

HIGH PERFORMANCE COATINGS AND LININGS OVERVIEW

DESCRIPTION

CIM 500 is a tough, durable, waterproofing coating specifically formulated to meet the demands of waterproofing for buried, non-UV exposed, or below grade applications. This two-component, liquid applied urethane coating adheres to most materials to form a permanent, seamless barrier to water. It is especially well suited for plaza decks, areas with multiple penetrations and curbs, and between-slab waterproofing.

ADVANTAGES

- · Cold, liquid applied, self-leveling coating
- Self-adheres to most materials used in construction
- Easily applies to complex areas including penetrations and curbs
- Durable: withstands foot traffic
- Complies with the toughest VOC regulations
- Self-flashing; saving time and materials at transitions

SURFACE PREPARATION

GENERAL: Substrates must be **clean and dry** with no oil, grease, or loose debris. CIM VOC Compliant

Bonding Agent is recommended on all non-porous substrates. Perform adhesion tests to confirm adequacy of surface preparation. See C.I.M. Industries' specific substrate

Instruction Guides for more information.

CONCRETE: ICRI-CSP 4-6 surface profile. The substrate must be clean and dry (see CIM Instruction Guide

IG-2), and free of contaminates. Use of CIM epoxy primer is recommended to limit

outgassing and maximize adhesion.

STEEL: SSPC-SP6 / NACE No. 3 Commercial Blast.

OTHER METALS: SSPC-SP1 solvent clean and abrasive blast to roughen and degloss the surface.

WOOD: Substrate must be clean, dry and free of surface contamination. Use of CIM epoxy primer is

recommended to limit outgassing and maximize adhesion.

GLASS: Thoroughly clean. CIM VOC Compliant Bonding Agent must be used for proper adhesion.

PREVIOUS COATINGS

AND LININGS:

CIM 500 may be applied over some existing coatings and linings. Perform adhesion tests to confirm adequacy of surface preparation. CIM VOC Compliant Bonding Agent can be used to achieve higher adhesion properties. C.I.M. Industries does not accept responsibility for determining the suitability of an existing coating or lining as a substrate for CIM products. Owner shall perform adhesion tests on any existing coating or lining to determine suitability.

EARTH: Use CIM Scrim

COLOR CIM 500 is initially shiny black, turning dull when exposed to direct sunlight.

SOLIDS BY VOLUME 91% mixed (1460 mil x sq ft/gal)

VOC 97 g/l (0.8 lb/gal)

UV EXPOSURE CIM 500 is not designed for long term UV exposure, exposure should be limited to no longer

than 180 days.



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All information presented in this publication is believed to be accurate, but it is not to be construed as a guarantee of minimum performance. Test performance results are obtained in a controlled laboratory environment using procedures that may not represent actual operating environments.

TYPICAL PROPERTIES

Abrasion Resistance

ASTM D4060

CS-17 Wheel, 1000 rev <5 mg loss Liner Weight (60 mil film) 38.2 lbs./100 sq. ft.

Mix Ratio

Adhesion to Concrete (dry)

ASTM D7234 >350 psi 9.4:1 Weight

Volume 10.8:1 Deflection Temperature (Minimum Use Temperature)

Permeability to Water Vapor ASTM D648 below -20°F ASTM E96 Procedure B,

Density 100 mil sheet 0.03 perms

Premix 8.9 lbs./gal

Recovery from 100% extension: Activator 10.1 lbs./gal after 5 minutes >90% Mixed & Cured

9.3 lbs./gal after 24 hours >95%

Elastomeric Waterproofing

After heat aging

Service Temperature ASTM C836 exceeds all criteria -20°F to 180°F

ASTM C957 exceeds all criteria Softening Point, Ring & Ball

greater than \(\frac{1}{4} \)"

Extension to Break ASTM D36

>275°F 200% ASTM D412

Tear Strength Hardness, Shore A

ASTM D624 (Die C) 140 lbs./in. **ASTM D2240** 70

Tensile Strength Liner Performance Crack Bridging ASTM D412 (Die B)

greater than 1/8" 10 cycles @ -15°F

700 psi



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GENERAL APPLICATION INFORMATION

FOR PROFESSIONAL USE ONLY.

PRECAUTIONS

Avoid contamination with water or moisture. Keep all pails and jugs tightly closed until ready for use. All equipment, air supplies, and application substrates must be ABSOLUTELY DRY. Do not apply in wet weather or when the CIM 500 or substrate may become wet within 6 hours after application. Use caution when applying CIM 500 in confined spaces. See C.I.M. Industries' Instruction Guide, "Applying CIM Within Confined Spaces" (IG-9).

TEMPERATURE

Surface should be at least 50°F (10°C) and must be 5°F (3°C) above the dew point. DO NOT APPLY WHEN THE SUBSTRATE OR AMBIENT TEMPERATURE IS RISING OR THE APPLIED COATING IS IN DIRECT SUNLIGHT. CIM 500 should be at least 50°F (10°C) when mixed and applied. CIM 500 may be preheated to facilitate application at low temperatures however working time will be reduced. See C.I.M. Industries' Instruction Guide "Applying CIM Coatings in Cold Weather" (IG-11).

EQUIPMENT

Suitable for application with a roller, brush, squeegee, trowel, or spray equipment. Spray equipment requires large diameter hose and air supplied mastic gun. Airless pump may be used to provide fluid side pressure. See "Spray Application of CIM Coatings" (IG-12) or contact C.I.M. Industries for specific recommendations.

WORKING TIME

Working time depends on temperature and method of application, typically 35-45 minutes. Working time for spray application requirements will be significantly shorter.

PRIMING

Porous substrates such as wood and concrete may be primed with CIM epoxy primer to minimize outgassing. CIM 500 must be applied within 48 hours of primer application. See the epoxy primer technical data sheet for additional information.

MIXING

DO NOT THIN. DO NOT HAND MIX. Begin mixing each pail of CIM 500 Premix using a power mixer (e.g., 1/2" drill and an eight-inch mud mixer). Do not draw air into the mix. The premix and activator are packaged and supplied in the proper mix ratio. Failure to mix CIM 500 as provided will result in off-ratio or uncured coating. While mixing, slowly add one full jug of CIM 500 Activator to one full pail of CIM 500 Premix. Mix thoroughly for 3 FULL MINUTES. Mixing Jigs and Timers are available from C.I.M. Industries to help eliminate mixing errors and increase productivity on the job. See C.I.M. Industries' Instruction Guide, "Mixing CIM Premix and Activator" (IG-8).

APPLICATION

Apply CIM 500 directly to a clean and dry substrate. Vertical surfaces will require the use of CIM 500 Vertical Grade (VG) to achieve 60 wet mils in one application. See C.I.M. Industries' specific substrate Instruction Guide for additional information.

RECOATING

If multiple coats are needed to achieve 60 wet mils, CIM 500 should be recoated as soon as practical, typically within 2 hours from mixing. If the coating has cured longer than this, the surface must be severely abraded using surface grinder or other mechanical means. The surface must be made free of dust and debris and then use CIM VOC Compliant Bonding Agent before applying the CIM 500.

RECOMMENDED MINIMUM THICKNESS The recommended minimum thickness of the coating is 60 wet mils. Contact C.I.M. Industries for additional information. Refer to CIM 500 Coverage Chart for coverage rates.

CURING TIME

Typically, CIM 500 can be placed in service within 24-48 hours. Contact C.I.M. Industries for specific recommendations.

CLEAN-UP

Use mineral spirits for clean-up of uncured material. Spray equipment must be flushed regularly during application to prevent material from setting up in the hose and pump. Cured material is very difficult to remove. Soaking in solvent will soften the material and may assist in its removal.



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WARNING Flammable. Use only in well ventilated areas. Do not store or use near open flame, sparks or hot

surfaces. Keep tightly closed. Avoid contact with moisture or water. Keep out of reach of children.

SAFETY INFORMATION Adequate health and safety precautions should be observed during storage, handling, application

and curing. Refer to C.I.M. Industries' Safety Data Sheets for further details regarding the safe use

of this product.

PACKAGING CIM 500 is available in 5-gallon ready to mix kits. Each kit consists of a container of premix and a

smaller container of activator. The kits are supplied in the proper mix ratios with sufficient room

in the premix container to facilitate adequate mixing.

		Premix	Activator
SHIPPING	Weights		
	5.0 gallon kit	40 lb/pail	4.4 lb/jug (27 lb/case of 6)
	Properties Flash Point Shipping Class	101°F Not Regulated*	>400°F Not Regulated
STORAGE	Temperature Shelf Life NFPA	20°F to 110°F 2 years Class II	70°F to 95°F 18 months Class III B

^{*} CIM 500 Premix can be shipped as Not Regulated for most ground shipments, see the SDS for other shipping classifications and guidelines.

WARRANTY & LIMITATION OF SELLER'S LIABILITY

CIM warrants as follows: (1) that for a period of five (5) years from the date of shipment to the initial purchaser the Membrane Products, when mixed in prescribed ratios and for the prescribed length of time, (a) will not become brittle or crack and (b) will provide a water barrier and (2) that the Membrane Products will, at the time of manufacture, conform to CIM's current quality standards. Notice in writing, of water leakage or other potential claim or breach under this warranty, must be provided to CIM within seven (7) days of the claimed leakage, claim or breach.

If CIM determines, at its sole discretion, that a breach of warranty has occurred, CIM's sole responsibility shall be repayment of the purchase price of the non-conforming Membrane Product or, at CIM's option, resupply of conforming Membrane Product to replace the non-confirming Membrane Product. No warranty shall apply to any Membrane Product subjected to misuse, improper installation, repair alteration, neglect, accident, abnormal conditions of operation, or use in any manner contrary to instructions

EXCEPT FOR THE EXPRESS WARRANTIES CONTAINED IN THIS WARRANTY CIM MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED (INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) CONCERNING ITS MEMBRANE PRODUCTS. IN NO EVENT SHALL CIM BE LIABLE OR OBLIGATED IN ANY MANNER FOR ANY SPECIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES OF ANY KIND (INCLUDING WITHOUT LIMITATION LOST PROFITS) REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT PRODUCT LIABILITY, OR OTHERWISE.

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