

FloroPoxy MVT-99 Moisture Vapor Transmission Mitigating Primer

Product Description—FloroPoxy MVT-99 Primer is a two component, 100% solids, alkali resistant epoxy prime coat that provides outstanding protection to concrete surfaces subjected to Moisture Vapor Transmission (MVT).

Typical Uses, Applications—Ideally suited for priming in commercial, industrial and institutional applications where MVT may be of concern, such as:

- Aircraft hangars
- Chemical and waste treatment plants
- Pharmaceutical and biotechnology facilities
- Schools and universities
- Hospitals and healthcare campuses
- Manufacturing plants and warehouses
- Retail, restaurant and office buildings

Product Advantages—

- Highly resistant to MVT, a condition found in certain concrete substrates
- Zero V.O.C. and solvent free
- For interior use and low odor

Packaging—

- 2.9 Gal (10.98 L) Pail Set
- 5.5 Gal (20.82 L) Pail Set
- 146 Gal (552.67 L) Bulk Set
- 746 Gal (2,823.92 L) Bulk Set

Storage—Store all containers at 63° F to 90° F (17.2° C to 32.2° C), tightly sealed and out of direct sunlight.

Coverage—

For Maximum 24 lbs. and/or 99% RH MVT Protection:

On concrete that is at least 28 days old, apply 1 coat at an average spread rate of 94 SF/gal (2.31 m²/L) for a total of 17 mils (431.8 microns), in strict accordance with application instructions.

On green concrete cured less than 28 days, apply 1 coat at an average spread rate of 73 SF/gal (1.79 m²/L) for a total of 22 mils (558.8 microns), in strict accordance with application instructions.

For Maximum 15 lbs. and /or 85% RH MVT Protection:

Apply 1 coat with a spread rate of 133.3 SF/gal (3.27 m²/L) for a total of 12 mils (304.8 microns), in strict accordance with application instructions.

Note: Apply FloroPoxy MVT-99 Primer as a Clear to get the full resistance to Moisture Vapor Transmission. Pigmenting reduces the resistance of FloroPoxy MVT-99 Primer and voids the warranty.

Required MVT Testing—Start by using either the Calcium Chloride Test, ASTM F1869 or the Relative Humidity Test, ASTM F2170.

If initial test results are either less than 15 lbs./ 1,000 SF/ 24 hours using the Calcium Chloride Test, or below 85% RH using the Relative Humidity Test, continue testing with either method, repeating required procedures every 1,000 SF.

If initial test results are either higher than 15 lbs./1,000 SF/ 24 hours using the Calcium Chloride Test, or greater than 85% RH using the Relative Humidity Test, then *both* tests must be performed every 1,000 SF.

Florock strongly recommends core samples be taken and lab-tested for penetration of the slab by any sealers, oils, adhesives, or other bond breakers.

Florock does not warranty Alkali Silica Reaction (ASR) or other concrete problems. Taking core samples through the depth of the slab can help indicate the absence or failure of a moisture barrier or the presence of aggregate between the membrane and slab.

Florock warrants product penetration and bond only where cores have been tested by an independent laboratory and determined to be free of impediments to bond and penetration of product.

Surface Preparation—New concrete should have a minimum 7 day cure and preferably a broom-swept finish prior to coating. In the case of older concrete flooring, remove all surface oils, paint, dust and debris. Prior to coating, ensure the surface is clean, bare, passes the water drop test and that all surface defects have been repaired.

Concrete should be shot-blasted to a minimum CSP-3 profile. MVT testing must be performed before applying FloroPoxy MVT-99 Primer.

Note: FloroPoxy MVT-99 Primer should not be applied when floor temperature is above 90° F (32° C) or below 50° F (10° C), or when within 5° F (2.5° C) of the dew point. Product must be kept between 63° F (17.2° C) and 83° F (28.3° C) during application.

Mixing Instructions— Always premix FloroPoxy MVT-99 Part A to ensure a homogenous consistency.

Note: Product has an uneven mix ratio of 2.1:1. Follow mixing instructions carefully. Florock does not recommend splitting kits.

For 2.9 gal. (10.96 L) and 5.5 gal. (20.82 L) kits, premix Part A. Then combine entire contents of premixed Resin Part A with entire contents of Activator Part. Blend thoroughly for 3 minutes using a low speed mechanical mixer with a Jiffy® blade. Transfer the mixture from the batch container to a transport container. Remix and immediately pour entire contents from the transport container onto floor. Retaining mixture in the bucket will shorten the pot life.

For bulk packaging, measure out 3 gallons (11.34 L) of Part A into a clean, dry 5 gallon mixing pail. Premix Part A. Pour off 1 gallon (3.79) plus 56 ounces (1.66 L) of Part B into a separate container to ensure correct amount. Then pour Part B into the premixed Part A. Blend thoroughly for 3 minutes using a low speed mechanical mixer with a Jiffy® blade. Transfer the mixture from the batch container to a transport container. Remix and immediately pour entire contents from the transport container onto floor. Retaining mixture in the bucket will shorten the pot life.

Note: Correct mixing is essential for product performance. Do not short mix, alter the mix ratio or use dirty or improper mixers when blending product.

Application for Maximum 24 lbs. and/or 99% RH MVT Protection—

On concrete that is at least 28 days old, mix per above. Then, using a 1/8" to 3/16" (3.1 to 4.8 mm) v-notched squeegee, apply at a rate of 94 SF/gallon (2.31 m²/L). Backroll with a 3/8" (9.5 mm) nap roller immediately after spreading.

Blended Components	
Blended Ratio	2.1 : 1
Induction Time	None
Pot Life, 15 lb. (6.8 kg) mass	15 - 25 min.
Recommended Spread Rate	Varies
Cure Time at 70° F (21° C) @ 50% RH and Average Spread Rate of 17 Mil (431.8 Microns)	
Set to Touch	8 hours
Minimum Recoat	10 hours
Maximum Recoat	24 hours
Floor & Air Temperature Limitations During Installation	50° F - 95° F (10° C - 35° C)
Clean-Up Solvent	Xylene
N.V.W.	100%
N.V.V.	100%
V.O.C.	0 gpl
Recommended Thinner	None

On green concrete cured less than 28 days, mix per above. Then, using a 1/8" to 3/16" (3.1 to 4.8 mm) v-notched squeegee, apply at a rate of 73 SF/gal (1.79 m²/L). Backroll with a 3/8" (9.5 mm) nap roller immediately after spreading.

Note: If outgassing, pinholes or fisheyes occur, re-prepare area and apply an additional coat of MVT-99 Primer to address. Outgassing or pin holes must be remedied.

Application for Maximum 15 lbs. and/or 85% RH MVT Protection—

Mix per above. Then, using a 1/8" to 3/16" (3.1 to 4.8 mm) v-notched squeegee, apply at a rate of 133.3 SF/gallon (3.27 m²/L). Backroll with a 3/8" (9.5 mm) nap roller immediately after spreading.

FloroPoxy MVT-99 Primer Certification Board—

A certification board will be provided by Florock. This board is to be coated with FloroPoxy MVT-99 at the same time as the floor, allowed to cure and then returned to Florock as soon as possible after project installation, in order to validate warranty.

Note: The cure time will vary with conditions. Allow a minimum of 8 hours and a maximum of 24 hours before next step.

Note: Consult your Florock representative for compatible systems. Pigmenting FloroPoxy MVT-99 voids the product warranty.

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Application of Coatings Over FloroPoxy MVT-99 Primer—Once FloroPoxy MVT-99 Primer has been applied and cured for a minimum of 8 hours, inspect floor for outgassing, pinholes or fisheyes. If any are found, repair areas before proceeding with the subsequent application of the finish coating system.

Florock FloroPoxy Epoxy, Florock FloroThane and FloroWear Urethanes and FloroSpartic Polyaspartic products may be applied directly to FloroPoxy MVT-99 Primer within the recoat window.

Warranty—Florock offers a full one year warranty against material defects for the FloroPoxy MVT-99 Primer. In addition, Florock will guarantee the installation will not be adversely affected by MVT up to 24 lbs./1,000 SF and/or 99% Relative Humidity, when applied at a total 17 mils (431.8 microns) over 28 day old concrete, and 22 mils (558.8 microns) over concrete younger than 28 days old. Florock will guarantee the installation will not be adversely affected by MVT up to 15 lbs./1,000 SF and/or 85% Relative Humidity when applied at a total of 12 mils (304.8 microns).

This limited warranty is subject to the following conditions:

Florock products must be applied per application instructions on structurally sound and clean areas in which concrete meets acceptable industry standards as defined in ACI committee 201 reports (Guide to Durable Concrete). If the areas to which the products are applied now or in the future fail to meet these standards, this warranty is void.

This warranty shall be void if a cohesive substrate failure in concrete surfaces occurs, resulting in a delamination of the FloroPoxy MVT-99 Primer.

This warranty is void if Florock products are applied to improperly prepared substrates or if bond-inhibiting contaminants are present, preventing the proper performance/adhesion of the Florock products. Cracks and joints are not covered by this warranty.

This warranty shall be void if Florock instructions for coverage and surface preparation are not followed.

This warranty shall be void if any cracks develop

after the application of Florock products or leakage/Moisture Vapor Transmission occurs due to pin holes in the coating.

This warranty shall be void if the Florock system is installed by an applicator not approved/certified by Florock.

Calcium Chloride and/or Relative Humidity Tests must be performed before installation and recorded, and a Primer Certification Board must be submitted to Florock. Core testing may also be required. This warranty is void if MVT exceeds the Testing for concrete deficiencies and contaminates such as unreacted silicates, organic residues, A.S.R., etc., is the responsibility of the building owner and is recommended by Florock to help avoid product failures.

This warranty does not apply if products by other manufacturers are used in conjunction with Florock. Full specifications, statements of technical information and recommendations contained therein are based on tests believed to be reliable, but the accuracy or completeness thereof is not guaranteed. Seller's and Manufacturer's only obligation shall be to repair the defective areas due to the failure of Florock products. Neither Seller nor Manufacturer shall be liable for injury, loss or damage, direct or consequential, arising out of the use of, or the inability to use, the products. Before using, User shall determine the suitability of each product for his intended use and User assumes all risk and liability in connection therewith.

No statement or recommendation not contained herein shall have any force or affect unless in agreement signed by officers of Seller and Manufacturer.

The beneficiary of the warranty must provide Florock, 1120 W. Exchange Ave., Chicago, Illinois 60609, USA, a written notice within 30 days of the discovery of a claim under this warranty, in order to assert their right to any repair covered by this warranty.

ALL WARRANTIES ARE NULL AND VOID IF CUSTOMER HAS NOT PAID IN FULL, IN ACCORDANCE WITH SELLER'S PAYMENT TERMS.

Please read Safety Data Sheets before using product.

DISCLAIMER—

All preceding statements and recommendations are based on experience we believe to be reliable. The use or application of these products being beyond the control of the Seller or Manufacturer, neither Seller nor Manufacturer makes any warranty, expressed or implied, as to results or hazard from its use. The suitability, risk and liability of a product for an intended use shall be solely up to the User.