



# MOISTURE VAPOR BARRIER

FOR MOISTURE MITIGATION

2 COMPONENT, 2 TO 1 MIX RATIO EPOXY

## Physical Properties

**Volumetric Ratio:**.....2 to 1  
**Coverage:**  
Industrial Floors . . 100 Sq. Ft./Gal@16mil

**Application Temperature:**... 50 - 95°F

**Pot life** ..... 15-20 minutes  
**Working Time on Floor:** . . . 20-30 min  
**Recoat:** .....24 hours  
**Shelf life:** ..... 12 months

**Color - Clear/Amber**

**NOTE: For Warranty purposes MVB15 cannot be Accelerated, pigmented, applied at more than 100 SF/Gal, Surface MUST be shot blasted, cannot be broadcast into (Sand - quartz-flake), and slab must be moisture tested at least 1 week prior to application and results documented.**

## Packaging

**1.5 Gallon Kits:**  
Part A .....1 gal.  
Part B..... 1/2 gal.

**15 Gallon Kits:**  
Part A .....10 gal.  
Part B.....5 gal.

## PRODUCT DESCRIPTION

E2U MVB15 is VOC-compliant, two component, 100% solids epoxy system for concrete substrates. MVB15 is a moisture vapor barrier that reduces the permeance of moisture vapor to levels that are acceptable for the application of flooring installation systems and floor coverings. It is compatible with most flooring adhesives and cementitious underlayments, including all E2U adhesives, primers and underlayments.

### Understanding Moisture Vapor:

Often referred to as breathability, vapor permeability describes a material's ability to allow water vapor to pass through it. Unlike bulk water holdout, which refers to water in its liquid form, vapor permeability concerns water in its gas form. E2U MVB15 is a VAPOR barrier (gas form) not a WATER barrier (liquid form). If you have any questions regarding the use of a vapor barrier please contact your E2U sales representative or local E2U distributor.

## ADVANTAGES

- Compatible with all E2U flooring adhesives and underlayments
- 2 to 1 mix ratio by volume
- 100% Solids Formulation
- Low odor makes it ideal for interior use
- One coat application
- Block moisture vapor emissions pressure up to 15 lbs

## WHERE TO USE

### MOISTURE VAPOR BARRIER APPLICATION

- Concrete floors and slabs with a compressive strength of at least 2500 psi
- Where moisture vapor transmission of substrate falls between 3 lbs and 15 lbs per 1000 ft<sup>2</sup> over 24 hours using calcium chloride test per ASTM F1869
- Where the relative humidity is between 75% and 90% per ASTM F2170 or F2420, as outlined below:

RH LEVEL	90%
<b>NEW CONSTRUCTION*</b>	
Above Grade	
On Grade	
Below Grade	•
<b>EXISTING CONSTRUCTION</b>	
Above Grade	•
On Grade	•
Below Grade	•

- Where vapor drive of porous concrete surfaces needs to be controlled
- Where low-odor applications are desired

## SURFACE PREPARATION

### Moisture Vapor Barrier Application:

1. Ensure that floors are structurally sound and cured a minimum of 28 days.
2. Follow all standard ACI recommendations for surface preparation. Remove all contaminants such as dirt, oil, paint, wax, grease, bitumens, and forming, curing, and release agents, efflorescence, or other foreign matter.
3. Repair concrete and install joint sealants and fillers as necessary. Use patching materials not susceptible to moisture.
4. Mechanical surface profiling is the mandatory method by means of shotblasting for both new and existing floors. It is the only acceptable preparation method where warranties are issued. Acid etching is NOT allowed. Mechanically profile the floor to medium-grit sand-paper texture (CSP 3 or 4).
5. Measure MVT (moisture vapor transmission) after shotblasting using a calcium chloride test per ASTM F1869 instructions, or a relative humidity test per ASTM F2170 or F2420
6. If the moisture vapor transmission tests show that a rate of 3 lb/1000 ft<sup>2</sup> in 24 hours or a relative humidity of 75% is exceeded, then E2U MVB15 is needed prior to the application of flooring adhesives and underlayments. Note: It is recommended that a test area is completed prior to applying MVB15 on the entire floor to ensure that water vapor levels are sufficiently suppressed to allow floor covering installations.

## MIXING

The ratio of MVB15 is 2 to 1. That is, two parts A (resin) to one part B (hardener). Mix the following with a drill and mixing paddle. Note: If using a drill mixer, use a low speed (not to exceed 300 rpm) to prevent air entrapment.

1. Premix 1 gallon of Part A for 30-45 seconds.
2. Add 1/2 gallon of Part B and mix for another 60-90 seconds.
3. E2U Epoxy is designed to be immediately poured on the floor. Leaving mixed product in the container will greatly reduce pot life. Once poured out on the floor, 20-30 minutes of working time can generally be expected.

## APPLICATION INSTRUCTIONS

1. The ambient and surface temperature must be between 50 and 90° F at the time of application, and temperatures should not rise above this range during application or while the material is curing. Ambient relative humidity percentage should not exceed 80% at the time of application. Note: Higher temperatures will shorten the working and cure time of this material.
2. For application as a moisture vapor barrier, spread the mixed material onto the substrate with a notched squeegee at a rate of up to 100 square feet per gallon. Place the epoxy to permit a continuous operation by applying the second mix immediately behind the first mix. Apply to the entire surface, ensuring there are no dry areas.
3. Allow MVB15 to become tack free (approximately 8-12 hours under normal conditions) before applying another flooring installation product. After 24 hrs surface must be sanded and latence free prior to applying next coat.
4. If cementitious underlayment are required for the floor covering installation, prime the tack free surface of MVB15 with primer prior to installing the underlayment. The MVB15 surface must be free of any contaminants such as dust prior to applying primer to ensure proper adhesion.
5. Flooring adhesives may be applied directly to the tack free MVB15 surface if no underlayment is required.
6. The MVB15 creates a non porous surface when cured. Apply flooring installation materials accordingly over the top.

## CLEAN UP

Clean tools and equipment with acetone or xylene immediately after using. Wash hands and skin with soap or industrial hand cleaner, not with solvent. Cured material must be removed mechanically.

## HEALTH AND SAFETY INFORMATION

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling MVB15. Before working with these products, you must read and become familiar with the available information on their hazards, proper use, and handling. This cannot be overemphasized. Information is available in several forms, e.g., material safety data sheets and product labels.

### PRECAUTIONS

Use only with adequate ventilation. Avoid contact with skin, eyes and clothing. Keep container closed when not in use. Wash thoroughly after handling. DO NOT take internally. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations.

### FIRST AID

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if

swallowed, SEEK IMMEDIATE MEDICAL ATTENTION. Refer to Material Safety Data Sheet (MSDS) for further information.

### PROPOSITION 65

This product contains material listed by the state of California as known to cause cancer, birth defects, or other reproductive harm.

### VOC CONTENT

0 g/L or 0 lbs/gal less water and exempt solvents when components are mixed and applied per E2U instructions..

### WARRANTY

E2U products are warranted for one year after date of purchase. Please refer to the Limited Material warranty for additional clarification.

**KEEP OUT OF REACH OF CHILDREN**