



Manufacturer of
U.S. SPECIALTY COATINGS

PERMASHIELD ELITE HP

PERMASHIELD ELITE HP is a one-component, water-based, cross-linked acrylic/urethane coating. It exhibits outstanding resistance to environmental conditions, and has exceptional film hardness, adhesion and block resistance. **PERMASHIELD ELITE HP** is resistance to impacts, abrasion, corrosion, UV exposure, hot tire pick-up, household stains and chemicals.

BASIC USES:

- Interior / Exterior
- Kitchen Cabinets
- Wood Trim
- Drywall
- Wood
- Prepared Metals
- Painted or Unpainted
- House Siding
- Doors and Doorways
- Stucco
- Concrete / Masonry

FEATURES:

- Universally Compliant
- Anti-Microbial*
- USDA Acceptable**
- Superior Weatherability compared to household paints
- Outstanding Resistance to Dirt Pick-up, Staining & Scrubbing
- Excellent Scrub Resistance and Adhesion
- Resistant to Chemicals including Chlorine
- Hot tire resistant.

PERMASHIELD ELITE HP is an excellent choice for products where odor for the finished system is a concern.

Antimicrobial properties built in to protect **PERMASHIELD ELITE HP provide mold and mildew-resistance to the dried film.*

****PERMASHIELD ELITE HP** conforms to the USDA-FSIS regulatory sanitation performance standards for coatings in contact with food establishment facilities.*

PACKAGING:

- | | |
|--------------------------------|----------------------------------|
| Base: White Tint Base | Short-Fill: 4 Ounces per gallon |
| Base: Neutral Tint Base | Short-Fill: 12 Ounces per gallon |

FINISHES:

1730 - MATTE 6-9 @ 60°

1750 - SATIN 20-25 @ 60°

1700 - SEMI-GLOSS 40-45 @ 60°

PHYSICAL PROPERTIES

Composition: Water Base Acrylic-Urethane

VOC: < 100 g/L

White Base Weight Solids: 43% ±1

White Base Volume Solids: 34%

Neutral Base Weight Solids: 32% ±2

Neutral Base Volume Solids: 37%

Weight per Gallon: White Base: 10 Lbs; Neutral: 9 Lbs

Viscosity: 95-102 Kus

Coverage: 300-500 Sq. Ft per Gallon

Recommended Wet Mils: 3 - 5

Recommended Dry Mils: 1 - 2

Always apply a test patch to check for adhesion, compatibility and proper results.

Drying Time @77° and 50% Relative Humidity:

Dry To Touch: 45-60 Minutes

Recoat Time: 1-2 Hours

Cooler Temperature, higher humidity and film thickness will require longer drying time.

Shelf Life: 18 Months

PRIMER COAT: (1 Coat)

PERMASHIELD ELITE HP is self-priming when applied directly over unsealed porous surfaces (180 grit surface texture), however if a primer is needed, we recommend the use of:

AQUAPRIME: Multi-surface primer including surfaces with a pH over 13.

MONOBOND: Difficult to adhere to substrates including non-porous or glazed concrete, wood, metal (non-ferrous) and all masonry surfaces.

MONOBOND RI: A Rust Inhibitive Primer

PERMASHIELD ELITE HP: (2 Coats)

Brush: Synthetic Bristle

Roll: ¼"-3/8" Synthetic cover

Spray: 2000-2500 psi-.0009-.015 Tip

PREPARATION:

Surface preparation is critical to product performance. The surface must be dry and clean, free from all adhesion affecting contaminants like dirt, dust, oil, grease, wax, loose materials, etc.

WOOD SURFACES:

Sand wood to a rough finish to provide "tooth" for the coating. If exposed to weather, Monopole requires sealing all exposed sides of the wood to prevent moisture penetration and hydrostatic pressure. The moisture content of the wood must be 13% or lower. Some woods, such as redwood, pine, and cedar contain tannin acid. **PERMASHIELD ELITE HP** will not stop tannin acid or bleeding if exposed to UV rays. We require using a water-based premium grade stain blocker/primer before applying **PERMASHIELD ELITE HP** for these specific applications.

PREVIOUSLY PAINTED CONCRETE & MASONRY SURFACES:

LATEX PAINTED SURFACE: Remove all loose, peeling or poorly bonded paint. Surfaces must be mechanically cleaned and abraded, using 60-80 grit sandpaper. Dull glossy surfaces by sanding or using a chemical DE glosser. Then clean the surface by scrub washing with a solution of $\frac{1}{2}$ cup TSP to one gallon of warm water. Pay special attention to areas where build-ups of dirt, grease and oil exist. These areas should be scrubbed clean.

OIL BASED PAINTED SURFACES: Over non-porous or oil based painted surfaces, **MONOCHEM 21** 100% Epoxy Primer is required. **MONOCHEM 21** primer has excellent adhesion when applied over oil base, solvent base, and water base coatings. A test patch to a clean contaminant free coating is required to ensure the proper adhesion and performance. If **MONOCHEM 21** isn't used, then remove all chlorinated rubber and solvent based finishes such as oil based enamels, epoxies, urethanes, etc. prior to product application.

UNPAINTED CONCRETE SURFACES:

Concrete surfaces to receive **PERMASHIELD ELITE HP** must be porous, structurally sound, cured for a minimum of four weeks, dry for 48 hours (< 15% moisture), free from rock pockets, voids, cracks, etc. (larger than 1/16"). Dense, non-porous concrete should be primed with **MONOBOND** or **MONOCHEM 21**. To create 180 grit surface profile for proper penetration and adhesion, surface must be abraded or grinded.

METAL SURFACES:

Non Ferrous (galvanized, aluminum, stainless steel): Remove all oils or films with a neutral detergent or emulsion cleaner. Blast lightly with fine abrasives or conduct a light etching. Prime with Monobond within 3-6 hours to avoid oxidation, then apply **PERMASHIELD ELITE HP** within 3 hours.

Corrosive Metals: Remove all the adhesion affecting rust, dirt, grease and other contaminants by one of the following depending on the degree of cleanliness required: Blast SSPC-SP3; SSPC-SP2; SSPC-SP6; SSPC-SP7. Blasting lightly with fine abrasives or conducting a light etching are also options. Then prime with a rust inhibitive primer within 3-6 hours to avoid oxidation.

APPLICATION AND COVERAGE:

PERMASHIELD ELITE HP can be applied by roller, brush or airless sprayer. Recommended Tip Size: 513. The coverage varies depending on the texture and condition of the substrate. Apply at an approximate rate of 300-500 sq. ft. per gallon to yield 1 to 2 dry mils of thickness. Surface and air temperatures must be between 50°F and 90°F during application.

DRY TIMES:

Recoat: 45-60 Minutes between coats
A second coat is always recommended for increased durability and proper hide.
Light Foot Traffic: 4-5 Hours
Full Foot Traffic: 24 Hours
Heavy Objects & Hot Tire Exposure: 4-5 Days.

ALWAYS apply a test patch to check for adhesion, compatibility and proper results. Responsibility for determining the adhesion and performance of **PERMASHIELD ELITE HP** to an existing finish rests with the applicator.

WHEN NOT TO USE PERMASHIELD ELITE HP:

- Do not apply over poorly-bonded previous paint.
- Do not apply if moisture in the substrate is higher than 15%.
- Do not apply to a poorly cured or dusty concrete.
- Do not apply to a surface exhibiting hydrostatic pressure.
- Do not apply if surface temperature is over 90°F or below 50°F.
- Do not apply during windy conditions or if rain is eminent within 24 hours.
- Do not apply to surfaces with a pH over 9.
- **CLEAN UP:**
- Clean all tools and equipment immediately after use with soap and water

CHEMICAL RESISTANCE (ASTM D 1308)	
One Hour Test Exposure with no evaporation.	
Rating (1-5, 1 Lowest, 5 Best)	
Motor Oil	5
Power Steering Fluid	5
Brake Fluid	5
Gasoline	5
Anti-Freeze (50:50 water)	5
Spic & Span/Water	5
Bleach	5
Mr. Clean/Water	5
409	5
Red Wine.....	5
Windex	5
Sodium Hydroxide (10%)	5
STAIN RESISTANCE (One Hour Exposure)	
Coffee	5
Ketchup	5
Kool-Aid	5
Yellow Mustard	4
Chocolate Syrup	5
Grape Juice	5

WARRANTY INFORMATION: MONOPOLE believes that the information in this publication is an accurate description of the typical characteristics and/or uses of the product or products. But it is the end users responsibility to thoroughly test the product in the specific application to determine its performance efficacy and safety. Since use of this product is beyond our control, Monopole, Inc. cannot assume any risk or liability for results obtained when not used according to our specifications and directions. Unless MONOPOLE provides a specific written statement of fitness for a particular use, MONOPOLE's sole warranty is that the product will meet its current sales specifications. MONOPOLE specifically disclaims any other expressed or implied warranty, including the warranty of merchantability and fitness for use. The exclusive remedy and MONOPOLE's sole liability for breach of warranty is limited to a refund of the purchase price or replacement of product proven to be defective. In no event shall the seller be liable for any loss of profits or other consequential damages. Under no circumstance will MONOPOLE pay labor charges.