



PERM-A-SHIELD

1. PRODUCT DESCRIPTION

PERM-A-SHIELD is a water based liquid applied, urethane-modified acrylic coating. PERM-A-SHIELD is very low VOC and has little odor. It is an economical light to medium duty deck coating top coat with excellent resistance to weathering and ultra violet rays. PERM-A-SHIELD is a high build top coat with excellent hiding capabilities.

2. MANUFACTURER

URETHANE POLYMERS INTERNATIONAL, INC.

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3. BASIC USES

To re-seal and color coat existing cover layers that have become faded, stained or discolored. PERM-A-SHIELD can be used to top back to cover all types of existing systems of the cover layer as acrylics, epoxies and urethanes.

4. SURFACE PREPARATION

All surfaces must be cleaned and free of all foreign matter such as, dirt, oil and grease. High pressure water washing with a mild detergent is recommended. Proper cleaning is mandatory for PERM-A-SHIELD to bond properly to the substrate.

5. APPLICATION

After the surface has been properly cleaned and repaired, apply one coat of UI-7012 Water Based Epoxy Primer at 250-350 square feet per gallon and allow to dry. The PERM-A-SHIELD should be installed the same day as the Primer application or re-priming may be necessary. With a brush, roller or spray equipment, apply PERM-A-SHIELD at 125-150 square feet per gallon per coat. Depending on the surface condition and the aggregate size, two coats are almost always recommended. Two light coats always work better than one heavy coat. Depending on air temperature, allow to sufficiently dry (usually 4-8 hours) before light foot traffic is allowed. Do not place heavy objects on the surface or put patio furniture on the surface until after at least 96 hours of warm weather curing. **CAUTION:** The application of PERM-A-SHIELD over some surfaces may cause the surface to become slippery when wet. In these situations, light aggregate should be added to and backrolled into the PERM-A-SHIELD to aid in slip resistance.

6. LIMITATIONS

Do not apply to hot surface or during unusually hot weather or streaking or sticky condition may result. Do not apply in temperatures below 55°F or above 90°F. Do not apply if rain is anticipated before the coating can adequately dry. Not designed for vehicular traffic. Avoid applying PERM-A-SHIELD in hot weather in direct sun.

7. AVAILABILITY

PERM-A-SHIELD is supplied through Building Material Distributors. These products are designed and manufactured to be installed by professional installers familiar with surface preparation and application procedures. All others should consult a professional installer. Those who choose to install these products without professional assistance do so at their own risk.

8. COLORS AND PACKAGING

PERM-A-SHIELD is stocked in Standard Gray and Standard Tan colors. Available in range of non-stocking colors with minimum order of 100 gallons per color per batch. Available in 2-gallon pails, 5-gallon pails and 55-gallon drums.

9. TECHNICAL DATA

<i>PROPERTY (Cured Film)</i>	<i>TYPICAL VALUE</i>	<i>TEST METHOD</i>
BOND STRENGTH TO PLYWOOD	130 psi	ASTM C-297
WATER VAPOR PERMEABILITY	2.3 PERMS	ASTM E-96
IMPACT TEST	NO CRACKING	ASTM D-3320
FREEZE /THAW	NO CHANGE	ASTM C-67
WEATHEROMETER (2000 hours)	NO DEGRADATION	ASTM G-23
ELONGATION	125%	ASTM D-2370
TENSILE STRENGTH	1000 psi	ASTM D-412

10. LIMITED WARRANTY

URETHANE POLYMERS INT'L (UPI) warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any UPI materials prove to contain manufacturing defects that substantially affect their performance, UPI will at its option, replace the materials or refund this purchase price.

This limited warranty is the only warranty extended by UPI with respect to its materials. There are no warranties, including the implied warranties or merchantability and fitness for a particular purpose. UPI specifically disclaims liability for any incidental, consequential, or other damages, including but not limited to, loss of profits or damages to a structure or its contents, arising under any theory of law whatsoever.

The dollar value of UP's liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the UPI material in question.

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