PERMASHIELD
PREMIUM GRAFFITI CONTROL

PERMASHIELD PREMIUM is a high performance, aliphatic polyurethane anti-graffiti coating designed for use on interior and exterior, vertical and horizontal surfaces. It provides outstanding protection and longevity for heavily graffitied areas. The advanced, waterborne formula allows for graffiti to be removed easily while preserving the original look of the surface. 10 Year Limited Warranty.

FEATURES:
Extremely Durable
Graffiti Resistant
Abrasion Resistant
Excellent Weathering
Easy-To-Clean
Low Odor & VOC
USDA Compliant

BUILT FOR:
Interior & Exterior
Concrete & Masonry
Tile & Stone
Prepared Metal
Previously Painted Surfaces

BEST ON:
Schools & Parks
City & County Buildings
Commercial Buildings
Public Spaces
Bus & Train Stations
Murals

MEETS VOC REQUIREMENTS:

CAL Green	YES
SCAQMD	YES
CARB	YES
National AIM	YES
Green Seal GS-11	YES
LEED v4 v5	YES

SPECIFICATIONS:

Composition:	Waterborne Polyurethane
VOC (ASTM D6886)**:**	< 10 g/L
Solids by Weight:	54% ± 2
Solids by Volume:	51% ± 2
Shelf Life:	12 Months Matte 18 Months Gloss

AVAILABLE PRODUCTS:

MFG Codes:	5600 Clear Matte 5650 Clear Gloss
Tint Capacity:	Do Not Tint
Sizes:	Gallon Kit; 3 Gallon Kit
Component Ratio:	2.5:1 (Part A : Part B)

***If tinted colors are needed, contact a Monopole representative for availability and instructions.*

PREPARATION:

All surfaces must be cured, firm and dry. Use suitable cleaning methods to remove all dirt, efflorescence, oil, rust, or other contamination. Mechanically grind or sand smooth, glossy, dense, or glazed surfaces to create a profile and remove dust (See **WARNING!**)

APPLICATION:

Brush:	Synthetic Bristle
Roll:	Synthetic Nap - 1/4" – 3/8"
Spray:	2000 PSI; 0.009" - 0.013" Tip

Temperature:	40°F - 90°F Air, Surface, & Material
Film Thickness:	3-5 Wet Mils; 1.5-2.5 Dry Mils
Coverage:	300-400 Sq. Ft. / Gal
Pot Life: @75°F; 50% R.H.	2 Hours Maximum
Drying Time: @75°F; 50% R.H.	4-6 Hours – Recoat ***Do not exceed 12 hours;* *Finish may still be tacky when recoating* 7 Days – Full Use / Graffiti Resistance
Thinning:	Up to 5% Water
Clean Up:	Water
Graffiti Removal:	Citrus Clean Super

Sealer (Bare Concrete & Masonry Only) – 1 Coat:
Aquaseal Premium Masonry Sealer ME12

Basecoat (All Surfaces) – 1-2 Coat:
Permashield Base

***Apply as many basecoats as needed to create a pinhole free surface*

Topcoat (All Surfaces) – 2 Coats:
Permashield Premium

Mix:
Mix Part A 3-5 minutes with a paint stick or low speed drill.
Intermix Part A and Part B. Mix together for 3-5 minutes.
Scrape sides and bottom of each can to ensure all material is intermixed.

All Surfaces:
Seal all sides of surface or elevation with an appropriate sealer or coating even if anti-graffiti is only being applied to one section.

Apply material working in small areas. Maintain a wet edge and do not work back into areas that have started to dry. Do not over apply or over work the material. Apply all material within 2 hours of mixing.

If the recoat window is missed, prime the surface with Monobond High Adhesion Primer before repainting.

Application Guidance: Information provided is a general guide based on standard substrates and conditions. Jobsite conditions, environment, and application methods may affect product performance. Always perform a test sample before full application to confirm suitability. If results do not meet project requirements, contact a Monopole representative before proceeding.

See following pages for detailed preparation and application instructions.

PREPARATION & APPLICATION:

BEFORE APPLICATION

GENERAL PREPARATION: All surfaces must be cured, firm, dry and cleaned free of dust, dirt, oil, grease, wax, chalk, rust, mildew or any other contamination or condition that would adversely affect the performance of the coating. Mechanically grind or sand glossy, dense or glazed surfaces (see **WARNING!**). Protect all surrounding areas - shrubbery, plants, grass, glass, metal, glazed surfaces, etc.

REPAIRS: Complete any required structural or substrate repairs prior to application and allow repair materials to fully cure. Ensure horizontal surfaces have positive drainage or slope (minimum 1/4″ per foot) to eliminate ponding water.

PATCHING & CAULKING: Fill and seal any voids, seams, holes, or cracks greater than 1/16″ using an appropriate paintable patching material and allow to fully cure. Spot priming patched areas is recommended. Coating over flexible patch or caulking or in areas with substrate movement may cause the topcoat to crack.

MOISTURE: Ensure roofs, windows, doors, and all penetrations are properly installed, sealed, and caulked to prevent moisture intrusion. All surfaces must be dry before application. Properly seal all sides of the surface to keep moisture out. Moisture intrusion behind the coating may cause blistering or peeling.

CONCRETE & MASONRY: All surfaces must be thoroughly cured and have an adequate profile. Curing compounds, non-recoatable sealers, and densifiers must be removed or properly primed.
Moisture content must be < 15% and pH < 8. Calcium chloride testing moisture testing is recommended per ASTM F1869.

METAL: Remove all loose rust, mill scale, or deteriorated previous coatings by Hand Tool (SSPC-SP-2) or Power Tool (SSPC-SP-3) cleaning. Wash surface with a suitable cleaner or degreaser to remove oil and contaminants and allow to dry. Prime ferrous metal with a rust preventative primer as soon as it dries.

PREVIOUSLY PAINTED SURFACES: Remove any peeling, chalky or loose paint, sand to feather edges, and dust clean. Spot prime bare and patched areas. When making a significant color or sheen change, a primer is recommended to aid hide and appearance of the topcoat.

STAIN BLOCKING: When painting over stains or tannins, an appropriate stain blocking primer is recommended before painting.

MIXING: Mix well before use. Purchase enough material to complete your project at the same time. If additional material is needed, retain some of the original non-catalyzed material and intermix the material before application or touch up.

CONTAINERS AND TOOLS: Transfer material into a clean container for use. Use new or thoroughly cleaned tools. To avoid contamination, do not re-dip applicators or add used material into containers being used for storage.

DURING APPLICATION

TESTING: Prior to full application, complete the preparation and apply a test patch to ensure the system chosen is appropriate for the project. If results do not meet expectations, contact Monopole Inc. for recommendations.

GENERAL PAINTING: Primer or sealer is always recommended prior to painting. Apply two separate finish coats to create even color, uniform sheen, maximum durability and easier touch-up. Maintain a wet edge while painting.

WEATHER: Apply product only when material, air, and surface temperature are within the recommendations on page 1 and will remain within that range for at least 24 hours. Temperatures must remain 5° above the dew point during application and dry time. Do not expose to rain, fog, snow or any moisture during application or dry time. Limit exposure to heavy moisture for 24-48 hours after application.

COVERAGE: May vary depending on method of application, porosity and texture of the surface. Measure estimated coverage during the test application.

FILM THICKNESS: Always follow recommendations for application thickness on page 1. Over application may reduce performance and can lead to runs, extended dry times, a soft film, trapped air bubbles, cracking, uneven finish, or a white haze.

BACKROLLING: While spraying, it is recommended to follow with a wet roller to ensure an even coat and fill in porous surfaces. This will reduce pinholes, create uniform sheen and make for easier touch-up.

RECOATING: Always follow recommendations for recoat times on page 1. Recoating too soon or too long after application may reduce performance and lead to adhesion loss, improper cure or a soft film.

AFTER APPLICATION

DRYING: Dry times are based on standard conditions of 75ºF with a relative humidity of 50%. Lower temperatures or higher humidity may extend drying times. Higher temperatures may speed up drying time and shorten pot life. Provide adequate ventilation and air movement during and after application.

STORAGE: Store material at room temperature in clean, tightly sealed containers free of rollers, brushes, or other outside materials. Protect from freezing.

CURE: Coatings may require between 7-30 days after final application for full cure and maximum performance. Cure times vary depending on application and environmental conditions.

CLEANING: Wait until at least two weeks after final application to clean contaminates from the surface. Use fresh water and a small amount of mild detergent or non-solvent cleaner, if necessary. If power washing, use low pressure or wide fan tips to maintain the integrity of the coating.

WARNING! If you scrape, sand or remove old paint from any surface, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Carefully clean up with a wet mop or HEPA vacuum. Before you start, find out how to protect yourself and your family by contacting the U.S. EPA/Lead Information Hotline at 1- 800-424-LEAD (5323) or log on to www.epa.gov/lead.

LIMITATIONS:

OVER APPLICATION: Do not apply heavier than 5 wet mils per coat or over work the material on the surface as it may trap air bubbles, create a white haze, or create an uneven finish.

WATERPROOFING: This coating does not form a waterproofing membrane nor seal inaccessible or below grade areas. It will not bridge cracks, voids, or pores larger than 1/16" nor compensate for flawed construction.

Exposed walls must be capped and the backside of the free standing or retaining walls must be sealed, flashings must be in place and weep holes and drains installed and functioning (where applicable).

MOISTURE INTRUSION: This coating should not be used on surfaces that experience ponding water or hydrostatic pressure. Ensure horizontal surfaces have positive drainage or slope (minimum 1/4″ per foot) to eliminate ponding water. Calcium chloride testing moisture testing is recommended per ASTM F1869.

If there are signs of moisture such as water rings, efflorescence, blistering of previous coatings, etc., the source of the moisture must be corrected prior to application. Moisture intrusion may cause blistering or peeling of the new coating system. Blistering and peeling caused by moisture intrusion are not defects of the coating and are not covered by warranty.

On-grade concrete should have a vapor barrier installed under the substrate or a Moisture Vapor Barrier primer used prior to painting.

All exposed sides should be sealed with an appropriate sealer or coating including those adjacent to landscaping, dirt, gravel, or other areas with water run-off. Below-grade areas should have an appropriate waterproofing membrane installed.

SPECIAL USES:

CLEANING GRAFFITI (NON-SACRIFICIAL COATINGS): Use Monochem Citrus Clean Super for surfaces coated with Permashield Premium Anti-Graffiti Coating.

Spray the graffiti cleaner directly onto the graffiti and allow a 2-minute dwell time. Do not allow the cleaner to dry. Gently agitate with a stiff-bristle nylon brush or nylon scour pad, working the cleaner into the graffiti. Apply additional cleaner as needed to maintain a wet surface and remove the dissolved graffiti.

Once the graffiti has been completely dissolved and removed, thoroughly flush the surface with water to remove all residues. Do not flush the surface with water if graffiti removal is incomplete. If incomplete removal is exposed to water, allow the surface to dry completely for 1–2 hours, or wipe the surface dry, before repeating the cleaning procedure.

Do not allow Citrus Clean Super or graffiti runoff to dry on the surface. Do not use solvents or other chemicals, such as MEK or lacquer thinner, to clean the surface.

CLEAR COATING – BARE SURFACES: When applying water repellents or clear coatings over varied surfaces, differences in the color and appearance of the substrate may become more pronounced. Always perform a test sample before full application to confirm the final appearance meets project requirements. If the results do not meet project requirements, contact a Monopole representative before proceeding.

Do not apply clear coatings over tannin rich woods or bare ferrous metal.

CLEAR COATING – MURALS & PAINTED SURFACES: Clear coatings may alter the appearance of murals, painted surfaces, or other decorative finishes. Existing coatings, colors, patching, and surface variations may become more pronounced or may change in appearance after application. Some clear coatings such as anti-graffiti coatings may amber due to interactions with the existing coatings. Always perform a test sample in an inconspicuous area before full application to confirm compatibility and appearance. If the results do not meet project requirements, contact a Monopole representative before proceeding.

WARRANTY: Monopole, Inc. provides a 10 Year Limited Warranty (the "Warranty") against peeling and blistering defects and protects against yellowing, shadowing, ghosting, and chemical staining after each graffiti removal of Permashield Premium Anti-Graffiti Coating (the "Product") as more particularly set forth in the Product's Limited Warranty document. For the purpose of this Warranty, the stated time period commences on the date of application of the Product on the structure until such time that the owner conveys, assigns, sells or transfers the structure on which the Product has been applied. All recommendations for surface preparation and application set forth in the Technical Data Sheet (the "TDS") must be followed in order for the Warranty to be valid. Contact Monopole Inc. at info@monopoleinc.com to begin the warranty process. No modifications, changes or amendments to this Warranty or the TDS are valid. This Warranty is non-transferable.