



Master Protective Coatings Inc.

## Product Description

**MPC-MEM-5000** is a coating system that utilizes epoxy and polyurethane technologies to protect parking decks and concrete traffic bridges. **MPC-MEM-5000** is an elastomeric, waterproofing, seamless system designed to protect concrete substrates against water infiltration and wear caused by vehicular traffic. The membranes included in this system provide high elongation and tear resistance.

This coating system contains no solvent and meets the VOC regulations limit of under 100 g/L for architectural floor coatings. This system is comprised of high-end products to provide tailor-made solutions based on the end use of the system.

This system is composed of:

1. Option: Primer Coat (**MPC-160**) 90-100 square feet / gallon @ 18 mils
2. First Coat of (**MPC-MEM-300**) 50-80 square feet / gallon @ 20-30 mils (specially pigmented to help indicate wear/recoat)
3. 1<sup>st</sup> wear coat of (**MPC-MEM-100**) 60-80 square feet / gallon @ 20-25 mils with partial aggregate broadcast (sand)
4. 1<sup>st</sup> wear coat of (**MPC-MEM-100**) 60-80 square feet / gallon @ 20-25 mils with full aggregate broadcast (sand)
5. 2<sup>nd</sup> wear coat of (**MPC-MEM-100**) 60-80 square feet / gallon @ 20-25 mils with partial aggregate broadcast
6. Optional: Aliphatic coating with UV protection for exterior areas (**MPC-275**) 200-250 square feet / gallon @ 8-10 mils
7. Optional: Seamless cove base can be made using **MPC-COVE**
8. Optional: Safety lines can be made using **MPC-100**

Aggregate grade	Application area	2.	3.	4.	5.
no 28	Parking area	X	X		
no 28	Circulation lanes	X	X		X
no 28	Turns	X		X	X
no 28-16(aggressive)	Ramps	X		X	X

## Areas of application

- Parking deck on structural concrete slabs
- Balcony terraces
- Mechanical rooms

Master Protective Coatings Inc.

785 rue Salaberry  
 Laval, Québec, H7S 1H5  
 Phone : 1.800.324.5819  
 e-mail : info@mpcoatings.ca



Master Protective Coatings Inc.

## Surface Preparation

The concrete surface to be coated must be structurally sound and free of curing membranes, paint, or other sealants. Remove dust, laitance, grease, oil, dirt, surface curing agents, impregnating agents, wax, foreign matter, coatings, and loosened substances by mechanical means such as shotblasting (BLASTRAC) or any other approved method to obtain an ICRI-CSP 3-4 profile. The compressive strength of the concrete must be at least 25 MPa (3625 psi) after 28 days of curing and the tensile strength of at least 1.5 MPa (218 psi).

The concrete must be dry before applying the coating. Concrete moisture testing is strongly recommended via the calcium chloride test (ASTM F1869) or in situ probe (ASTM F2170). Calcium chloride test results should be less than 3 pounds per 1000 square feet over a 24-hour period or 75% less for the internal concrete relative humidity.

## Mixing Instructions

The products must be conditioned between for 18°C (65°F) and 30°C (86°F) prior to application. Pre-mix each component separately. Open container with 2 parts of component A in it, then add the 1part of component B to it (mixing ratio 2:1). Mix the components for at least 2-3 minutes using a low-speed drill (300-450 rpm) to reduce air entrapment and to obtain a homogeneous mixture.

## Product Application

APPLICATION : Primer coat of MPC-160

Apply the coating as recommended on the MPC-160 technical data sheet.

APPLICATION : Membrane coat MPC-MEM-300

Apply the coating using a rubber squeegee and pass a roller to obtain a uniform coating.

APPLICATION: 1<sup>st</sup> layer of wear coat MPC-MEM-100

Apply the topcoat with a rubber squeegee and pass a roller to obtain a uniform coating. Partially saturate the wet coating with the selected aggregates and pass a roller to evenly coat the aggregates.

APPLICATION: 2<sup>nd</sup> layer of wear coat MPC-MEM-100

Apply the topcoat with a rubber squeegee and pass a roller to obtain a uniform coating. Partially saturate the wet coating with the selected aggregates and pass a roller to evenly coat the aggregates.

For areas requiring full saturation apply the coating in the same way and completely saturate the surface with the selected aggregates. Allow the coating to cure and remove any excess aggregate and clean thoroughly before applying the second wear coat.

APPLICATION of a protective layer against UV (external areas) MPC-275

Apply the coating as recommended on the MPC-275 technical data sheet.

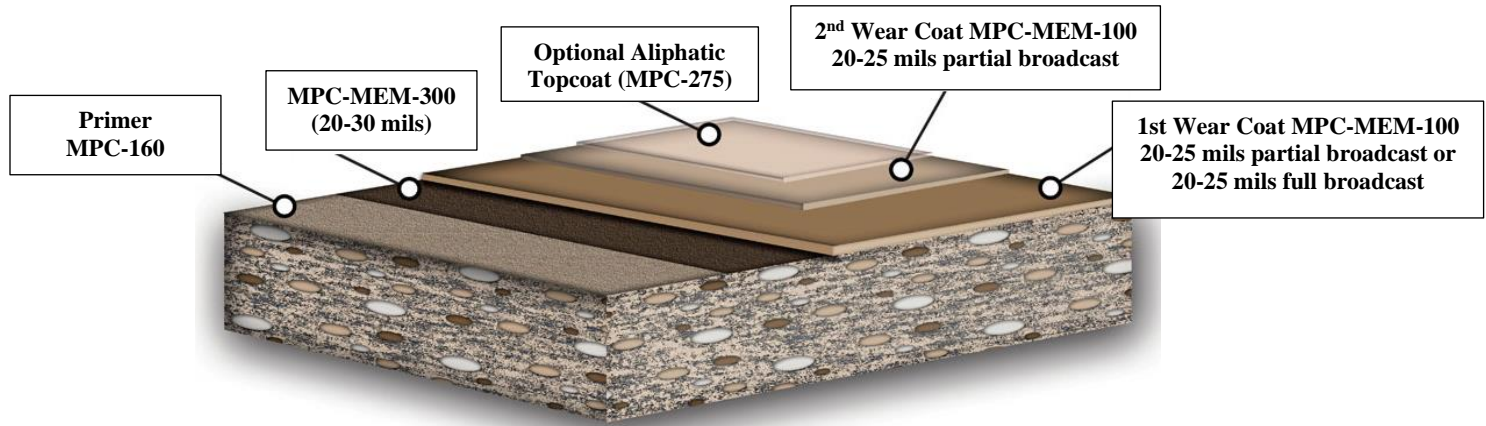
Always apply the coating on the vertical walls at a minimum height of 4 inches.

Master Protective Coatings Inc.

785 rue Salaberry  
Laval, Québec, H7S 1H5  
Phone : 1.800.324.5819  
e-mail : info@mpcoatings.ca



Master Protective Coatings Inc.



## Product Restrictions

- Not recommended for application at temperatures below 10°C / 50°F or above 30°C / 86°F.
- Ambient humidity of the surroundings should not exceed 85% during application and during curing process.
- Substrate must be clean, sound and dry.
- Substrate temperature must be 3°C (5.5°F) above measured dew point.
- Humidity content of substrate must be < 4% at time of application.
- Do not apply on porous surfaces where a transfer of humidity may occur during the application.
- Applying this product on a substrate without a moisture barrier may risk delamination due to hydrostatic pressure.

Master Protective Coatings Inc.

785 rue Salaberry  
 Laval, Québec, H7S 1H5  
 Phone : 1.800.324.5819  
 e-mail : info@mpcoatings.ca



Master Protective Coatings Inc.

- Freshly applied product must be protected against moisture, condensation and water for at least 48 hours.
- Surface discoloration of product may occur when exposed to UV rays.
- Exposure during the curing stage of the coating to the by-products of propane combustion may cause discoloration (amine blushing)

## Health and Safety

Components A and B contain toxic and corrosive ingredients. Consult the safety data sheet (S.D.S) for further information.

## Disclaimer and Product Warranty

MPC warrants that our products are free from manufacture defects in accordance with our quality control procedures. Any products proven defective are limited to the replacement of defective product or refund of the purchase price as determined by MPC. Please contact your local MPC sales representative for more information and warranty requirements.

The information and recommendations contained in this technical data sheet are based on reliable test results according to MPC. The data mentioned are specific to the material indicated. If used in combination with other materials, the results may be different. It is the responsibility of the user to validate the information therein and to test the product before using it. MPC assumes no legal responsibility for the results obtained in such cases. MPC assumes no legal responsibility for any direct, indirect, consequential, economic or any other damages except to replace the product or to reimbursement the purchase price, as set out in the purchase contract.

Master Protective Coatings Inc.

785 rue Salaberry  
Laval, Québec, H7S 1H5  
Phone : 1.800.324.5819  
e-mail : info@mpcoatings.ca