

## TECHNICAL DATA SHEET

### PRODUCT DESCRIPTION:

CM 7007 Dampproof and Waterproof Coating is a vapor coating retarder applicable on new precast concrete. The product, a mixture of emulsified acrylic (min. 50% post-consumer) and bituminous polymers of low VOC, is designed for above and below grade coating applications on concrete, stucco, masonry type substrates, modified bitumen, and rigid polyurethane foam ply, and rigid PVC materials. This modified acrylic and bituminous coating also provides excellent adhesion on incidental applications on metal and wood substrates. This product is breathable for concrete.

CM 7007 Dampproof and Waterproofing Coating is a high solids system and provides a seamless durable coating, superior adhesion and flexibility to a variety of substrates, fungicide and mildewcide protection, UV protection, and heat reflective properties saving cooling costs, and provides water resistance and vapor permeability. It comes in a standard grey color and can be color matched to any darker colors.

### TECHNICAL DATA:

Polymer Type: Acrylic-Bituminous Emulsion Polymer

Viscosity: 120 +/- 3 KU (Stormer)

Weight per Gallon (WPG): 10.20 +/- 0.20

Solids by Weight: 50% (minimum)

Shelf Life: 1-Year

Meets Federal and State VOC limit requirements for volatile organic components (VOC).

Complies with South Coast Air Quality Management District (SCAQMD) VOC limit.

Hardness (ASTM C-836) Shore Type 00 Durometer

81

Hydrostatic Resistance (ASTM D5385/5385M-20) of

PASS (24-Hours / No leak @ 100 PSI)

Waterproofing Membrane (Cold-Applied)

Hydrostatic Resistance (ASTM D-751) Mullen Type,

36 psi (max head resisted)

Method A, Procedure 1

ASTM D7234 Pull-Off Strength (Concrete: 100% Cohesive Break)

Minimum: 300 PSI strength

Water Vapor Transmission (ASTM E-96) Procedure B, water method

1 coat: 7.8 grain/ hr-ft<sup>2</sup>

1 coat: 0.0039 gm/PA-hr-m<sup>2</sup>

1 coat: 18.7701 perm (inch-lb.)

ASTM D2939-03 for Emulsified Bitumen used as Protective Coatings

Resistance to Heat

PASS (25mm, 100 deg. C for 2-hrs)

Resistance to Water

PASS (min. 7 days, no adhesion failure)

Direct-Flame Test

PASS (10 sec. blue flame test)

Resistance to Impact

PASS (2 lbs./8-ft; no adhesion failure)

ASTM D1640 Dry Time (30-50 mils wet film thickness)

30-60 minutes – tack free @ 77 deg. F

4 – 6 hrs. – dry hard @ 77 deg. F

24 hrs. – dry through @ 77 deg. F

ASTM D2939-03 / MSMT 423

Resistance to Flow and Sag

PASS (113 deg. F / 4-hrs & RT/24-hrs)

Imperviousness / Chemical Exposure Test

5% Solution Sulfuric Acid (24-hrs)

PASS (No chemical attack 73.4 deg. F)

5% Sodium Hydroxide Solution (24-hrs)

PASS (No chemical attack 73.4 deg. F)

Saturated Sodium Chloride Solution (24-hrs)

PASS (No chemical attack 73.4 deg. F)

ASTM C666, Method A, modified with 2% sodium chloride, 300 cycles

PASS (avg mass change: -2.56%, avg RDM: 91%)

## **LEED POINTS CREDIT**

MR Credit 4.1: Recycled Content: 10%, (post-consumer + 1/2 pre-consumer) - 1 Point

MR Credit 4.2: Recycled Content: 20%, (post-consumer + 1/2 pre-consumer) - 1 Point in addition to MR Credit 4.1

Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least 10% (based on cost) of the total value of the materials in the project.

MR Credit 5.1: Regional Materials: 10% Extracted, Processed & Manufactured Regionally – 1 Point

MR Credit 5.2: Regional Materials: 20% Extracted, Processed & Manufactured Regionally – 1 Point in addition to MR Credit 5.1

Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for a minimum of 10% (based on cost) of the total materials)

EQ Credit 4.2: Low-Emitting Materials: Paints & Coatings - 1 Point

Do not exceed the VOC content limits established in South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect on January 1, 2004.

## **AREA COVERAGE:**

Various substrates have different porosity conditions, and the estimated coverage spread for a gallon is based on actual testing. Actual test results may vary depending on the actual porosity condition of the substrate applied. The list below provides the area coverage in square feet (sq. ft.) for 1-gallon of CM 7007 Dampproof and Waterproof Coating.

General Smooth Concrete Surfaces: 40-60 square feet / gallon for dampproof coating application and a minimum of 20-square feet / gallon for waterproofing application.

Application Thickness: 20-30 mils DFT (dry-film thickness) in 1 coat and can be applied in multiple coats of up to 3 coats, depending on desired vapor permeability protection, apply a minimum of 40-mils DFT for waterproofing requirements.

## **SURFACE PREPARATION:**

The surface to be applied must be free from any dirt or other foreign materials that will impair bonding to substrate. Refer to NACE No. 6 / SSPC 13 for Surface Preparation of Concrete, must meet the minimum ASTM D4258 for surface cleaning method to remove any type of foreign contaminants. As needed, other surface cleaning options stated under the guideline can be employed, such as ASTM D4259 or ASTM D4260.

Check for moisture content prior to coating and must not exceed over 15% prior to coating application. The concrete surface will be tested for surface moisture prior to coating application, using either a plastic sheet method referencing ASTM D4263 for qualitative (PASS/FAIL) visual evaluation or a portable handheld instrument for quantitative evaluation, using an electrical resistance or electrical impedance (ASTM F2659). The quantitative method takes precedence over qualitative methods in determining approval to proceed in coating applications.

CM 7007 Dampproof and Waterproof Coating is specifically designed to have excellent adhesion properties with other CoatMasters product (please contact Technical Service Support for guidance) and does not provide warranty with other coating or paint products. Always check the test substrate for adhesion performance prior to completely applying the product, always test to ensure compatibility with other coating for other planned applications. CM 7007 Dampproof and Waterproof Coating must be used as-is, do not thin with water or other substances, additionally do not contaminate or mix with an unapproved material.

Use of material requires knowledge of standard safety practices and good protection for areas being applied, keep children and pets away from the work area. Maintain good air ventilation if used indoors. The material is ideally applied in ambient temperatures below 100°F. If planned to be used in warmer conditions, spray application would help ensure better spread coverage. Not recommended to be applied below 40°F or when rain is imminent.

## **PRODUCT APPLICATION:**

The product can be applied by brush, roller, or spray. For spray applications, the product can be both applied by either spray atomization or airless techniques. The most common is the use of hand-held texture sprayer for easy clean-up. Follow manufacturer recommendations for spray applications and optimize when the desired coating is achieved. For airless or air assisted sprayers use texture spray nozzles with a minimum 4-mm orifice size to start, and always maintain a uniform number of coating application.

Recoat Window: 30 -60 min at 77°F condition. For recoating application, the coating must be tacky and not sagging. For elevated field temperature situations due to high humidity and low temperature, use a digital hygrometer to take environmental reading conditions, such as ambient and surface temperatures with relative humidity to estimate “Dew Point”. Measure the difference of surface temperature and less dew point temperature, difference must be no less than plus 5-degrees to be able to apply the product. Should rising temperature occur for favorable applications, ensure environmental meets all specified guidelines.

#### **STORAGE AND DISPOSAL:**

The product must be stored in a cool and dry place, always seal container after using. The shelf-life of the product is 1-year at 77°F storage condition and could be longer depending on conditions. Avoid the material from freezing, and before using mix the product thoroughly until homogenous in appearance. Empty containers must be disposed of according to your local city, state, and federal guidelines. Do not throw liquid portions to any drains, avoid spills, and always protect the environment.

#### **PACKAGING:**

The product is available is available in 5-gallon pails, 55-gallon drums, and 275-gallon totes only.

#### **TECHNICAL SUPPORT:**

Technical service support is available to answer any questions regarding other product performance characteristics, safety, and product application with no obligation. Please call (951) 413-0240 and ask for Technical Service Support 8AM – 5PM PST.

#### **DISCLAIMER:**

The information and recommendations made are on our own studies and research that are believed to be accurate. However, no guarantee of their accuracy is given mainly due to variations caused by actual application and substrate conditions the material is used. The customer / contractor must conduct their own appropriate testing to ensure compatibility and suitability for all its intended use.