

### PRODUCT DESCRIPTION

#### PRODUCT DATA

MOISTURE VAPOR BARRIER is VOC-compliant, two component, 100% solids epoxy

system for concrete substrates. MOISTURE VAPOR BARRIER 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 AXIS 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. MOISTURE VAPOR BARRIER 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 AXIS.

**Volumetric Ratio** 2 to 1 Solids 100%(+/- 1%) Coverage 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 **Critical Re-Coat Time** 10 to 12 hrs depending on Temperature **Shelf Life** 12 months **USDA Food & Beverage** Meets Req.

#### AVAILABLE COLORS

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.

#### WHERE TO USE

#### MOISTURE VAPOR BARRIER APPLICATION

- Concrete floors and slabs with a compressive strength of at least
- 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
- Where vapor drive of porous concrete surfaces needs to be
- controlled
- Where low-odor applications are desired

### **ADVANTAGES**

- Compatible with all AXIS 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

#### 90% REFERENCE

**NEW CONSTRUCTION\*** 

**Above Grade** 

On Grade

**Below Grade** 

**EXISTING CONSTRUCTION** 

**Above Grade** 

**Below Grade** 

On Grade

# **PACKAGING**

1.5 GALLON KITS

PART A 1 GAL PART B 0.5 **GAL** 

3 GALLON

PART A 2 GAL PART B 1 GAL

**15 GALLON KITS** 

PART A **10 GAL** PART B 5 GAL



# **CONCRETE PREPERATION**

#### **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.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 installations.

### **HEALTH AND SAFETY INFORMATION**

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling MOISTURE VAPOR BARRIER. 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.

#### **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 MOISTURE VAPOR BARRIER 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 MOISTURE VAPOR BARRIER with primer prior to installing the underlayment. The MOISTURE VAPOR BARRIER 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 MOISTURE VAPOR BARRIER creates a non porous surface when cured. Apply flooring installation materials accordingly over the top



# **CONCRETE PREPERATION**

#### **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.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 installations.

### **HEALTH AND SAFETY INFORMATION**

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling MOISTURE VAPOR BARRIER. 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.

#### **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 MOISTURE VAPOR BARRIER 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 MOISTURE VAPOR BARRIER with primer prior to installing the underlayment. The MOISTURE VAPOR BARRIER 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 MOISTURE VAPOR BARRIER creates a non porous surface when cured. Apply flooring installation materials accordingly over the top



# **CONCRETE PREPERATION**

#### **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.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 installations.

### **HEALTH AND SAFETY INFORMATION**

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling MOISTURE VAPOR BARRIER. 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.

#### **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 MOISTURE VAPOR BARRIER 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 MOISTURE VAPOR BARRIER with primer prior to installing the underlayment. The MOISTURE VAPOR BARRIER 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 MOISTURE VAPOR BARRIER creates a non porous surface when cured. Apply flooring installation materials accordingly over the top



MIXING CLEAN UP

The ratio of MOISTURE VAPOR BARRIER 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.MOISTURE VAPOR BARRIER 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. 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.

#### WARNING! SLIP AND FALL PRECAUTIONS

OSHA and the American Disabilities Act (ADA) have now set enforceable standards for slipresistance on pedestrian surfaces. The current coefficient of friction required by ADA is .6 on level surfaces and .8 on ramps. AXIS COATINGS recommends the use of angular slip-resistant aggregate in all coatings or flooring systems that may be exposed to wet, oily or greasy conditions. It is the contractor and end users' responsibility to provide a flooring system that meets current safety standards. AXIS COATINGS or its sales agents will not be responsible for injury incurred in a slip and fall accident.

#### **Handling Precautions**

Use only with adequate ventilation. Appropriate cartridge-type respirator must be used during application in confined areas. Avoid contact with skin. Some individuals may be allergic to epoxy resin. Protective gloves and clothing are recommended.

#### WARRANTY

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

