

## 100 % Solids Moisture Vapor Barrier Primer

### **TDS AND APPLICATION**

#### **DESCRIPTION:**

S3 125 MVB Primer is a two component, 100% solids epoxy moisture remediation primer, formulated to reduce moisture vapor created in either green or old concrete. S3 125, with an ASTM E96 perm rating of .08 can be applied at any time after 24 hours of the concrete being poured, eliminating the traditional 28-day cure period. This remediation primer forms a resilient base coat for the installation of epoxy, LVT, carpet, vinyl tiles, sheet goods and wood flooring system. S3 125 MVB Primer will reduce a moisture vapor emission rate from 25 pounds to less than 3 pounds as per the ASTM F1869 Calcium Chloride Test.

## **FEATURES & BENEFITS:**

- Mitigates moisture in subfloors with up to 25 lbs. MVER per ASTM F1869 and/ or relative humidity (RH) up to 100%, per ASTM F2170
- Surface Alkalinity of Concrete can be up to 14 pH
- Apply primer up to 100% RH, no standing water
- Can Be Applied to Green Concrete 24 hours after initial pour
- Low Odor/Solvent Free/V.O.C. Compliant
- U.S.D.A/C.F.I. Compliant
- Semi-Gloss Appearance
- Applied with Squeegee or Roller
- Meets ASTM C-884 Compatibility with Concrete
- Extended working time allows the trapped air to escape and ensures film integrity.
- Good Chemical Resistance
- Fast Turnaround Times (4–6-hour tack free at 73°F)
- Eliminates the 28-Day cure waiting period
- Excellent Adhesion to Clean, Sound, Damp Concrete
- Made with Materials Produced in North America
- Complies with SCAQMD 1113

## **Applications**

- As a moisture barrier primer over etched (S3 Surface Prep EXT) or mechanically profiled concrete (CSP 3)
- Moisture Barrier Primer for Epoxies, Adhesives, Wood, Tile, Sheet Goods, LVT and Carpeting
- Moisture Remediation Primer for Concrete
- Primer and/or Bedding Grout for Acid Brick or Ceramic Tiles
- As a Sealer to Help Prevent Oil and Grease from Penetrating into Concrete
- As a "Curing" Primer for Green Concrete
- As a Stand-Alone Sealer/Topcoat





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## **PRODUCT DETAILS:**

Packaging	21.2 oz (627mL) Dual-cartridge tubes
Color packaged	Light brown
Color cured	Opaque brown
Ratio by volume	1:1
Shelf Life	12 months in unopened containers
Gel time @ 70F	2 minutes
Tack free time @ 70F	6 minutes
Return to service time @ 70F	15 minutes
Ready to grind wait time @ 70F	<45 minutes
Solids content	100%
Shore D hardness	74
Application Temperature	40-90F
VOC Content	0 g/L
Viscosity	60-100cps

## SURFACE PREPARATION

ALL substrates must be clean, sound, and have a minimum 250 psi tensile bond strength when tested per ASTM D4541. Be sure concrete is free from oil, grease, paint, or any contaminants that would act to prohibit adhesion. Do not apply to concrete that has hardeners, curing agents, or densifiers, without first checking compatibility and adhesion. \$3 125 MVB should not be applied over slabs subject to Hydrostatic Pressure, please consult manufacturer for solutions.

MOISTURE VAPOR TESTING: Prior to application of 125 MVB, test for concrete moisture vapor emission rate using a calcium chloride test kit (ASTM F-1869-11), perform Relative Humidity test (ASTM F-2170-11) and a pH test (ASTM F 710-11). These results will help determine if S3 MoistureShield™ is required or MRP will be required based on the potential for further mitigation or bonding requirements.

**CONCRETE FINISH:** S3 125 MVB is designed to go over S3 Surface Prep EXT<sup>™</sup> or profiled concrete. Profile can also be achieved by shot blasting to create a CSP of 3. Optimal adhesion and prep is a min of CSP 2 and ideal is a CSP of 3 both are required. Recommended to use S3 Surface Prep EXT.

**NEW CONCRETE SYSTEM SOLUTION:** \$3 125 MVB is designed to go direct to GREEN concrete, applied in approximately 24 hours from fresh pour, or when a person can walk on the concrete surface without marring it.





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## MIXING & APPLICATION

First, pre-mix the B-side to integrate fillers that have settled to the bottom of the pail. Best results are achieved with plastic paint mixer shown below, that quickly loosen sediment from the bottom of the pail. Once sediment is loosened off the bottom of the pail, a high-speed hand drill will allow integration of the fillers into the liquids. Scrape bottom and corners of the pail with a paint stick to help loosen all material. Once fillers are off the bottom, they will integrate quickly using a high-speed hand drill and the paint mixer as shown below. Once B side fillers are mixed, slowly add part A to part B, and continue mixing with the same high-speed hand drill until homogenous mix is obtained and uniform consistency. Sufficient mixing is typically achieved in 1-2 minutes, make sure mixture looks completely integrated.

**WRONG** Paint Mixing Blade:



CORRECT 3" diameter Paint Mixing Blade:



After mixing, distribute the liquids in ribbon fashion over designated area that can be rolled out immediately. The use of 1/8" V notched squeegee, wait 20 mins and back roll with an 18" wide roller (1/4-3/8 nap) 90 degrees from squeegee is recommended for best results. \$3 125 MVB must be applied in a consistent film, at a rate of 80-100 ft² / gallon (depending on porosity) and should not be stretched beyond that rate. While rolling, you should not feel a pull or drag on the nap roller. The best practice is to layout application grids equal to application rate, to ensure proper coverage. Be sure to work material into all voids and pinholes to ensure mitigation performance. Allow to cure to tack free surface before trying to recoat and/or application of finished flooring. NOTE: must recoat or apply materials within 36-hour window from the initial cure. Do not leave material in bulk in the bucket, a thermal reaction occurs. IMPORTANT: spread when mixing is complete.

For harsh conditions, you have three options, First, Surface Prep EXT<sup>™</sup> for high pH or prior usage of chemical abatement products. Second, MoistureShield<sup>™</sup> in combination with Surface Prep EXT<sup>™</sup> as a potential Hydrostatic solution.





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### **INSTALLATION NOTES**

Any surface should be completely free from oils and greases to prevent proper adhesion of 125 MVB. Use a high-quality industrial degreasing product to properly remove any oils or greases. Smooth, shiny surface should first have its gloss knocked down to ensure proper adhesion of self-leveling products and some adhesives. Use simple methods, such as, sanding discs to abrade glossy surfaces prior to installation of secondary applications. 125 MVB is designed to allow most quality adhesives to bond to it and pass the carpet tile and LVT adhesive pull test.

## **CAUTION/NOTES**

Please see warranty documents that detail installation and product warranties related to \$3 125 MVB

## **CLEAN UP**

S3 MVB, while still wet, can be cleaned up with a scouring pad and warm soapy water. If allowed to set, then mechanical cleaning or the application of a suitable paint stripper is required.

Dispose of excess material in accordance with local, state, and federal regulations.

### **STORAGE**

S3 125 MVB should be stored in closed containers, between temperatures 50-90°F. Can manage a single freeze thaw experience, must bring containers to 73°F using no heat. Once reached open container and mix thoroughly until consistent appearance.

## SAFETY PRECAUTIONS

#### **HEALTH CONSIDERATIONS**

As with all epoxies, good hygienic habits must be observed, and the wearing of protective clothing and gloves is advised. Before using any \$3 Surface Solutions, LLC.. products, please read and follow the product Safety Data Sheet (SDS). Use this product only as directed. Keep out of the reach of Children.

#### FOR YOUR PROTECTION

The data, statements and recommendations set forth in this product information sheet are based on research and development work which has been carefully conducted by \$3 Surface Solutions, LLC. and we believe such data, statements and recommendations will serve as reliable guidelines. This product is subject to numerable uses under varying conditions over which we have no control, and accordingly, we do NOT warrant that this product is suitable for any use. Users are advised to test the product in advance to make certain it is suitable for their installation conditions and uses.





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### **DISCLAIMER**

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### WARRANTY

All products manufactured by us are warranted to be first class material and free from defects in material and workmanship. Liability under this warranty is limited to the net purchase price of any such products proven defective, or, at our option to the repair or replacement of said products upon their return to us transportation prepaid. All claims hereunder on defective products must be made in writing within 30 days after the receipt of such products in your plant and prior to further processing or combining with other materials and products. WE MAKE NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE SUITABILITY OF ANY OF OUR PRODUCTS FOR ANY PARTICULAR USE, AND WE SHALL NOT BE SUBJECT TO LIABILITY FROM ANY DAMAGES RESULTING FROM THEIR USE IN OPERATIONS NOT UNDER OUR DIRECT CONTROL. THIS WARRANTY IS EXCLUSIVE OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND NO REPRESENTATIVE OF OURS OR ANY OTHER PERSON IS AUTHORIZED TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF OUR PRODUCTS. THIS WARRANTY DOES NOT COVER DAMAGE DUE TO PHYSICAL IMPACTS, HYDROSTATIC PRESSURE, FORCE MAJURE, ACTS OF GOD, OR ANY OTHER CAUSE OUTSIDE OF S3 SURFACE SOLUTIONS'S KNOWLEDGE.

