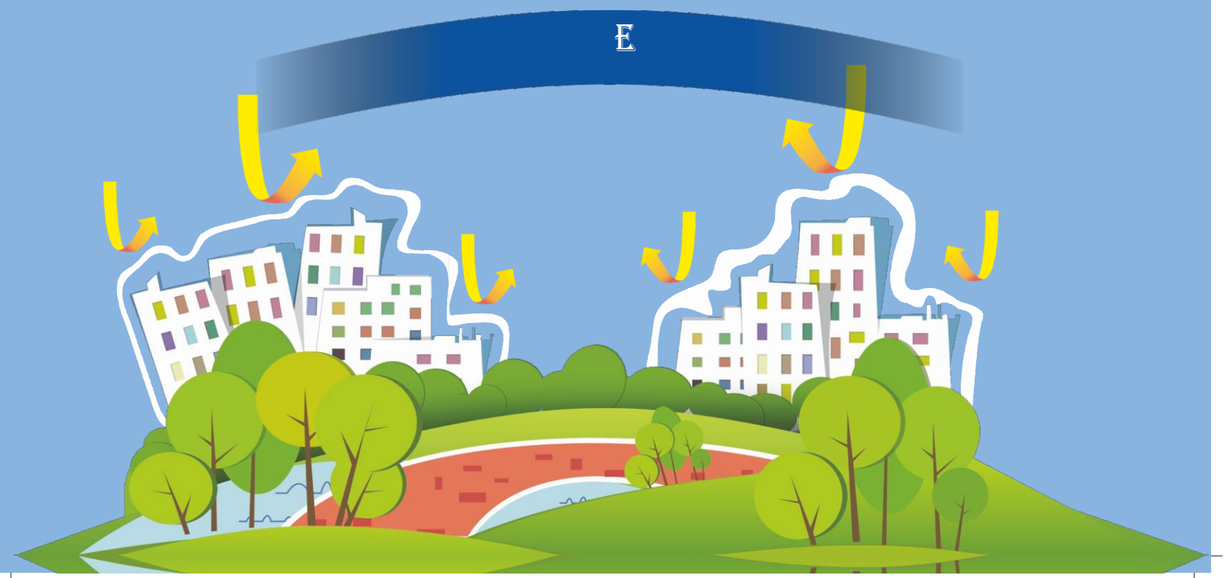
NANO

Koolcoat

- Low VOC: Eco Friendly
- Reduces Roof Heat Upto 20°C
- Low Cost Application & Maintenance
- High SRI Value
- Reflects 85% of UV and 90% of IR rays
- Reduces Energy Cost upto 30%

ANM nano-KoolCoat®



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"Beat the HEAT off" with ANM KoolCoat Nano®

ANM nano-KoolCoat® is a High SRI, 200% elastic, ready to use coating. nano-KoolCoat® when coated on the roofing materials, reflects sunlight to a greater extent and prevents the roofing materials from getting heated up, even during peak summer afternoons. Since it **works on the principle of continuous rejection of UV and solar radiation,** the roofing substrate itself does not get heated up. So the air below the roof never gets hot, keeping the rooms cool and comfortable. This protects the buildings for a longer period, extending the life of the buildings.

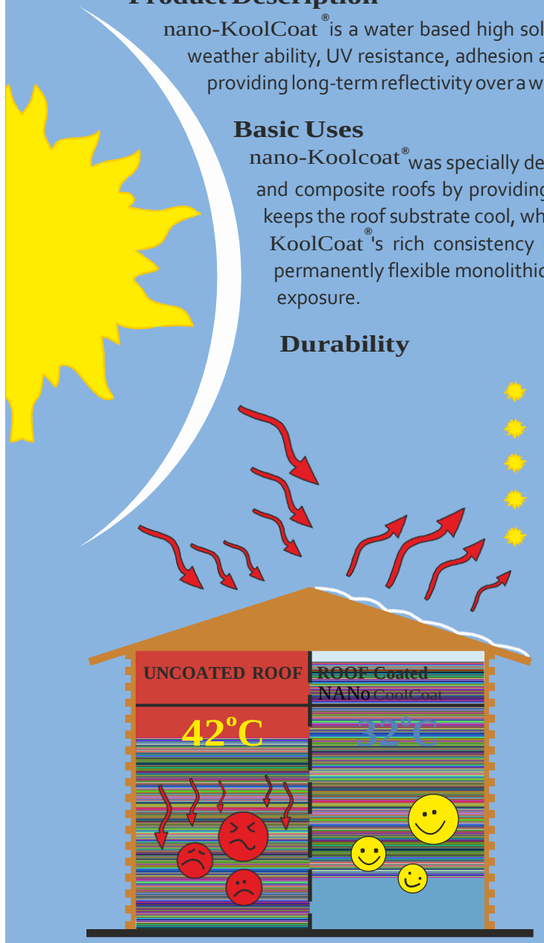
Product Description

nano-KoolCoat® is a water based high solids, flexible, 100% acrylic coating. High reflectivity combined with good weather ability, UV resistance, adhesion and ease of application makes nano KoolCoat® an effective coating for providing long-term reflectivity over a wide range of roofing substrate.

Basic Uses

nano-Koolcoat® was specially developed for extending the life of new or existing built-up, metal concrete, and composite roofs by providing a white reflective top coat. The high reflectivity of nano-Kool coat® keeps the roof substrate cool, which not only prolongs its longevity, but also saves on energy costs. nano-KoolCoat®'s rich consistency uniformly covers the textured profile of various substrates forming a permanently flexible monolithic membrane, providing protection from normal weathering, aging and UV exposure.

Durability



- Life of ANM KoolCoat will be 7 to 9 years under standard and normal weather conditions.
- Building remains cool even during peak summer.
- Improved working environment, resulting in improved efficiency of labours.
- Reduction in humidification and air conditioning costs upto 30%.
- Reduction of roof heat about 8°C to 20°C.
- Blocks 90% of solar IR rays and 95% of UV rays.

Areas of Application

- Air Conditioned Buildings
- Office Buildings
- Green Buildings
- Shopping Malls
- Factories
- Houses
- Warehouses
- Oil Storage Tanks
- Terrace of Commercial Buildings
- Sintex tanks / water pipelines
- Residential Complexes
- Apartments

PROPERTIES

Ultraviolet Resistant heat. -Continuous rejection of solar heat resulting in drastic reduction of roof

Reduced Energy Costs -Remains white to reflect the sun's heat, drastically lowering roof substrate's temperature. Approximately 30% of the cost is saved in the area of humidification and air conditioning.

Long-term Flexibility -200% elastic, acrylic membrane remains permanently flexible even upon extended exterior exposure.

Water-Based - Contains no solvents, cleans up with water. No toxic substance included.

Low Cost Application -All these advantages at an affordable cost. Specially designed for user friendly application.

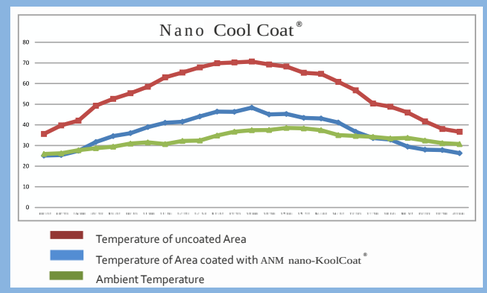
& Maintenance No recurring maintenance cost. Roof gets cleaned automatically in rain.

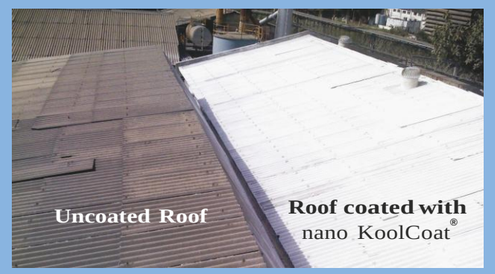
Stable Color - The acrylic resins cross-link under UV exposure to lock in color and lock out dirt.

ADVANTAGES

- ANM nano-KoolCoat® reflects s 90% of Solar heat and 95% of UV radiation, keeping the roofing substrate cool even during peak summer.
- Attractive power saving of upto 30% can be achieved during peak summers in air-conditioned and humidification areas.
- Drastic reduction of roof heat upto 20°C in peak summer.
- Controls and checks leaks, resistant to water, fungus and mould.
- Reduces global warming by reducing CO_2 emission and green house gases.
- Prevents Island effect.
- Reflects UV and IR rays back to the atmosphere, preventing heat retention.
- Helps in reducing green house effect.
- Improves the working efficiency of roof ventilators.
- Extends the life of roofs, since a cooler roof would tend to undergo less expansion, and thus experiences less wear and tear under the Sun.
- Buildings looks brighter and new with all these advantages.

Reduced Energy Costs - nano-KoolCoat®'s top coat remains white to effectively reflect the Sun's heat, unlike dark-colored roofs that retain heat and are subject to UV degradation. Roof temperature can be reduced in excess of 20°C. Exceeds Energy Star® & Cool Roof Rating Council Guidelines.





Comparative thermal performance of ANM nano-KoolCoat® on corrugated roofing materials

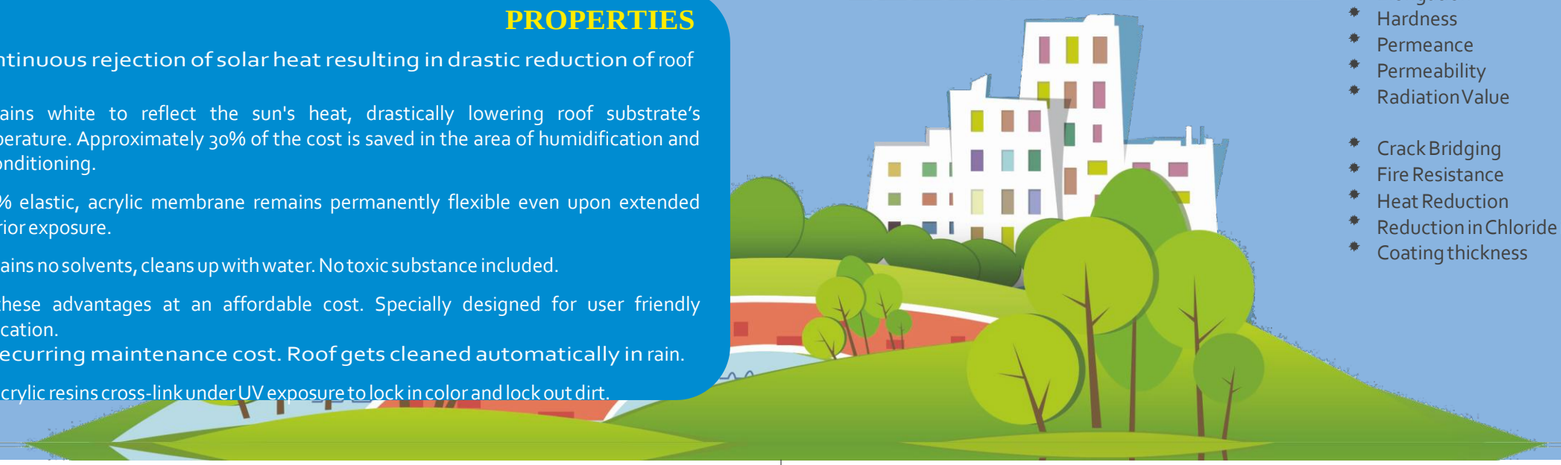
Thermal Test:

Ambient temperature	=40°C
Uncoated Sheet roofing	=68°C
Uncoated RCC roofing	=70°C
Coated with ANM nano-KoolCoat®	= 48°C

This result proves the continuous rejection of solar heat, preventing the roof from getting hot. Maximum surface temperature will only be around 6°C more than the ambient temperature.

Technical details of ANM nano-KoolCoat®

Solar Reflective Index	: 112 (as per ASTM E 1980)
Solids by Weight	: 65% (±2)
Solids by Volume	: 50% (±2)
Emissivity	: 0.939 (As per ASTM EN 410)
Solar Reflectance	: 0.874 (As per ASTM EN 673)
Tensile Strength	: 0.878 Mpa
Temperature Limits	: -18°C to 80°C
Elongation	: 200% (±20) @ 75°F (24°C)
Hardness	: 70 to 80 Shore A
Permeance	: 3.2 Perms @ 17 mils
Permeability	: 0.05 Per Inch
Radiation Value	: Infrared : 90% Ultraviolet : 85%
Crack Bridging	: Bridges gap upto 1.6 mm
Fire Resistance	: Class A
Heat Reduction	: 8°C to 20°C
Reduction in Chloride ion	: 90%
Coating thickness	: 200 microns



Certified by BEPL, Gujarat

Applied Nano Coats