 14 days before washing **Duration Home** coating.

When removing stains, dirt, and marks, use a soft cloth or sponge with water. Stubborn stains may require the use of a general-purpose household cleaner of total removal. Do not use an abrasive cleaner or scrub brush to remove stains.

Surfactant leaching is a term used when a concentration of water-soluble paint ingredients called "surfactants" are noticed on the surface of a latex paint film. Surfactant leaching is most commonly seen as a streak or stain of tan, brown, or clear spots that sometimes can be glossy, soapy, oily or even sticky. Surfactants are soap-like materials that help in the dispersion of the paint's pigment and latex binders.

Duration Home with Moisture Resistant Technology has excellent resistance to surfactant leaching when applied on new or existing substrates. However, surfactants can remain on existing painted surfaces if not removed prior to coating. Existing painted surfaces must be thoroughly washed clean and allowed to dry prior to apply any finish.

SPECIFICATIONS

Duration Home Interior Latex can be used directly over existing coatings, bare drywall, or plaster (cured with a pH of less than 9).

Block:

1 coat Loxon Acrylic Block Surfer
2 coats of Duration Home Interior Latex

Drywall:

Self-prime using 2 coats of Duration Home Interior Latex

or

1 coat Premium Wall & Wood Primer
2 coats Duration Home Interior Latex

Masonry:

1 coat Loxon Concrete & Masonry Primer
2 coats Duration Home Interior Latex

Plaster:

Self-prime using 2 coats of Duration Home Interior Latex

or

1 coat Loxon Concrete & Masonry Primer
2 coats Duration Home Interior Latex

Wood:

1 coat Premium Wall & Wood Primer
2 coats Duration Home Interior Latex

If the wood has bleeding (such as tannin or knot-holes), prime with Multi-Purpose Primer.

Other primers may be appropriate.

When repainting involves a drastic color change, or coating over heavily stained areas, a coat of primer will improve the hiding performance of the topcoat color.

Duration Home[®]

Interior Latex Satin

SURFACE PREPARATION

WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull. Stains from water, smoke, ink, pencil, grease, etc. should be sealed with the appropriate primer-sealer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Caulking:

Gaps between walls, ceilings, crown moldings, and other interior trim can be filled with the appropriate caulk after priming the surface.

Drywall:

Fill cracks and holes with patching paste-spackle and sand smooth. Joint compounds must be cured and sanded smooth. Remove all sanding dust.

Masonry, Concrete, Cement, Block:

All new surfaces must be cured according to the supplier's recommendations – usually about 30 days. Remove all form release and curing agents. Rough surfaces can be filled to provide a smooth surface. If painting cannot wait 30 days, allow the surface to cure 7 days and prime the surface with Loxon Concrete & Masonry Primer.

SURFACE PREPARATION

Mildew:

Prior to attempting to remove mildew, it is always recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint films. Bleach alternative cleaning solutions may be advised.

Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts clean water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with clean water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach-water solution.

Plaster:

Bare plaster must be cured and hard. Textured, soft, porous, or powdery plaster should be treated with a solution of 1 pint household vinegar to 1 gallon of clean water. Repeat until the surface is hard, rinse with clean water and allow to dry.

Wood:

Sand any exposed wood to a fresh surface. Patch all holes and imperfections with a wood filler or putty and sand smooth.

CAUTIONS

For interior use only.
Protect from freezing.
Non-Photochemically reactive.

Before using, carefully read **CAUTIONS on label**.

CRYSTALLINE SILICA Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. **FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. **DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.** Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. **WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

HOTW 09/19/2022 A97W01251 42 33
FRC,SP

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm clean water. After cleaning, flush spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

Pro Industrial™

Waterbased Alkyd Urethane Enamel Gloss

B53-1050/2050 Series


**SHERWIN
WILLIAMS.**

CHARACTERISTICS

Pro Industrial Waterbased Alkyd Urethane Enamel is a premium quality interior-exterior enamel formulated with a urethane modified alkyd resin system for high performance. It provides beauty and durability when applied to interior-exterior surfaces such as properly prepared drywall, wood, masonry and metal. It brings together the convenience and ease of use of a waterborne coating with the performance and coating characteristics of a traditional oil-based enamel.

- Excellent washability & flow & leveling
- Excellent touch up
- Easy application & cleanup
- Resistant to yellowing compared to traditional alkyds
- Suitable for use in USDA inspected facilities

For use on properly prepared:

Steel, Galvanized & Aluminum, Drywall, Concrete and Masonry, and Wood.

Finish: 75+ @60°

Color: Most colors

Recommended Spreading Rate per coat:

Wet mils: 4.0-5.0

Dry mils: 1.3-1.6

Coverage: 320-394 sq.ft. per gallon

Theoretical Coverage: 513 sq. ft. per gallon
@ 1 mil dry

Approximate spreading rates are calculated on volume solids and do not include any application loss.

Note: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 4.0 mils wet, @ 50% RH:

Drying, and recoat times are temperature, humidity, and film thickness dependent.

@77°F

To touch 1-2 hours

To recoat 4 hours

Tinting with CCE only:

Base	oz. per gallon	Strength
Extra White	0-6	SherColor
Deep Base	4-12	SherColor
Ultradeep Base	10-14	SherColor

Extra White B53W02051

(may vary by color)

V.O.C. (less exempt solvents):

less than 50 grams per litre; 0.42 lbs. per gallon

As per 40 CFR 59.406

Volume Solids: 32 ± 2%

Weight Solids: 49 ± 2%

Weight per Gallon: 10.68 lb

Flash Point: N/A

Vehicle Type: Urethane modified alkyd

Shelf Life: 36 months, unopened

COMPLIANCE

As of 03/10/2020, Complies with:

OTC	Yes
OTC Phase II	Yes
SCAQMD	Yes
CARB	Yes
CARB SCM 2007	Yes
Canada	Yes
LEED® v4 & v4.1 Emissions	No
LEED® v4 & v4.1 V.O.C.	Yes
EPD-NSF® Certification	No
MIR-Manufacturer Inventory	No
NSF® Certification	No
MPI®	No

APPLICATION

Temperature:	
minimum	50°F / 10°C
maximum	100°F / 37.8°C
	air, surface, and material
	At least 5°F above dew point

Relative humidity: 85% maximum

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

Reducer: Water

Airless Spray:	
Pressure	2000 p.s.i.
Hose	1/4 inch I.D.
Tip	.013 - .017 inch
Filter	60 mesh
Reduction	Not recommended
Brush	Nylon-polyester
Roller Cover	1/4-1/2 inch woven

If specific application equipment is listed above, equivalent equipment may be substituted.

Apply paint at the recommended film thickness and spreading rate as indicated on front page. Application of coating below minimum recommended spreading rate will adversely affect coating performance.

No painting should be done immediately after a rain or during foggy weather. When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. Apply coating evenly while maintaining a wet edge to prevent lapping.

SPECIFICATIONS

Steel:

- 1 coat Pro Industrial Pro-Cryl Primer
- 2 coats Pro Industrial Waterbased Alkyd Urethane

Aluminum and Galvanizing:

- 1 coat Pro Industrial Pro-Cryl Primer
- 2 coats Pro Industrial Waterbased Alkyd Urethane

Concrete Block (CMU):

- 1 coat Pro Industrial Heavy Duty Blockfiller or Loxon Acrylic Block Surfacer
- 2 coats Pro Industrial Waterbased Alkyd Urethane

Concrete-Masonry:

- 1 coat Loxon Concrete & Masonry Primer (if needed)
- 2 coats Pro Industrial Waterbased Alkyd Urethane

Drywall:

- 1 coat ProMar 200 Zero V.O.C. Primer
- 2 coats Pro Industrial Waterbased Alkyd Urethane

Wood, exterior:

- 1 coat Exterior Wood Primer
- 2 coats Pro Industrial Waterbased Alkyd Urethane

Wood, interior:

- 1 coat Premium Wall & Wood Primer
- 2 coats Pro Industrial Waterbased Alkyd Urethane

The systems listed above are representative of the product's use, other systems may be appropriate.

Pro Industrial™

Waterbased Alkyd Urethane Enamel Gloss

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Do not use hydrocarbon solvents for cleaning.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull. Stains from water, smoke, ink, pencil, grease, etc. should be sealed with the appropriate primer/sealer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Iron & Steel - Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6. Primer recommended for best performance

Aluminum - Remove all oil, grease, dirt, oxide and other foreign material per SSPC-SP1. Prime the area the same day as cleaned.

Galvanizing - Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP16 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.

Concrete Block - Surface should be thoroughly clean and dry. Air, material and surface temperatures must be at least 55°F (13°C) before filling. Use Pro Industrial Heavy Duty Block Filler or Loxon Acrylic Block Surfacer. The filler must be thoroughly dry before topcoating.

Masonry - All masonry must be free of dirt, oil, grease, loose paint, mortar, masonry dust, etc. Clean per SSPC-SP13/Nace 6/ ICR No. 310.2R, CSP 1-3. Poured, troweled, or tilt-up concrete, plaster, mortar, etc. must be thoroughly cured at least 30 days at 75°F. Form release compounds and curing membranes must be removed by brush blasting. Brick must be allowed to weather for one year prior to surface preparation and painting. Prime the area the same day as cleaned. Weathered masonry and soft or porous cement board must be brush blasted or power tool cleaned to remove loosely adhering contamination and to get to a hard, firm surface. Apply one coat Loxon Conditioner, following label recommendations.

Wood - Surface must be clean, dry, and sound. Prime with recommended primer. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed before full coat of primer is applied. All nail holes or small openings must be properly caulked.

SURFACE PREPARATION

Previously Painted Surface - If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Mildew - Prior to attempting to remove mildew, it is always recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint films. Bleach alternative cleaning solutions may be advised.

Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.

PERFORMANCE

System Tested: (unless otherwise indicated)

Substrate: Steel
Surface Preparation: SSPC-SP10
Finish:

1 coat Waterbased Alkyd Urethane, 5 W.F.T.

Adhesion:

Method: ASTM D3359 method B
Result: 4B

Pencil Hardness:

Method: ASTM D3363
Result: 5H

Flexibility:

Method: Method: ASTM D522,
180° bend, 1/4" mandrel
Result: Pass

Dry Heat Resistance:

Method: ASTM D2485
Result: 200°F

Block Resistance:

Lab assessment: Excellent

Resistance to Yellowing:

Lab assessment: Excellent

No painting should be done immediately after a rain or during foggy weather. Do not paint on wet surfaces. Check adhesion by applying a test strip to determine the readiness for painting.

SAFETY PRECAUTIONS

Before using, carefully read **CAUTIONS** on label. Refer to the Safety Data Sheets (SDS) before use. **FOR PROFESSIONAL USE ONLY.**

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

DANGER: Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations.

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Loxon® XP

Waterproofing Masonry Coating-Flat

LX11-50 Series


**SHERWIN
WILLIAMS**

CHARACTERISTICS

Loxon XP is an exterior, high build coating that provides excellent flexibility, durability and weather resistance. This product will protect against wind-driven rain when used on concrete, CMU, stucco and shotcrete-gunite. It is highly alkali and efflorescence resistant. This may be applied to a surface with a pH of 6 to 13.

Apply directly to fresh concrete (at least 7 days old). Shotcrete/gunite surfaces may be painted after 3 days.

Can be applied over high pH (up to 13) substrates, no primer required.

Can be applied down to 35°F.

Color: Most Colors

1 coat system, brush, roller, or spray applied, coverage per coat:

Wet mils: 14.5-18.5

Dry mils: 6.5-8.4

Coverage sq.ft. per gallon 85-110

Can be applied up to 40 mils wet.

Coverage will vary with the substrate and the texture.

Coverage on porous & rough stucco 80 square feet per gallon.

Drying Schedule @ 50% RH: temperature and humidity dependent.

@35-45°F @ 45°F+

Touch: 6 hrs 4 hrs

Recoat: 24-48 hrs 24 hrs

Drying time is temperature, humidity, and film thickness dependent.

Finish: 0-10 units @ 85°

Tinting with CCE only:

Base	oz. per gallon	Strength
Extra White	0-6	SherColor
Deep Base	4-12	SherColor
Ultradeep	10-12	SherColor
Light Yellow	0-12	SherColor

Extra White LX11W0051
(may vary by color)

V.O.C. (less exempt solvents):

less than 50 grams per litre; 0.42 lbs. per gallon
As per 40 CFR 59.406

Volume Solids: 45 ± 2%

Weight Solids: 61 ± 2%

Weight per Gallon: 11.46 lb

Flash Point: N.A.

Vehicle Type: Proprietary Acrylic

Shelf Life: 36 months, unopened

Mildew Resistant:

This coating contains agents which inhibit the growth of mildew on the surface of this coating film. Passes ASTM D3273/D3274

COMPLIANCE

As of 2/4/2022, Complies with:

OTC	Yes
OTC Phase II	Yes
S.C.A.Q.M.D	Yes
CARB	Yes
CARB SCM 2007	Yes
CARB SCM 2020	Yes
Canada	Yes
LEED® v4 & v4.1 Emissions	N.A.
LEED® v4 & v4.1 V.O.C.	Yes
EPD-NSF® Certified	No
MIR-Manufacturer Inventory	No
MPI®	Yes
SWRI®- Wall Coating	Yes

APPLICATION

Temperature:

minimum 35°F

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

Reducer: Do not reduce

Airless Spray:

Pressure 2300 p.s.i.

Tip .021 inch

Brush Use a nylon/polyester brush

Roller Cover Use a ½ to 1½ inch nap synthetic roller cover.

The substrate and its condition will determine the application procedure. Considerations to minimize pinholes:

- 2 coat application with overnight drying between coats
- Spray application with backrolling
- Power rolling

Spray and backroll on porous & rough stucco to achieve required film build and a pin-hole free surface.

When the air temperature is at 35°F, substrates may be colder. Prior to painting, check to be sure the air, surface, and material temperatures are above 35°F and at least 5°F above the dew point. Avoid using if rain or snow is expected within 2-3 hours.

Do not apply at air or surface temperatures below 35°F or when air or surface temperatures may drop below 35°F within 48 hours.

Do not reduce.

APPLICATION TIPS

For proper waterproofing performance and to resist alkalis, 2 coats of the coating **MUST** be applied between 14.5 -18.5 mils wet per coat.

A total dry film thickness of 13 - 16.8 mils of topcoat and a surface with 10 or less pinholes per square foot is required for a waterproofing system.

For extremely porous block a coat of Loxon Block Surfacer may be required to achieve a pinhole free surface.

For rehabilitating existing concrete water tanks, additional products may be used.

RECOMMENDED SYSTEMS

Concrete, Stucco, Concrete Block, CMU, Split-face Block, and other Cementitious surfaces

1 coat Loxon Acrylic Block Surfacer
(if needed) or
Loxon Conditioner (if needed)

1-2 coats Loxon XP

Previously Coated in good condition:

After power washing, apply 1 coat of Loxon XP over the surface.

Incidental Wood:

1 coat Exterior Latex Wood Primer1-
2 coats Loxon XP

Incidental Metal:

(steel, galvanized, or aluminum):
1 coat Pro Industrial Pro-Cryl Primer
1-2 coats Loxon XP

Waterproofing System:

- Two coats of topcoat
- 6.5 to 8.4 mils d.f.t. per coat
- 13 to 16.8 mils total dry film thickness
- 10 or less pinholes per square foot

Loxon® XP

Waterproofing Masonry Coating-Flat

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Scrape and sand peeled or checked paint to a sound surface. Sand glossy surfaces dull. Seal stains from water, smoke, ink, pencil, grease, etc. with the appropriate primer-sealer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Concrete, CMU, Stucco:

On tilt-up and poured-in-place concrete, commercial detergents and sandblasting may be necessary to remove sealers, release compounds, and to provide an anchor pattern. Concrete and mortar must be cured at least 7 days at 75°F. Fill bugholes, air pockets, cracks, and other voids with an elastomeric patch or sealant. Rough surfaces can be filled to provide a smooth surface.

Incidental Metal:

Wash to remove any oil, grease, or other surface contamination. All corrosion must be removed with sandpaper, wire brush, or other abrading method. Primer required.

Incidental Wood:

Sand any exposed wood to a fresh surface. Patch all holes and imperfections with a wood filler or putty and sand smooth. All patched areas must be primed. Primer required.

Sealing and Patching—After cleaning the surface thoroughly, prime the concrete surface with Loxon XP, apply an elastomeric patch or sealant if needed, allow to dry, then topcoat.

To improve the performance, consider:

- Use caution when preparing the substrate to create a uniform surface.
- Cracks, crevices, and through-wall openings must be patched with an elastomeric patch or sealant.
- Fill voids and openings around window and doors with an elastomeric patch or sealant.
- Stripe coat all inside and outside corners and edges with 1 coat of Loxon XP coating.

SURFACE PREPARATION

Mildew:

Prior to attempting to remove mildew, it is always recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint films. Bleach alternative cleaning solutions may be advised.

Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach-water solution.

PHYSICAL PROPERTIES

Do not paint on wet surfaces.

LX11W0051

Wind-Driven Rain Test : Pass
Method: ASTM D6904 7 day cure
2 coats Loxon XP @ 8.1 mils d.f.t. per coat

Water Vapor Permeance:
(perms) 18.03 grains/h-ft²-in Hg.
Method: ASTM D1653 7 day cure @ 73°F & 50% RH: Method B, Condition A-Wet cup
2 coats Loxon XP @ 8.1 mils d.f.t. per coat

Elongation : 312%
Method: ASTM D412, 7 day cure @ 72°F & 50% RH 20 inch per minute
2 coats Loxon XP @ 8.1 mils d.f.t. per coat

Tensile Strength : 295 p.s.i.
Method: ASTM D412, 7 day cure @ 72°F & 50% RH 20 inch per minute
2 coats Loxon XP @ 8.1 mils d.f.t. per coat

Flexibility:
Method: ASTM D522, 9 mils d.f.t., 1 day cure
Result: Pass 1/8 inch

Alkali Resistance:
Method: ASTM D1308, 7 day cure,
11.25 mils d.f.t.
Result: Pass

Chloride Ion Permeability:
Result: 243 coulombs
Result: "Very Low" Permeability Class
CO₂ Diffusion (anti-carbonation):
Method: ASTM F2476
Result: 344 meters
equivalent air thickness >50 meters to pass
8.0 g/m²/24 hrs

Crack Bridging: Class A5 Pass
Method: EN 1062-7 Method A
Result: up to 2.5 mm @-10°C

Efflorescence:
Method: ASTM D7072-19
1 coat, 1 day cure, 7.2 d.f.t.
Result: Pass

Adhesion:
Method: ASTM D4541
2 coats, 7 day cure, 7.2 d.f.t. per coat
Result: 375 average p.s.i.

CAUTIONS

For exterior use only.

Protect from freezing.

Non-photochemically reactive.

Not for use on horizontal surfaces (floors, roofs, decks, etc.) where water will collect.

Not for use below grade. Will not withstand hydrostatic pressure.

Before using, carefully read **CAUTIONS** on label.

ZINC. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. **FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. **WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

HOTW 2/4/2022 LX11W0051 27 00
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CLEANUP INFORMATION

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