

Coat'N'Cool[®]HMS

High-Tech Coatings for High-Temp Conditions
HEAT MANAGEMENT SYSTEM FOR SURFACES EXPOSED TO DIRECT SUNLIGHT

PRODUCT APPLICATION GUIDE

5407 Basecoat

Description:

Coat 'N' Cool[®] 5407 Basecoat is a long lasting, easy to apply water-borne epoxy coating specially engineered to reflect solar radiation in the visible, ultraviolet (UV) and infrared (IR) spectrum emitted from the sun.

Environmental Advantages/Benefits of the

5407 Cool Roof System:

- Reduces exterior surface temperatures by 50°F
- Reduces interior temperatures up to 20%
- Up to 30% energy saving towards cooling
- Increase photovoltaic efficiency by 10 – 20%
- Reduce carbon footprint
- Increase occupant comfort
- Resists ponding water
- Extends roof life
- Class A fire rated coating
- Easy water clean-up

Uses:

- Low Slope/Step Slope Built-up Roofs
- Single Ply Roofs
- Metal Roofs
- Modified Bitumen
- Polyurethane Foam
- Concrete/Masonry
- Wood

	<u>Initial</u>	<u>Weathered</u>
Solar Reflectance	0.83	0.76
Thermal Emittance	0.87	0.86
Rated Product ID Number	0001	
Licensed Seller ID Number	0960	
Classification	Production Line	
Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary.		
Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating Council procedures.		
Exceeds Title 24 Performance Requirements Certified by CRRC		



Surface Preparations:

Proper roof preparation is essential for successful coating application.

1. The roof surface must be dry, clean and free of all loose and oxidized material, dirt, oil and other contaminants.
2. Thoroughly and carefully use a power blower or a stiff bristle broom and/or power wash the roof surface. Do not power wash if the roof has any water leaks.
3. Using **XP3 White Bond** patch all cracks, seams, flashings, skylights, vents, etc. For older roofs and/or roofs with cracking, alligatoring, failing systems and minor leaks use polyester roofing fabric to reinforce the roof system (See Application System for XP3 White Bond).

DO NOT COAT OVER MILDEW. Mildew is a fungus, brown, black, grey or even white in color, and will rapidly grow through any coating applied over it. A solution of 50% household bleach and 50% water will kill the mildew.

Mineral Cap Roof Application (low slope, steep slope, single ply, modified bitumen roofs):

1. Re-emulsify each container prior to application by using a power mixer.
2. Provided that a clean and sound surface is prepared, 2 coats of **5407 Basecoat** should be applied at a rate of 1.5 gallons per 100 square feet. **5407 Basecoat** can be sprayed with commercial sprayer (a 30" fan tip is recommended) or applied with a ½ inch nap paint roller. It is recommended to cross-hatch the two coats whenever possible.
3. For optimum results, apply **5407 Basecoat** at temperatures between 50° and 100° Fahrenheit. First and second coats do not need to be applied on the same day.
4. When a white reflective surface is desired, use two coats of **5407 Basecoat**. When applying any other color, apply one coat of **5407 Basecoat** and one coat of the desired **5417 Topcoat** color chosen from our standard color pallet.

Metal Roof Application:

1. Prepare the metal roof by removing all loose material. Clean and etch any required areas (See Surface Preparations for additional information).
2. Re-emulsify each container prior to application by using a power mixer.
3. Provided that a clean and sound surface is prepared, 2 coats of **5407 Basecoat** should be applied at a rate of 1.5 gallons per 100 square feet. **5407 Basecoat** can be sprayed with commercial sprayer (a 30" fan tip is recommended) or applied with a ½ inch nap paint roller. It is recommended to cross-hatch the two coats whenever possible.
4. For optimum results, apply **5407 Basecoat** at temperatures between 50° and 100° Fahrenheit. First and second coats do not need to be applied on the same day.

Urethane Foam Roof:

1. Remove all old delaminated coating and vacuum or power blow clean.
2. **Do not open the roof system.**
3. Use a Poly-Fabric Seam application using **1752 Elastomeric Underseal** to patch all blisters and sump areas until surface is smooth.
 - a. Refer to the 1752 Elastomeric Application Guide for a recommended Poly Fabric Seam application
4. Coat with 2-3 coats of **1752 Elastomeric Underseal** until smooth.
5. In areas of standing water less than ½ inch apply 2 coats of **1752 Elastomeric Underseal** with Poly-

Fabric with 2 more coats of **1752 Elastomeric Underseal**. (note area must be clean and dry)

- a. Areas of standing or ponding water at a depth greater than of ½" after 24 hours must be addressed by a qualified roofer.
6. Re-emulsify each container prior to application by using a power mixer.
7. Provided that a clean and sound surface is prepared, 2 coats of **5407 Basecoat** should be applied at a rate of 1.5 gallons per 100 square feet. **5407 Basecoat** can be sprayed with commercial sprayer (30" fan tip) or applied with a ½ inch nap paint roller. It is recommended to cross-hatch the two coats whenever possible.
8. For optimum results, apply **5407 Basecoat** at temperatures between 50° and 100° Fahrenheit. First and second coats do not need to be applied on the same day.

Concrete/Masonry:

1. See Surface Preparations for additional information.
2. Re-emulsify each container prior to application by using a power mixer.
3. Provided that a clean and sound surface is prepared, 2 coats of **5407 Basecoat** should be applied at a rate of 1.5 gallons per 100 square feet. **5407 Basecoat** can be sprayed with commercial sprayer (30" fan tip) or applied with a ½ inch nap paint roller. It is recommended to cross-hatch the two coats whenever possible.
4. For optimum results, apply **5407 Basecoat** at temperatures between 50° and 100° Fahrenheit. First and second coats do not need to be applied on the same day.

Wood:

1. See Surface Preparations for additional information.
2. Re-emulsify each container prior to application by using a power mixer.
3. Provided that a clean and sound surface is prepared, 2 coats of **5407 Basecoat** should be applied at a rate of 1.5 gallons per 100 square feet. **5407 Basecoat** can be sprayed with commercial sprayer (a 30" fan tip is recommended) or applied with a ½ inch nap paint roller. It is recommended to cross-hatch the two coats whenever possible.
4. For optimum results, apply **5407 Basecoat** at temperatures between 50° and 100° Fahrenheit. First and second coats do not need to be applied on the same day.

Vertical Applications:

Sprayer Application:

1. See Surface Preparations. Protect areas of overspray BEFORE surface preparation.
2. When conducting a vertical spray application it is best to spray several light coats (ghost spray) to achieve the desired thickness and spread rate to assure that overspray and dripping do not occur.
3. **5407 Basecoat** is properly applied when original surface color is no longer visible when dry.
4. Allow **5407 Basecoat** to dry for 4 hours after desired area is completely coated.
5. Once completely dry, apply the desired **5417 Topcoat** by spraying several light coats (ghost spray) to achieve the desired thickness and spread rate to assure that overspray and dripping do not occur.
6. When the desired color is White, use **5407 Basecoat** as the topcoat or final coat to achieve the desired results.
7. **5417 Topcoat** is properly applied when **5407 Basecoat** is no longer visible when dry.

Roller Application:

1. When conducting a vertical roller application, use a ½ inch nap roller to apply **5407 Basecoat**. To avoid coating from dripping, apply **5407 Basecoat** using multiple thin coats.
2. **5407 Basecoat** is properly applied when original surface color is no longer visible when dry.
3. Allow **5407 Basecoat** to dry for 4 hours after desired area is completely coated.
4. Once completely dry, apply desired **5417 Topcoat** by use a ½ inch nap roller. To avoid coating from

dripping, apply **5417 Topcoat** using multiple thin coats.

5. When the desired color is White, use **5407 Basecoat** as the final coats to achieve the desired results.
6. **5417 Topcoat** is properly applied when **5407 Basecoat** is no longer visible when dry.

Coverage:

For smooth surfaces: 2 – 2.5 gallons per 100 sq. ft. (2 coats required)

For rough surfaces: 2.5 to 3 gallons per 100 sq. ft. (2 coats required)

Color Options:

White

Thinning:

Do not dilute or thin.

Drying/Cure Time:

Initial cure time is 1 hour. Allow 4 hours minimum before applying additional coats. Cool and/or humid weather conditions will slow the drying time.

Clean Up

Clean up with warm water and soap is recommended.

Handling and Storage:

Do not allow **5407 Basecoat** to freeze in container. Store **5407 Basecoat** in a dry protected area in original packaging. **5407 Basecoat** is not recommended for medium to heavy traffic areas.

Technical & Physical Properties				
IMPORTANT WEATHER GUIDELINES:	Physical Property	ASTM	Result	Requirement
1. Do not apply under foggy conditions. 2. Do not apply when rain is forecast within 24 hours. 3. Do not apply when temperatures are expected to drop below 50°F within 24 hours. Warranty Systems: Various warranties are available, see warranty specification sheet.	Tensile Strength @73°F	D2370	490 psi	100 min
	Elongation @73°F	D2370	73%	200 min
	Permeance, perms	D1653	7.54	50 max
The maximum V.O.C. of this product does not exceed 50 grams/liter. WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. Contact the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead .	Solar Reflectance/ Thermal Emittance		Section 118: (i) 1 Requirement	
	Solar Reflectance	CRRC-1	0.83	0.70 min
	Thermal Emittance	CRRC-1	0.87	0.75 min

CCJJ LLC (Makers of Coat 'N' Cool)
22895-F Savi Ranch Parkway, Yorba Linda, CA 92887