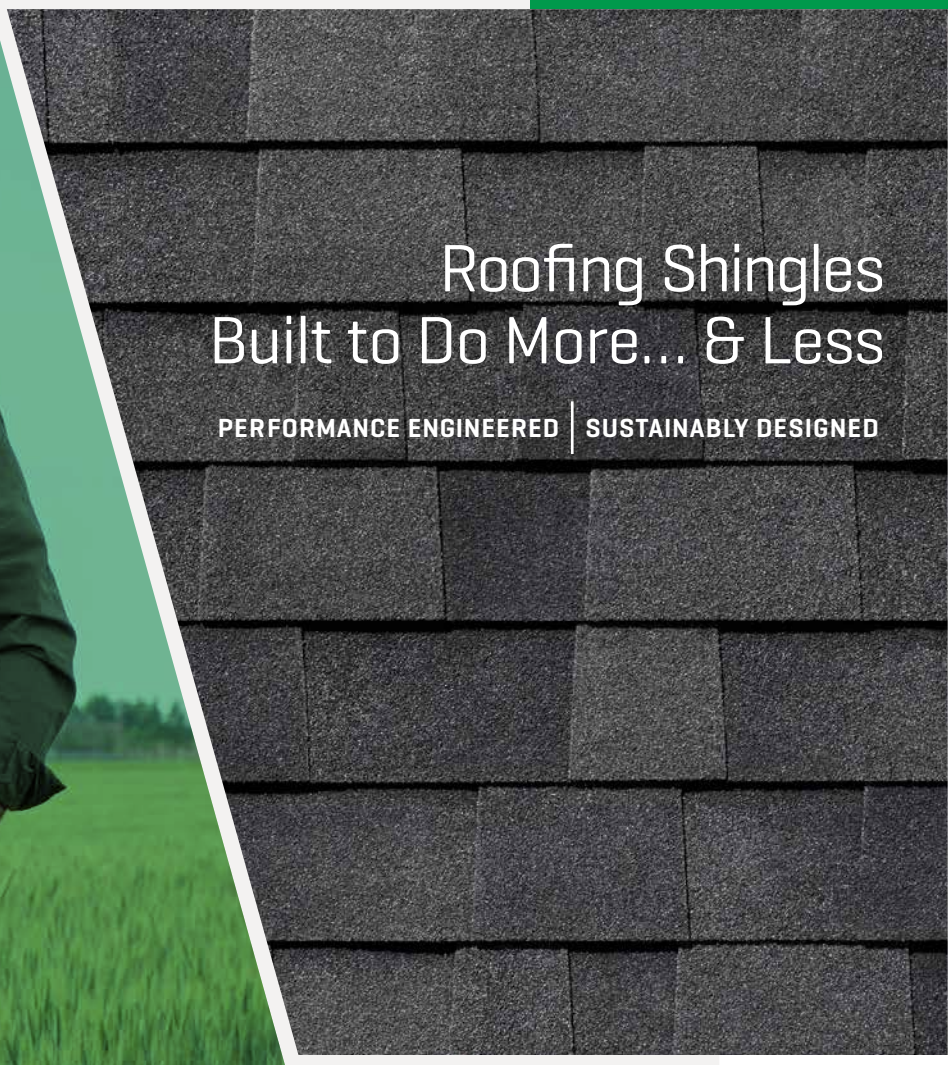
Malarkey Roofing Products®

ARCHITECTURAL SHINGLE LINES



Roofing Shingles Built to Do More... & Less

PERFORMANCE ENGINEERED | SUSTAINABLY DESIGNED

Sustainable Performance™

WHY A MALARKEY SHINGLE?

Unlike standard roofing shingles, Malarkey shingles are made with our patented **NEX® Rubberized Asphalt** for superior all-weather durability, **Upcycled Rubber and Plastic** to help reduce landfill waste, and **Smog-Reducing Granules** that help clean the air.

Superior performance ***and*** better for the environment – why not a Malarkey shingle?

Made Better
Up to **2X Larger Nailing Area**
Up to **50% More Adhesive Bonds**
2X Rain Seals

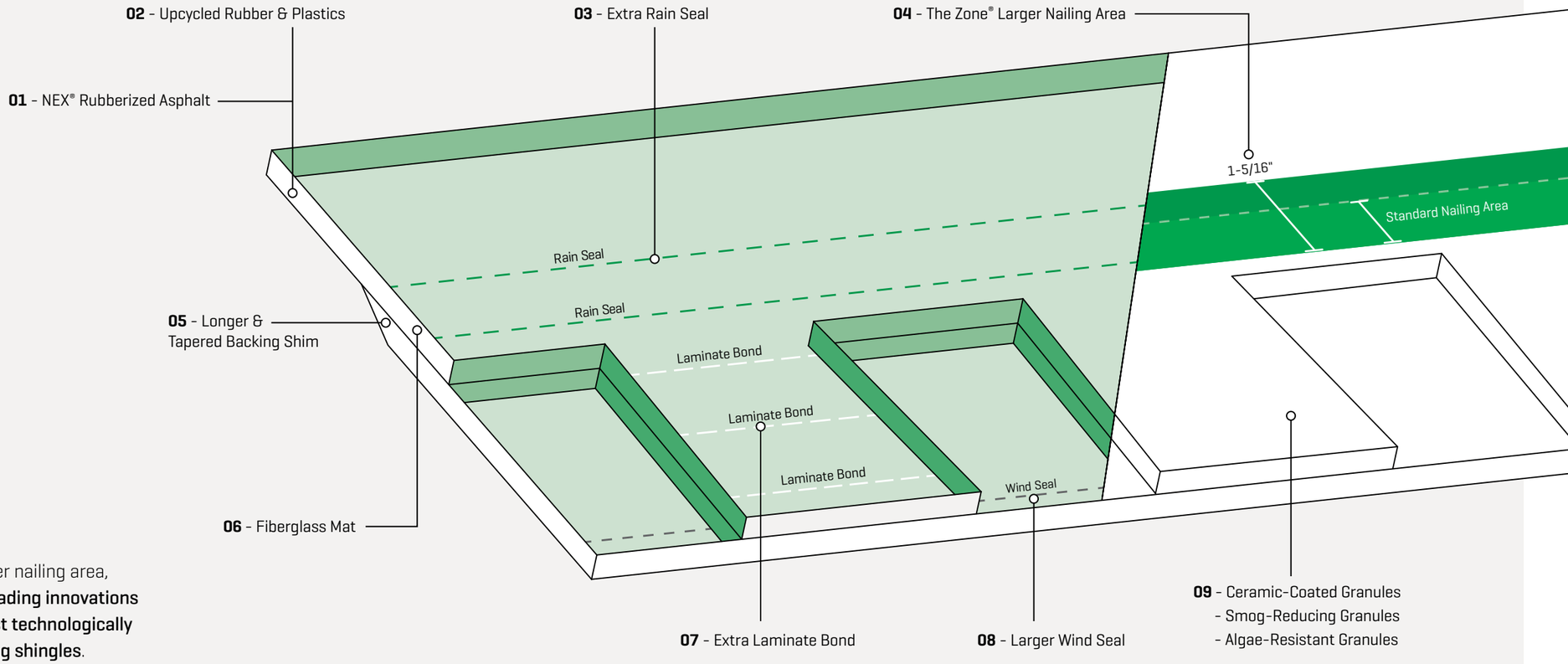
Lasts Longer
Up to **35% Greater Tear Strength**
Up to **65% Greater Granule Adhesion**
Up to **Class 4 Impact Rating** (highest rating possible)

More Sustainable
Upcycles **~5 Rubber Tires**
Upcycles **~3,200 Plastic Bags**
Cleans Smog Pollution like **~2 Trees**
**per roof*

Foremost, a shingle must perform and last.

PERFORMANCE ENGINEERED

Rubberized asphalt, upcycled rubber and plastic, larger nailing area, tapered backing shim, double rain seals - **industry-leading innovations that have earned Malarkey its reputation for the most technologically advanced, sustainably designed, performance roofing shingles**.



1. **NEX® Polymer Modified (Rubberized) Asphalt**
   Asphalt core of shingle is strengthened with SBS rubber polymers for superior all-weather resilience and aging longevity. **Up to Class 4 hail impact rating (highest rating possible)**. *Insurance discounts often apply.*

2. **Upcycled Rubber & Plastic**
   Polymers from recycled rubber and plastic improve shingle durability and aging resistance, while helping reduce landfill waste. **Each average-sized roof (30 squares) upcycles the equivalent of ~5 tires and ~3,200 plastic bags**.[1]

3. **Extra Rain Seal**
   2X the rain seals of standard shingles, rubberized with SEBS rubber polymers to improve adhesion, resist dry-out, and provide extra leak protection from wind-blown rain.

4. **The Zone® Larger Nailing Area**
   Up to 2X larger nailing area creates a bigger nailing target, improving installation speed and accuracy.

5. **Longer & Tapered Backing Shim**
   Longer backing shim helps ensure nails secure BOTH shingle layers, (top and bottom) critical to preventing blow-offs. Tapered backing shim helps shingles lay flatter to better shed water and help prevent rain from blowing under the shingle and pooling (troughing), waiting to leak down a misplaced nail.

6. **Fiberglass Mat**
   Provides structural reinforcement and, combined with NEX® Rubberized Asphalt, from **10-35% greater tear strength** than the industry standard (ASTM D3462).

7. **Extra Laminate Bond**
   Up to 50% more laminate bonds than standard shingles, rubberized with SEBS rubber polymers to improve adhesion, resist dry-out, and protect against shingle delamination.

8. **Larger Wind Seal**
   Larger wind seal, rubberized with SEBS rubber polymers to improve seal-down adhesion and resist dry-out, helps prevent wind from lifting the shingle up and off the roof. **Wind warranties up to 130 mph**.

9. **Ceramic-Coated Granules**
   3M™ Roofing Granules add color vibrancy and protect the shingle from hail impact and UV aging, while NEX® Rubberized Asphalt delivers **up to 65% greater granule adhesion** than the industry standard (ASTM D3462).

   Smog-Reducing Granules
   Blend of photocatalytic 3M™ Smog-Reducing Granules harness sunlight to actively clean the air of smog emission pollutants like nitrogen dioxide (NO_2). **Each average-sized roof (30 squares) has the smog-fighting potential of ~2 trees**.[2]

   Algae-Resistant Granules
   Blend of algae-resistant 3M™ Copper Granules helps prevent black streaks caused by algae growth. **Up to Limited Lifetime Algae Warranty** (only on Legacy® shingle line).

Malarkey Industry First

SUSTAINABLY DESIGNED

We all share the same roof over the same home. Malarkey is committed to circular roofing – less waste and pollution, longer lasting products and materials, and the preservation of nature.

Product Longevity

Made with rubberized asphalt for greater strength, durability, granule adhesion, and impact resistance, **Malarkey shingles last longer – the very definition of sustainable**.

Cleaner Technology

Rubberized asphalt is a cleaner technology resulting in much fewer emissions than the oxidized asphalt process used to make standard shingles.

Waste Diversion

All Malarkey shingle manufacturing facilities are **GreenCircle Certified for *Waste Diversion from Landfill***.

Global Warming

In the Environmental Product Declaration (EPD) compiled by the Asphalt Roofing Manufacturer’s Association (ARMA), **Malarkey shingles are shown to have up to 26% less embodied carbon than standard shingles**, greatly reducing their global warming potential.

Upcycled Content

Recycled content can sometimes diminish product quality. Malarkey upcycles rubber and plastic that improve product performance. Malarkey shingles are **GreenCircle Certified for *Recycled Content***.

Smog-Reducing Granules

Clean air is a concern of us all, which is why we integrate smog-reducing granules. **These innovative granules harness sunlight to help clean the air of smog emission pollutants**.

SHOWN IN MIDNIGHT BLACK

"One of the amazing parts of working with Malarkey is that **they upcycle materials to reduce the impact on our environment** with their products!"

– Anytime Roofing, Inc.
Seattle

Asphalt weathering, rubber tough, environmentally conscious.

RUBBERIZED ASPHALT (& ADHESIVE) TECHNOLOGY

Malarkey pioneered polymer modified (rubberized) asphalt roofing shingles, a superior, sustainable, and cleaner (fewer emissions) technology that sets the standard for modern shingle-making.

Standard Shingle Technology *(Oxidized Asphalt)*

Standard roofing shingles are made of oxidized asphalt, an old technology that uses oxygen and extreme heat to dry-out and harden asphalt for use in shingles.

The problem is that oxidation dries-out the asphalt too much. Like over-baking a cookie, oxidized asphalt becomes hard and brittle – more prone to breaking and cracking; and like dried-out glue, loses its extreme stickiness, resulting in premature granule loss.

Malarkey Shingle Technology *(Rubberized Asphalt)*

Malarkey invented *rubberized asphalt* roofing shingles. Our patented **NEX® Polymer Modified (Rubberized) Asphalt** formulation uses SBS virgin rubber polymers, and upcycled rubber and plastic polymers, to strengthen the asphalt core of the shingle for stronger, longer, all-weather durability.

Rubberization enhances asphalt's suppleness to resist thermal dry-out (aging longevity) and stickiness to better adhere and embed granules (granule retention), while adding rubberlike flex to resist tears and breaks and shock dispersion to better absorb and deflect force impact without damage (impact resistance).

Rubberized Adhesive

We also rubberize the adhesive used throughout the shingle (wind seal, rain seals, laminate bonds) with SEBS rubber polymers for **stronger seal-down action and greater resistance to thermal dry-out**.

Upcycled Sustainability

In addition to virgin polymers, we also incorporate *upcycled* rubber and plastic polymers. **These recycled polymers *improve* shingle strength and durability**, while also benefiting the shingle with an anti-UV aging ingredient inherent in tires. **Recycled ingredients extending product life and landfill life**. A true win-win!

MALARKEY'S PATENTED NEX® RUBBERIZED ASPHALT FORMULA

High-Grade Asphalt
Waterproofing & Granule Adhesion

Synthetic Rubber Polymers (SBS)
Strength, Flexibility, Aging

Upcycled Rubber Polymers
Durability, Aging, Sustainability

Upcycled Plastic Polymers
Strength & Sustainability

Installation accuracy is as important as the shingle itself.

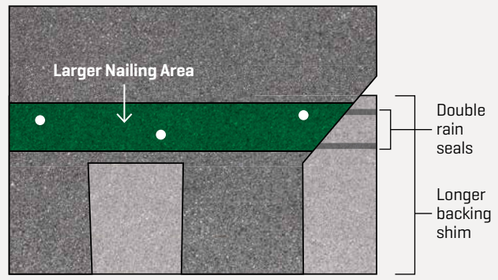
LARGER NAILING AREA

Malarkey invented the larger nailing area, called The Zone®, which consists of 4 key components:

1.) Wider nailing lines on the top of the shingle create a bigger nailing target to improve installation speed and accuracy, **2.) Longer backing shim** helps ensure nails also secure the bottom shingle layer – critical to preventing shingle uplift and blow-offs, **3.) Tapered backing shim** helps shingles lay flatter to better shed water and help prevent rain from blowing under the shingle and pooling (troughing), waiting to leak down a misplaced nail, and **4.) Extra rain seal** helps keep out wind-blown rain.

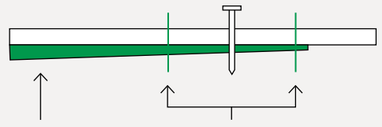
Malarkey Shingle - Nailing Area

Top view, partial section of shingle:



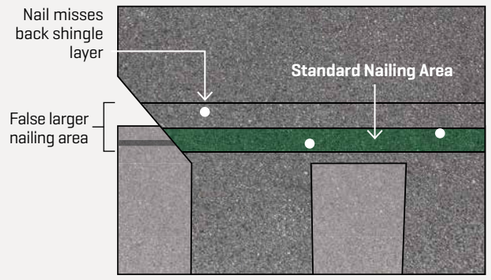
Wider nailing lines create a bigger nailing target, while a longer backing shim, helps ensure nails also secure the bottom shingle layer – critical to helping prevent uplift and blow-offs.

Side view of shingle laying flat:

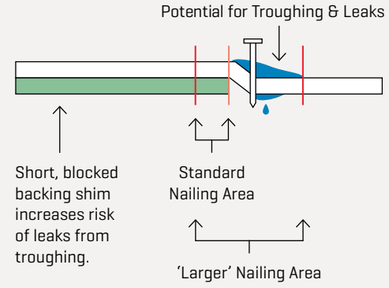


Competitor Shingles - Nailing Area

Top view, partial section of shingle:



Competitor shingles can have a smaller nailing area that's hard to hit, or a 'false' larger nailing area with wider nailing lines on the top of the shingle, **but a short backing shim,** so even nails that hit ***within*** the wider nailing lines can still fail to secure the short, bottom (back) shingle layer.



"My husband and I were so thankful we had your shingles installed.

We truly feel having those shingles on our roof saved us from additional damage if the shingles were to have been ripped off, as all our neighbors' houses lost their shingles."

– Tina Stewart, Homeowner
Lake Park, Iowa

SHOWN IN NATURAL WOOD

Rubberized to resist hail damage.

IMPACT RESISTANCE (& GRANULE ADHESION)

Hail is hard on shingles. When it hits, it dents and tears and dislodges granules, elevating the risk of leaks. **Malarkey’s rubberized asphalt formulation adds rubberlike durability to resist tears and breaks, as well as shock dispersion to better absorb and deflect hail impact without damage. All Malarkey shingles are Class 3 or 4 impact rated (highest ratings possible).**

Granule Adhesion

Granules protect the shingle from UV aging and hail impact. The longer they stay on the shingle, the longer it lasts. Asphalt is the glue that holds them in place.

As temperatures change, the asphalt in shingles moves - expands in heat, contracts in cold - constantly gripping and regripping granules. **Malarkey’s rubberized asphalt formulation enhances asphalt’s suppleness and stickiness for deeper granule embedment and adhesion, with rubberlike elongation and recovery to more effectively grip and regrip granules for longer, helping reduce granule loss. Malarkey shingles have up to 65% greater granule adhesion than the industry standard specification (ASTM D3462).**

IMPACT RATING METHODOLOGY

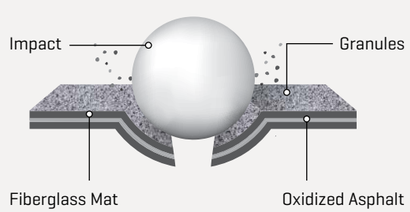
Shingles are classified for impact resistance. Class 3 and 4 rated shingles can withstand a 1.75" and 2.0" steel ball dropped on the shingles 12 times from 17 and 20 feet, respectively, with neither the exposed nor back surface of the shingle showing signs of fracturing.

IMPACT PERFORMANCE

Malarkey’s entire shingle line is Class 3 or Class 4 impact rated (highest ratings possible). Malarkey also consistently ranks at the top of the Institute for Business and Home Safety’s *Hail Impact Study* and meets their stringent FORTIFIED™ Roof requirements. *Insurance discounts often apply.*

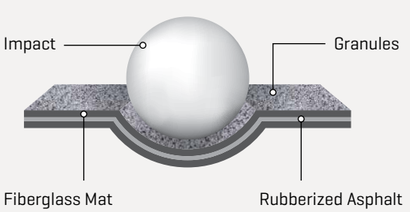
Standard Shingle

Standard shingles are brittle, more likely to fracture and lose granules from hail impact.



Malarkey Shingle

Malarkey shingles are rubberized to better absorb and deflect hail impact.



One Roof at a Time
"Granted, it's just one roof, but if everyone starts choosing a shingle that reduces landfill waste and also fights air pollution, who knows what the end result will be."

– James Martinez, Homeowner

There's more than one way to plant a tree.

SMOG-REDUCING GRANULES

Smog is a form of air pollution resulting from the interaction of UV sunlight with chemicals in the atmosphere like nitrogen dioxide (NO_2) that get into the air primarily from the burning of fuel (ex. vehicle emissions).

Improving Our Climate
3M™ Smog-Reducing Granules

All Malarkey shingles include 3M™ Smog-Reducing Granules. Designed with a photocatalytic coating, and blending inconspicuously into the shingle's color, these innovative granules harness sunlight to actively clean the air of emission pollutants. **Each average-sized roof of Malarkey shingles (30 squares) has the smog-fighting potential equivalent to ~2 trees**.[2]

HOW IT WORKS

Sunlight activates the smog-reducing granule with enough energy to break apart water molecules in the air, like from humidity (H_2O breaks into OH and H). The newly formed OH molecule seeks to attach itself to smog molecules (NO_2) that come close to the roof.

When the OH molecule attaches to the NO_2 smog molecule, it chemically transforms NO_2 (smog gas) into NO_3 (a salt solid) which drops to the roof and rinses away as plant food.

Why Not Just Clean the Roof?
Climbing on the roof and attempting to remove black streaks caused by algae growth via pressure washing is dangerous and can damage your roof by dislodging the shingle's protective granules, their primary defense against damage and UV aging.

Prevent black streaks caused by algae growth.

ALGAE-RESISTANT GRANULES

Humidity and sunlight create the perfect environment for algae growth. On a roof, this growth can manifest as black streaks that diminish your roof's appearance.

3M™ COPPER GRANULES (ALGAE)

To help combat algae growth, we utilize 3M™ Copper Granules. Designed with a special copper coating, and blending inconspicuously into the shingle's color, these innovative granules, on our algae resistant Legacy® Scotchgard™ Protector shingles, release copper ions which inhibit algae growth, helping prevent it from getting started in the first place.

MAXIMUM ALGAE PROTECTION

For maximum algae protection, **shingles featuring Scotchgard™ Protector utilize at least a 10% blend of 3M™ Copper Granules**.

Malarkey was the first shingle manufacturer to receive the Scotchgard™ Protector designation.

"**Turning old tires into beautiful roofs that are also hail resistant!** We love teaming up with companies like Malarkey who are on the leading edge of technology!"

– Misty Krebs, Valcore Roofing
Colorado

YMCA COMPLEX, ESTES PARK, CO - SHOWN IN ANTIQUE BROWN

COLOR OPTIONS

Malarkey offers a full palette of shingle colors.
To see more examples of finished roofs, visit
www.malarkeyroofing.com/homeowners/gallery.

COLORS AVAILABLE BY SHINGLE LINE

(H) Highlander®
(V) Vista®
(L) Legacy® Scotchgard™ Protector

Prior to making your color selections, please ask to see an actual shingle for the most accurate depiction of shingle, color, and thickness. *It is recommended to view five or six shingles.*

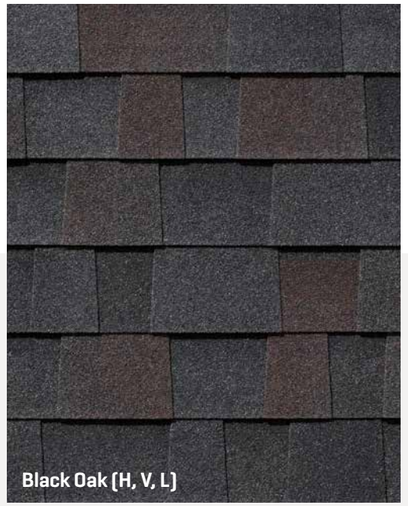
Matching colors are available in high-profile **EZ-Ridge®** and **EZ-Ridge® XT** as well as standard low-profile **RidgeFlex®** hip and ridge shingles.

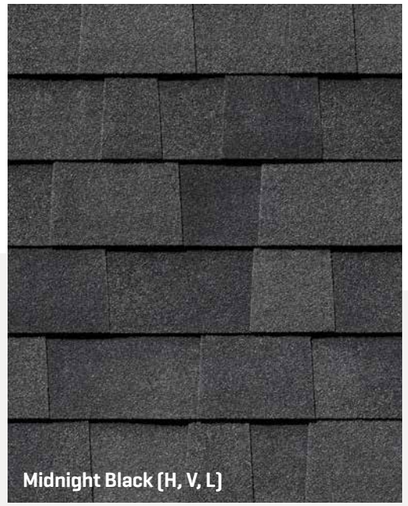
CRRC rated colors can be used to comply with California Energy Code (CEC) Title 24, Part 6 Cool Roof Requirements. Colors with an SRI of 20 or greater can also be used to comply with Los Angeles County, California Title 31 Cool Roof Requirements.

Title 24: Highlander® (Sienna Blend, Golden Amber, Silverwood, Ivory Mist)
Vista® (Sienna Blend, Silverwood)

Title 31: Highlander® (Sienna Blend, Golden Amber, Silverwood, Ivory Mist)
Vista® (Silverwood)

Distributed from South Gate, California


Black Oak (H, V, L)


Midnight Black (H, V, L)

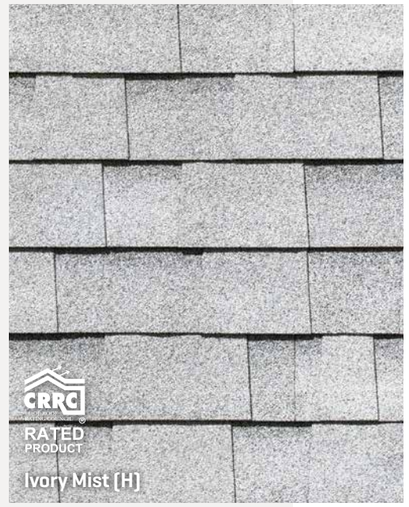

Storm Grey (H, V, L)


CRRC RATED PRODUCT
Silverwood (H, V, L)


Heather (H, V, L)


Natural Wood (H, V, L)


Weathered Wood (H, V, L)


CRRC RATED PRODUCT
Ivory Mist (H)


Antique Brown (H, V, L)


CRRC RATED PRODUCT
Sienna Blend (H, V, L)


CRRC RATED PRODUCT
Golden Amber (H)


SHOWN IN SILVERWOOD

Roof Designer

To help you visualize your new roof, try our Roof Designer at **www.malarkeyroofing.com/roof-designer**.

COLOR OPTIONS

Antique Brown
Black Oak
Golden Amber
Heather
Ivory Mist
Natural Wood
Midnight Black
Sienna Blend
Silverwood
Storm Grey
Weathered Wood


HEATHER


MIDNIGHT BLACK


STORM GREY

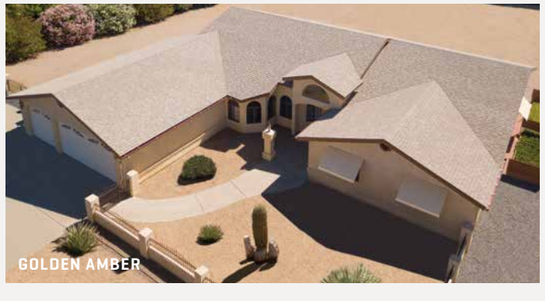

IVORY MIST


WEATHERED WOOD


SIENNA BLEND


BLACK OAK


SILVERWOOD


GOLDEN AMBER


NATURAL WOOD


ANTIQUE BROWN

Industry-leading performance, industry-only sustainability.

BEST IN CLASS

Malarkey shingles are each *Best In Class* in their respective product categories. The only complete shingle line *(Good-Better-Best)* made with the **industry's leading technology** (NEX® Rubberized Asphalt), **highest impact ratings** (Class 3 and Class 4), **strongest sustainability** (aging longevity, upcycled rubber & plastic, smog-reducing granules), and **superior warranty protection** for peace of mind.

Architectural Shingle Lines Comparison Chart	VERY GOOD Highlander®	BETTER Vista®	BEST Legacy® Scotchgard™ Protector
Rubberized Asphalt Technology	NEX®	NEX®	NEX®
Impact Rating (Class 4 highest)	Class 3	Class 4	Class 4
Fire Rating (Class A highest)	Class A	Class A	Class A
Tear Strength*	+10%	+25%	+35%
Granule Adhesion*	+65%	+65%	+65%
Thickness		+10%	+19%
Sustainability (assumes roof of 30 squares)			
~Upcycled Tires	4	5	6
~Upcycled Plastic Bags	2,900	3,200	4,000
~'Planted' Trees[2]	2	2	2
Warranties+:			
Shingle Warranty	Limited Lifetime	Limited Lifetime	Limited Lifetime
Non-Prorated Period (years)	10	15	20
Algae Warranty	NA	NA	Limited Lifetime**
Standard Wind Warranty (mph / kph / years)	110 / 177 / 15	110 / 177 / 15	110 / 177 / 15
Enhanced Wind Warranty (mph / kph / years)	130 / 209 / 15	130 / 209 / 15	130 / 209 / 15

**Versus standard shingles, as measured per ASTM D3462. **Included on shingles with Scotchgard™ Protector from 3M.*

MEETS CSA A123.5 STANDARDS

MADE IN USA

[1] Assumes roof of 30 squares using Vista® shingles .

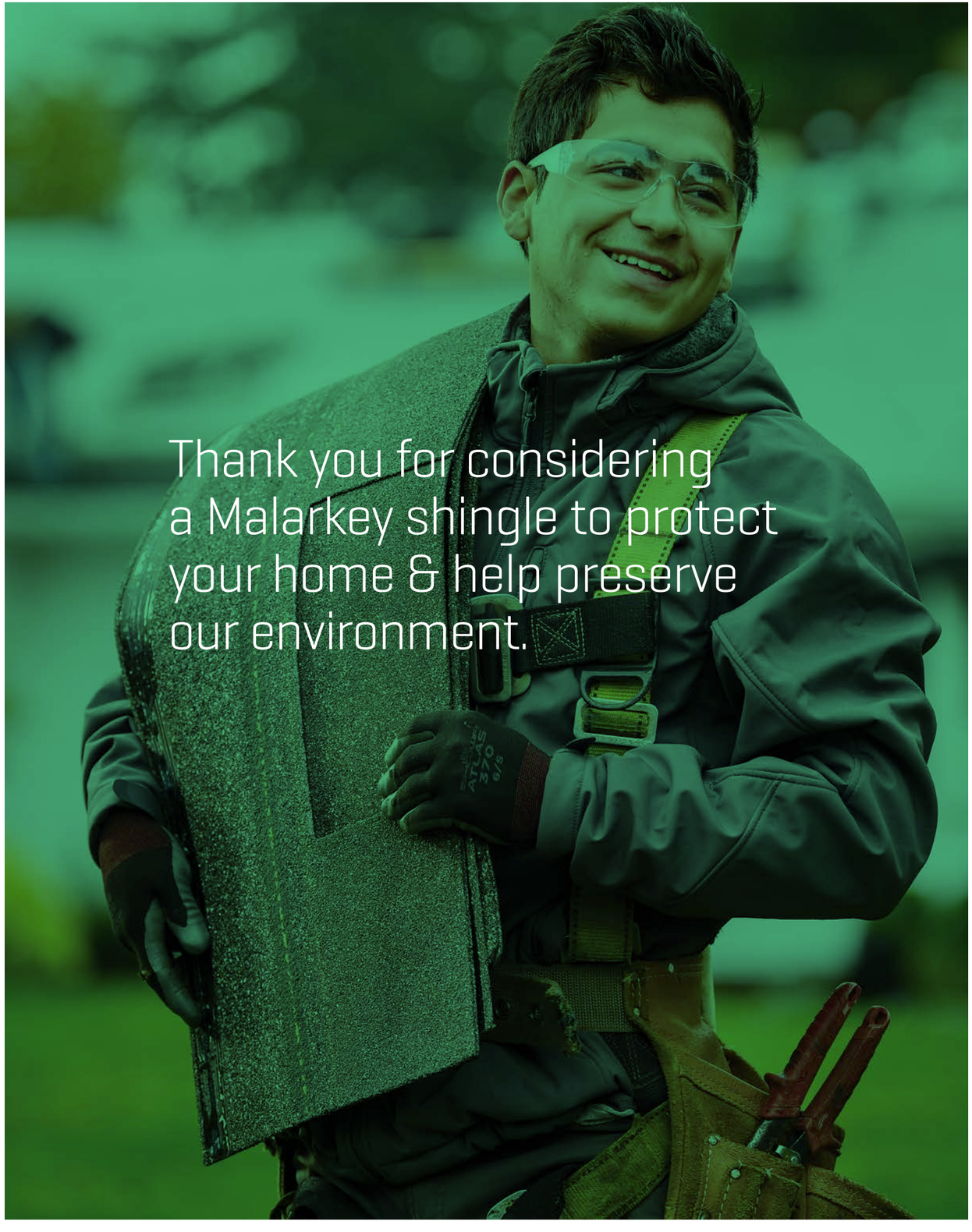
[2] Approximation assuming standard roof of 30 squares. Source: Lawrence Berkeley National Laboratory and 3M.

TEST COMPLIANCE: All Shingles - ASTM D7158 Class H, ASTM D3462, ASTM D3161 Class F, ASTM D3018 Type I, ASTM E108 Class A Fire Rating, CSA A123.5, ICC Approval – ESR-3150, and ICC-ES AC438. UL 2218 Class 4 (Legacy® and Vista® lines) and UL 2218 Class 3 (Highlander® line). CRRC-rated colors can be used to comply with California Energy Code (CEC) Title 24, Part 6 Cool Roof Requirements (Highlander® Golden Amber, Ivory Mist, Sienna Blend, and Silverwood, and Vista® Sienna Blend and Silverwood). Highlander® Golden Amber, Ivory Mist, Sienna Blend, and Silverwood, and Vista® Silverwood shingles can also be used to comply with Los Angeles County, California Title 31 Cool Roof Requirements.

DISCLAIMER: Photographs of shingles may not accurately represent their true color or the variations of color blends that will appear on the roof. **Before installation, five or six shingles should be laid out and reviewed for desired color.** Colors and specifications subject to change without notice. Shingle colors not available in all regions or product lines. Scotchgard and Scotchgard Protector, including the 3M logo, are all trademarks of 3M.

+ For complete information on all warranties, including 'Your Choice' Warranty and the Right Start™ non-prorated period against manufacturing defects, please reference **Malarkey's Shingle and Accessory Warranty available at www.malarkeyroofing.com/warranties**.

This version supersedes all previous versions. Rev. 03/24



Pioneering a Better Way for Over 65 Years

Started as a family business in Oregon in 1956, and now part of the Holcim family of companies, Malarkey Roofing Products® is the industry leader in sustainable, high-performance, roofing shingles, and pioneer of modern shingle-making.

- *First* Polymer Modified (SBS Rubberized) Asphalt Roofing Shingles
- *First* Upcycled Rubber in Roofing Shingles
- *First* Upcycled Plastic in Roofing Shingles
- *First* Larger Nailing Area
- *First* Tapered Backing Shim
- *First* Double Rain Seals
- *First* 3M Scotchgard™ Protector Algae Designation
- *First* Smog-Reducing Shingle

A little more thought, a little more effort, a little more care;
if there's a better, more sustainable way to make a roofing shingle,
we intend to find it.

Malarkey Roofing Products®

WHEN IT MATTERS®
www.malarkeyroofing.com

Brochure made with post-consumer recycled content and is curbside recyclable.