



Moisture Vapor Barrier Fast Cure TDS

PRODUCT TECHNICAL DATA SHEET

PPC MVB FC is a transparent two-component epoxy, comprising 100% solids with a mild scent and low viscosity. It is specially designed as a moisture barrier coating for treating both new and existing concrete floors exhibiting elevated moisture levels and high pH. Serving as a one-coat moisture vapor barrier coating, PPC MVB FC proves versatile for different concrete applications. Its low viscosity formulation not only facilitates enhanced penetration into the concrete for superior substrate adhesion but also ensures a greater ability to seal and block moisture compared to conventional epoxy flooring products. When **Premera FPI Fusion Primer** is included, minimal surface preparation is required on sound and stable surfaces, no shotblasting, no grinding or scarifying is required.

WHERE TO USE

- Pharmaceutical
- Manufacturing & Warehouse Floors
- Laboratories
- Mechanical Rooms
- Animal Care Areas
- Shop Floors
- Loading Docks
- Pharmaceutical Plants
- Retail Stores
- Multiple-Unit Housing
- Institution Facilities
- Excellent Moisture Blocker
- Underneath any Coatings Showing Concrete Contamination
- Underneath Various Floorings Such as Carpet, Wood, Rubber, Vinyl, Tile, & Linoleum/PVT

ADVANTAGES

- Essentially odorless and self-priming.
- 100% Solids, Low VOC, Low Odor
- Vapor Control for High Moisture and High pH Slabs.
- One-Coating Moisture Vapor Barrier
- Excellent Concrete Adhesion
- Standard and Fast Drying Times
- Low Viscosity for Deeper Concrete Slab Penetration
- Controlled Vapor Pressure up to 25lb. / 24 hr. / 1000 sq ft

THEORETICAL COVERAGE RATES

100 sq.ft per gallon at 16 WTF

PACKAGING & COLORS

Packaging: 3 Gallon and 15 Gallon Kits (on special order)
Colors: Clear

MIX RATIO

PPC Moisture Vapor Barrier FC mix ratio is 2A:1B, meaning two parts A (resin) to one part B (hardener) by volume.

SHELF LIFE AND STORAGE

(at 40°F to 100°F)

18 months in original unopened factory sealed containers. Protect from freezing. Store dry between 50-110°F (10-44°C).

PHYSICAL/CHEMICAL CHARACTERISTICS

Solids Content.....	100%
Gel time.....	15–20 min
Pot Life	15 min
Mix Ratio	Mix full units only
Application	32°F (0°C) min. / 86°F (30°C) max Temperature
Visual Appearance	High Gloss
Recoat Window.....	2 - 24 hours
Viscosity (A+B) @ 70F (21C)	1800 - 2200 cps
USDA Food & Beverage & CFIA.....	Meets the requirements
LEED V4.....	Compliant
Curing Details	
TACK FREE.....	45 Min
FOOT TRAFFIC	12 hours
HEAVY TRAFFIC:	24 hours
FULL CURE	3 days / 1/4 in (6 mm)
Thinner Recommended	Xylene
Bond Strength ASTM D454.....	500 psi (substrate rupture)
Compressive Strength.....	10,000 psi ASTM D695
Abrasive Resistance (ASTM D4060)	0.10 g (CS17, 1000g, 1000 cycles)
Tensile Strength ASTM D638	8,500 psi
Bond Strength ASTM D4541	500 psi (substrate failure)
Coefficient of Friction (ASTM D1894).....	0.5 – 0.7
Elongation (%), ASTM D638.....	6 - 7%
Fire Rating ASTM E84.....	Flame Spread 5 Smoke Developed: 94 (Class A)

OVERVIEW OF INSTALLATION STEPS

Mandatory Mockup: A 100-200 sq/ft mockup should be installed as a guide for installation and quality control panel days or weeks before the actual installation of the coating system. The mockup should be approved by an authorized representative of the Property Management for Slip Resistance, aesthetics, and functionality.

Surface Preparation: No grinding or surface profile is needed when **Premera FPI Fusion Primer** is used. Otherwise, surface must be clean, sound and dry. Prior to coating the floor all trowel marks and surface imperfections must be removed to produce a smooth and uniform surface.

** Times are approximate and will be affected by changing ambient conditions, especially changes in temperature and relative humidity.*

** The indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same mileage.*

Proper surface preparation is critical to ensure an adequate chemical bond to substrate. Substrates must be dry and free of all wax, grease, oils, contaminants, loose or foreign matter and laitance. Concrete should be cleaned and prepared using a shot blast machine or adequate grinding equipment to achieve a CSP-3 to CSP-4 profile as per ICRI guidelines. Compressive strength of concrete should be at least 3,500 psi (24 Mpa) @ 28 days and at least 215 psi (1.5 Mpa) in tensions at time of product application.

Cavities, cracks, and imperfections will be visible in the coating if the concrete is not properly repaired. Use **PPC Crack Repair Fast** to smooth out and fill any concrete voids, pinholes, or other imperfections on the surface. Once the material has hardened, correct any imperfections through diamond grinding.

Another option will be to use **PPC Polyurea Decking 95** as a grout coat to fill scratches, pinholes, or cracks over the concrete. Once the material is dry you can apply your next coating right on top of it (24 Hr recoat window)

Mixing: Maintain the temperature of both (A) and (B) components between 70°F and 80°F (20°C-25°C). Mix them separately to achieve a consistent texture. For a 3-gallon kit, pour (Side-B) into (Side-A) in a 3.5-gallon bucket. Thoroughly mix the contents until all components are fully integrated, and no streaking is evident. Avoid thinning the mixture. Precise measurement of each component is crucial for optimal product performance. Consider the beneficial technique of pouring from one container to the other (boxing) during mixing to ensure thorough blending. Mix for a duration of 2 minutes. Avoid unnecessary entrapment of air during mixing.

Application Equipment: The equipment required may vary depending on the system used. It typically includes a low-speed drill (operating at 450 rpm) with a Jiffy® type impeller mixing paddle, a disposable 3-inch brush for precise application, a 3/8-inch nap non-shedding roller with a phenolic core, and a rubber squeegee. Pouring, squeegeeing, and back-rolling are recommended techniques because Dip-n-Roll can be challenging for less experienced installers, potentially resulting in unsightly lap lines.

Application: Once you have thoroughly mixed all the components according to the instructions, promptly pour the mixture onto the surface in a ribbon. Evenly spread the material using a squeegee and assess the film thickness with a wet-film thickness gauge. It is crucial to perform back-rolling and then cross-rolling. Allow a minimum of 12 hours for drying before applying a recoat. (but not later than 24 hours). Light foot traffic may be permitted in 8-12 hours, light vehicle traffic in V, heavy traffic in 3 days.

FOR BEST RESULTS

- Always protect materials from excessive heat and cold, and pre-condition to room temperature, as necessary.
- Always apply at decreasing temperatures. Concrete is porous and traps air. During rising temperatures (typically in the morning), air expands and can cause gas release in the coating. It is safer to apply coatings in the late afternoon, especially for outdoor applications.
- Measure surface and ambient temperatures to ensure the material is only applied when temperatures are between 45°F and 86°F during placement and cure time.
- Regularly check wet film thickness with mil gauge and monitor consumption to ensure correct application rates are obtained.
- The proper application of this product is the sole responsibility of the end user. Job site visits by PPC representatives are only for the purpose of making recommendations, and do not assume any liability for supervision or quality control.

- Spray down **Premera T2 MCM** topcoat to provide superior resistance to harsh chemicals, abrasion, mold, mildew, moss, chlorides & salt spray, acid rain, UV damage, oxidation, animal & bird waste damage, gum, and graffiti.

LIMITATIONS:

Avoid contact with Part A and B as they may cause skin and/or eye irritation. In case of contact, immediately flush area with copious amounts of clean water for at least 15 minutes. Seek medical attention. Applicators should cover hands with impervious gloves. Wash hands thoroughly with soap and water after use, and before eating, smoking, etc.

LIMITED WARRANTY:

PPC warrants its products to be free of manufacturing defects and that they will meet PPC current published physical properties. PPC warrants that its products, when properly installed by a state licensed contractor according to PPC guide specifications and product data sheets over a sound, properly prepared substrate, will not fail for a period of 12 months. Seller's sole responsibility shall be to replace that portion of the product which proves to be defective. There are no other warranties by PPC of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. PPC shall not be liable for damages of any sort, including remote or consequential damage resulting from any claimed breach of any warranty whether expressed or implied. PPC shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. PPC reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the users responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein is the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and PPC makes no claim that these tests or any other tests, accurately represent all environments. For further information please contact us at the following email address: orders@premierprotectivecoatings.com or visiting www.premierprotectivecoatings.com

DISPOSAL

Any surplus material, including both Part A and Part B components, should be combined and allowed to cure. Upon curing, the product can be disposed of without any restrictive conditions.

Uncured materials should be securely stored in an appropriate sealed container and disposed of in strict adherence to the applicable provincial, state, municipal, and federal regulations.

CAUTION

ALWAYS KEEP OUT OF THE REACH OF CHILDREN

KEEP FROM FREEZING CONDITIONS

INTENDED FOR INDUSTRIAL USE ONLY