

# RHINO TOP

## ACRYLIC/EPOXY EMULSION COATING

### Technical Data & Application Instructions

#### PRODUCT DESCRIPTION

**RHINO TOP** is a high quality, water-based acrylic coating that incorporates an epoxy additive to increase its abrasion resistance. A special spherical silica sand is suspended in the textured version to provide a fine uniform non-skid finish.

**RHINO TOP** provides a durable colored topping for horizontal concrete and asphalt surfaces. Its satin sheen makes **RHINO TOP** an aesthetically pleasing wall dressing that effectively evens out texture and color variations on cast concrete substrates.

#### BASIC USES

**RHINO TOP** was specifically developed for use over concrete, masonry, stucco, plaster and asphalt. Its epoxy-modified acrylic finish is designed to resist abrasion, weathering and moisture degradation. **RHINO TOP** is recommended for use on recreational courts, walkways, pool decks, tennis courts, patio decks and floors. It provides a finely textured, weather-resistant colored finish on vertical surfaces such as building exteriors, highway bridge structures, median barriers, retaining walls and noise abatement walls. In addition, **RHINO-TOP** may be used over **ROOF MATE** or other roof coatings to delineate walkways and service areas, as well as to incorporate non-skid properties.

**RHINO TOP** can also be used in combination with **Uniflex 101** Basecoat on applications requiring a waterproof membrane topcoated with a non-skid colored finish. This system is particularly effective on above grade tennis courts and recreational decks as well as balconies and lanais.

#### PACKAGING & MIXING

**RHINO TOP** is a single package material available in 1-gallon (3.8 liter) cans, 5-gallon (19 liter) pails and 55-gallon (208 liter) drums. **RHINO TOP** should be thoroughly mixed prior to application utilizing a power mixer capable of uniformly mixing the entire container. When using the textured formulation, mix the container periodically to prevent settling of the non-skid texture aggregate.

#### PHYSICAL PROPERTIES

- Solids by Weight:**  
52% [ASTM D2369]
- Solids by Volume:**  
38% [ASTM D2697]
- Weight per Gallon:**  
10.5 lbs. (4.8 kg) ( $\pm$ .5)
- Flash Point:**  
>200°F (93°C) [ASTM D3278]
- Dry Time:**  
30 minutes to touch  
1 to 2 hours for recoat  
@ 75°F (24°C), 50% R.H. [ASTM D1640]
- Cure Time:**  
48 hours @ 75°F (24°C), 50% R.H.  
[ASTM D1640]
- Gloss:**  
2.5 (60° Gardner) [ASTM D523]
- Hardness:**  
3H pencil [ASTM D3363]
- Temperature Limits for Normal Service Conditions:**  
-30°F to 150°F (-34°C to 66°C)

#### ADVANTAGES

- Single package, water-based system for ease of application and cleanup.
- Bonds tenaciously to concrete, masonry and asphalt surfaces.
- Resists ultraviolet degradation for long-term protection and color stability.
- Provides durable, non-skid texture on interior or exterior surfaces.
- Resists wear and abrasion through the incorporation of an epoxy additive.
- Protects against asphalt degradation by sealing in the vital oils of the asphalt mix.
- Helps prevent dusting and spalling of concrete surfaces.
- Surfaces resist penetration from general soils, motor oils and gasoline for ease in cleaning.
- No toxic fumes or objectionable odor; meets all VOC requirements.

## COLORS

**RHINO TOP** is available in ten standard colors: **Flint Gray, Concrete Gray, Smoke Gray, Burlap, Sandstone, Brownstone, Tile Red, Turf Green, Black, and White**. Custom color selection is virtually unlimited to meet specific project requirements. Color chips or samples must be submitted to UNITED for all custom colors.

## SURFACE PREPARATION

All surfaces must be structurally sound, clean, dry, fully cured, and free from dust, curing agents or form release agents, efflorescence, scale or other foreign contaminants. Concrete and masonry surfaces shall be free of sharp projections, ridges and loose aggregate. Prior to application over vertical masonry block, a quality acrylic block filler must be used to fill the pores and achieve a pinhole-free surface.

Concrete or asphalt surfaces can be repaired, sloped or resurfaced utilizing UNITED'S **Uni-Crete**, a polymer modified concrete. Mix with water to the desired consistency and apply as per instructions on container.

New concrete must be allowed to cure a minimum of 28 days. It shall then be cleaned with **United Cleaning Concentrate (UCC)** before etching and rinsing with liberal amounts of fresh water to assure complete acid removal. Sandblasting of concrete will be required if the surfaces are contaminated to the point that alternate cleaning methods are ineffective. Concrete surfaces having a smooth, steel-trowelled finish must be acid etched or sandblasted.

All asphalt shall be allowed to age a minimum of 60 days prior to the application of **RHINO TOP**. A test application is recommended over new asphalt to assure there is no bleed-through of the asphaltic oils.

Prior to sealer application, all loose material, foreign objects, dirt and dust shall be removed by use of a power vacuum or compressed air. Immediately following final cleaning, concrete and asphalt surfaces shall be sealed with one coat of **Uni-Tile Sealer LV** or **Uniseal** respectively. After the sealer has completely dried, existing hairline cracks shall be filled with an approved acrylic or single-component urethane sealant. All cracks larger than hairline should be considered as "moving" and shall be routed and cleaned prior to application of sealant. Sealant shall be trowelled flush with sufficient pressure to fill the cracks and joints completely. At the intersection of all vertical and horizontal surfaces, apply a ½" (1.3" cm) sealant bead, tooled slightly concave, and extended a minimum of 1½" (3.8" cm) vertically and horizontally. Use backer-rod or other bond breaker on moving cracks.



## APPLICATION

Prior to the application of **RHINO TOP**, concrete surfaces shall be primed with one coat of **Uni-Tile Sealer LV**, reduced as necessary with M.E.K., Xylol or Acetone, applied at the rate of 250 to 500 sq. ft. per gallon (6.1 to 12.2 m<sup>2</sup>/l). Over asphalt surfaces, or over concrete when an all water-based system is required, prime with UNITED'S **Uniseal**. Reduce as necessary with water to achieve adequate penetration over dense surfaces. Apply the primer at the rate of 200 to 250 sq. ft. per gallon (4.9 to 6.1 m<sup>2</sup>/l) over asphalt, or 250 to 300 sq. ft. per gallon (6.1 to 7.3 m<sup>2</sup>/l) over concrete. For additional details on primer application, refer to separate literature entitled **Uni-Tile Sealer LV** or **Uniseal** Technical Data & Application Instructions.

**RHINO TOP** may be applied by brush, roller or airless spray. The textured finish must be roller applied utilizing a ¼" to ½" (6 to 13 mm) nap roller. Brush application can be used for edge work or confined areas inaccessible by roller. Airless spray may be utilized to apply the smooth finish over substrates that have a heavy surface texture already or do not require non-skid protection.

**RHINO TOP** shall be applied in two (2) separate coats to assure even coverage and proper film build. Apply at the rate of 200 to 250 sq. ft. per gallon (4.9 to 6.1 m<sup>2</sup>/l) per coat. All surfaces must be uniformly coated and free from voids, pinholes and blisters. Successive coats of **RHINO TOP** should be applied perpendicularly and as soon as the previous coat has dried sufficiently to allow the applicator to walk back on. This is normally accomplished within 2 hours, but in any event before contamination occurs. If contamination does occur on any coated surface, it must be broomed or if necessary, pressure washed before additional coats are applied. **RHINO TOP** should extend a minimum of 4" (10 cm) up vertical walls or projections to create a self-terminating flashing.

When **RHINO TOP** is applied over existing primed metal, apply coating to a small test area to ensure proper adhesion. All bare metal surfaces must be primed with **Acrylex 400** applied at 250 to 300 sq. ft. per gallon (6.1 to 7.3 m<sup>2</sup>/l).

**RHINO TOP** cures to an attractive flat finish. If a semi-gloss sheen is desired, or for ease of cleanability in high traffic or other areas subject to dirt pick-up, **RHINO TOP** may be topcoated with **Acrysheen**. Apply a single coat at the rate of approximately 200 sq. ft. per gallon (4.9 m<sup>2</sup>/l) over the final coat of **RHINO TOP**, once it has dried.

Brush or roller are easily cleaned with soapy water. Clean spray equipment with water and final flush with a mixture of water and Lacquer Thinner or water and Methyl Ethyl Ketone (MEK).

## LIMITATIONS & PRECAUTIONS

**RHINO TOP** requires complete evaporation of water to cure. Cool temperatures and high humidity retard cure. Do not apply during weather conditions such as rain, fog, or freezing temperatures, or if such conditions are imminent.

Do not apply **RHINO TOP** at temperatures below 50°F (10°C) or when there is a possibility of temperatures falling below 32°F (0°C). Do not ship or store unless protection from freezing is available.