PM 180 Application Guide

Milamar's **PM 180** flexible epoxy is a multi-use product. It can be used as a flexible epoxy membrane under Milamar's PM trowel or broadcast seamless, as a mechanical equipment floor system with slip resistant finish and as a filler for control joints and cracks.

COMPONENTS

PM180 - Part "A" Clear or Pigmented Epoxy

PM180 - Part "B" Hardener

(Mix ratio is 1 parts "A" to 1 part "B" by volume)

RECOMMENDED COVERAGE RATE

Minimum as membrane, 64 sq. ft per gallon.

See specific usage for coverages

NOTE: Consumption rate will be dramatically higher on a porous substrate

PREPARATION
(See Floor Preparation Section)

CAUTION

Make certain all personnel has read and fully understood all safety precautions on product labels and Material Safety Data Sheets.

INSTALLATION
Step 1. Mixing

Carefully mix 1/2 gallon of PM 180 Part "A" with 1/2 gallon PM 180 Part "B" Hardener. Mixing should be done with a 1 gal. Jiffy Mixer and a low speed drill (max. 650 rpm) for a minimum of 2 minutes.

For use as Membrane:

Step 2. Priming concrete floors

When used as a membrane, priming with PM 100/ PM 125/126/127 is recommended to seal the concrete and allow the PM 180 to flow uniformly. See PM 100 installation for mixing information.

Step 3. Membrane
Pour entire contents of mix onto floor in a continuous ribbon. Slowly move and level the mixture with a flat or notched squeegee or trowel, then back roll with a medium nap phenolic core roller to remove any squeegee or trowel marks. A standard 1 gallon mix should cover approximately 64 sq.ft. at 25 mils or 53 square feet at 30 mils

but this will vary depending upon the porosity and texture of the concrete as well as the thickness called for in the specification.

NOTE: Larger quantities of epoxy may be mixed if there is sufficient manpower to squeegee and roll before epoxy begins to set up. Working time is approximately 40 minutes for PM 180.

Cure Time: Before applying the Milamar PM flooring system, allow to cure 16 hours at 75° F.

For use as a Slip Resistant Floor System and Mechanical Equipment Room Floor

Step 2. Priming (Optional)

For porous and rough concrete, priming with PM 100/ PM 125/126/127 is recommended to seal the concrete and allow the PM 180 to flow uniformly. See PM 100 installation for mixing information.

Step 3. Flexible Membrane Coat

Pour entire contents of mix onto floor in a continuous ribbon. Slowly move and level the mixture with a flat or notched squeegee or trowel, then back roll with a medium nap phenolic core roller to remove any squeegee or trowel marks. A standard 1 gallon mix should cover approximately 64 sq.ft. at 25 mils but this will vary depending upon the porosity and texture of the concrete.

NOTE: Larger quantities of epoxy may be mixed if there is sufficient manpower to squeegee and roll before epoxy begins to set up. Working time is approximately 40 minutes for PM 180.

Cure Time: Allow to cure 14-16 hours at 75° F.

NOTE: If first coat has cured over 48 hours before additional coats can be applied, the receiving coat should be lightly sanded with a medium grit sanding pad and then vacuumed or swept to remove dust or debris.

Step 4. Body/Receiving Coat for Aggregate

Pour entire contents of mix onto floor in a continuous ribbon. Slowly move and level the mixture with a flat or notched squeegee or trowel, then back roll with a medium nap phenolic core roller to remove any squeegee or trowel marks. A standard 1 gallon mix should cover approximately 100 sq.ft. but this will vary depending upon the porosity and texture of the concrete.

While still wet, broadcast silica (or colored quartz for decorative finish) into epoxy until surface appears completely dry. Broadcasting can be done by hand or by blower, but by either method, the aggregate must be evenly distributed. Do not leave any puddles or wet spots on surface, as this will cause an uneven and unacceptable finish.

NOTE: To enhance even distribution, it is recommended that the broadcast installer wear spiked shoes (old golf shoes are acceptable) to allow him to walk in the wet epoxy and stay close to the broadcast area.

Allow to cure at least 14 hours when at 75° F.

When floor is no longer tacky, sweep, blow or vacuum all excess aggregate from surface.

Step 5. Finish Coat

Pour a ribbon of mixed epoxy on surface and squeegee or trowel to an even finish. Back roll with a medium napped, non-shedding, phenolic core roller to evenly distribute epoxy for a uniform surface texture. Do not leave any puddles.

Coverage of the top coat will vary depending upon application techniques used and the surface finish desired.

Return to Service

Normally allow new floor to cure a minimum of 36 hours @ 75° F before returning floor to light duty service and 48 hours @ 75° F before returning floor to full service. Be certain that the floor is no longer tacky and hard before turning over to customer.

For use as a crack or control joint filler.

Step 2. Crack filler

Mix as noted above. Installation should follow standard joint filling practices. Cracks greater than 1/16" should be routed out to a minimum width of ¼" minimum and minimum depth of ½" with use of backer rod. On sloped areas or to reduce "run out" from joints, it is recommended to use a thickener such as Cab-o-sil. A ratio of one part thickener to 3 parts liquid should provide some body to reduce flow in these conditions but may be adjusted to suit job conditions. Allow to fully cure before applying floor system. Coverage will vary by joint width and depth. For repair to joint nosing, use PM 100.

SEALANT COVERAGE CHART IN LINEAL FEET PER GALLON					
WIDTH IN INCHES	DEPTH				
	1/4	3/8	1/2	3/4	1
1/4	308	205			
3/8	205	136			
1/2	154	103	77		
3/4	103	68	51		
1	77	51	39		
1 ¼	62	43	31	21	15
1 1/2	51	34	26	17	13

The information above is to be used as a guideline. The coverages and times provided may vary due to temperature, humidity, mixing time, concrete surface and preparation used.