STRATAMAX
NANO-TECH ELASTOMERIC COATING

StrataMax Nano-Tech Elastomeric Coating
Technical Data Sheet

GARLAND
since 1895

OVERVIEW

StrataMax is a patent pending, innovative elastomeric roof coating combining nano-technology and urethane chemistry that performs as a heat shield protecting asphaltic modified bitumen surfaces from UV degradation and infrared radiation. The nano-technology used in StrataMax replaces commonly-used titanium dioxide and reduces the temperature of the underlying roofing materials by as much as 8% compared to traditional roof coatings. A cooler substrate is more resilient to the damaging effects of thermal shock, thereby extending the life of the roofing system.

StrataMax is 28% lighter than typical elastomeric coatings at 15 lbs/5 gal (6 kg/18.8 L). The product is non-toxic and contains a proprietary blend of biocides to inhibit the growth of bacteria, algae and fungi.

Lightweight & Low-Odor – The nano-spheres in StrataMax reduce the weight of the product by 28%, reducing shipping costs and improving labor productivity. Combined with the low odor of StrataMax, this nano-tech elastomeric coating is both ergonomically and environmentally friendly. StrataMax is VOC compliant in every region.

Thermal Protection – StrataMax helps protect the roof surface from thermal shock, the expansion and contraction of roofing materials as they heat up and cool. Along with protection from ultraviolet rays, StrataMax extends the life of a roofing system.

Inhibits Mold & Bacteria Growth – StrataMax contains a proprietary, specifically-engineered biocide package that inhibits the formation and growth of mold, fungi, algae, and bacteria on the coating's surface. This biocide package helps the coating surface stay cleaner, reducing the effects of solar heat gain and damage by not allowing mold, fungi or algae to attach to the coating.

Heat Shield – Typical dark-colored roofs can absorb more than 70% of the solar energy that reaches the surface, creating temperatures over 180°F (82.2°C). StrataMax reduces the roof temperature by 50°-80°F (10°-26.7°C) and functions as a heat shield that keeps the underlying substrate 8% cooler than a traditional reflective roof coating.

Durable – This innovative nano-tech elastomeric coating is engineered to be flexible, allowing it to flex with the roof's movement. The tough coating protects the substrate beneath and extends the life of the roof.

SURFACE PREPARATION

Remove all loose material, moisture/water, debris, oil, and other contaminants that could prevent full adhesion of the coating. The existing roof surface must be sound and free of defects such as blisters, splits, fish mouths, etc. Repair all defects with suitable patching material. All fresh applications of mastics, coatings, or asphalt adhesives require a minimum of 30 days to cure prior to the application of StrataMax. No primer is required. However, if stains from asphalt oils in the roof system are a concern, apply Garla-Block™ primer before application of StrataMax.

APPLICATION

StrataMax is required to have two (2) coats of the same color (gray or white) installed on the prepared roof surface for best color retention.

Stir product before use. DO NOT THIN. StrataMax can be applied by spray, brush, or roller.

First, apply one coat of StrataMax to the prepared surface at a maximum rate of 1.0 gal/100 sq ft (0.41 l/m^2) (16 wet mil thickness).

After applying the first coat, top with one coat of StrataMax in a crosshatch pattern at a maximum rate of 1.0 gal/100 sq ft (0.41 l/m^2) (16 wet mil thickness). Total coverage rate should be 2.0 gal/100 sq ft (0.82 l/m^2) (32 wet mil thickness).

Once the StrataMax application has cured sufficiently, apply LiquiTec over the StrataMax surfacing in waterways, drains, or scuppers (where water is expected to temporarily accumulate) at 3 gal./sq. with reinforcing fabric. Once cured, install LiquiTec Top Coat at 2 gal./sq..

PRECAUTIONS

- Do not apply when the ambient temperature is below 50°F (10° C) or above 95°F (35°C).
- Roof surface must be at least 6°F (3°C) above the dew point and rising.
- Substrate must be clean, dry, and free of any moisture.
- Do not use on roof areas subject to ponding water or where there is standing water for more than 48 hours.
- Do not use on roofs with less than 1/4" slope. Must provide positive drainage.
- Do not apply when rain is expected within 12 hours.
- Do not allow product to freeze.
- Store material in dry, protected areas and on clean, raised platforms.
- Do not apply over any coal tar-based product.

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Technical Data	StrataMax
Type	Water-Based Elastomeric
Density @ 77°F (25°C) (ASTM D 1475)	8.4 lbs/gal (1 g/mL)
Elongation (ASTM D 2370)	150% min
Tensile Strength (ASTM D 2370)	250 psi min
Weathering (ASTM D 4798)	No deterioration over 1,000 hours
Non-Volatile (ASTM D 1644)	64% min
Coverage Rate	Two coats at maximum of 1.0 gal/100 sq. ft for each coat for a total of 2 gal/100 sq. ft. (0.82 l/m²).
Packaging	5-gallon pail 55-gallon drum
Available Colors	White Gray
Shelf Life	12 months, unopened container

For specific application recommendations, please contact your local Garland Representative or Garland Technical Service Department.

ECO-FACTS

Eco-Fact	StrataMax (smooth)	StrataMax (rough)
VOC	<50 g/l	<50 g/l
Reflectance		
Initial	0.79	0.71
Rapid Ratings	0.64	0.59
Emittance		
Initial	0.89	0.91
Rapid Ratings	0.91	0.92
SRI		
Initial	98	87
Rapid Ratings	78	71

ACCREDITATIONS

FM APPROVED

PATENT PENDING

Tests verified by independent laboratories. Actual roof performance specifications will vary depending on test speed and temperature. Data reflects samples randomly collected. ± 10% variation may be experienced. The above data supersedes all previously published information. Consult your local Garland Representative or the home office in your country for more information.

CRRC COOL ROOF RATING COUNCIL RATED PRODUCT

Garland GreenHouse

For more information, visit us at: www.garlandco.com/StrataMax

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