



Application Guide

PM 4000 EF

Note: This system requires the installation of two coats of PM 400 followed by PM 550 pigmented urethane at temperatures between 65°F and 95°F or when relative humidity is no more than 80%.

COMPONENTS

PM 400 - Part "A" Pigmented Epoxy

PM 400 - Part "B" Hardener (cream colored)

PM 400 is sold in 4 gallon units. (Mix ratio is 1 part "A" to 3 parts "B" by volume)

PM 550 - Part "A" Gray or White Urethane

PM 550 - Part "B" Clear Hardener

PM 550 is sold in 1.84 gallon units and 4 gallon kits. (Mix ratio is 3 parts "A" to 1 part "B" by volume")

Surface Preparation - The single most important step to assure the performance of PM 400 is a clean surface to bond to. The surface must be dry and free of any debris, dirt, oil, concrete sealers, curing compounds or loose paint. Even new concrete must be cleaned properly to assure adhesion.

Step 1. Scrape, sand or grind off any surface debris such as: plaster, putty, grease, oily dirt, sealers or paint spills. Surface should be smooth and even.

Step 2. Rinse surface with water to remove all loose dirt and debris. Remove dirty water from area with broom or squeegee.

Step 3. Thoroughly clean and degreaser area. Allow cleaner/degreaser to soak for 15 minutes. Vigorously scrub entire area with stiff bristle broom or brush, giving special attention to any oil or grease spots.

Step 4. Rinse entire area thoroughly with running water to remove all residual cleaner/degreaser, oil and grease. Remove all excess water with broom or squeegee. (**NOTE:** Any residue, such as a white powdery substance is an indication that more rinsing and/or scrubbing is required).

Step 5. Testing to see if concrete floor has clear sealer, hardener or other contamination: Dampen the concrete in one of the corners, 4" x 4" spot. Apply a small amount of muriatic acid or muriatic acid etching solution. If the acid solution instantly fizzes on the surface the concrete is suitable to proceed. If the acid does not fizz instantly, the concrete floor has a sealer, hardener or other contaminant that must be removed with chemical strippers, sanding, or diamond grinding. Muriatic acid solution may be

purchased at any home supply store. Removing sealers, hardener or paint may require a professional, contact us at 800-459-7659 for assistance. Preferred surface preparation is diamond grinding after degreasing if necessary.

Mixing Instructions – PM 400 is a two-component epoxy which comes in a four gallon kit. Part “A” comes in a gallon can and is the pigmented resin. The Part “B” comes in a five gallon pail that contains three gallons of hardener that is cream colored. It requires thorough mixing for material to harden properly. Use a low speed electric drill (<650 rpm) with a Jiffy paddle/mixer. High speed mixing can cause air bubbles and pin holes in the finished floor.

Step 1. Open the Part “A” container and mix to a smooth, even consistency. Step 2. Open the Part “B” container and mix until the color is uniform and the liquid is smooth and consistent. Step 3. Pour the gallon of Part “A” into the 3 gallon pail of Part “B”. Step 4. Mix Parts “A” and “B” for at least three minutes and until the color is consistent. Improperly mixed PM 400 may not harden and will not perform properly. If you will not be using the entire four gallon unit for the first coat, first mix thoroughly Part “A” as above and separately mix Part “B” until the color is uniform. Mix 1 (one) part of Part A to 3 (three) parts of Part B by volume.

Application First Coat/Primer – PM 400 is as easy to apply as paint. However, as a two-component epoxy material, it can begin to harden in the pail as soon as two hours after mixing. Step 1. Trim the perimeter of the area being coated with a trim roller (cigar shaped trim rollers work the best). Apply PM 400 generously to these areas. Step 2. Pour PM 400 into a standard paint tray or use roller grid in a 5 gallon bucket. Apply the coating with a sturdy, long handled, roller frame and a 3/8” napped, non-shedding roller cover. Keep coating even and consistent. Apply coating in a common direction. Mix ratio by volume is 1 Part A to 3 Parts B. Coverage is approximately 200-250 square feet per mixed gallon and will vary depending on concrete.

Application Second Coat- The second coat can be applied as soon as the first coat is dry to the touch. This should occur in approximately six hours at 75° F, and 50% humidity. If second coat is applied after 72 hours of first coat being dry to touch, a light sanding of the original coat is suggested to insure adhesion of subsequent coats.

Mix material as described under “Mixing” above. Application of PM 400 is same as first coat. Pour PM 400 into a standard paint tray or use from a 5 gallon bucket with a roller grid. Apply the coating with a sturdy, long handled, roller frame and a 3/8” napped, non-shedding roller cover. Keep coating even and consistent. Coverage is approximately 200 square feet per gallon.

Allow to cure overnight at 75°F, and 50% humidity until hard and dry.

Note: Cooler temperature will make material stiffer to work with. It is recommended that material be stored at 70°F prior to using for best handling. Cold slabs will also affect the rolling of the material and slow down the cure and recoat time. Care needs to be taken applying material on cool slab when temperatures are rising as out gassing may occur. Normally the second coat will seal this if not applied under the same conditions.

First Application of Urethane Topcoat- When epoxy is hard and no longer tacky, carefully mix premeasured unit of 1.38 gallons of PM 550 Part “A” with .46 gallons PM 550 Part “B”. (If using 4 gallon kits, mix 1 gallon Part “A” to 3 gallons of Part “B”) Mixing should be done with a Jiffy Mixer and a low speed drill (maximum 650 rpm to avoid bubbling) for a minimum of 2 minutes. Be sure to premix PM 550 Part “A” before mixing with Part “B” as settling may occur during shipping and storage. Smaller batches can be mixed using mix ratio by volume of 3 Parts A to 1 Part B.

Apply the coating with a sturdy, long handled, roller frame and a 3/8” napped, non-shedding roller cover. Keep coating even and consistent. A standard 1.84 gallon mix should cover approximately 600-700 sq.ft. (320-400 sq. ft. per mixed gallon). Working time is approximately 30 minutes at 75°F for PM 550.

A second topcoat is recommend for color uniformity and may be installed in the same manner as above after overnight cure at 75° F.

Note: Although the pot life for PM 550 is longer than one (1) hour, we recommend that the material be used in one hour for best results. Do not apply material greater than 6 wet mils as material can bubble and turn milky at excessive thicknesses. Wipe up drips from roller to avoid excessive thickness. Do not reseal product once it has been mixed.

Second Application of Urethane Topcoat- When urethane is hard and no longer tacky, carefully mix premeasured unit of 1.38 gallons of PM 550 Part "A" with .46 gallons PM 550 Part "B" and apply as noted above. If application of the second topcoat is longer than 60 hours at 70°F, it may be necessary to lightly sand the surface to insure adhesion of subsequent coats.

For skid resistance, fine transparent slip resistant aggregate can be used in the final coat of urethane. **PM 550** should be mixed thoroughly before adding slip resistant aggregate. Amount of slip resistant aggregate will vary in amount and texture depending on materials used and finish required. (When using #80 mesh aluminum oxide the normal rate is ¼ pound per mixed gallon of PM 550. When using #150 mesh the normal rate is one pound per mixed gallon of PM 550.) We recommend a sample of the slip resistant aggregate be tested with the PM 550 prior to application for acceptance of texture and appearance by the owner.

Return to Service- PM 4000EF System should cure for twenty-four (24) hours at 75° F after the final coating step before opening the area to foot traffic, seventy-two (72) hours before driving across and for ninety-six (96) hours before parking vehicles on the surface. Low temperatures and high humidity levels can retard these cure times dramatically. If the PM 4000EF system is not "rock hard" after seventy-two (72) hours at 75° F; call Tele-Tech at 1-405-755-8454 for professional assistance.

Clean Up- While wet, the PM 400 and PM 550 can be cleaned using hot soapy water. Dish washing detergent is recommended. Partially dried PM 400 can be cleaned using mineral spirits or xylene. Fully dried PM 400 and PM 550 can only be removed by mechanical means such as sanding or grinding. Leftover mixed PM 400 and PM 550 will fully harden and can be discarded according to your local area regulations.

SAFETY: As with any chemical, avoid contact with skin and wear appropriate protective eyewear during preparation and installation. Apply only in well ventilated area.

First Aid: For skin contact, wash thoroughly with soap and rinse with running water. In case of contact with eyes, flush with cold water for 15 minutes and contact a physician. If swallowed, do not induce vomiting. Contact the Poison Control Center immediately.

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