

PERMASHIELD PREMIUM[®]

PERMANENT GRAFFITI CONTROL SYSTEM

CLEAN-UP:

Do not allow **PERMASHIELD BASE** and **PERMASHIELD PREMIUM** to dry in the spray equipment. Empty spray equipment and wash with water or detergent while the material is fresh. Keep in mind the 1-2 hour pot life of **PERMASHIELD PREMIUM** because the mixture will thicken and be hard to apply. Schedule your mixing, application, and clean up accordingly.

APPLICATION: PERMASHIELD PREMIUM

A continuous application will ensure a smooth and level coat without lines or streaks to disfigure the surface. The application should not be stopped part way across an area and completed later.

- Apply at a rate of 200-250 square feet per gallon.
- Two coats are required.
- Each coat should yield 2-3 dry mils (do not exceed 4 dry mils).
- Recoat time is approximately 4-6 hours between coats.
- Do not exceed 12 hours.
- The pot life of the mixture is 1-2 hours.
- For the best results use a high quality roller, brush or airless sprayer with a tip size of .013 to .017 inches.
- Extra care should be taken not to cause air bubbles. Spread the coat evenly.
- **PERMASHIELD PREMIUM** can be applied on properly prepared surfaces such as primed metal and previously painted water-based epoxies, acrylics and urethanes. Abrade the previous paint to provide tooth for the new coating.
- Porous or natural surfaces should always be sealed with a film forming coating such as **PERMASHIELD BASE** (clear or pigmented) to minimize outgassing and pin holes.

PRECAUTIONS:

- In all applications, Monopole requires conducting a test section to determine compatibility, adhesion and appearance. All surfaces must be tested and approved by architect or project owner prior to doing the complete project.
- Air and surface temperatures must be between 50° F. and 90° F.
- Do not apply in windy conditions.
- Protect surrounding areas from overspray.

CAUTION! (MURALS)

Due to its chemical composition, its outstanding adhesion and hardness, the **PERMASHIELD PREMIUM** Graffiti Control System is not suitable for application over painted murals classified by Federal, State, or City Counties as "ART WORK" which are subject to continuing redesigned and refinish. It would be extremely difficult to remove this PERMANENT, NON-REVERSIBLE system in order to re-do the murals. For more information, contact the manufacturer: (800) 471-9977

LEED CREDITS:

PERMASHIELD PREMIUM qualifies for earning LEED® credits for Indoor Environmental Quality, EQ 4.2 Low-Emitting Materials, based on low contribution of VOC.

CHEMICAL RESISTANCE: (ASTM D1308)

MEK double rubs	300+ cycles
Skydrol.....	No effect after 7 days
Brake Fluid.....	No effect after 7 days
Gasoline.....	No effect after 7 days
Motor Oil	No effect after 7 days
Betadine	No effect after 24 hours
50% NaOH	No effect after 24 hours
14% NH4OH.....	No effect after 24 hours
10% Acetic Acid.....	No effect after 24 hours
10% H2SO4	No effect after 24 hours
10% HCL	No effect after 24 hours
10% Bleach	No effect after 24 hours
DI Water	No effect after 24 hours
IPA	No effect after 4 hours
Toluene	No effect after 4 hours

PACKAGING:

AQUASEAL ME12 is available in one-gallon cans, five-gallon pails, and fifty-five gallon drums.

PERMASHIELD BASE is available in one-gallon cans and five-gallon pails.

PERMASHIELD PREMIUM is available in a 96 OZ kit (Part A: 64 OZ; Part B: 32 OZ) and a three-gallon kit (Part A: 2 Gallons; Part B: 1 Gallon).

GUARANTEE:

PERMASHIELD PREMIUM has a ten year warranty. It is available on an individual job basis and must be approved before application. Contact Monopole's service department for further information.

TERMS OF WARRANTY:

- The applicator shall warrant that they have installed the materials in compliance with Manufacturer's written Specifications and Instructions.
- Monopole Inc. warrants **PERMASHIELD PREMIUM** Graffiti Control System to perform free from defect under normal un-sacrificed conditions for ten years. During this period, the system will protect against future graffiti attacks without the need for reapplication.
- Capable of withstanding a minimum of 100 cleaning cycles without measurable coating deterioration.
- Defects are defined as the failure to withstand a complete graffiti removal, ghosting, shadowing, chemical staining, and yellowing.

WARRANTY REQUIREMENTS:

1. The purchaser must obtain a written specification letter from Monopole, Inc. prior to the application outlining application, substrate, and removal methods.
2. The applicator shall warrant that they have applied the materials in compliance with Monopole Inc's written specifications and instructions upon application completion.
3. Attempts to remove graffiti defacing from a surface treated with **PERMASHIELD PREMIUM** Graffiti Control System must be performed according to the exact procedure explained on the technical bulletin and specification letter. No other chemical cleaners should be used except **MONOCHEM CITRUS CLEAN SUPER**.

PRODUCT DESCRIPTION:

PERMASHIELD PREMIUM is the most advanced formulation of Permanent Graffiti Resistant Coatings, utilizing an easy to use Graffiti Removal. **PERMASHIELD PREMIUM** is intended for use on concrete, masonry, wood, stucco, aluminum, metal, EIFS, murals, signs and other surfaces to create a graffiti-free environment where graffiti tagging can be removed without affecting the clear coating.

ADVANTAGES:

- 10 Year Warranty
 - Withstands Unlimited Graffiti Removals for 10+ Years
- **ZERO VOC**, no fumes, no odor and no induction time
- Clear or Pigmented System to match any architectural tone or finish
- Available in Matte (<5°) and High Gloss (80° -90°)
- 20-25 years Life Expectancy
- Permanent, Non-Sacrificial Coating
- FDA/USDA Approved for all States
- Non-Yellowing, Non Chalking
- Excellent UV, Stain and Chemical Resistance

SYSTEM COMPOSITION:

A. UNPAINTED/UNSEALED (NATURAL) SURFACES:

1. **AQUASEAL ME12** (1 Flood Coat)
2. **PERMASHIELD BASE COAT** (2 Coats Minimum)
3. **PERMASHIELD PREMIUM** (2 Coats Minimum)

B. PAINTED SURFACES:

1. Degloss and abrade the surface.
2. One coat of **PERMASHIELD BASE** may be necessary to create a pinhole free finish coat.
3. **PERMASHIELD PREMIUM** (2 Coats Minimum)



TECHNICAL BULLETIN



MADE IN U.S.A

9 ANTI-GRAFFITI COATINGS SECTION 09960



Manufacturers of:
U.S. SPECIALTY COATINGS

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COMPOSITIONS AND MATERIALS:

SEALER COAT: AQUASEAL ME12

- AQUASEAL ME12** is a clear, flat, water base, penetrating Silane/Siloxane water repellent. It must be used on the entire exterior elevation of an unsealed/unpainted wall to protect against water seepage and to allow for a more consistent application of the Graffiti Control System.
- AQUASEAL ME12** should be applied in a uniform manner. The first coat consists of a light fog spray that wets the entire surface and breaks the surface tension. The fog spray coat must be followed immediately with a flood coat to achieve maximum penetration. Allow materials to run down 10 to 12 inches (back roll all rundowns). We recommend using a low pressure spray gun with a tip size of .035.
- Coverage rate may vary considerably due to the porosity of the surface.
- Estimated Coverage Rate: Approximately 50-80 sq/ft per gallon over porous concrete, mammoth block, standard block, split face block, old masonry brick, etc.. Refer to our Technical Data Sheet for additional information.
- Allow 24 hours of drying time prior to applying **PERMASHIELD BASE**.



Code # 5200

BASE COAT: PERMASHIELD BASE

- PERMASHIELD BASE** is a clear or pigmented, 1-component, water base, aliphatic polyurethane designed to provide a pin-hole free coating on natural substrate surfaces.
- Two coats of **PERMASHIELD BASE** are required. Extremely porous or irregular surfaces such as split face block, fluted block, bee-hole block, rough stucco, etc. will require at least three coats to achieve a continuous pin-hole free coating.
- PERMASHIELD BASE** should be applied using a good quality roller, brush or airless sprayer with a tip size of .013-.017 inch.
- Estimated Coverage Rate: Approximately 200-250 sq/ft per gallon, resulting in 2-3 dry mils of thickness per coat. (4-6 dry mils for 2 coats).
- Allow 1-2 hours drying time prior to applying the second coat (or when the milky-ness of the first coat clears and it is dry to the touch).
- Allow 24 to 48 hours of dry time before applying the **PERMASHIELD PREMIUM TOP COAT**.



Code # 6100 Clear
Code # 6150 Colors

TOP COAT: PERMASHIELD PREMIUM

- PERMASHIELD PREMIUM** is a clear 2-component, water base, aliphatic polyurethane top coat.
- Two coats of **PERMASHIELD PREMIUM** are required. More porous substrates may require an additional coat to satisfy warranty requirements.
- Estimated Coverage Rate: Approximately 200-250 sq/ft per gallon, resulting in 2-3 dry mils of thickness per coat. (4-6 dry mils for 2 coats).
- Allow 4-6 hours (do not exceed 14 hours) drying time prior to applying the second coat.
- Allow up to five days for full cure and hardness, depending on temperature before exposing the system to markers and spray paint tagging.



Code # 5600 Matte
Code # 5650 Gloss

REMOVER: CITRUS CLEAN SUPER

- Water-miscible cleaner / graffiti remover.
- Designed to remove permanent markers, spray paint, blemishes, scuff marks, etc.
- CITRUS CLEAN SUPER** is the only cleaner recommended for graffiti removal with this system. Spray the **CITRUS CLEAN SUPER** on the graffiti and allow it to set for 2 to 3 minutes (do not allow the cleaner to dry on the surface). Then use a nylon hard bristle scrub brush or scour pad, to work the cleaner into the graffiti. Spray more cleaning solution to maintain a wet surface and to remove the dissolved graffiti. Continuous wet scrubbing is the key to removing the graffiti. After complete removal, rinse the cleaned area thoroughly with water. Do not use solvents such as M.E.K. or lacquer thinners for cleaning the surface.
- Do not dilute and use as is.
- Protect the surrounding vegetation, foliage, painted surfaces, and non-masonry materials from the splashing of the cleaner residue. Maintain good ventilation when working indoors.



Code # 9800

REQUIREMENTS:

- Refer to each products' technical data pages for complete instructions.
- Conduct a test patch to ensure the desired results on each surface type and have it approved by the project architect and/or building owner prior to doing the complete job.

CAUTIONS!

- Do not allow **CITRUS CLEAN SUPER** to dry for more than 30 minutes on the surface.
- Do not use solvents such as M.E.K. or lacquer thinners on the system.
- Do not introduce water to the surface prior to or during the use of **CITRUS CLEAN SUPER**.



SURFACE PREPARATION:

- Substrates to receive materials must be cleaned and free of dirt, rust, scale, bond-breakers, grease, moisture, efflorescence, lime, and all other foreign substances which can be detrimental to the adhesion and required appearance of the finished system.
- Concrete, masonry, and stucco must be cured at least 28 days.
- Level protrusions and repair cavities, voids and cracks. Dense, non-porous concrete must be sandblasted, abrasive blasted (ASTM D4259) or acid etched (ASTM D4260).
- Steel, aluminum and galvanized: Mill scale and rust must be completely removed (a rust inhibitive primer is required within 8 hours of removing rust). Abrasive blast the surface to SSPC-SP6, SSPC-SP1 or SSPC-SP10, or acid etch.
- Freestanding and Below Grade Walls: Contact Monopole, Inc Technical Department for the required additional steps.

MIXING INSTRUCTIONS:

- PERMASHIELD PREMIUM** is a water based, 2-component, aliphatic polyurethane top coat.
- Stir each component thoroughly for 3-5 minutes before blending.
- Add Part B to Part A using an electric mixer for 2-3 minutes to blend the 2 components. Mix for at least 5 minutes if using a stir stick. No partial mixing is permitted.
- A maximum of 8 ounces of water may be added to the mixture (after blending Part A and B) to adjust viscosity.
- The pot life of the mixture is 1 to 2 hours, depending on ambient temperature and humidity.
- Discard unused mixtures after 2 hours.
- Do not blend new mixtures with the old.

CAUTION:

- Do not apply more than 5 wet mils of thickness to avoid micro blistering.
- Surfaces displaying hydrostatic pressure should not be coated.
- Do not apply to surfaces with a pH over 9.
- Ensure that the surface temperature is between 50° F and 90° F during application.

TECHNICAL DATA:

Composition.....	2K, Aliphatic Polyurethane	Elongation (ASTM D-412).....	150%
Solids by weight Matte Finish.....	62% ±2	Hardness, pencil, 2 weeks (ASTM D-530).....	2 H
Solids by weight Gloss.....	55% ±2	Modulus @100% Elongation.....	4190 PSI
VOC level (ASTM D2369-81).....	ZERO	Taber abrasion resistance (ASTM D-4060).....	<45 mg loss/1000 Cycles
Film appearance, Gloss 60° (ASTM D-523).....	85°-90°	Impact resistance (ASTM D-2794)Reverse.....	160 In/Lbs
Film appearance, Matte (ASTM D-523).....	4°-6°	Outdoor weathering (ASTM G53).....	No chalking, gloss or color changes
Weight.....	96 OZ Kit: 9 Lbs; 3G Kit: 28 Lbs	Chemical resistance (ASTM D5402 & B117).....	No coating wear. Min 5 RATING
Mixed Viscosity @75°F.....	85-90 KU	Fluid resistance (ASTM D1308) (Water, paint thinner, gasoline).....	No Blistering, discoloration, softening or adhesion loss
Pot life of mixture.....	1-2 Hours	Cleanability (ASTM C756) w/ CITRUS CLEAN SUPER (LEVEL 3)	No damage to coating, no color loss or change
Tensile strength (ASTM D-412).....	5950 PSI	Withstands MEK (LEVEL 5).....	Double rubs 300+ cycles

