

KOOL SEAL®

ROOF RESTORATION COATINGS



THE KOOL SEAL® ADVANTAGE

Repairs and protects against the harshest elements.



Roofing performance is one of the most critical concerns facing building owners today. An underperforming roof system can lead to costly damage to assets inside the facility, building envelope disintegration, and the high cost of ongoing maintenance and repairs. To avoid these problems, roofs need the best protection available on the market today: Kool Seal® Fluid Applied Roofing Systems.

Kool Seal is a trusted leader in roofing technology, having engineered the industry's first fluid-applied roof coating in 1946. By meeting the high quality management standards set by the International Organization for Standardization (ISO), Kool Seal became one of the first in the business to receive ISO 9001 registration.

Since then, Kool Seal has grown through a network of approved contractors, architects and roofing consultants who trust the Kool Seal history of innovation and industry leadership.

With Kool Seal, protection starts at the top.



Authorized Contractor Network

Kool Seal Roof Systems are installed by approved Authorized Kool Seal contractors.

Kool Seal contractors are versed in the roofing industry and achieve their commitment to quality.

Kool Seal Contractor Support teams available to the Kool Seal authorized contractor network include Field Sales and Technical Support.

Kool Seal also offers a lead generation program for its authorized contractor network to help establish sales growth.

Kool Seal systems are simple, user friendly and provide efficiency with service highlights which include the following:

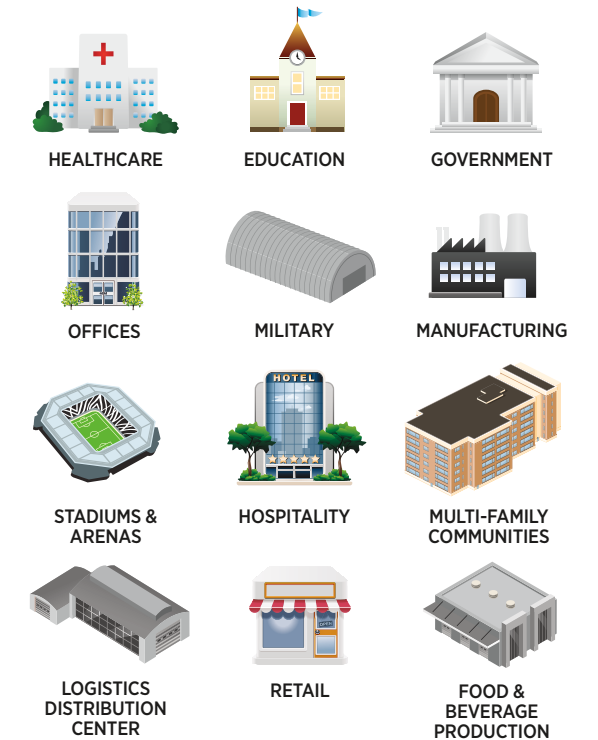
- Roof condition assessment – in-field support
- Project budgeting support tools (e.g., material reference guides, field reference guides and more)
- Kool Seal-authorized contractor recommendations for bidding purposes
- User-friendly specification guideline documents
- Kool Seal Warranties feature options for transferability and renewability.
- Kool Seal University offers virtual and in-person training for our approved contractors.
- Property management education seminars

Training & Customer Service/Support

Whether it's on-the-job technical assistance, design information, application recommendations, process improvement ideas or installation support that is needed, dedicated Kool Seal representatives are ready to assist with project needs and offer expert Technical and Sales support.



Facility designers, engineers, contractors and building owners take advantage of Kool Seal® versatility in the following markets:



Kool Seal also protects the environment. The Kool Seal complete line of highly reflective systems and accessory products are designed to reflect the sun's heat and damaging UV radiation. These systems assist in lowering roof surface temperature and decreasing the amount of heat transferred into the building — which in turn provides significant energy savings.

Kool Seal offers long-term warranties, including 10-year and 12-year system warranties. The Kool Seal authorized network of contractors will provide competent, worry-free installation, with knowledgeable sales and technical support staff on call during every phase of the project.

With a comprehensive product portfolio to cover a wide variety of roof types, Kool Seal provides the total roofing solution.

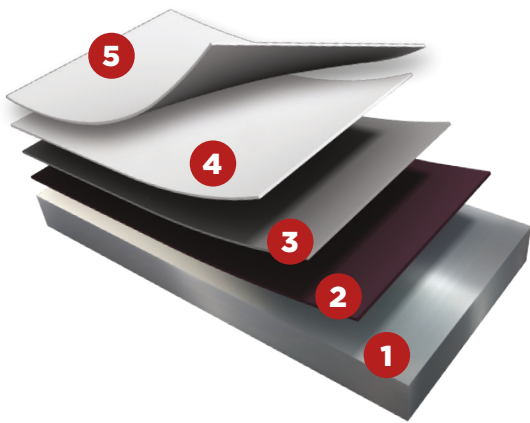
KOOL SEAL® SYSTEMS

Kool Seal offers a variety of fluid-applied roofing system solutions that meet the demands of every roofscape and climate. These systems minimize thermal shock, ensuring that the roof will last longer and perform better.

Kool Seal high-performance roofing systems have excellent tensile strength and high reflectivity, keeping the roof closer to ambient temperature and decreasing thermal expansion. Reducing temperature fluctuations on the roof will minimize thermal stress on seams, flashing detail and fasteners — in short, the entire roofing system.

Kool Seal Fluid Applied Elastomeric Roofing System

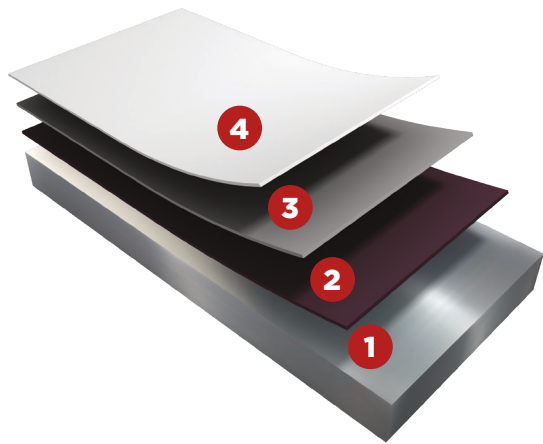
Kool Seal Fluid Applied Elastomeric Roofing System is engineered to provide maximum water resistance and protect the building from leaks. With acrylic formulations, these fully adhered and monolithic systems provide seamless protection for even the most challenging roofs. Extend the building's life cycle and reduce energy consumption with Kool Seal highly reflective elastomeric roofing system.



- 1 Roof Substrate
- 2 Kool Seal Primer (per specification)
- 3 Kool Seal Freedom Flash®
- 4 Kool Seal Acrylic Basecoat
- 5 Kool Seal Premium Acrylic Finish Coat

Kool Seal Rubberized Silicone Roofing System

Kool Seal Tundra® Rubberized Roof Coating is the solution for building owners looking for a roof coating that provides ponding water resistance. It's a premium silicone rubber roof coating designed to provide protection against leaks caused by ponding water. The monolithic coating provides a seamless rubberized layer of protection to low-slope and moderate slope (<3:12 pitch) roofs.



- 1 Roof Substrate
- 2 Kool Seal Primer (per specification)
- 3 Kool Seal Freedom Flash
- 4 Kool Seal Tundra Finish Coat

FEATURES & BENEFITS



Benefits of Kool Seal® Fluid Applied Roofing Systems

No Tear-Offs

- **No Disruption to Occupants.** With Kool Seal, there is no need to close the building during installation. The non-toxic formulation means no disruption to occupants and no interruption of business.
- **Lightweight Solution.** Unlike traditional roof replacement, Kool Seal Fluid Applied Roofing Systems provide a lightweight solution to roofing needs. It's ounces, not pounds, per square foot.
- **Maintenance Budget.** Make the best use of your maintenance budget.

Extend the Life of Your Roof

- **Longer Building Life Cycle.** Kool Seal Fluid Applied Roofing Systems are installed onto existing roofs to extend the service life of the facility.
- **Great Weatherability.** Kool Seal Fluid-Applied Roofing Systems are resistant to blistering, chalking, checking, cracking and flaking — protecting the roof from further weathering and degradation.

Sustainable Solutions

- **Environmentally Responsible.** The formulations of Kool Seal Fluid Applied Systems do not require hot kettles or flames during installation. It's a safer process, and the environmental benefits are significant.
- **Lower Roof Temperatures.** Highly reflective white coatings reflect 85% of the sun's radiant heat, dramatically lowering the temperature of the underlying roof and preventing further degradation.

Seamless Waterproofing

- **Proven Performance.** Kool Seal Fluid Applied Roofing Systems are fully adhered and monolithic (seamless), protecting the investment and providing maximum durability.

Energy & Utility Savings

- **Significant Energy Savings.** Having a white, reflective roof reduces the roof's surface temperature by up to 100 °F (black to white) significantly decreasing the amount of heat transferred into the building and reducing peak cooling demands. Higher reflectivity = lower energy consumption and lower cooling costs.
- **Cost-Saving Installation.** Kool Seal Fluid Applied Roofing Systems are typically easier to install and maintain than a conventional tear-off roof and also eliminate unnecessary construction waste. This means such projects generally cost a fraction of the price of a new roof installation.
- **Tax Benefits.** Because roof maintenance jobs are often deductible in the first year while most total roof replacements are not, some building owners realize a tax benefit when using Kool Seal Fluid Applied Roofing Systems.
- **Utility Rebates.** Some utility companies offer rebates to building owners who conserve energy by using white reflective fluid-applied roofing systems. Local utility companies can provide more details about their energy rebate programs. Further details can be found at www.dsireusa.org

Kool Seal Fluid Applied Roofing Systems can be applied for the restoration of these existing roof types:



METAL



SINGLE PLY



CONCRETE



POLYURETHANE FOAM



ASPHALT/BUR/
GRANULAR CAP SHEET

KOOL SEAL® WARRANTY PROGRAM

Making an investment in roof restoration is an important decision. To have the added peace of mind knowing that a high-performance roof system was professionally installed by an authorized contractor and that it is backed by one of the roofing industry's best warranties makes that decision easier.

Through the Kool Seal Warranty Program, Kool Seal offers both material and total system warranties for many of the different fluid-applied roofing system installations.

Kool Seal Materials Quality Warranty

Kool Seal Materials Quality warranties are ideal for roofs where basic preventative maintenance is needed and where the existing roof condition is sound. When Kool Seal products are installed per Kool Seal published guidelines, they can qualify for a Kool Seal Material Quality Warranty. Contact your Kool Seal Sales Representative for additional details.

Kool Seal Systems Warranty

Kool Seal Systems warranties provide comprehensive protection and coverage for a professionally installed Kool Seal Fluid Applied Roofing System. A complete line of coatings, flashing materials, seam tapes, reinforcing fabrics, sealants and other Kool Seal branded products are used in these installations. In addition, when Kool Seal branded products are applied per published guidelines, they create a completely weathertight and complete roof envelope system. Contact your Kool Seal Sales Representative for additional details.



INNOVATION

Testing & Approvals

Kool Seal® products are certified by a wide variety of industry agencies, including the Cool Roof Rating Council (CRRC). Kool Seal Fluid Applied Roofing Systems have a number of different roof assemblies tested by Factory Mutual (FM 4470) standard. Kool Seal coatings are also UL Class A Approved and meet the stringent requirements of, NSF, Miami-Dade County and Florida Building Code.



Research & Development

Kool Seal state-of-the-art research and development facilities are unparalleled. Every Kool Seal product undergoes rigorous testing before it reaches the market. Product concept testing and field technical trials are performed exhaustively before product launch at the weathering farms in Medina, Ohio and Miami, Florida.

Advancing Technology

Kool Seal leads the industry in innovation, quality and cutting-edge technology, with an investment in research and development that represents the largest research effort in North America devoted exclusively to coatings innovation and development. With staff scientists, chemists and engineers located in the Ohio research centers, Kool Seal Commercialization, Emerging Technologies and Raw Materials/Analytics labs work hard to ensure that Kool Seal products set the industry standard.

Kool Seal Member Organizations



Fire and Wind Uplift Resistance Testing



Weathering Farm, Medina, OH



Highly trained scientists and chemists on site

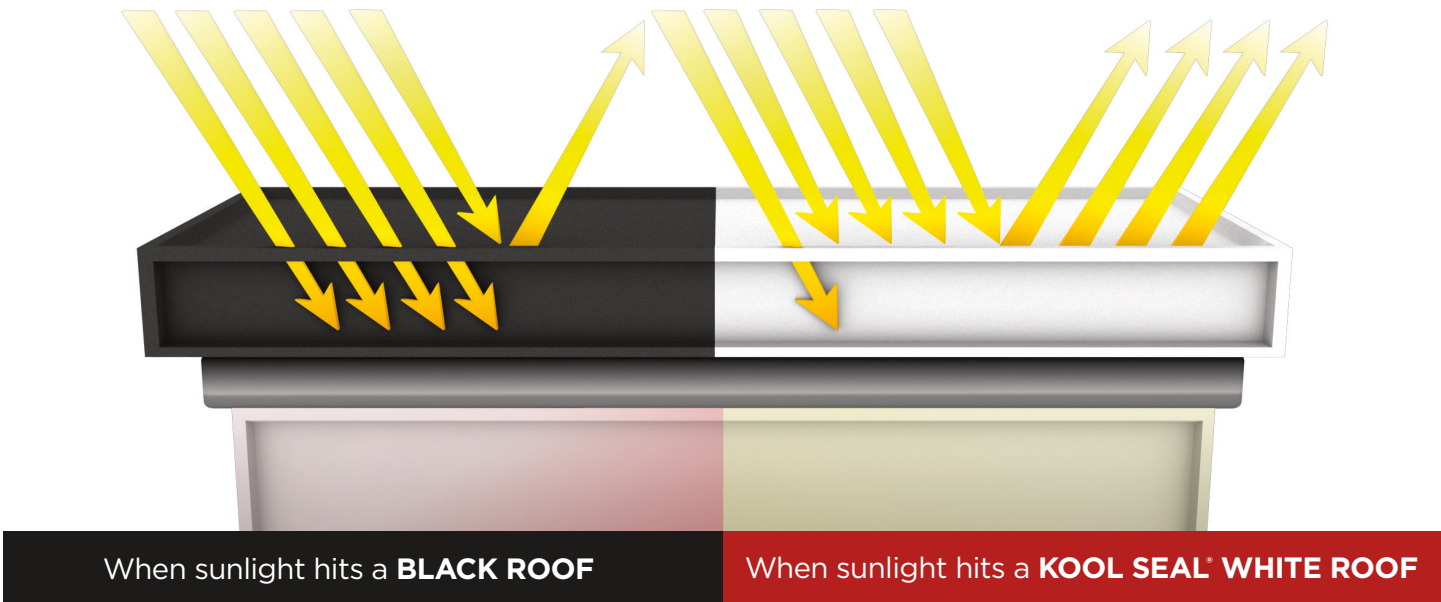
COOL ROOF TECHNOLOGY

What Is a Cool Roof?

- A roof that reflects the sun's heat and releases absorbed heat back into the atmosphere
- The roof surface temperature is usually only slightly higher than the air temperature

Benefits of Cool Roofs Include:

- Increased occupant comfort, especially during hot summer months
- Reduced HVAC system use, resulting in energy savings
- Reduction in Heat Island Effect and smog
- Compliance with code and green building programs
- Peak energy savings and electrical grid stability



Roof Temperature: 158.5 °F



Roof Temperature: 91.5 °F



In full sun, the surface temperature of a black roof may rise as much as 90 °F, reaching midday temperatures of 150–190 °F. This places a heavy strain on the building's air conditioning unit, as it struggles to keep temperatures comfortable within the facility.

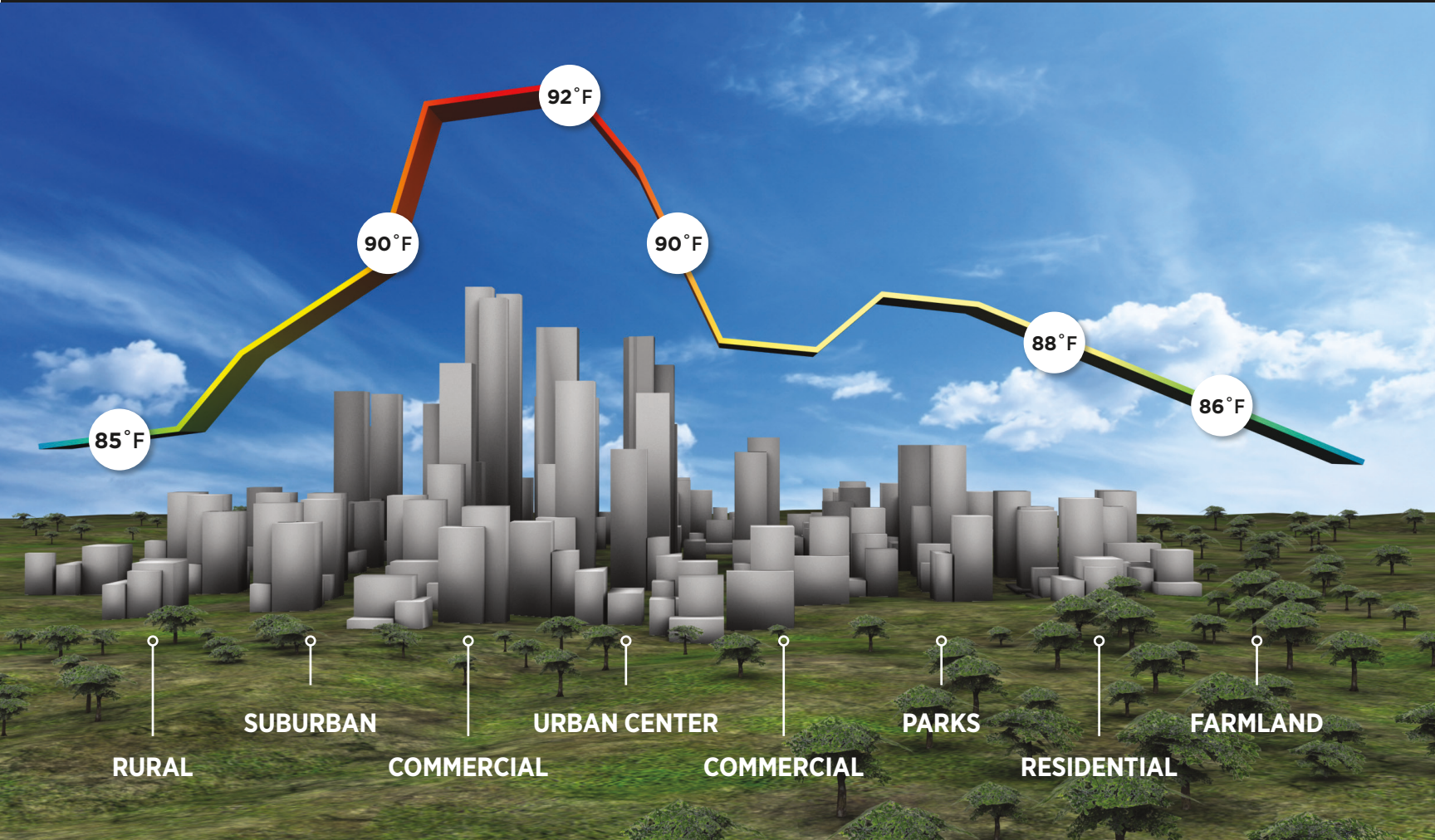
A white reflective roof coating typically increases only 10–25 °F above ambient temperature in full sun. Kool Seal products offer superior reflective capabilities, helping to keep the roof's surface cooler and slashing cooling costs by at least 30%.

HEAT ISLAND EFFECT

What Is Heat Island Effect?

Heat Island Effect is defined as the higher temperature of an urban area compared to the "cool sea" of lower temperatures in the nearby natural landscape. Dark-colored construction materials and reduced vegetation contribute to temperatures up to 12 °F higher than in surrounding rural areas.

- Heat area radiates from urban areas
- Green areas disband heat accumulation
- Green wall, roofs and parkland absorb heat and cool urban atmosphere

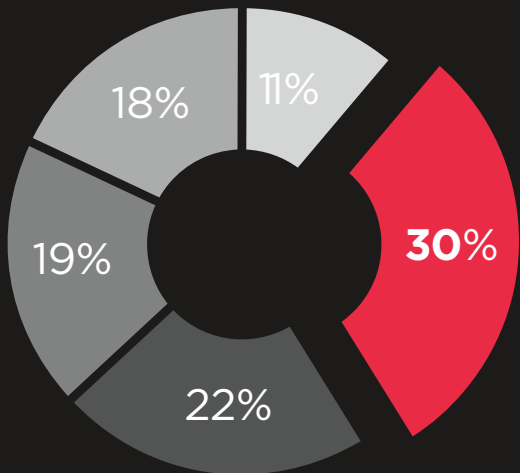


Energy Facts

Energy represents 30% of a typical office building's costs — its single largest operating expense.

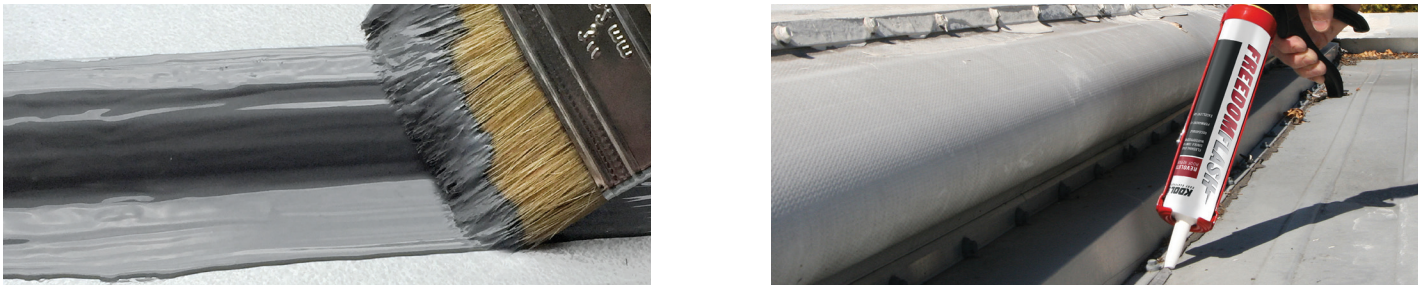
30% Utilities

- 18% Cleaning
- 11% Roads, Grounds, Security
- 22% Repairs & Maintenance
- 19% Administrative



Source: www.epa.gov/climateleaders - Data based on 2002 BOMA Experience Exchange Report

KOOL SEAL® ROOFING SEALANTS



Kool Seal continues to position itself as the leader in fluid-applied roofing systems. These high-quality performance sealants provide a flexible, weathertight seal protection when used in conjunction with Kool Seal Fluid Applied Roofing Systems. Kool Seal Roofing Sealants are available in a variety of technologies, sizes and colors (Solvent-Based and Hybrid).

Kool Seal continues to provide high-quality products for the roofing professional.



ACRYLIC-BASED Roofing Sealants

One-step application with no primer needed.



Tundra® Roofing Sealant

Can be applied in damp conditions and withstands ponding water.



Freedom Flash® Roofing Repair Sealant

Low-temp, single-step application without the need for reinforcement fabric. No fabric or tape needed for gaps less than 1/8".



DISTRIBUTION NETWORK



Sustainable Solution

Kool Seal® Roof Restoration Coatings manufacturing and distribution network is unmatched in the industry. Kool Seal Roof Restoration Coatings facilities are strategically located throughout North America, reducing distance and time in the supply chain and ensuring that products are delivered when needed. Projects will benefit from Kool Seal Roof Restoration Coatings quicker response and shortened lead times.

Manufacturing: Our Commitment to Quality

Kool Seal Roof Restoration Coatings production is done in-house at ISO 9001 2008 certified manufacturing locations. Comprehensive quality control testing, processes and metrics are in place for everything from raw materials to final batch production. This ensures that raw material suppliers meet stringent quality requirements, that color consistency is achieved batch to batch and that every batch is right every time. This information is charted, analyzed and reviewed regularly by Operations Teams as part of a commitment to quality and continuous improvement.

 Kool Seal Roof Restoration Coatings Distribution Locations

 Kool Seal Roof Restoration Coatings Manufacturing Facilities



See the entire line of Kool Seal® roofing products at koolseal.com