

CIM 1000

HIGH PERFORMANCE COATINGS AND LININGS

OVERVIEW

DESCRIPTION CIM 1000 is a liquid applied urethane coating that cures in hours to form a tough elastomeric coating that adheres to most substrates, forming a chemical and abrasion resistant barrier for waterproofing, corrosion protection, and containment of water and most aqueous chemicals.

ADVANTAGES CIM 1000 has over 30 years of proven performance in demanding environments. It remains flexible and resilient and provides exceptional service in a broad range of applications.

- Ideal for coating concrete.
- Forms a tough elastomeric liner able to bridge cracks.
- Tested to ANSI 118.10-199, "Standard Specification for Load Bearing, Bonded, Waterproof Membrane for Thin-Set Ceramic Tile and Dimension Stone Installation".
- Impervious to water and most aqueous chemicals, providing a long lasting tank and pond liner.
- Asphalt extended urethane formula provides superior wear and weatherability for parking decks and containment areas.
- Adheres to and bridges between common construction materials such as concrete, steel and other metals, asphalt pavement, glass, wood, and most coatings.
- Environmentally sound, complying with the toughest VOC regulations.
- Can be repaired when damaged.
- Excellent abrasion resistance for severe wear applications.
- UV stable.
- Liquid, two-component urethane can be applied to complex shapes, multiple penetrations or to most geotextiles.

SURFACE PREPARATION

- GENERAL:** Substrates must be **clean and dry** with no oils, grease or loose debris. CIM 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 Guide for specific guidelines.
- CONCRETE:** ICRI-CSP 4-6 surface profile exposing aggregate. Concrete must exhibit minimum 3,000 psi compressive strength and be free of release agents and curing compounds. The substrate must be clean and dry (see CIM Instruction Guide IG-2), and free of contaminants.
- STEEL:** Minimum 3 mil profile.
Immersion service – SSPC-SP10 / NACE No. 2 Near White Blast.
Non-Immersion service – SSPC-SP6 / NACE No. 3 Commercial Blast.
Use CIM Bonding Agent for greater adhesion.
- OTHER METALS:** SSPC-SP1 solvent clean and abrasive blast to roughen and degloss the surface. Use CIM Bonding Agent for greater adhesion.
- GLASS:** Thoroughly clean. CIM Bonding Agent must be used for increased adhesion. For immersion service roughen the surface.
- WOOD:** Substrate must be clean, dry and free of surface contamination.
- PREVIOUS COATINGS AND LININGS:** CIM 1000 may be applied over some existing coatings and linings and achieve acceptable performance. CIM Bonding Agent is recommended for greater adhesion. Finished system results vary due to a variety of project specific factors, including the service conditions to which the system is exposed. Therefore, C.I.M. Industries does not accept responsibility for determining the suitability of an existing coating and 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 1000 is initially shiny black, turning dull over 3 to 6 months when exposed to direct sunlight. For a colored or reflecting surface finish, see C.I.M Industries' Instruction Guide, "Topcoats" (IG-7) for further instructions.
- SOLIDS BY VOLUME** 88% (1413 dry mils x sq. ft./gal.)
- VOC** 92 g/l (0.76 lb./gal.). CIM 1000 complies with the toughest VOC regulations.

CIM 1000

HIGH PERFORMANCE COATINGS AND LININGS

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—Wt. Loss, Taber Abraser CS-17 Wheel 1000 gr./1000 rev. ASTM D4060		1.2 mg. Loss	Liner Performance Crack Bridging 10 cycles @ -15°F After heat aging		greater than 1/8" greater than 1/4"
Adhesion to Concrete (dry) Elcometer		350 psi	Liner Weight (60 mil wet film thickness)		31 lbs./100 sq. ft.
Deflection Temperature ASTM D648		below -60°F	Mix Ratio Weight Volume		7:1 9:1
Density (Approx.) Premix Activator Mixed & Cured		8.0 lbs./gal. 10.1 lbs./gal. 8.3 lbs./gal.	Mullen Burst Strength ASTM D751, 50 mil		150 psi
Elastomeric Waterproofing ASTM C836 ASTM C957		exceeds all criteria exceeds all criteria	Permeability to Water Vapor ASTM E96 Method E, 100°F, 100 mil sheet		0.03 perms
Extension to Break ASTM D412		400%	Recovery from 100% extension: after 5 minutes after 24 hours		98% 100%
Flammability ASTM D2859 UL790		pass/combustible substrate Class A ¹	Salt Spray ASTM B117 Service Temperature		pass 2000 hrs. -60°F to 220°F
Flooring and Shower Lining UPC/IBC ANSI 118.10		Pass	Softening Point, Ring & Ball ASTM D36		>325°F
Green Roof Membrane/Root Barrier FLL, 2002		Pass	Tear Strength ASTM D624 (Die C)		150 lbs./in.
Hardness, Shore A ASTM D2240 @ 77°F		60	Tensile Strength ASTM D 412, 100 mil sheet		900 psi
Jet Fuel Resistance FS SS-S-200D		pass for joints	Weathering ASTM D822		pass 5000 hrs.

¹Contact C.I.M. Industries for details regarding UL fire ratings

CHEMICAL RESISTANCE

CIM 1000 is resistant to a broad range of acids and alkalis. Consult C.I.M. Industries for additional information regarding chemical resistance after reviewing CIM 1000 Chemical Resistance Chart.

**THE INFORMATION PRESENTED IN THIS PUBLICATION IS SUBJECT TO CHANGE WITHOUT NOTICE.
CONTACT C.I.M. INDUSTRIES FOR CURRENT INFORMATION.
www.cimindustries.com**

CIM 1000

HIGH PERFORMANCE COATINGS AND LININGS

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 rain is imminent or when the CIM 1000 or the substrate may become wet within 4 hours after coating. Use caution when applying CIM 1000 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 COATING IS IN DIRECT SUNLIGHT.** CIM 1000 should be at least 60°F (15°C) when mixed and applied. CIM 1000 may be preheated to facilitate application at low temperatures, but working time will be reduced. See C.I.M. Industries' Instruction Guide "Applying CIM Coatings in Cold Weather" (IG-11).
- EQUIPMENT** Spray equipment requires large diameter hose and air supplied mastic gun or plural component spray equipment. See "Spray Application of CIM" (IG-12) or contact C.I.M. Industries for specific recommendations. Roller, squeegee, and trowel may also be used.
- POT LIFE** About 30 minutes. Working time depends on temperature and method of application. Working time for spray application will be significantly shorter.
- PRIMING** Porous substrates such as wood and concrete may be primed with CIM Epoxy Primer to minimize outgassing. The maximum recoat window for CIM Epoxy Primer is 48 hours. See CIM Epoxy Primer Technical Data Sheet for additional information. Perform adhesion tests to confirm adequacy of adhesion to primer.
- MIXING** **DO NOT THIN. DO NOT HAND MIX.** Begin mixing each pail (4.5 gal.) of CIM 1000 Premix using a power mixer (e.g. $\frac{1}{2}$ " drill and an eight inch mud mixer). Do not draw air into the mix. While mixing, slowly add one jug (0.5 gal.) of CIM 1000 Activator to the pail. Once the CIM 1000 Activator has been added, mix thoroughly for **3 FULL MINUTES**. The proportions are premeasured. **DO NOT ESTIMATE.** Mixing Jigs and Timers from C.I.M. Industries 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 1000 directly to a clean and dry substrate. Vertical surfaces will require multiple coats. See C.I.M. Industries' specific substrate Instruction Guide for additional guidelines.
- RECOATING** CIM 1000 may be recoated in 1 hour and must be recoated soon after the coating no longer comes off on polyethylene (typically within 4 hours of mixing). If the liner has cured longer than this time, the surface must be severely abraded using surface grinder or other mechanical means, and be free of dust and debris. Use CIM Bonding Agent for better adhesion. For immersion conditions, all coats shall be applied within 4 hours of each other, except at joint lines.
- RECOMMENDED MINIMUM THICKNESS** Recommended minimum thickness of the coating is 60 wet mils. Contact C.I.M. Industries for detailed cure time information. Refer to CIM 1000 Coverage Chart for coverage rates.
- CURING TIME** CIM 1000 may be placed in service within 24 hours for non-aggressive service. Severe service applications may require a cure time of 72 hours or more. 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.

CONTACT C.I.M. INDUSTRIES FOR SPECIFIC RECOMMENDATIONS AND INSTRUCTION GUIDES.

www.cimindustries.com

CIM 1000

HIGH PERFORMANCE COATINGS AND LININGS

SHIPPING, STORAGE AND SAFETY DATA

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 This product contains petroleum asphalt, petroleum distillates, amine compounds and/or other chemical ingredients. Adequate health and safety precautions should be observed during the storage, handling, application and curing. Refer to C.I.M. Industries' Material Safety Data Sheets for further details regarding the safe use of this product.

PACKAGING CIM 1000 is available in mixed units of 5 gallons. Each unit consists of a container of premix and a smaller container of activator. Quantities have been premeasured to provide the proper mixing ratio, leaving sufficient room in the premix container to facilitate adequate mixing. **Do not estimate proportions.**

SHIPPING	Premix	Activator
Weights		
5.0 gallon units	40 lb/pail	5.5 lb/jug (33 lb/case of 6)
Properties		
Flash Point	101°F	>400°F
Shipping Name	Not Regulated*	Not Regulated
DOT Class	Not Regulated*	Not Regulated
STORAGE		
Temperature	20°F to 110°F	70°F to 95°F
Shelf Life	2 years	1 year
NFPA	Class II	Class III B

* Reclassed based on container size and physical properties, see SDS for additional details.

WARRANTY & LIMITATION OF SELLER'S LIABILITY

C.I.M. Industries Inc. (C.I.M.) warrants that for a period of five (5) years from the date of shipment to the initial purchaser, the products, when mixed in proper ratios for the proper length of time, (a) will not become brittle or crack and (b) will provide a water barrier. Due to application variables beyond C.I.M.'s control which may affect results, C.I.M. makes no warranty of any kind, expressed or implied, including that of merchantability, other than that the products conform to C.I.M.'s current quality control standards at time of manufacture. If breach of warranty is established, the buyer's exclusive remedy shall be repayment of the purchase price of the non-conforming CIM membrane product or, at C.I.M.'s option, resupply of conforming product to replace the non-conforming product. The buyer expressly waives any claim to additional damages, including consequential damages.

THE INFORMATION PRESENTED IN THIS PUBLICATION IS SUBJECT TO CHANGE WITHOUT NOTICE.

CONTACT C.I.M. INDUSTRIES FOR CURRENT INFORMATION.

FOR PROFESSIONAL USE ONLY.

www.cimindustries.com