

NanoTech Materials Cool Roof Base Coat

Crosslinking Acrylic Latex Elastomer

NanoTech Materials Cool Roof Base Coat is a high-solids, single-component acrylic elastomeric roof coating, enhanced with a specially engineered, advanced cross-linking resin. It can be applied by brushing, rolling, or spraying on various commercial roof systems. This innovative, eco-friendly formulation creates a seamless and durable protective barrier against the elements, adapting to the expansion and contraction of your roof, setting it apart from other products.

OUTSTANDING FEATURES:

- Highly durable: puncture- and tear-resistant without requiring fabric reinforcement
- Warranties up to 20 years
- Hail-resistant warranties for up to 2 inches
- UV stable
- Environmentally responsible manufacturing: made with non-toxic materials, low VOCs, and packaged in lined drums to minimize waste
- High solar reflectivity
- Easy to install and maintain
- Efficient: high solids formulation allows for thicker application in fewer coats
- Available in 5 standard stocked colors
- Custom colors at no additional cost and with no minimum order quantity
- Unique cross-linking properties
 - After drying, a chemical reaction creates strong internal bonds along each polymer chain, forming a single large molecule that enhances durability

APPLICATION:

Clean surface and remove all loose debris (power washing is recommended). Apply in no more than 2 gallons per 100 square feet per coat.

MAINTENANCE:

Damaged areas should be cleaned and free of loose debris. NanoTech Materials Cool Roof Base Coat or NanoTech Materials Roof Sealant should be applied.

PRECAUTIONS:

- The ideal application conditions are when the ambient temperature is above 45°F and relative humidity is below 85 percent.
- Avoid applying the product to wet surfaces or during inclement weather.
- Do not apply more than 1.5 gallons per 100 square feet per coat.
- Do not apply if there is standing water, if the existing roofing system might retain moisture, or if the roof area does not effectively shed water.
- Consult the Safety Data Sheet (SDS) and container labels for comprehensive health and safety information. This product is intended solely for use by trained and approved professional applicators.

TECHNICAL DATA

Solids (wt.)	73%
Solids (vol.)	63%
Wt./gal	11.43 lbs.
Viscosity (Brookfield @ 100 rpm)	3,000 cps
Vehicle Type	100% Crosslinking Acrylic
Pigment/Vehicle Ratio	1.5/1
Elongation (failure, ASTM D 412)	360%
Elongation (90% recovery, ASTM D 412)	350%
Tensile Strength (ASTM D 412)	304 psi
Hardness (ASTM D 2240, Shore A)	57
Tear Strength (ASTM D 624)	63 lbs./inch
Service Temperature (ASTM D 2137, D 794)	- 45°F to 250°F
Ponding Water Resistance	Excellent
Water Vapor Permeance @ 45 mils (ASTM E 96)	2.21 perms
Water adsorption (ASTM D 471; 22hrs, 73°C)	4.34%
Cold Flex (ASTM C 711)	Pass
Weatherometer (ASTM D 1499, G 23)	1000 hours
Weathered Elongation	76% of original
Weathered Tensile Strength	169% of original
Fire Resistance (UL 790 Non-Comb. Deck), incline unlimited	Class A
Fire Resistance (UL 790 Combustible Deck)	Class B
Fire Resistance (FM, ASTM E108)	Class A
Hail/UV/Hail Resistance (Factory Mutual)	Severe Hail Resistant
Fungicide	0.02%
Adhesion (ASTM D 3359)	Pass
Chemical Resistance (ASTM D 1308)	Pass (No effect)

Initial Solar Reflectance (ASTM E 903)	84%
3-year	76%
Initial Thermal Emittance	90%
3-year	81%
Initial Solar Reflectance Index	106%
3-year	93%
Near-Normal Infrared Emittance (ASTM E408)	0.95
VOC	16.2g/liter

By harnessing crosslinking chemistry and custom-engineered acrylic resins, NanoTech Materials Cool Roof Base Coat offers high tensile strength and elongation comparable to some urethane coatings, while maintaining the superior UV resistance and ease of application of acrylics.

The cured NanoTech Materials Cool Roof Base Coat membrane also boasts excellent resistance to ponding water, fire, and harsh chemical environments, including acids, bases, industrial pollutants, and hydrocarbons like petrochemicals and animal fats.

With its advanced crosslinking acrylic resins, superior formulation, and competitive pricing, NanoTech Materials Cool Roof Base Coat stands out from other coatings in any price range. Its versatility and durability make it suitable for nearly every type of commercial and industrial exterior surface.