

Product Information

DURABOND®



D-250™ Moisture Vapor Barrier Coating

Product Description:

D-250 is a high performance, rapid drying, water-based, penetrating epoxy formulated to dramatically reduce moisture vapor transmission and surface alkalinity from substrates including; “freshly-poured/green concrete,” properly prepared concrete, cement backer board, radiant heat flooring, and cement based terrazzo prior to the installation of carpet; vinyl/VCT; rubber; engineered or solid hardwood; porcelain, marble, granite or ceramic tile floor covering. D-250 is a low odor, non-flammable, two-component system.

D-250 contains Bostik's Blockade® antimicrobial protection and utilizes a breakthrough, silver-based, antimicrobial agent 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. D-250 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). It is pigmented green for visual indication of coverage and film thickness during the application process. It is extremely durable and wear resistant.

When properly installed, D-250 is designed to reduce the moisture vapor emission rate of concrete slabs to ≤ 3 lbs. per 1,000 ft² per 24 hours. This non-blushing formulation requires no solvent wiping, and has no application window in which floor covering adhesives must be applied to achieve a strong bond. D-250 is formulated to be effective in reducing the surface alkalinity of concrete slabs with pH levels as high as 14 down 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.

Please refer to and follow industry standards for flooring material being installed (ie.:NWFA, NOFMA, MMFA, TCA, NTCA, CRI, 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.

CHEMICAL & PHYSICAL PROPERTIES

Application Temperature	40°F to 90°F
Flash Point	>200°F
Viscosity	
Part A	10,000 cps
Part B	1,800 cps
Mixed	4,100 cps
Maximum allowable moisture vapor emission rate	1 coat \leq 14 lbs/1,000 ft ² 24 hrs (ASTM 1869) 2 coats > 14 lbs to \leq 25 lbs./1000 ft ² /24 hrs (ASTM 1869)
Odor	Mild
Color	
Part A	White
Part B	Green
Mixed	Green
Weight	11.65 lbs./gallon
Pot Life @ 72°F	60 minutes
Cure Time*	6 hours
VOC Content	67 g/L

*Cure time may vary due to temperature and humidity.

Directions For Use:

Read and understand data sheet and Material Safety Data Sheet completely before beginning installation. Follow industry 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.

Moisture Vapor Emission Testing:

Prior to the application of D-250, a Moisture Vapor Emission Rate, using “Anhydrous Calcium Chloride” testing per ASTM F 1869-05, must be obtained to determine the Moisture Vapor Emission Rate.



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For Applications Over “Freshly-Poured/Green Concrete”:

D-250 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”). Since a calcium chloride test cannot be done prior to application, the “Anhydrous Calcium Chloride” test, per ASTM F 1869-05, 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 hours after application of D-250 at 70°F. Dry time will vary depending on the temperature of the concrete slab.

Surface Preparation:

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 sandblasting, shot blasting or scarifying. All surfaces to be treated must have a concrete surface profile of CSP 2-3 (similar to light broom finish), as defined by ICRI (International Concrete Repair Institute, Guideline No. 03732).

Surface areas requiring patching or leveling must be treated using Durabond® Webcrete® 95, Webcrete 98 or Duralevel® 83P Self-Leveling Underlayment with Bostik Universal Primer® or Durabond® Extreme Primer ON TOP OF the properly cured D-250 Moisture Vapor Barrier Coating according to label instructions.

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 separately pre mix Part B (HARDENER). 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 A into Part B while mixing, 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. 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) during and for a minimum of 24 hours after application. To achieve proper coverage, protection, and application of material, layout jobsite into 150 ft “grids”. 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 to coat the substrate with D-250. Let the coating cure a minimum of 6 hours (until it is tack free to the touch), this may vary due to temperature and humidity. A nylon bristle deck brush can be used to work the coating into any pin holes or surface imperfections that may not be properly filled using the nap roller. For required application rates, please refer to the COVERAGE section.

The surface of D-250 should be tack-free prior to application of a second coat of D-250 (if required), floor covering adhesives, primers or patch/underlayments. Cementitious patch/underlayment products, such as Durabond Webcrete® 95, Webcrete® 98 or Duralevel 83P Self Leveling Underlayment with Bostik Universal Primer® or Durabond® Extreme Primer, must be installed ON TOP OF properly cured D-250 according to label instructions. Always coat the dry surface of D-250 with Bostik Universal Primer or Durabond Extreme Primer prior to the installation of Duralevel 83 P Self Leveling Underlayment.

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 D-250 by applying a layer into the joint with a paint brush to completely coat the walls of the cavity. Once dry, fill the crack/joint with an approved cement-based patch material (ie: Durabond Webcrete 95 or Webcrete 98).

For “Dynamic” Joints/Cracks (Joints With Movement):

Remove any existing sealant or debris. Treat all dynamic joints (i.e. expansion, isolation, control) with D-250 by applying a layer into the joint with a paint brush to completely coat the walls of the cavity. Once dry, fill the joint with sand or backer rod while leaving the top 1/8” to 1/4” of joint for proper treatment with Bostik Chem-Calk 900 Urethane sealant.

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. 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 typically begin after 6 hours of cure time (once the surface is tack free to the touch.) **DO NOT INSTALL OVER D-250 IF IT IS STILL TACKY.**

Coverage:

For applications over "freshly-poured/green concrete" or installations with substrate moisture vapor emission rate of ≤ 14 lbs. per 1,000 ft² per 24 hours: Required coverage is 150 ft² per gallon which yields a dry film thickness of ~6.4 mils.

For applications with substrate moisture vapor emission rate of > 14 lbs. to ≤ 25 lbs. per 1,000 ft² per 24 hours: Two coats of D-250 are required; required coverage for each coat is 150 ft² per gallon. The second coat must be applied over a fully cured/dried initial coat (typically 6 hours after application of the coating) which will yield a dry film thickness of 12.8 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.

Limitations:

- For applications involving a wet set adhesive installation of resilient floor covering, or 'non-breathable floor coverings' with a water-based adhesive, a cementitious layer, such as Webcrete 95, Webcrete 98 or Durabond Duralevel 83P, must be installed at a minimum of 3/16" layer on top of the D-250 coating according to label instructions. Failure to apply this layer will result in the adhesive not drying and remaining wet/uncured.
- If using pressure sensitive adhesives such as Durabond D-650 VCT Adhesive or D-870 Carpet Tile Adhesive, a cementitious layer is NOT required to be placed over the D-250 coating, ONLY IF the products are used properly (according to label instructions) and allowed adequate time to 'flash off' prior to 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.
- 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.
- 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 with gypsum-based materials in wet/moist environments, gypsum-based patches/underlayments should not be used in conjunction with this system.
- Thoroughly clean surface to remove any substance that could interfere with the bond including; dirt, paint, oil, grease, laitance, efflorescence and other surface contaminants that may inhibit proper bond.
- Completely remove cutback adhesive residue, curing compounds, and sealers by sandblasting, shot blasting, or scarifying.
- Do not use in areas subject to hydrostatic head.
- Use indoors only.
- This is not a waterproofing or anti-fracture membrane.
- Do not use acid etching to prepare substrate surface.
- Do not thin/dilute product with water or solvent.
- D-250 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 two years from date of manufacturing in unopened original packaging. Store at temperatures between 60°F and 90°F. DO NOT ALLOW MATERIAL TO FREEZE.

Packaging:

Each kit contains 24 fl. oz. of Part A Resin and 104 fl. oz. of Part B Hardener.

For the name of a distributor nearest you, contact Customer Service at 888-592-8558.

Warranty:

D-250 is warranted for one year from date of installation when applied according to directions.

To obtain the Durabond Installation System Warranty for adhesion, moisture reduction and alkalinity control (prorated 10 years), D-250 must be applied according to directions, used only with Durabond brand adhesives and patch/underlayments, and the Warranty Registration Form (included in every kit) must be completely filled out and registered with Bostik, Inc. within 30 days of the installation.



PLANT LOCATIONS

TEMECULA, CA 92590
TWINSBURG, OH 44087

CONYERS, GA 30207
PAULSBORO, NJ 08066

www.bostik-us.com

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LIMITED WARRANTY

Bostik, Inc. warrants that the product conforms with Bostik's written specifications and is free from manufacturing defects. A PURCHASER'S SOLE REMEDY FOR NONCOMPLIANCE WITH THIS WARRANTY SHALL BE THE REPLACEMENT OF THE PRODUCT OR REFUND OF THE PURCHASE PRICE. Purchasers may address their warranty claims to Bostik, Inc., 211 Boston St., Middleton, MA 01949, Attn: Customer Service or call Bostik at 1-800-726-7845. TO THE MAXIMUM EXTENT ALLOWED BY LAW, BOSTIK DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND LIABILITY FOR DIRECT, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



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