

TRÜNANO™ CONCRETE ARMOR

Complies with SCAQMD
 VOC: Less than 100 g/L
 LEED 7 Points CARB

DESCRIPTION

TruNano™ Concrete Armor is a protective coating for concrete & masonry surfaces. TruNano™ Concrete Armor was designed to protect the substrate from normal destructive forces, providing a long lasting barrier which exhibits superior resistance to moisture, abrasion, uric acids and food acids. TruNano™ Concrete Armor is peel and flake resistant and protects against damage resulting from moisture intrusion and chloride ion penetration on masonry. For professional use only.

NOTE: TruNano™ Concrete Armor is available in a Gloss or Satin finish.

SURFACE

Poured Concrete, Concrete Masonry, Brick, Concrete Block and Concrete Walls.

SOLUTION

Moisture, Stains, Mild Acids and Abrasion.

MATERIAL RESISTANCE CHART

CHEMICAL	RESULT
Moisture	No Effect
Mold	No Effect
Motor Oil	No Effect
Food Acids	No Effect
Acid Rain	No Effect

CHARACTERISTICS

Color: Translucent red or pink
 Finish: Gloss or Satin
 Vehicle: Type: Solvent Base
 Flash Point: (C Penskey-Martens closed Cup)
 16.7C/62.1F
 VOC: less than 100 g/L
 Weight per Gallon: 7.36 lbs.
 Non-breathable
 Not for use as a hydrostatic barrier

COVERAGE

Approximate Coverage: 500-800 sq. Ft./Gal.

NOTE: Coverage will vary depending on the porosity and texture of the substrate. Substrates with high porosity will require more sealer resulting in a lower coverage rate.

SPREAD RATE

Recommended Spread Rate per coat:
 Wet mils: 2.0-3.0
 Dry mils: 0.7-1.5

EXPECTED WEAR

TruNano™ Concrete Armor will protect the substrate, if properly maintained and provided the surface is not exposed to a highly abrasive atmosphere, for up to 3 to 5 years. It is highly recommended that the substrate be inspected on an annual basis to determine environmental wear on the surface.

SURFACE PREPARATION

Prior to the application of TruNano™ Concrete Armor all surfaces and substrates must be clean, dry, and in sound condition. It is extremely important that all oil, dust, grease, dirt, loose rust, and other foreign material be removed.

Silicone Sealer Removal

If the surface has been previously sealed with a silicone sealer, the silicone must be removed entirely. To remove silicone sealers, clean surface with a solution of 80% water and 20% vinegar. Wet surface with water and vinegar solution and let stand 10 minutes. Remove solution and rinse thoroughly with clean water. Flush with fresh clean water. Surface must then be neutralized with a mixture of 50% baking soda and 50% water. Spraying neutralizing solution onto the surface and let stand, then rinse with clean water. Use of a hot water pressure washing system will enhance cleaning application.

NOTE: pH level must be between 7 and 10. The rising moisture vapor emission rate must not exceed 3 pounds per 1,000 square feet (3 lb/1,000 ft²) over a 24-hour period as measured by the calcium chloride test method, ASTM F-1869. Surface measuring equipment can provide a wide variety of results. Tramex Concrete Encounter CME 4 digital moisture meter is recommended with a reading of 3% or below. If using a meter other than the Tramex, rely upon the ASTM F-1869 reading as a cross-reference.

Pre-sealing Required on Unsealed/Porous Concrete

On unsealed or porous concrete, you must apply TruNano™ Enhancer Plus to seal the concrete prior to applying Concrete Armor (see Enhancer Plus Data Sheet for application instructions).

New Concrete or Masonry Surfaces

If in sound condition, clean the surface of all foreign material including dirt, dust, grease, oil, loose particles, laitance, coatings, and curing or release agents. Smooth surfaces should be prepped by abrading the surface to between 200 and 400 grit by blasting or grinding. Prepared surface should be brought to a pH level of between 7 and 10. Thoroughly clean and allow surface to

SURFACE PREPARATION - Continued

dry seal surface using TruNano™ Enhancer Plus (See Enhancer Plus Data Sheet for complete application instructions). Allow sealer to dry for 15 minutes. Using a floor machine and a white scotch style scrubbing pad, go over the sealed area. Remove any loose particles generated by the floor machine.

Previously Coated or Sealed Surfaces

If in sound condition, clean the surface of all foreign material. If the coating is peeling or badly weathered, re-application of existing coating may be necessary. Prepared surface should have a pH between 7 and 10

APPLICATION INSTRUCTIONS

Test Area

Due to the wide variety of substrates and the various environments, always test TruNano™ Concrete Armor in an inconspicuous location to ensure adhesion and determine that the desired look is achieved. There will be an enhancement or change in appearance from the natural surface.

NOTE: TruNano™ Concrete Armor is available in a Gloss or Satin finish.

CAUTION: If applying outdoors, make certain the ambient temperature is between 45° F and 105° F, and that there is no chance of rain for a minimum of 5 hours after the estimated time of completion of the coating process. Also make certain there will be no additional morning dew to make the surface damp again after it has dried.

Applications

Once surface had been properly prepared, mask off any adjacent surfaces to keep them free of drips or accidental coating. Prior to coating, wipe all surfaces with a tack cloth to remove any small pieces of dust or contaminants. The application area must be free of dust and other contaminants that may settle into the finish during application and become part of the surface. Using a tack cloth just prior to applying the coating will ensure no contamination and a more aesthetically pleasing look to the finish coating. (see Stone Armor)

Open TruNano™ Concrete Armor. Manually stir contents thoroughly to suspend the nano particles that have settled to the bottom. Make certain to re-stir every 15-20 minutes to ensure proper performance. Do not use a power mixer when mixing. All mixing should be done by hand.

TruNano™ Concrete Armor can be applied in three different methods. Each method should be evaluated to determine the appropriate application for each project or substrate.

Roller Application: Using an ultra smooth high density foam roller, pour the TruNano™ Concrete Armor into a roller pan and completely saturate the roller with the mixture. Apply a liberal coat in a cross-pattern; left to right, then up and down

as quickly as possible, making sure there is always plenty of material in the roller so no spots are missed. Desired wet film thickness (WFT) is approximately 2.0 - 3.0 mils. Observe the surface right away to make certain there are no lines or roller marks. If lines or marks are visible, quickly touch up and avoid any further contact to the surface as the working time is very short. Over-working the coating will ruin the finish.

NOTE: Do not apply a second coat until the surface has dried for 24 hours and the surface has been re-abraded with 400 grit sand paper to allow the second coat to bond.

Pump Sprayer: Using a good quality acetone/alcohol proof pump sprayer equipped with a grey or red cone tip, hold the tip square to the surface being coated. Hold the tip at a distance of 8" to 10" off the surface and spray the surface in a cross-pattern; left to right, then up and down. Be careful not to apply too thick or allow the product to puddle. Desired wet film thickness (WFT) is approximately 2.0 - 3.0 mils. Observe the surface right away to make certain there are no missing spots.

NOTE: Do not apply a second coat until the surface has dried for 24 hours and the surface has been re-abraded with 400 grit sand paper to allow the second coat to bond.

HVLP Spray Application: Use a high volume low pressure sprayer (HVLP) with a 1.0 spray tip with air pressure set at 25 to 30 psi. On a piece of cardboard first spray a test pattern, you are looking for a 6" to 8" elongated pattern approximately 1 ½" wide in the middle.

Once you achieve the desired spray pattern on the test cardboard, spray the surface in a cross-pattern; left to right, then up and down. This will provide sufficient coverage and help prevent missing any spots. Desired coverage is approximately 2.0 to 3.0 mils wet film thickness (WFT).

CAUTION: If using spray application method in an enclosed space, make certain to tent off the area being sprayed with plastic tarps to avoid spray dust from traveling and contaminating other surfaces with overspray dust. Tented and enclosed areas should always be positively supplied with fresh air and have ventilated exhaust to outside using fans. Never spray near any open source of ignition such as pilot light flames, or anything that may spark, as this may cause ignition and explosion of the fumes and vapors.

When spraying outdoors, make certain there will be no rain for at least 5 hours after anticipated completion time. If there is high wind, this will affect the quality of the finish as blowing wind can disrupt the spray pattern from the HVLP sprayer and can contribute to contamination of the finish. It may be necessary to erect a wind screen to protect the area prior to beginning the coating application.

To spray small pieces or tight locations use a "Preval" sprayer. This is a small disposable sprayer that can spray any liquid and holds approximately 6 oz., which is also ideal for touch