

MVB - MOISTURE VAPOR BARRIER

DRYTEK® MVB is a premium water-based epoxy that is easy to apply, fast drying, and an effective moisture vapor barrier. **DRYTEK® MVB** penetrates into the substrate to reduce moisture vapor transmission and improve surface alkalinity.

Effective over the following substrates:

- freshly-poured/green concrete
- properly prepared concrete
- cement backer board
- radiant heat flooring
- cement based terrazzo

Effective under the following floor coverings:

- vinyl/VCT
- rubber
- epoxy flooring systems
- engineered or solid hardwood
- porcelain, marble, granite or ceramic tile floor covering
- DRYTEK self-leveling cement underlayments and wear surfaces



PERFORMANCE CHARACTERISTICS

- Reduce surface alkalinity of concrete with pH levels as high as 14 down to 9 or below
- Reduce moisture vapor emission rate (MVER) as high as 25 lb down to 3 lb or below
- Easy to mix two-part kits are blue in color to clearly indicate full coverage
- Each one gallon kit covers 150 sq ft per coat*

Apply one coat at a dry film thickness of 6.4 mm if $RH \leq 92\%$ and $MVER \leq 14$ lbs
Apply two coats at a dry film thickness of 12.8 mm if $RH > 92\%$ or $MVER > 14$ lbs

- MICROBE BLOCKER antimicrobial protection inhibits mold and mildew growth and associated staining
- Can be applied over fresh “green” concrete (once substrate can be walked on)
- 10-year manufacturer’s warranty
- Non-blushing formula requires no solvent clean-up
- Non-flammable
- Low odor

* Coverage rates are approximate. Actual coverage will vary based upon substrate porosity, surface roughness, application technique, waste and/or other jobsite conditions.

Please visit www.drytek.com for the latest technical information.

BEFORE USING ANY DRYTEK PRODUCT:

- Read and understand the Product Information Sheet and Material Safety Data Sheet.
- Perform a mock-up to ensure product will perform as required
- Check www.drytek.com for any technical bulletins or updated information about the product and its application
- Contact your local DRYTEK TECHNICAL SALES REPRESENTATIVE with any questions.

DRYTEK™ MVB INSTALLATION INSTRUCTIONS:**A. TEST SUBSTRATE SURFACE AND DETERMINE COVERAGE RATES**

1. ASTM F 1869: Perform a Dynamic Condition Test to determine Moisture Vapor Emission Rate (MVER). MVER tests must be conducted in accordance with the latest edition of ASTM F 1869, "Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride."
2. ASTM F-2170: Perform a Static Condition Test to determine Percent Relative Humidity (RH). RH Tests must be conducted in accordance with the latest edition of ASTM F-2170, "Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes."
3. ASTM F-710: Perform an Alkalinity Condition Test to determine the alkalinity (pH) at the surface of a concrete slab must. Alkalinity Tests must be conducted in accordance with the latest edition of ASTM F 710 "Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring".
4. DETERMINE COVERAGE RATE: The results of the above tests will indicate whether one coat or two coats of **DRYTEK® MVB** are required.
 - ONE COAT is required if RH is less than or equal to 92% AND MVER is less than or equal to 14 lbs.
 - TWO COATS are required if RH is greater than 92% OR MVER is greater than 14 lbs.

NOTE: Each one gallon kit of **DRYTEK® MVB** will cover ~150 sq ft at a dry film thickness of ~6.4 mils. When applying TWO COATS be sure that the first coat is fully cured and dried before installing the second coat. TWO COATS will yield a total dry film thickness of ~12.8 mils.

NOTE: TWO COATS are always required when applying over freshly poured or "green" concrete.

B. PREPARE FOR INSTALLATION

1. PREPARE SURFACE: Clean substrate to eliminate dust, dirt, oil, grease, paint or any contaminants which may inhibit bonding. Mechanically clean weak or contaminated surfaces by shot blasting or scarifying. Do not use chemicals to clean the substrate. Surfaces must have a concrete surface profile of CSP 2-3 as defined by ICRI (International Concrete Repair Institute, Guideline No. 03732).
2. CHECK CONDITIONS: Ensure substrate maintains minimum temperature of 40° F (4° C) during the application and the ambient temperature is maintained between 40-90° F (4-32° C) during and 24 hours after application. **DRYTEK® MVB** kits should be at a minimum temperature of 60° F (15° C) at time of mixing.
3. GRID JOBSITE: To achieve optimal coverage and proper applied material thickness, the jobsite should be laid out in 150 sq ft area "grids". A one gallon kit of **DRYTEK® MVB** should be staged in each grid area to ensure smooth workflow.
4. REQUIRED TOOLS: Slow speed industrial drill (< 150 RPM) fitted with a 3" diameter (or larger) mixing blade. Short 3/8" nap rollers. Nylon bristle deck brush.

C. MIX MATERIAL

1. PREMIX PART B (HARDENER): Open the larger container of the two-part kit and pre-mix using a slow speed drill (< 150 RPM), fitted with a blade that is at least 3" in diameter until. Scrape the sides and bottom of the container when mixing to ensure a complete mix.
2. PREMIX PART A (RESIN): Open the smaller container of the two-part kit and pre-mix using the wooden stick provided. Scrape the sides and bottom of the container when mixing to ensure a complete mix.
3. MIX PART A & PART B: After each container has been thoroughly mixed, add PART A into the large container of PART B while continuously mixing with the drill. Use the wooden stick provided to scrape all of PART A into the PART B container. Mix for approximately one minute until a uniform light blue color with no streaks is obtained. Do not over mix, as the pot life will be reduced.

NOTE: Do not mix partial batches, mix full kits only. Do not dilute components or add any additional materials to the A/B mix.

D. APPLY MATERIAL

1. POUR: Pour mixture onto floor. Ensure optimal coverage by using contents of one mixed kit per 150 sq ft area grid.
2. SPREAD: Use short 3/8" nap roller to uniformly coat the floor surface area. A uniform blue color will indicate a uniform coat.
3. BRUSH (if required): Use a nylon bristle deck brush to work the material into surface imperfections or pin holes.
4. CURE: Allow a 6 hour minimum cure time. The material will be cured when it is tack free to the touch. Cure time may vary due to job site temperature and humidity.
5. APPLY COAT TWO (if required): Once material is tack free a second coat of **DRYTEK MVB** may be applied if required.
6. INSTALL FLOOR GOODS: Once material is tack free; primers, patches, underlayments, and/or floor good adhesives may be applied per manufacturer's instructions.

NOTE: **DRYTEK® MVB** should be installed BEFORE installing any patching or leveling products. After installing **DRYTEK® MVB** surfaces may be patched by directly applying **DRYTEK® SKIMCOAT** or leveled by applying **DRYTEK® PRIMER** and a **DRYTEK® SELF-LEVELING CEMENT** per product instructions.

E. CLEAN UP

1. Immediately clean all tools and equipment with soap and water.

NOTE: Once **DRYTEK® MVB** hardens it can be removed by scraping, however care should be taken not to damage surfaces.

LIMITATIONS

- Maximum MVER 25 lbs
- Maximum pH is 14
- Maximum RH is 99%
- Do not apply over standing water

NON-DYNAMIC CRACKS/JOINTS: For cracks and joints with no movement (Non-Dynamic) - remove existing sealant and debris. Coat all surfaces of the cavity walls with **DRYTEK® MVB** using a paint brush. Once cured, patch the area with **DRYTEK® SKIMCOAT** or **DRYTEK® 8400**.

DYNAMIC CRACKS/JOINTS: For cracks and joints with movement (Dynamic) - remove existing sealant and debris. Coat all surfaces of the cavity walls with **DRYTEK® MVB** using a paint brush. Once cured, fill the joint with sand leaving 1/8" to 1/4" at the top. Fill remainder of joint with a urethane sealant.



WARNING: DRYTEK® MVB is for professional use only. Wear eye and skin protection. If eye contact occurs, immediately flush thoroughly with water for 15 minutes and get medical attention. Do not ingest. If ingested and any discomfort occurs, call physician. **Keep out of reach of children.** For more information and Material Safety Data Sheets please visit www.drytek.com