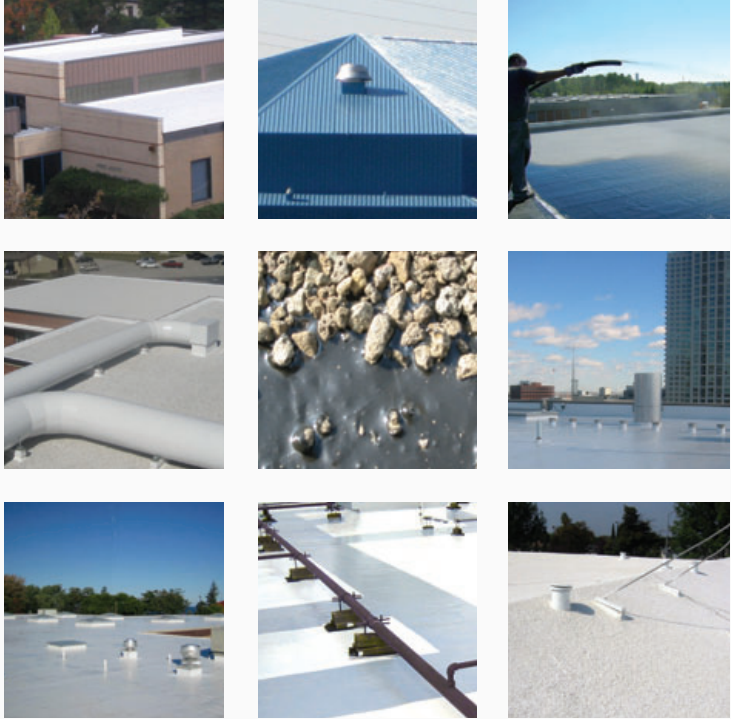


Garland ■ Coating Solutions




Functional Versatility. Ecological Sustainability.



# MAXIMIZING RETURN ON YOUR ROOFTOP INVESTMENT



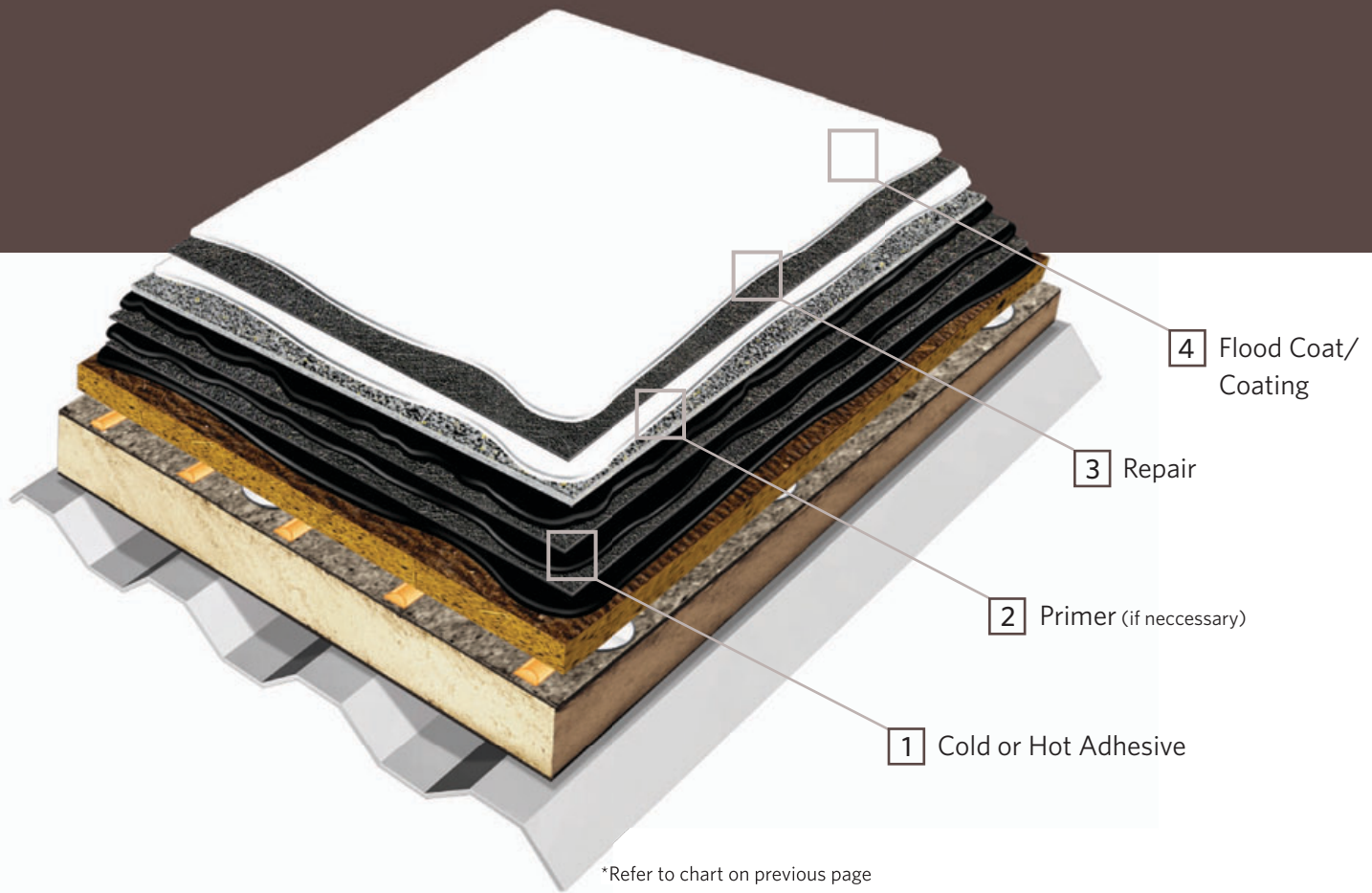
## MATCHING MATERIAL SOLUTIONS TO APPLICATION

<i>Garland Product Family</i>	<i>Application Layer per Illustration on next page</i>	<i>Reflect</i>	<i>Restore</i>	<i>Repair</i>	
All-Knight™/All-Stallion™ Primer	2				■
Black-Knight®/Black-Stallion®	1, 3, 4		■	■	■
Energizer®	4		■		■
Flashing Bond®	3			■	■
Garla-Brite®	4	■			■
Garla-Flex®	3			■	
Garla-Prime®	2				■
Garlastic®	1, 4		■		
Garla-Shield®	4		■		■
Green-Lock®	1, 3, 4		■	■	■
HPR® All-Temp Asphalt	1, 4		■		
Pyramic®	4	■			E, L, C
Rust-Go®	2, 4	■			■
Silver-Flash®	3	■		■	■
Silver-Shield®	4	■			E
Solex®	4	■			L, C
VitaPly®	4		■		■
Weatherking®	1, 4		■		
White-Star	4	■	■		L, C
White-Knight®/White-Stallion®	3, 4	■	■	■	E, L, C
WeatherScreen	4		■		
White-Knight® Plus/White-Stallion® Plus	3, 4	■	■	■	■
Energizer® LO	4		■	■	

E= ENERGY STAR® qualified, L= LEED® point contributor, C= Title 24 compliant

Extending rooftop service life has become an environmental and economic imperative for today's private companies and public entities. Rooftop materials that enhance, restore, and repair your properties will maximize your return on capital investment while:

- Increasing energy efficiency
- Reducing landfill waste
- Reducing labor and material costs
- Realizing the immediate tax benefits of expensing, rather than the delayed benefits of depreciation
- Earning credits, rebates, and tax advantages related to sustainability improvements
- Postponing reroofing can also postpone costly mandatory upgrades, such as insulation



As a leading manufacturer of high-performance solutions for the total building envelope, The Garland Company, Inc. offers a complete range of coatings for single-ply, BUR, modified bitumen, and metal substrates and for a variety of slope configurations, enabling our locally based network of representatives to offer non-biased, application-appropriate specifications. Whether you are looking for reductions in environmental impact and energy usage, or for improvements in chemical-resistance, moisture control, or color retention — Garland has a solution to meet your functional and budgetary requirements.

# ANALYZING THE COST-TO-VALUE BENEFITS OF ENHANCING, RESTORING, AND MAINTAINING YOUR ROOFS

Today's reflective, restorative, and maintenance coatings are not only good for your roof; they're good for your budget. The challenges of escalating material costs, volatile energy pricing, and increasingly stringent environmental regulations have made it more evident than ever before that the costs of neglecting a roof are significantly higher than the costs of properly maintaining it.

☐ Solex

## REFLECTIVITY PAYS

The surface temperature of this StressPly® Plus roof in North Carolina was measured at an ambient-air temperature of 86° F (30° C), uncoated, and with various surface coatings, demonstrating significant rooftop temperature reductions. When the Department of Energy (DOE) performed an energy return on investment calculation (ROI) for this roof, it determined the reflectivity enhancement would pay for itself in less than 9 years.



☐ 144.6° F (62.5° C)  
Uncoated



☐ 101.2° F (38.4° C)  
Pyramic as topcoat



☐ 89.6° F (32° C)  
Solex as topcoat

# RESTORATION PAYS

## Comparative Costs of Reroofing and Restoration<sup>1</sup>

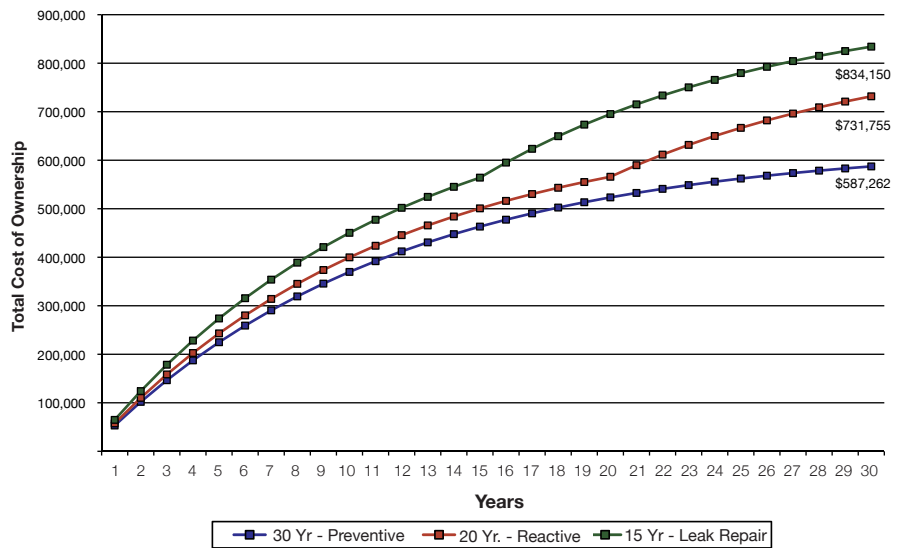
Installed Cost or New Roof System	\$12 per square foot
+	+
Wood Deck Replacement (or)	\$7 per square foot (or)
Metal Deck Replacement (or)	\$6 per square foot (or)
Lightweight Deck Replacement	\$15 per square foot
<b>Total Cost Range</b>	<b>\$12 - \$27 per square foot</b>
<b>Restoration</b>	<b>\$5 per square foot</b>

<sup>1</sup> U.S. average - will vary by region due to the variable costs of labor, bonding, etc.

Restorations of mature roofs that have been properly maintained provide significant savings, costing anywhere from 75 to 84 percent less than a total tear-off and replacement, depending on application factors such as the type and condition of the underlying deck, and regional factors such as variable labor costs. In addition, since restorations are not considered replacements under the International Building Code (IBC), they are not counted towards the two-roof maximum between tear-offs.

# PROACTIVE MAINTENANCE PAYS

The Effect of Maintenance on Total Cost of Ownership



The costs of owning a high-performance roof dramatically decrease over its 30-year life-cycle when proactively maintained. As shown here, reactive, rather than proactive maintenance, can increase life-cycle costs by nearly 25 percent. Performing leak repairs only after leaks have been detected, and allowing the roof to be continually neglected, can increase life-cycle costs by over 40 percent.<sup>2</sup>

<sup>2</sup> Life-cycle calculations are based on a 50,000 square foot modified bitumen built-up roof system with an initial cost of \$12.00 per square foot, using the Weighted Average Cost of Capital (WACC) of 9.18 percent as the discount rate, and anticipating material cost increases of 5.5 percent and labor cost increases of 4.5 percent. Materials are assumed to be 40 percent and labor is assumed to be 60 percent of the costs for all work performed.

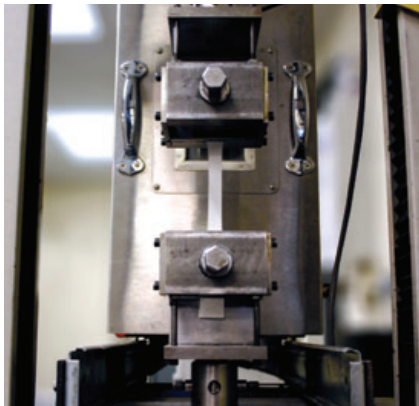
## THE GARLAND PROCESS



□ Original coating and maintenance line of The Garland Company, Inc.

Garland provides single-source accountability from a stable and responsive full-service organization that has been putting customer needs first for over a century — and protective coatings have been a core competency since our founding. Our coatings solutions are manufactured and specified with the same attention to detail as our high-performance roofing systems. By offering total solution capabilities, we are able to help our customers:

- Advance environmental responsibility objectives
- Maintain predictable budgeting
- Reduce liability exposure
- Meet inflexible scheduling demands
- Maintain zero tolerance for material- or labor-related deficiencies
- Meet a complete range of performance requirements
- Manage the roofing assets of multiple properties consistently



- The **MTS Q-Test/ 10** is used to determine breaking strength and elongation according to ASTM specifications.

We were the first roofing manufacturer in the United States to become ISO 9000 certified, and we continue to pursue product, service, and process improvements in compliance with procedures that are independently audited for ISO 9001:2008 certification. Our material suppliers, locally based contractors, and subsidiary partners are subjected to the same diligent scrutiny as our internal manufacturing operations to ensure compatibility with a philosophy that demands the highest standards of accountability.



- The **Brookfield RV viscometer** is used to measure viscosity and can help predict certain low/high shear end use properties.



## RESTORING YOUR CONFIDENCE IN AGING ROOFS

□ White-Knight/White-Stallion



Before



After

□ EPDM roof restored with White-Knight/White-Stallion

If restoration is appropriate, a solution will be specified to meet rooftop conditions, functionality requirements, budget, and other considerations, such as the intended length of building ownership. If roof replacement is your only option, your Garland representative can help you identify a roof system to meet your needs.

Specifying a quality coating system is only one step in successful restoration. Garland will recommend a highly qualified, locally based, contractor authorized in the proper application of Garland technologies.

Typically, proactive roof restorations are recommended within the first half of the second decade of a roof's life. In order to determine that restoration is a viable option for your roof, your local Garland representative will visually examine the ten critical areas of your roof that are most vulnerable to water penetration, using core samples or infrared scans as necessary to verify the condition of rooftop insulation.

Every Garland roof restoration includes these critical steps:

- Proper preparation, including necessary repairs and surface preparation
- Performance upgrades to flashings and other areas most vulnerable to water penetration
- The proper application of an appropriate waterproofing system
- The proper application of a protective top coat or other surfacing

Your Garland representative will also help you establish a proactive preventive maintenance program to help ensure continued success, or if you prefer, help train your in-house maintenance teams to properly maintain your restored roof. Together, we will ensure that the working life of your roof will be extended for ten years or more, *guaranteed*.



- Wet film thickness gauge** is used to ensure the coating has been properly applied to its specified gauge.



- Restoring flashings with White-Knight/White-Stallion

## SERVICE IS OUR BEST PRODUCT

Since Garland is a 100 percent employee-owned company, your local representative and the entire Garland team has a very personal interest in the successful outcome of your projects. We support you through every aspect of the specification and application process, and stand by you after the installation is over, with mutually agreed upon, proactive inspections and maintenance.

With time-saving service tools, such as our Roof Asset Management Program (RAMP®) and ROI calculator, and a broad range of support services, including specifications, energy payback analysis, engineering services, and design-build delivery — Garland is uniquely capable of delivering seamless roof enhancements, restoration, and repair solutions throughout North America and the United Kingdom. No one delivers a more comprehensive selection of technologies with as high a standard of technical and professional support.



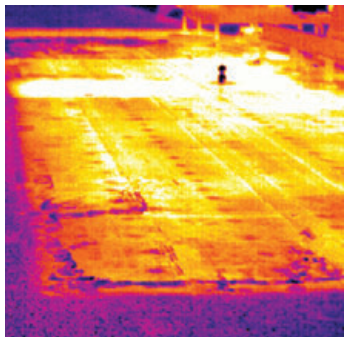
RAMP



Black-Knight/Black-Stallion



Review Specs



Infrared Scan of Roof



Roof Inspection



Solex

Your local Garland representative welcomes the opportunity to demonstrate how our coating and service solutions can help maximize return on your rooftop investment. To review coating samples, request an energy savings calculation, or to schedule a rooftop survey, contact your local Garland representative today.

## Over 100 Years of The Garland Company, Inc.

Founded by J.B. Wise in 1895, as a supplier of refining products, The Garland Company, Inc. has evolved from a local manufacturer and distributor of oils, greases, and paints to a worldwide leader in manufacturing high-performance roofing and building maintenance systems for the commercial and institutional markets. We've prevailed by remaining dedicated to our customers, continually developing innovative solutions to meet the ever-changing needs of a demanding market.

Today, the Garland network of employee-owner representatives is servicing customers around the world with the same vision, enterprise, and integrity demonstrated by J.B. Wise back in 1895. Dedicated sales representatives remain the driving force of our success by serving the customer with an unwavering commitment to quality and a single-minded responsiveness to individual requirements. Strategically located throughout the United States, Canada, and the United Kingdom, Garland representatives are ideally positioned to provide responsible, integrated facility management for single or multiple properties.

- High-performance modified roofing and built-up systems
- Architectural and structural standing seam metal roof systems
- **Sustainable roofing solutions**
- Metal wall panels
- **Fluid-applied systems**
- **Rooftop maintenance and restoration products**
- **Computerized roof-asset management services**
- Flooring repair and restoration solutions
- Engineering services, including shop drawings
- Design-build construction management
- Financing options
- **Preventive-maintenance programs**

For more information, visit us at: [www.garlandco.com](http://www.garlandco.com)

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