Cool Coat™

Thermal Enhancement & Waterproofing

TECHNICAL DATA SHEET

CSI Reference: Division 9

Product	U/M	Code
White	1 Gallon	SP-2001
White	5 Gallon	SP-2005
White Drum	55 Gallon	SP-2007
White Tote	250 Gallon	SP-2008
Deep	1 Gallon	SP-2003
Deep	5 Gallon	SP-2011
Clear	1 Gallon	SP-2000
Clear	5 Gallon	SP-2004
Accent	1 Gallon	SP-2009
Accent	5 Gallon	SP-2010
Custom Color	1 Gallon	SP-2012
Custom Color	5 Gallon	SP-2013

Description

Cool Coat is a premium quality, high build, 100% acrylic water-based elastomeric coating with ceramic spheres that provides waterproofing and insulating coating. The insulation effects can reduce surface temperature up to 30% depending on heat levels. Over 500% dynamic elongation and recovery strength ensures that the coating will move and flex with the thermal changes of the masonry surface and will not rupture or crack. Cool Coat is vapor permeable yet resists the effects of wind driven rain. Restores and beautifies damaged masonry surfaces and unifies color and texture on new surfaces. Recommended for application to new or existing surfaces such as block, brick, stucco, cement, concrete as well as wood and EFIS surfaces. Cool Coat is quick drying with excellent adhesion and hide.

Features

- 500% elongation
- Full range of colors
- Low VOC/Low Odor
- Great for high mold & mildew environments
- High UV resistance
- Excellent adhesion when used as a system
- May be applied at 35°F and rising

Special Considrations

Use of fluted or scored block or raked joints will increase surface areas by 20%-30% or more and decrease coverage rates. Allow for this increased surface area when determining material requirements.

Coverage

The coverage will vary depending on the surface. Product will cover up to 150 square feet per gallon on a smooth surface (two coats required) and up to100 square feet per gallon on a rough/porous surface (two coats required). Test product over small area of the substrate to determine coverage. Coating should dry to 6 mils on a smooth surface and 9 mils DFT on a textured surface.

Test Panel

Always apply material to a mock wall or test panel. Test wall or actual surface area to determine acceptable color, surface porosity, application rates and methods before starting general application.

Clean Up

Uncured material can be removed with water. Cured material can only be removed mechanically. All empty containers must be disposed of according to local, state, and federal regulations.

Bare Surfaces

Apply 1 coat of Micro-Seal® Water Repellent by Rainguard® (required for warranted applications).

Warranty

Rainguard® guarantees that this product is free from manufacturing defects and complies with our published specifications. In the event that the buyer proves that the goods received do not conform to these specifications or were defectively manufactured, the buyer's remedies shall be limited to either the return of the goods and repayment of the purchase price or replacement of the defective material at the option of the seller. Rainguard® makes no other warranty, expressed or implied, and all warranties of merchantability and fitness for a particular purpose are hereby disclaimed. Manufacturer or seller shall not be liable for prospective profits or consequential damages resulting from the use of this product. Manufacturer shall not be liable for material used outside of its shelf life. For product dating, please refer to the batch number on the

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Application

All Vertical Surfaces

Moisture content of surfaces shall be less than 15% moisture as measured with an electronic moisture meter. New concrete and masonry construction shall be allowed to cure for 10 days to neutralize alkalinity and release residual moisture. All surfaces shall be structurally sound, clean and free of dirt, grime, efflo-rescence, lime run, construction debris, form oils and release agents, chalked materials, loose and peeling paint, mold and mil-dew or other surface contaminants, etc.

Wood

Properly clean and prepare wood surfaces. Pre-treat knots with stain blocking primer material. Prime surfaces.

Metal

Etch or otherwise clean metal surfaces and prime with appropriate primer.

Previously Painted Surfaces

Remove chalk, grime, loose and peeling paint and other contaminants. Repair surface and mortar joint defects. Allow patching materials to cure prior to application of primers. Cool Coat is best applied using airless spray equipment with a minimum 1.0 GPM capacity. Refer to equipment manufacturer for best tip size. Cool Coat is supplied ready to use. Mix contents thoroughly prior to application. If material becomes too heavy to spray, thin with up to 1 quart of water per 5 gallons of material. To prevent skinning, cover pail with a damp cloth. Apply materials to properly prepared and primed surfaces. Apply Cool Coat to surfaces at the recommended coverage rates depending on surface type and porosity.

Spray Application

Spray apply Cool Coat to surfaces using a crosshatch spray pattern. Back-roll materials into surface to cre-ate a uniform and pinhole free surface film. Be sure to angle the spray tip from a point higher than the surface to allow coating to build proper mil thickness.

Roller

Apply 2 coats to surfaces at the recommend coverage rate for each coat to create a uniform and pinhole free surface. Re-coat in approximately 4 hours.

Inspection

Surface must be clean, dry, and free of grease, paint, oil, dust, curing agents, or any foreign material that will prevent proper adhesion. The surface should be at least 2500 psi and feel like 30-grit sandpaper. The surface should be porous and be able to absorb water. A minimum of 28 days cured is required on all surfaces. Relative humidity in the surface should be below 80% (per ASTM F-2170). All moisture should be kept away a min. of 72hrs before application and a min. of 72 hours after installation. This includes sprinklers, rain, fog, dew, etc.

Before starting flooring work, test existing surface to make sure there is no efflorescence or high levels of alkalinity. Alkalinity refers to a high pH reading which means the floor is not neutral. A high alkaline environment can cause salts to creep up through the surface called efflorescence. These salts tend to prevent or destroy the bonding of coatings to the surface. The most common form of testing is the use of a wide-range pH paper or tape. Make sure the floors pH reading ranges between 5-9 to ensure adhesion. The testing of surfaces for alkalinity can show the amount of alkalinity only at the time the test is ran, and cannot be used to predict long-term conditions.
Calcium chloride tests should be conducted to determine if the surface is sufficiently dry for a floor coating's installation. The calcium chloride tests should be conducted in accordance with the latest edition of ASTM F 1869, Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. When running a calcium chloride test, it is important to remove any grease, oil, curing agents, etc. so accurate readings can be obtained. A rate of 3 lbs/1000 ft^2/24hr period or less is an acceptable amount of vapor pressure. If the reading is any higher, please consult your Rainguard Salesman for further instructions.

Failing to adhere to these strict guidelines can result in product delamination, discoloration, blistering, or all together failure of the coating system. Testing is the responsibility of the applicator. Rainguard bears no responsibility for failures due to any of the above conditions.

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Precautions

Handling Precautions:
Use only with adequate ventilation and/or appropriate cartridge type respirator. Avoid contact with skin and wear protective gloves. Read Material Safety Data Sheets before using.

Slip and Fall Precautions:
Rainguard recommends the use of slip-resistant aggregate in all coating or flooring systems that may be exposed to wet, oily or greasy conditions. These aggregates can be incorporated into the materials using different methods to achieve varying profiles and degrees of slip-resistance. However, textured surfaces can be slippery under certain conditions. This type of activity on the flooring surface, maintenance procedures and type of footwear may all be factors to consider when deciding the degree of slip-resistance needed for given area. Rainguard or its sales agents will not be responsible for injury incurred in a slip and fall situation. It is the end users' responsibility to provide for their own safety and to determine the suitability of these coatings for their particular application.

Limitations

- Do not apply in temperatures below 50°F or above 90°F.
- Do not apply unless temperature is 5° above the dew point or if rain is expected within 24 hours.
- Do not apply on damp or moist surface as it will whiten and may cause delamination.
- Do not allow any Rainguard products to freeze.
- Always apply on a test area before starting actual job.
- Shelf Life of this material is 6 months from the date of manufacture. (See batch number for manufactured date)
- Rainguard recommends the use of angular slip resistant aggregate in all coatings or flooring systems that may be exposed to wet, oily or greasy conditions. It is the contractor and end users' responsibility to provide a flooring system that meets current safety standards.
- OK for use as an Industrial Maintenance Coating, Concrete Masonry Sealer, or Floor Coating, anywhere in the United States, including the South Coast Air Quality Management District (SCAQMD).

Technical Data

Material Type	Modified Acrylic
V.O.C.	2 g/L V.O.C. Compliant
Weight	Approximately 12.2 lbs./gal.
Volume Solids	59%
Color of Material	White
Odor	Slight Latex Smell
Application Temperature Range	50ºF to 90ºF
Surface Dry/Recoat	2-4 Hours @ 75ºF
Full Chemical Cure	3-4 Weeks
Flash Point	Non-Flammable

Test Data

Dynamic Elongation	ASTM D-2370-82	500%
Shore Hard A	ASTM D-2240-86	89
Low Temp Flex	ASTM C-734-82	Passed - 180° bend @ 0° F
Tensile Strength	ASTM D-2370-82	260 PSI
Water Vapor Trans	ASTM-E-96	Breath @ 20 mils Dry
Mold Resist Fed Test	141B, 6271	Passed—No Growth
Mildew Resist ASTM	D-3273/3274	Passed—No Growth
Wind Driven Rain		98/mph Wind Driven
Federal Specification	TT-C-555b	Passed—No Water Absorption
Salt Spray	ASTM B117-64	500 Hours -No Change
Scaling Resist 25 Cycles	ASTM C672	Visual Rating—0 Mass - 0
Weatherability	ASTM C28	4500 Hours - Passed
Water Vapor Trans	ASTM D-1653	100% Vapor Perm
Water Repellency	ASTM C67-80A	97% Effective

Optical Properties

	Solar Reflectance at Air Mass 1.5	Thermal Emittance at 300K
Cool Coat	.812	.874
Uncoated Sample	.653	.040

Solar Reflectance Index (SRI)

Convection Coefficient	Cool Coat	Uncoated Sample
Low, 5 W/m (2) K	101	6
Medium, 12 W/m (2) K	101	45
High, 30 W/m (2) K	101	63

(Cool Coat meets the requirements that are stated for the Solar Reference Index of a material in the LEED 2009 for Construction and Major Renovation SS Credit 7.1: Heat Island Effect-non Roof pg. 16).

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