

# Product Information

**DURABOND®**



## D-261™ Extreme Moisture Vapor Barrier Coating

### Product Description

D-261™ Extreme Moisture Vapor Barrier Coating is a two-component, high performance, rapid drying, epoxy formulated to dramatically reduce moisture vapor transmission and surface alkalinity from substrates including; “freshly-poured/green concrete”, properly prepared concrete, cement backer board, cement patch/underlayments, 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.

D-261 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-261 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 light green for visual indication of coverage and film thickness during the installation process. It is extremely durable and wear resistant.

When properly installed, D-261 is designed to reduce the moisture vapor emission rate of even the most challenging concrete slabs from  $\leq 25$  pounds per 1,000 ft<sup>2</sup> per 24 hours to  $\leq 3$  lbs. per 1,000 ft<sup>2</sup> per 24 hours (per ASTM 1869). This non-flammable, non corrosive, low odor, 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-261 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.

Please refer to and follow industry standards for flooring material being installed (i.e.: 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.

### TYPICAL PHYSICAL PROPERTIES

Application Temperature	40°F to 90°F
Flash Point	> 200°F
Viscosity	
Part A	4,000 cps
Part B	700 cps
Mixed	1,700 cps
Maximum Allowable moisture Vapor emission rate	1 coat $\leq 25$ lbs/1,000 ft <sup>2</sup> /24 hours (ASTM 1869)
Odor	Mild
Color	
Part A	Light Green
Part B	Amber
Mixed	Light Green
Weight	12.48 lbs./gallon
Pot Life @ 72°F	30 minutes
Cure Time*	6 hours
VOC Content	59 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-261, a Moisture Vapor Emission Rate, using “Anhydrous Calcium Chloride” testing per ASTM F 1869, must be obtained. To obtain Durabond’s 10 year Installation System Warranty, a second “Anhydrous Calcium Chloride” test per ASTM F 1869,



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must be performed prior to installation of flooring to verify water vapor transmission is below 3 pounds per 1,000 square feet per 24 hours. If water vapor transmission rate is above 3 pounds after application of D-26 I, please contact Durabond immediately before proceeding.

**For Applications over “freshly-poured/green concrete”:**

D-26 I 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 D-26 I, the concrete must have a wood float finish (using a wood bull float, not magnesium). 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 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.

Since a calcium chloride test can not be done prior to application, the “Anhydrous Calcium Chloride” test, per ASTM F 1869, 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-26 I 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 shotblasting. All surfaces to be treated must have a 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 Durablevel® 83P Fast Set patches/underlayments on top of the D-26 I Extreme Moisture Vapor Barrier Coating according to label instructions. Durabond Extreme Primer must be used prior to the installation of these cementitious products.

**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 B into Part A 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. Pot life is 30 minutes at 70°F and is reduced by higher temperatures. 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 80% during and for a minimum of 16 hours after application. To achieve proper coverage, protection, and application of material, layout jobsite into 100 ft<sup>2</sup> “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-26 I, let the coating cure a minimum of 6 hours prior to installation (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 D-26 I 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 D-26 I into these small voids.

**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-26 I by applying a layer into the joint with a paintbrush to completely coat the walls of the cavity. Once dry, fill the crack/joint with an approved cement-based patch material (i.e. Durabond Webcrete 95, Webcrete 98). Durabond Extreme Primer must be used prior to the installation of these cementitious products.

**For “dynamic” joints/cracks (joints with movement):**

Remove any existing sealant or debris. Treat all dynamic joints (i.e. expansion, isolation, control) with D-26 I 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 or backer rod while leaving the top 1/8" to 1/4" of joint for proper treatment with Bostik #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 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 6 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 D-26 I IF IT IS STILL TACKY.**

### **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 Duralevel 83P, or cementitious patch, such as Webcrete 95 or Webcrete 98, must be installed at a minimum 3/16" layer on top of the D-26 I Extreme Moisture Barrier Coating according to label instructions. Durabond Extreme Primer must be used prior to the installation of these cementitious products. Failure to apply this cementitious layer will result in the adhesive not drying and remaining wet/uncured.
- If using Durabond D-650 or D-870 pressure sensitive adhesives, a cementitious layer is not required to be placed over the D-26 I, 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 Durabond Webcrete 95, Webcrete 98, and Duralevel 83P must be installed on top of the D-26 I according to label instructions. Durabond Extreme Primer must be used prior to the installation of these cementitious products.
- 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 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.
- Do not use acid etching to prepare substrate surface.
- Do not thin/dilute product with water or solvent.
- Do not apply if relative humidity exceeds 80%.
- 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.
- D-26 I 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:**

Kit contains 102 fl. oz of Part A Resin and 26 fl. oz of Part B Hardener.

### **Coverage:**

For Applications over "freshly-poured/green concrete" or installations with substrate moisture vapor emission rate of  $\leq 25$  lbs. per 1,000 ft<sup>2</sup> per 24 hours: Required coverage is 100 ft<sup>2</sup> per gallon which yields a dry 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.

## **Warranty:**

D-261 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-261 must be applied according to directions, used only with Durabond brand adhesives and patches/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. The warranty shall be void if any cracks occur in the concrete after the application of Durabond D-261.



## **PLANT LOCATIONS**

TEMECULA, CA 92590  
TWINSBURG, OH 44087

CONYERS, GA 30207  
PAULSBORO, NJ 08066

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July 2007; Supersedes all previously published literature.

### **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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