

# **MOISTURE VAPOR BARRIER**

FOR MOISTURE MITIGATION 2 COMPONENT, 2 TO 1 MIX RATIO EPOXY

## 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 f looring 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.

## COLOR

### NOTE

In order to receive a warranty from a manufacture, Shot Blasting is required as a preparation method, MVB15 must be applied in Clear @100 sq.ft/gal, MVB15 cannot be pigmented nor accelerator cannot be used.

# **PACKAGING**

PACKAGING	
1.5 GALLON KITS:	
PART A	1 GAL.
PART B	1/2 GAL.
3 GALLON KITS:	
PART A	2 GAL.
PART B	1 GAL.
15 GALLON KITS:	
PART A	10 GAL.
PART B	5 GAL.

# **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 high speed (1,000 to 1,500 rpm) to ensure thorough mixing.

- 1. Premix Part A for 30-45 seconds.
- 2. Add Part B and mix for another 60-90 seconds.
- 3. E2U MVB15 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.

# **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 ft2

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

RH LEVEL	90%
NEW CONSTRUCTION*	
Above Grade	
On Grade	_
Below Grade	
EXISTING CONSTRUCTION	
Above Grade	•
On Grade	•
Below Grade	•

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

# PRODUCT DATA

Volumetric Ratio —	2 to 1
Solids —	100%(+/- 1%)
Standard Application —	100 sqft/gal.
Application Temperature ——	55°-90°F
Thinning —	DO NOT THIN
Pot Life	3 - 5 min.
Working Time on Floor	20-30 min.
Cure Time	12-24 hrs
Full Cure	5-7 days
Shelf Life	12 months
USDA Food & Beverage	Meets Req.
Critical Re-Coat Time	— 10 to 12 hrs depending on Temperature



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# SURFACE PREPARATION

### Moisture Vapor Barrier Application:

- 1. Ensure that floors are structurally sound and cured a minimum of
- 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. Shot Blasting is required for both new and existing floors preparation. It is the only acceptable preparation method where warranties are issued. Acid etching is not approved. 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 ft2 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

# APPLICATION INSTRUCTIONS

- 1. The ambient and surface temperature must be between 55 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 12-16 hours under normal conditions) before applying another flooring installation product. After 20 hrs surface must be sanded and laitence 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.

# 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.

# **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.

### **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

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 IMMEDI- E2U products are warranted for one ATE MEDICAL

ATTENTION. Refer to Safety Data Sheet (SDS) 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 KEEP OUT OF REACH OF CHILDREN

0 g/L or 0 lbs/gal less water and

solvents when components are mixed. and applied per E2U instructions.. WARRANTY

after date of purchase. Please refer to

Limited Material warranty for additional clarification.