Slab-Cote™

EXTREME MOISTURE VAPOR BARRIER COATING

KEY FEATURES

- Single coat, rapid cure, 100% solids epoxy formulation
- For use on properly prepared, green concrete
- ≤0.1 perm rate, Class 1 vapor retarder per the IRC

DESCRIPTION

Bostik Slab-Cote™ Extreme Moisture Vapor Barrier Coating is a single coat, two-component, 100% solids, epoxy formulated to dramatically reduce moisture vapor transmission and surface alkalinity from substrates. Slab-Cote™ perm rate is ≤0.1, is a Class 1 vapor retarder per the 2007 supplement to the 2006 IRC (International Residential Code), and passes ASTM F 3010-13, moisture mitigation system for use under resilient flooring. It has 0 VOC's (as calculated per SCAQMD Rule 1113), low odor and is solvent-free. Slab-Cote's™ unique formulation exhibits a gel-like end of pot life indicator. Material left to cure in the pail will get hot, but will not smoke excessively.

Bostik Slab-Cote™ contains Bostik's Blockade™ antimicrobial protection that provides built in protection to inhibit the growth of a broad range of odor causing bacteria, mold and mildew on the surface of the coating's film. It is pigmented blue for visual indication of coverage and film thickness during the installation process. It is extremely durable and can be used as a wear layer.

MOISTURE & PH PROTECTION

When properly installed, Bostik Slab-Cote™ is designed to reduce the moisture vapor emission rate of the most challenging concrete slabs from up to 25 pounds per 1,000 ft^2 per 24 hours to < 3 lbs. per 1,000 ft^2 per 24 hours (per ASTM F 1869) or from 100% RH (per ASTM F 2170) to 75% RH equivalent. This non-flammable, low odor, non-blushing formulation requires no solvent wiping or sand broadcasting, and has no application window in which floor covering adhesives must be applied to achieve a strong bond. Bostik Slab-Cote™ is formulated to be effective in reducing the surface alkalinity of concrete slabs to pH levels of 9 or lower as recommended by the Carpet and Rug Institute and the Canadian Carpet Institute, making them ideal for bonding with most adhesives.

ULTIMATE VERSATILITY

Slab-Cote™ can be used over properly prepared concrete, radiant heat flooring, and cement-based terrazzo prior to the installation of carpet, vinyl/VCT, engineered or solid hardwood, porcelain, marble, granite, or ceramic tile floor covering.

Bostik Slab-Cote™ is uniquely formulated so that it may be applied to fresh "green" concrete as soon as it has achieved "initial set" (when the concrete can be walked on without disturbing the surface).

LEED® CONTRIBUTION

This 0 VOC formulation (as calculated per SCAQMD Rule 1113) may contribute toward LEED® credits under section EQ 4.1: Low-Emitting Materials - Coatings.

DIRECTIONS FOR USE

Read and understand Technical and Safety Data Sheets completely before beginning installation. Follow industry

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standards and flooring manufacturer's recommendations for design, layout and application of flooring materials, including test methods, jobsite temperature, and relative humidity. Always do a test area to ensure product satisfaction, including adhesion to substrate, and/or to become familiar with proper application techniques prior to use.

SURFACE PREPARATION

Please refer to and follow industry standards for flooring material being installed (i.e.: NWFA, MFMA, TCNA, NTCA, ICRI, etc.) prior to using this material. Various flooring materials have vastly different substrate preparation and installation requirements; substrate preparation and installation requirements are key to a successful installation regardless of flooring material being installed.

Surfaces must be absorptive, clean, free from loose materials, oil, grease, sealers, curing compounds, waxes, silicates, laitance, and all other surface contaminants that may inhibit proper bond. Completely remove cutback adhesive residue or other surface contaminants by shotblasting or diamond grinding.

PLEASE NOTE: Concrete substrate should NOT be smooth and reflective; it must have a concrete surface profile of CSP 1-3 (similar to broomed concrete or cinderblock texture), as defined by ICRI (International Concrete Repair Institute, Guideline No. 03732).

Surface areas requiring patching or leveling must be treated using Bostik UltraFinish™ Pro, Webcrete® 95, Webcrete® 98, SL-100™, SL-150™, SL-175™, SL-200™ or other portland cement-based patches/underlayments on top of Bostik Slab-Cote™ Extreme Moisture Vapor Barrier Coating according to label instructions. Bostik Universal Primer™ Pro must be used prior to the installation of these cementitious products and placed directly on top of the Slab-Cote™ once it has properly cured.

CONCRETE MOISTURE TESTING

Prior to the application of Bostik Slab-Cote™, testing of concrete moisture must be performed using either "Anhydrous Calcium Chloride" testing per ASTM F 1869, or "In Situ Relative Humidity" testing per ASTM F 2170. If water vapor transmission rate is above 25 pounds per 1,000 square feet per 24 hours following ASTM F 1869, or RH is greater than 100% following ASTM F 2170, please contact Bostik immediately before proceeding.

FOR APPLICATIONS OVER GREEN CONCRETE

Bostik Slab-Cote™ is uniquely formulated so that it may be applied as soon as the fresh concrete can be walked on without disturbing the surface ("initial set"). For maximum penetration of the Bostik Slab-Cote™, the concrete must have a wood float finish (using a wood bull float, not magnesium). A wood bull float opens the top of the slab to allow bleed water out, whereas a magnesium float seals the slab, which keeps the bleed water in. After the concrete has been placed and allowed to set hard enough to walk on, leaving no footprints and no bleed water, the floor must be swept with a medium to stiff bristle broom to remove any laitance and/or loose cement. (**THIS IS A MUST DO!**).

A calcium chloride test can not be done prior to application of Slab-Cote™, but should be done prior to application of flooring material to confirm the moisture vapor emission rate is within flooring manufacturer's acceptable rate. This can be done approximately 16-24 hours after application of Bostik Slab-Cote™ at 70°F (21°C). Dry time will vary depending on the temperature of the concrete slab.

MIXING

Using a slow speed drill (<150 rpm), fitted with a blade that is at least 3" in diameter, separately pre-mix Part A (**RESIN**), and then with a second mixing blade, pre-mix Part B (**HARDENER**) – do not use the same mixing blade to pre-mix both parts. Because some of the ingredients may settle to the bottom of each container, it is very important to scrape all of the material off of the sides and bottom of each pail to ensure that a proper mix is obtained.

After each container has been thoroughly scraped and mixed, slowly add Part B into Part A while mixing with a third mixing blade. Mix for one minute until a homogenous mix (uniform color / no streaks) is obtained. Do not over mix as the pot life will be reduced. Pot life is 30 minutes at 70°F (21°C) and is reduced by higher temperatures. Slab-Cote's™ unique formulation exhibits a gel-like end of pot life indicator. Material left to cure in the pail will get hot, but will not smoke excessively. Mix full units only; do not mix partial components, or alter components in any way. Material components should be a minimum of 60°F (15°C) at time of mixing.

INSTALLATION

Make sure the concrete substrate and ambient room temperature is between 40°F and 90°F (4°C to 32°C) and relative humidity does not exceed 85% during, and for a minimum of 16 hours after application. To achieve proper coverage, protection, and application of material, for each gallon, layout job site into 100 ft^2 "grids" for existing cured concrete or 75 ft^2 "grids" for green concrete (<28 days old). Ensure the material is applied at the required coverage rate by staying within the grid per unit/container. Use a short 3/8" nap roller or squeegee to coat the substrate with Bostik Slab-Cote™. Let the coating cure a minimum of 12 hours prior to the installation of subsequent flooring (until it is tack-free to the touch), this may vary due to temperature and humidity. For required application rate, please refer to the **COVERAGE** section. Surface of Bostik Slab-Cote™ must be tack-free prior to application of floor covering adhesives, primers or patch/underlayments. For surfaces with pin holes present in the concrete, the use of a nylon bristle brush is recommended to assist in working Bostik Slab-Cote™ into these small voids. If needed, an additional coat can be added in 6-8 hours.

FOR CRACK/JOINT TREATMENT

For "non-dynamic" cracks/joints (cracks with no movement): Remove any existing sealant or debris. Treat all non-dynamic joints with Bostik Slab-Cote™ by applying a layer into the joint with a paintbrush to completely coat the walls of the cavity. Once cured, fill the crack/joint with an approved cement-based patch material (i.e. Bostik UltraFinish™ Pro, Webcrete® 95, Bostik Webcrete® 98). Bostik Universal Primer™ Pro must be used prior to the installation of these cementitious products.

FOR "DYNAMIC" JOINTS/CRACKS WITH MOVEMENT

Remove any existing sealant or debris. Treat all dynamic joints (i.e. expansion, isolation, control) with Bostik Slab-Cote™ by applying a layer into the joint with a paintbrush to completely coat the walls of the cavity. Once dry, fill the joint with sand and backer rod while leaving the top 1/8" to 1/4" of joint for proper treatment with Bostik 915FS™ or 955-SL™ sealants.

CAUTION: There is a major difference between the proper application of flooring over non-dynamic vs. dynamic joints, as well as variations based upon the type of flooring being installed. Please follow appropriate industry standards, as well as flooring manufacturer's recommendation for treatment of joints.

CLEAN UP

Immediately clean all tools and equipment with soap and water or a mild solvent. Once cured, this material can only be mechanically removed, which may damage some surfaces.

CURE TIME

Light foot traffic and installation of flooring material may usually begin after 12 hours of cure time (once the surface is tack-free to the touch), this may vary due to temperature and humidity. **DO NOT INSTALL OVER BOSTIK Slab-Cote™ IF IT IS STILL TACKY. THIS WILL RESULT IN A COATING FAILURE.**

COVERAGE

For applications over green concrete or installations with substrate moisture vapor emission rate of 25 lbs. per 1,000 ft^2 per 24 hours or 100% RH: Required coverage is 75 ft^2 per gallon, which yields a cured film thickness of ~22 mils. For fully cured concrete (>28 days old), required coverage is 100 ft^2 per gallon, which yields a cured film thickness of ~16 mils.

Coverage rates are approximate and actual coverage will vary based upon porosity and roughness of substrate, application technique, waste and/or other jobsite conditions. Failure to achieve the proper mil thickness may result in coating failure and void warranty.

LIMITATIONS

- For applications involving a wet set adhesive installation of resilient floor covering, or 'non breathable floor coverings' with a water-based adhesive, a self-leveling underlayment, such as Bostik SL-100™, SL-150™, SL-175™, SL-200™, or cementititous patch, such as Bostik UltraFinish™ Pro, Webcrete® 95, Webcrete® 98, must be installed at a minimum 1/8" layer on top of Bostik Slab-Cote™ Extreme Moisture Barrier Coating according to label instructions. Bostik Universal Primer™ Pro must be used prior to the installation of these cementitous products. Failure to apply this cementitious layer will result in the adhesive not drying and remaining wet/uncured.
- If using pressure sensitive adhesives, a cementitious layer is not required to be placed over the Bostik Slab-Cote™, if the products are used properly (according to label instructions) and allowed adequate time to 'flash off' prior the installation of the floor covering. Failure to allow these adhesives to reach their intended high-tack state will result in the adhesives not drying and remaining wet/uncured.
- Cementitious patch/underlayment products, such as Bostik UltraFinish™ Pro, Webcrete® 95, Webcrete® 98, SL-100™, SL-150™, SL-175™, and SL-200™ must be installed on top of the Bostik Slab-Cote™ according to label instructions. Bostik Universal Primer™ Pro must be used prior to the installation of these cementitious products on top of Slab-Cote™.
- Always do a test area to ensure product satisfaction, including adhesion to substrate, and/or to become familiar with proper application techniques prior to use.

CHEMICAL & PHYSICAL PROPERTIES			
Use Environments	Residential		Yes
	Offices/Light Commercial		Yes
	Heavy Commercial		Yes
	Offices		Yes
	Hospital		Yes
	Wet Areas		Yes
	Exterior		No
Substrates	Below	Concrete	Yes
		Green Concrete	Yes
		Cement-based Terrazzo	Yes
	Above	Gypsum Underlayments*	Yes
		Cement Patch/ Underlayment*2	Yes
Flooring Types	Hardwood		Yes
	Sheet Vinyl		Yes
	Luxury Vinyl Tile		Yes
	Cork		Yes
	Carpet		Yes
	Porcelain		Yes
	Ceramic Tile, Marble, Stone		Yes
Cured Physical Properties	Cure Time*3	Re-coat	6-8 hours
		Prior to floor covering	12 hours
		Final cure	48 hours
	Water Vapor Permeability*4		≤ 0.1
	ASTM F 3010-13		Passes
	Concrete Moisture Vapor Limits for subfloor moisture vapor protection:		
	ASTM 1869 Calcium Chloride Method		≤ 25 lbs/ 1,000 ft^2/24 hrs
	ASTM 2170 Relative Humidity Test		≤ 100% RH
	Pull-Off Adhesion Strength ASTM D-7234-05		>480 psi, No Failure
	Service Temperature		-40°F to 150°F (-40°C to 66°C)
Uncured Physical Properties	Viscosity (Color)		
	Part A (Blue)		600 cps
	Part B (White)		1,000 cps
	Mixed (Light Blue)		700 cps
	Odor		Mild
	Pot Life*5 @ 72°F (22°C)		30 minutes
	Density (lbs/gallon)		9.47
	Percentage of Water*6		0%
	Application Temperature		40°F to 90°F (4.4°C to 32°C)
	Maximum Relative Humidity of the Room		85%
Chemical Properties	Chemistry Type		100% Solids Epoxy
	VOC Compliant (calculated per SCAQMD Rule 1113)		Yes (0 g/L)
	Flash Point		> 200°F (93°C)

* Dry, above grade
*2 After Universal Primer™ Pro
*3 The higher the temperature, the faster the cure.
*4 Per ASTM E-96 Standard Test Methods for Water Vapor Transmission of materials. Ratings are g/m2-24 hour-mmHG.
*5 May vary due to temperature.
*6 Per ASTM E203-01 Standard Test Method for water using Volumetric Karl Fischer Titration Method. Results rounded to the nearest tenth. Test Method has error range of +/_ 0.2%.

- **PLEASE NOTE:** Not all floor covering adhesives/installation systems are compatible, or designed for use over epoxy coatings. Use **ONLY** adhesives/installation systems specifically approved in writing for use over this coating. Please contact Bostik Technical Service for questions related to the application of adhesive systems.
- Do not use over concrete slabs treated with sealers or curing compounds.
- Due to limitations of gypsum-based materials in wet/moist environments, gypsum-based patches/underlayments are only acceptable when dry and above grade.
- Thoroughly clean surface to remove any substance that could interfere with the bond including, dirt, paint, oil, grease, laitance, efflorescence and any other surface contaminants that may inhibit proper bond.
- Completely remove cutback adhesive residue, curing compounds, and sealers by shotblasting.
- Do not use in areas subject to hydrostatic head.
- Use indoors only.
- This is not a waterproofing or anti-fracture membrane. Contact Bostik for a waterproofing membrane solution if necessary.
- Do not use acid etching to prepare substrate surface.
- Do not thin/dilute product with water or solvent.
- Do not apply to surfaces with visible/standing moisture
- Do not apply if relative humidity of air exceeds 85%.
- Concrete must be a minimum temperature of 40°F (4°C) and a maximum of 90°F (32°C).
- Do not apply to concrete that is in direct sunlight or is increasing in temperature. Apply as the concrete slab is cooling to reduce out gassing and the appearance of pinholes. Pinholes will compromise the coating and cause it to fail.
- Bostik Slab-Cote™ is not designed to be used as a penetrant to treat concrete slabs that contain ASR (Alkali Silica Reaction). If this condition is suspected to be present, do not use this product.

STORAGE/SHELF LIFE

Shelf life is one year from date of manufacturing in unopened, original packaging. Store at temperatures between 60°F and 90°F (15.5°C and 32°C). **DO NOT ALLOW MATERIAL TO FREEZE.**

PACKAGING

- 1 Gallon Kit contains 82.7 fl oz (2.44 L) of Part A Resin and 46.8 fl oz (1.38 L) of Part B Hardener (64 kits per pallet).
- 2.5 Gallon Kit contains 206.75 fl oz (6.1 L) of Part A Resin and 117 fl oz (3.46 L) of Part B Hardener (27 kits per pallet).

PART A (RESIN)

DANGER

CONTENTS HARMFUL IF SWALLOWED OR INHALED. STRONG SENSITIZER. MAY CAUSE ALLERGIC SKIN OR LUNG REACTION. MAY IRRITATE EYES, SKIN AND RESPIRATORY TRACT. Do not breathe fumes. Do not get in eyes, on skin or on clothing. Do not swallow. Handle with care. Use only in a well-ventilated area or wear mask. Wear protective clothing including gloves during handling. Wash thoroughly after handling. Store container in a cool, dry area with lid tightly sealed. Do not reuse container.

KEEP OUT OF THE REACH OF CHILDREN

FIRST AID TREATMENT

Contains Proprietary Ether, Titanium Dioxide and Carbon Black. If in eyes or on skin, rinse with water for at least 15 minutes. If on clothes, remove clothes. If breathed in, move person to fresh air. If swallowed, call a Poison Control Center or doctor immediately. Do not induce vomiting.

SEE SAFETY DATA SHEET

PART B (HARDENER)

DANGER

CORROSIVE. CONTENTS HARMFUL IF SWALLOWED, INHALED OR BY SKIN CONTACT. CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. STRONG SENSITIZER. MAY CAUSE ALLERGIC SKIN OR LUNG REACTION. Do not breathe fumes. Do not get in eyes, on skin or on clothing. Do not swallow. Handle with care. Use only in a well-ventilated area or wear mask. Wear protective clothing including gloves during handling. Wash thoroughly after handling. Store container in a cool, dry area with lid tightly sealed. Do not reuse container.

KEEP OUT OF THE REACH OF CHILDREN

FIRST AID TREATMENT

Contains Proprietary Amine Blend, Titanium Dioxide and Carbon Black. If in eyes or on skin, rinse with water for at least 15 minutes. If on clothes, remove clothes. If breathed in, move person to fresh air. If swallowed, call a Poison Control Center or doctor immediately. Do not induce vomiting.

SEE SAFETY DATA SHEET

LIMITED WARRANTY

Limited Warranty found at www.bostik.com/us or call 800.726.7845. TO THE MAXIMUM EXTENT ALLOWED BY LAW, BOSTIK DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. UNLESS OTHERWISE STATED IN THE LIMITED WARRANTY, THE SOLE REMEDY FOR BREACH OF WARRANTY IS REPLACEMENT OF THE PRODUCT OR REFUND OF THE BUYER'S PURCHASE PRICE. BOSTIK DISCLAIMS ANY LIABILITY FOR DIRECT, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES TO THE MAXIMUM EXTENT ALLOWED BY LAW. DISCLAIMERS OF IMPLIED WARRANTIES MAY NOT BE APPLICABLE TO CERTAIN CLASSES OF BUYERS AND SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. It is the buyer's obligation to test the suitability of the product for an intended use prior to using it. The Limited Warranty extends only to the original purchaser and is not transferable or assignable. Any claim for a defective product must be filed within 30 days of discovery of a problem, and must be submitted with written proof of purchase.

BOSTIK HOTLINE™

Smart help™
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