

Coat'N'Cool^{HMS}TM

Heat Management System

Product Description

Coat 'N' Cool HMSTM is a two-step water-borne epoxy system that includes a Basecoat and a premixed, UV resistant, solar-reflective Topcoat. While not intended as a waterproof coating this exterior, mildew-resistant finish also provides enhanced water repellency and adhesion on properly prepared exterior surfaces. **Coat 'N' Cool HMSTM** is very low in VOC's, with 11.0 grams per liter for the Basecoat and 13.4 grams per liter for the Topcoat. It is easy to apply, achieving a matte finish that lasts up to 15 years in most climatic conditions and cleans up with soap and water.

Area of Use

Can be used on new and old previously-coated exterior vertical and horizontal surfaces including natural and pressure-treated wood; smooth or textured brick, masonry, stucco, concrete, cement, slate, stone, cinderblock, adobe and clay; galvanic metals, gutters, and flashings; asphalt-based emulsions, foam and other roofing surfaces; and plastic or PVC materials. Not recommended for any area subject to foot traffic and/or vehicular traffic.

Surface Preparation

1. All surfaces must be free of dirt, chalk, mildew, wax and oily substances.
2. Remove dirt and grease with a heavy-duty alkaline cleaner/degreaser. Rinse and allow to dry.
3. Sandblast areas containing mildew and mold.
4. On galvanic metal use a diluted solution of a phosphoric acid cleaner. Rinse and allow to dry.
5. Power-wash all chalky areas and allow to dry.
6. Remove efflorescence on masonry surfaces with a diluted solution of a phosphoric acid cleaner. Rinse and allow to dry.
7. Scuff-sand all glossy surfaces.
8. Patch all holes, cracks and surface irregularities with a quality masonry or wood patching compound and sand smooth.

Application:

Coat 'N' Cool HMSTM Basecoat and **Coat 'N' Cool HMSTM** Topcoat have been formulated for use at package consistency. Do not dilute. The film thickness of the total coating system is the important factor. Refer to Film Thickness Requirements stated on the reverse side.

1. When working with two or more containers of the same color of Topcoat, intermix for color uniformity.
2. Stir container before and occasionally during application.
3. For best results, apply products when surface and air temperatures are between 60° and 90° Fahrenheit (16° and 32° Celcius) and 45% - 55% relative humidity. Do not apply if rain or heavy dew is expected within 24 hours. If temperature exceeds 90° Fahrenheit (32° Celcius), hose down surface and allow to dry to a damp condition before applying.
4. For textured surfaces:
 - a. Apply Basecoat at a spread rate of 150 – 175 square feet per gallon using a 3/4" – 1" long nap roller.
 - b. After four or more hours, apply Topcoat at a spread rate of 190 – 200 square feet per gallon using a 3/4" – 1" long nap roller.
5. For smooth surfaces:
 - a. Apply Basecoat at a spread rate of 300 – 350 square feet per gallon using nylon brush, short nap roller or a quality airless sprayer. For sprayer, use a .015 - .017 tip and follow sprayer manufacturer's recommendations for waterbased coatings.
 - b. After four or more hours, apply Topcoat at the spread rate of 380 - 400 sq. ft. per gallon using the same equipment as the Basecoat.
6. Maintain wet edge to avoid lap marks.
7. Wear appropriate breathing, eye and apparel protection.
8. Basecoat and Topcoat dry to touch in four hours and cure to finality in two weeks at 75° Fahrenheit (24° Celcius) and 50% relative humidity – slower in cooler or more humid conditions.

Technical Data Sheet

Inspection, Maintenance and Repair

Inspection – For **Coat 'N' Cool HMSTM** to provide maximum heat-reflective properties, a regularly scheduled program of inspection, maintenance and repair is recommended. The system should be inspected at six month intervals for heavy use or corrosive areas and at twelve to eighteen month intervals for areas experiencing normal wear and climatic conditions.

Maintenance – After approximately two weeks, **Coat 'N' Cool HMSTM** cures to a tough, flexible, low porosity film that contracts during the curing period leaving only the tiniest pores. This inhibits the penetration of surface contaminants. Cleaning and routine maintenance can be accomplished with a garden hose and an over-the-counter spray attachment.

Repair – If an area of coating is damaged or otherwise deficient in coating quality, clean the damaged area thoroughly using an alkaline cleaner so that no oil, dust, dirt or debris remains and reapply Basecoat or Topcoat at Film Thickness Requirements stated on the reverse side.

Clean-Up

1. Clean tools and spills with warm, soapy water. For dried spills, clean with a heavy-duty alkaline cleaner. Rinse with water.
2. Properly dispose of soiled rags.
3. For disposal of empty containers and unused product, contact local household refuse collection service.

Standard of Workmanship

It is vital to the successful application of this system that the condition of surfaces to be coated be assessed and if necessary the surface pre-treated (patched, leveled, cleaned) prior to application. "Misses," "holidays" or inclusion of foreign materials such as lint and "fallout" can cause the formation of "wicks" or channels that draw in moisture during coating. These conditions act as focal points for premature film failure.

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Following the Directions

Surface Preparation and Application instructions reflect standard practices that have resulted in durable coatings of excellent quality. The finished coating will be more durable if each phase of the surface preparation and application processes, including Film Thickness Requirements stated below, are strictly observed and recommendations for each carefully followed.

Pre-Application Inspection

The surface must be inspected and approved by the applicator, architect or engineer just prior to each coat. Any and all irregularities identified during these inspections must be dealt with before proceeding.

Film Thickness Requirements

Textured Surfaces

The optimum dry film thickness for both **Coat 'N' Cool HMS™** Basecoat and Topcoat is 3.0 – 3.2 mils. This equates to wet coverage of:

1. 6.0 mils
2. 27.2 grams/sq. ft.
3. 0.06 lbs./sq. ft.
4. 150 – 175 sq. ft./gallon (Basecoat)
190 – 200 sq. ft./gallon (Topcoat)

Smooth Surfaces

The optimum dry film thickness for both **Coat 'N' Cool HMS™** Basecoat and Topcoat is 1.5 – 1.6 mils. This equates to wet coverage of:

1. 3.0 mils
2. 13.6 grams/sq. ft.
3. 0.03 lbs./sq. ft.
4. 300 – 350 sq. ft./gallon (Basecoat)
380 – 400 sq. ft./gallon (Topcoat)

Physical Properties of Coat 'N' Cool HMS™

	Basecoat	Topcoat
Appearance	White, opaque	Variety of Colors
Polymer System	Epoxy/Acrylic	Epoxy/Acrylic
Media	Water	Water
pH	8.1–8.6	8.1–8.6
Viscosity Brookfield (LVF, 3@12 rpm) cps.	5,200–5,500	5,200–5,500
% Solids	49 ± 1.0	53 ± 2.0
* VOCs (grams/liter)	11.0 max.	13.4 max
**Rating	Class A Fire Rated Product	
**Flame Spread	15 lbs/gal	15 lbs/gal
**Smoke Development	10 lbs/gal	10 lbs/gal

*Independently Tested by West Coast Analytical Services, Santa Fe Springs, CA. According to the SCAQMD, Regulation 11, Rule 113, the current VOC standard for non-flat paint is 50 grams/liter.

**Independently Tested by Intertek Testing Services, Elmhurst TX. Index rating per ASTM E84-91a places the material as a Class A Fire Rated Product.

Independent Tests

Total Solar Reflectance (TSR)

TSR ranged from a high of 86.2% to a low of only 51.1% for colors on our color selection guide. Most of our colors are above the 65% rating. Total Solar Reflectance tests were independently conducted using ASTM C1549 and C1371.

Technical Data Sheet

Independent Tests (Continued)

Total Emittance

Total Emittance of many colors range from .91 to .94 on wood coated panels, cement and aluminum, based on ASTM E408-71 (reapproved 2002) Method A. Total Emittance Test Report independently completed by Atlas Weathering Services Group.

LEED Building Information

Coat 'N' Cool HMS™ may contribute to LEED SS (Sustainable Sites) Credit 7.1 and SS Credit 7.2 Heat Island Effect and may also contribute to LEED EA (Energy and Atmospheric) Credit Pre-2 and EA Credit 1 and EA Credit 2. This product is manufactured in Southern California USA and is a waterborne product that is very low in VOC's, with 11.0 grams per liter for the Basecoat and 13.4 grams per liter for the Topcoat.

Interior use of **Coat 'N' Cool HMS™** may also contribute to LEED EQ (Indoor Environmental Quality) Credit 4.2 Low Emitting Material for Interior Use.

Warranty and Limitations

CCJJ LLC warrants that **Coat 'N' Cool HMS™** shall be free of manufacturing defects in workmanship and materials only at the time of shipment from the factory. CCJJ LLC reserves the right to conduct performance tests on material claimed to be defective prior to repair or remedy by others. Determining suitability of product for any intended purpose shall be solely the responsibility of the user.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WHICH EXTEND BEYOND THE DESCRIPTION ON THE LABEL. CCJJ LLC IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, HOWEVER OCCASIONED.

Always conduct a test to determine desired results.