

# INSTRUCTIONS/USE

# STONE COATING

## Description

NanoTech Stone Coating is a clear, non-breathable, protective quartz coating ideal for calcium based stones such as marble, limestone, travertine and onyx (as well as man-made conglomerates that are cement based). NanoTech Stone Coating protects stone from etching by providing a superior, long lasting barrier against moisture intrusion, stains, mold, liquid and food acids. NanoTech Stone Coating is available in a gloss or satin finish, making it ideal for use in kitchens, restaurants, bars, tables.

## Surface

NanoTech Stone Coating is ideal for marble, limestone, travertine, tumbled marble, onyx and other natural stone as well as man-made conglomerates that are cement based.

## Solution

NanoTech Stone Coating protects surfaces against:

- Moisture
- Stains
- Acid Etching

## Characteristics

Color:	Clear
Finish:	Gloss and Satin
Vehicle Type:	Solvent Base
Flash Point:	(C Penske-Martens close cup) - 9C/15F
VOC:	Less than 100 g/L
Weight per Gallon:	7.36 lb
Non-Breathable	

## Spread Rate

Recommended Spread Rate per coat:

Wet mils: 4.0-5.0

Dry mils: 2.4-3.0

Limestone & Travertine require 2 coats wet on tack

## Coverage

Substrate	Sq Ft / Gal
Limestone	250-300*
Marble	300-400
Travertine	250-300*
Tumbled Marble	300-400
Onyx	300-400
Polished Marble	300-400

\*Requires 2 coats

## Surface Preparation

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, and other foreign material using NanoTech Coatings Surface Prep. Rinse with fresh, clean water and dry.

### Removal of All Existing Silicone Sealers

To determine if the surface is previously sealed or coated, sprinkle water onto the surface. If the water is absorbed and the surface becomes darker it has not been sealed. If the water beads up, there is a coating or sealer that must be removed to allow adhesion of Stone Coat to the substrate. It is crucial to ensure adhesion of the coating. Remove all surface contamination by washing with NanoTech Coatings Surface Prep. Rinse with fresh clean water and dry. (NanoTech Stone Coating will not adhere to silicone).

### Honed Stone Surfaces

On honed surfaces make sure to use the Satin version of Stone Coat to maintain that honed look, it may still be glossier than the natural honed finish. It may also enhance beige limestone or travertine. Always do a test sample.

### Exterior Surfaces

It should be noted that on exterior surfaces, especially white, NanoTech Stone Coating could turn slightly yellow over time.



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## Application Instructions

### Test Area

Due to the wide variety of colors and textures of stone and the various methods of application and environments, test NanoTech Stone Coating in an inconspicuous location to ensure adhesion and determine that the desired look is achieved. There will be a slight enhancement or change in appearance from the natural stone especially on light brown and beige stones.

### Application

Once surface has been properly prepared (clean, dry, and free of any prior silicon based sealers), cover any adjacent surfaces to keep them free of drips or accidental coating. Stone Coat is available in two finishes, satin or gloss. 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. Always wipe surface with a tack cloth prior to application to remove any small pieces of dust.

NanoTech Stone Coating is a 2 component product (REQUIRES PART B CATALYST). Stir contents of NanoTech Stone Coating thoroughly to re-suspend the nanoparticles that have settled to the bottom of the container. In a separate, large, clean container, mix 1 part Stone Coat and 1 part Catalyst and stir thoroughly. Make certain to re-stir every 15-20 minutes to ensure the nanoparticles are re-suspended in order to provide proper performance. For best results spray coating with an HVLP sprayer using a 1.4 tip and approximately 25 PSI. On a separate piece of cardboard first spray a test pattern to achieve a 6" to 8" elongated pattern approximately 1.5" to 2" wide in the middle. Spray in a cross pattern "left to right", then "up and down" to ensure that entire surface has been coated. If spraying is not conducive to the location and space, then the coating may be rolled on. Using an ultra smooth, high density foam roller (available at most major home improvement stores), pour the 1:1 mixture of Stone Coat and Catalyst 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 one time only making sure there is always plenty of material in the roller so no spots are missed. Do not over work the surface, simply spread the coating and let it stand to level out as it dries. Desired wet film thickness (WFT) is approximately 4 . 0 -5.0 mils. Over-working the coating will ruin the finish. Over the next 30 minutes, the coating will level further and become more smooth. When spraying outdoors, make certain there will be no rain for at least 5 hours after your anticipated completion time, the temperature needs to be between 45°F and 105°F and 90% RH. If there is high wind, this will affect the quality of the finish as blowing wind can disrupt the spray pattern from your HVLP It can also contribute to contamination of the finish with blowing dust. Take necessary precautions against natural elements.

### For Limestone or Travertine

Apply two coats wet on tack 10- 15 minutes apart. If the second coat cannot be applied within the 10-15 minutes reapplication window, let dry 24 hours, then lightly sand with 220 grit sandpaper to abrade the surface so the second coat can bond. Clean the surface and re-apply following the Application Instructions.

### Finish

Once Stone Coating is applied, do not attempt to adjust the finish by sanding to create a more matte finish, as this process will open the surface grain causing failure of the coating. Dust knobs or sharp peaks can be lightly buffed off with a soft wool polishing pad and polishing compound. Be very careful not to penetrate the surface. If the surface is accidentally abraded through the coating, then re-sand to 220 grit and re-apply NanoTech Stone Coating using Application Instructions above. If after applying the coating you notice defects in the finish that cannot be buffed out, simply wait 24 hours and sand the defects out of the surface with 220 grit or lower to remove the defects. It is not necessary to completely sand off the Stone Coating, only sand down the imperfections until they are no longer visible. The remaining surface can be sanded to 220 grit if re-coating the entire surface is desired. Stone Coating may also be blended in if damage has occurred to a spot. This is best achieved by an experienced finisher, similar to paint repair on a car. Wait the full cure time of 7 days after making repairs, avoiding liquids and heavy use. The surface is ready for use on Day 8.

### 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 over-spray dust. Tented and enclosed areas should always have excessive ventilation.

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.

## Dry Time

Drying Time (@ 77 F, 50% RH):

Drying time is temperature and humidity dependent.

Touch: 1 hour

Through: 2-4 hours

Dry: 24 hours

Full Cure: 7 Days

## Interruption of Work

It is not advisable to stop application in the middle of a singular surface.

## Clean Up

Clean and flush tools and equipment with acetone thoroughly immediately after application (before product dries). Once coating is dry it cannot be removed with acetone.



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### Caution

Always wear OSHA approved 1910.134 and ANSI Z88 2 respiratory protection. Fresh air and exhaust should be provided in the work area. If inhaled, move to fresh air.

Call physician immediately if physical difficulties occur.

Wear butyl-rubber gloves and other skin protection to avoid contact. In the event of contact with skin, wash skin thoroughly with soap and water. Chemical safety goggles or splash shields are required. Do not wear contacts without eye protection. Immediately flush eyes with water for 15 minutes after contact and get medical attention. If accidentally swallowed, rinse mouth thoroughly and obtain immediate medical attention.

### Care & Maintenance

#### First 7 Days (VERY IMPORTANT)

After NanoTech Stone Coating has been applied, do not use the surface for 3 days, keeping all liquids and objects off of the surface. On days 4 through 7, light use is allowed, but continue to keep all liquids off of the surface. Liquids will penetrate the surface before the coating has completely cured, which can cause a blister in the coating.

#### 8 Days and Beyond

On day 8, curing is complete and NanoTech Stone Coating surface is ready for normal use. It is designed to be a barrier against moisture intrusion, food and beverage acid etching, and stains for up to 8 hours. Longer exposure to these harmful items without cleaning them off would be lack of normal care and can eventually damage the surface. NanoTech Stone Coating is designed to provide some protection against vinegars as well, but these need to be cleaned up as quickly as possible (or within 1 hour).

#### Cleaning

Use NanoTech Coatings Safe Clean with warm water and a soft cloth or sponge, to clean up after spills. Always wipe up spills and standing water as soon as possible, to properly care for the coating. Although Stone Coat is scratch resistant, it is not scratch-proof. Do not use abrasive cleansers or abrasive scouring pads. Paint can be removed with acetone without damaging the coating. NanoTech Stone Coating does not require any additional waxing or protection.

