

**Industrial Objects** 

## What makes NANO-CERAMIC Permanent Coating System so durable?

NANO-CERAMIC permanent coating system is the latest generation of protective coating which transforms paint into a hard ceramic, providing superior scratch resistance and nearpermanent protection for all exterior or interior surfaces.

NANO-CERAMIC permanent coating system is 600°F resistant and more than 4 times stronger than traditional acrylic based paint finishes, and is effectively preventing damage that would otherwise affect the appearance and integrity of the original surface.

### Zero Maintenance for decades to come!

Our NANO-CERAMIC permanent coating system is rigorously tested by an independent testing laboratory according to the European standard for outdoor paints (EN 1504-2) as per test report page 19 as here below.

## Can NANO-CERAMIC Permanent Coating System be applied on any surface?

The NANO-CERAMIC permanent coating system can be applied directly or indirectly on all kinds of interior and /or exterior surfaces (absorbing and non-absorbing), such as concrete, steel, wood, acrylic, gypsum and many more.



### Is NANO-CERAMIC Permanent Coating System self-cleaning?

NANO-CERAMIC permanent coating system provides a permanent hydrophobic surface that is self cleaning, easier to clean and stays cleaner longer as water and dirt can not penetrate the ceramic layer. NANO-CERAMIC permanent coating system is resistant to water vapor and water absorption.

## Cities are getting hotter today by climate change.

## Can NANO-CERAMIC Permanent Coating System cool down buildings??

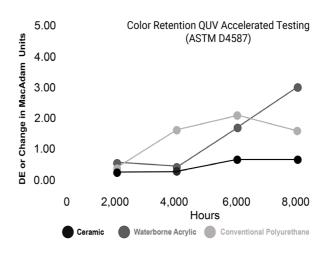
NANO-CERAMIC revolutionary **Coolest White Paint** has superb reflective properties of about 80% of the sun rays. Our **Coolest White Paint** shields buildings by blocking sunlight (passive cooling by +/-42°F), which effectively can reduce annual electricity cost and greenhouse gases.

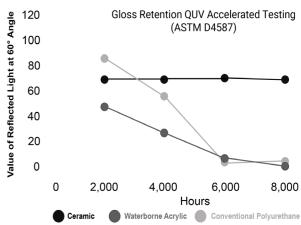
Our high tech reflective **Coolest White Paint** cools down the heat which means less airconditioning. NANO-CERAMIC **Coolest White Paint** has an extremely high TSR value (Total Solar Reflectance) of 80.

# Other paints are simply not suitable for longterm harsh outdoor environments.

In order to avoid poorly maintained properties (concrete rot, chipped and weathered paint, etc) for the next decades, our Permanent Coating System is simply the best solution to keep the value of your investment in place.

## **Superior in Color & Gloss Retention**





### A special selection of high grade tinting chemicals computerized dispersed in a superior ceramic resin.

Conventional gelcoats are a mixture with Epoxy or Polyurethane resins, of which the quality of resin and pigments are the most important factor in the ultimate strength. Most have a lifespan of 15 years, with hardness, color and gloss retention (sun fading) and manual mixing towards consistent quality being the most common problems in keeping the desired object at an aesthetically pleasing level.

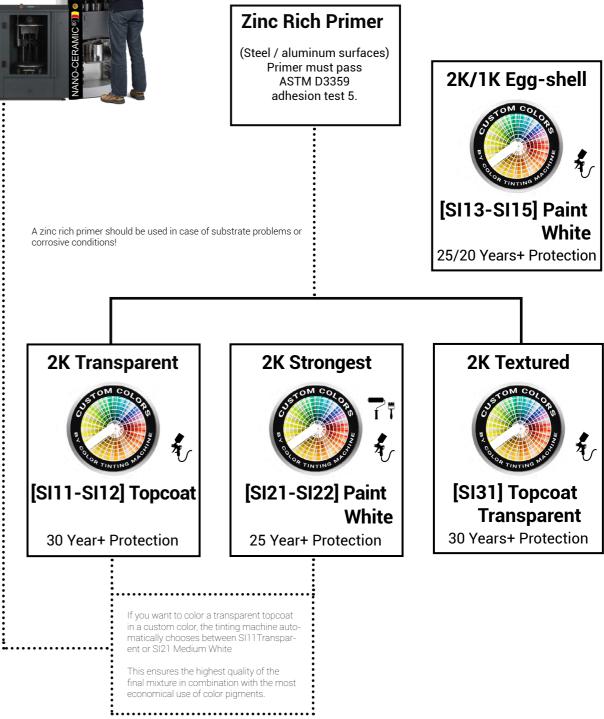
## Quality Comparison with traditional coating/paints.

In case written in bold font it means existing shortcomings in quality.

Characteristics	Acrylic	Ерохі	Polyurethane	Ceramic
Primer	Yes	Yes	Yes	No
Adhesion Strength	Poor	Poor	Poor	Excellent
Cross Cut Test	Poor	Good	Poor	Excellent
Abrasion Resistance	Poor	Good	Poor	Excellent
UV Radiation Resistance	Average	Poor	Good	Excellent
Artificial Atmospheric Agents	Poor	Good	Good	Excellent
Colour Retention	Average	Average	Poor	Excellent
Gloss Retention	Poor	Poor	Poor	Excellent
Chemical Resistance	Good	Good	Poor	Excellent
Severe Chemical Attack	Poor	Average	Poor	Excellent
Temperature Resistance	196°F	350°F	505°F	600°F
Thermal Shock Resistance	Good	Poor	Good	Excellent
Carbon Dioxide Permeability	Poor	Good	Poor	Excellent
Permeability water vapour	Average	Good	Average	Excellent
Water Absorption Resistance	1%	2%	3%	0%
Aging at 70°C	Poor	Good	Average	Excellent
Adhesion Strenght Pull-off	Average	Good	Poor	Excellent
Impact Resistance	Average	Good	Poor	Excellent
Anti-Graffiti	No	No	No	Yes
Anti-Termite (Wood)	No	Νο	Νο	Yes
Hydrophobic Self Cleaning	No	No	No	Yes
Easy to Clean	No	No	Νο	Yes
Total Solar Reflectance (TSR)	<b>60</b> (white)	60 (white)	<b>60</b> (white)	88 (white)
Expected Lifetime inYears	<7	<15	<15	30+

## **Permanent Coating Protection Plan for Industrial Objects**





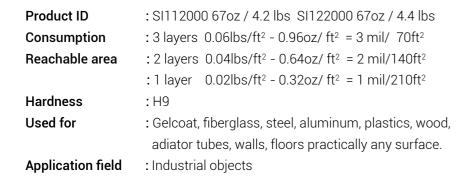


## SI11/SI12 2-Component (2K)

## **Topcoat Transparent** for glossy and matt surfaces



How to use: Page 10



SI11/SI12 is an incredibly strong 2-component paint system which forms a durable matrix of molecular bonds (transformation to ceramic) resulting in permanent protection of the surface.

Three simple steps: Clean, Dry, and Apply.

- · Easily repels water, dirt, dust, and pollutants.
- This coating is permanent hydrophobic. ٠
- Restores damaged finishes and reduces cleaning intervals.
- Resistant to all kinds of chemicals and UV radiation.
- Superior anti-pollution and anti-corrosion properties.
- This coating can withstand temperatures of 300°C.

Expected Life Duration up to 30 years+

Easy to apply Repaintable Cut maintenance

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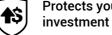
Anti-water spot Anti-corrossion

Permanent hydrophobic

Self-cleaning stays cleaner longer

Impact Resistance 1kg / 2lbs

Thermal Shock-Resistant



Protects your investment

SI21/SI22 2-Component (2K)

## **The Strongest White Paint** for glossy and matt surfaces

Product ID	: SI212000 67oz / 5.3 lbs SI2220		
Consumption	: 3 layers 0.044lbs/ft <sup>2</sup> - 0.56oz/		
Reachable area	: 2 layers 0.030lbs/ft <sup>2</sup> - 0.37oz/		
	:1 layer 0.014lbs/ft <sup>2</sup> - 0.19oz/		
Hardness	:H8		
Used for	: Gelcoat, fiberglass, steel, alumir		
	adiator tubes, walls, floors prac		
Application field	: Industrial objects		

SI21/SI22 is a medium white 2-component paint that binds molecules and (conversion to ceramic) provides permanent protection on applied surfaces.

Three simple steps: Clean, Dry, and Apply.

- Easily repels water, dirt, dust, and pollutants.
- This coating does not absorb any water •
- Resistant to all kinds of chemicals and UV radiation. •
- This coating can withstand temperatures of 300°C

Expected Life Duration up to 25 year+

2000 67oz / 5.5 lbs ft<sup>2</sup> = 3 mil/120ft<sup>2</sup>  $ft^2 = 2 mil/160 ft^2$  $ft^2 = 1 mil/240ft^2$ 

inum, plastics, wood, ctically any surface.



How to use: Page 10



Cut maintenance costs

Easy to apply

Repaintable



Anti-water spot Anti-corrossion



Permanent hydrophobic



Self-cleaning stays cleaner longer



Impact Resistance 1kg / 2lbs

Thermal Shock-Resistant



Protects your investment



## SI31 2-Component (2K)

## **Textured Transparent Semi Gloss** antislip - high inpact resistant

Article Nr.	: SI312000 67oz / 4.6 lbs
Consumption	: 3 layers 0.050lbs/ft <sup>2</sup> - 0.76oz/ ft <sup>2</sup> = 3 mil/90ft <sup>2</sup>
Reachable area	: 2 layers 0.033lbs/ft <sup>2</sup> - 0.51oz/ ft <sup>2</sup> = 2 mil/180ft <sup>2</sup>
	:1 layer 0.017lbs/ft <sup>2</sup> - 0.25oz/ ft <sup>2</sup> = 1 mil/270ft <sup>2</sup>
Hardness	: H9
Used on	: Gelcoat, fiberglass, steel, aluminium,
	: plastics, wood, virtually any surface.
Application area	: Buildings, marine, offshore structures, bridges, etc

SI31 is a clear solvent-based ceramic coating, linked with a ceramic activator, available in semi-gloss and includes sprayable nano particles. Known for its exceptional durability, this coating easily applies to any organic surface without needing a primer. Its textured design makes it perfect for anti-slip needs.

- Easily repels water, dirt, dust, and pollutants.
- This coating has an outstanding hydrophobic effect.
- Resistant to all kinds of chemicals and UV radiation.
- This coating can withstand temperatures of 600°F.
- Zero absorbtion, waterproof, insulation and heat rejecting

Expected Life Duration up to 30 years+



How to use: Page 10

Easy to apply Repaintable ¢\$ Cut maintenance Anti-water spot Anti-corrossion Permanent hydrophobic

Self-cleaning stays cleaner longer

Anti-scratch

Visibility safety

Anti-Scratch

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Protects your investment



# SI13 (2K) / SI15 (1K)

## The Coolest White Paint for egg-shell surfaces

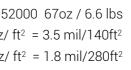
Article Nr.	:SI132000 67oz/7.3lbs SI15
Consumption	: 2 layers 0.050lbs/ft <sup>2</sup> - 0.48oz/
Reachable area	:1 layers 0.025lbs/ft <sup>2</sup> - 0.24oz/
Hardness	:H7
Used for	: Concrete, steel, wood, acrylic,
Application field	: Buildings Stations, tunnels, ex

SI13/SI15 is an incredibly strong 2-component eggshell paint system which forms a durable matrix of molecular bonds (transformation to ceramic) resulting in permanent protection of the surface.

Three simple steps: Clean, Dry, and Apply.

- · Easily repels water, dirt, dust, and pollutants.
- · This coating does not absorb any water
- Resistant to all kinds of chemicals and UV radiation.
- This coating can withstand temperatures of 300°C

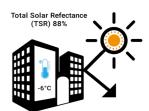
Expected Life Duration up to 25 year+ or 20 year+



gypsum , exteriors, interiors

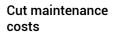


How to use: Page 10





Easy to apply Repaintable





Anti-water spot Anti-corrossion



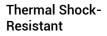
Permanent hydrophobic

Self-cleaning stays cleaner longer



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Impact Resistance 1kg / 2lbs





### How to use our Permant Coating System:

These products can be stored for up to 24 months (in a dry, temperature-stable dark environment)

#### **Processing Temperature:**

Ambient temperature: 41-86°F Avoid direct sunlight, Rain and /or high humidity.

#### **IMPORTANT:**

Before you use a NANO-CERAMIC product, please make sure you wear suitable protection gear. We always recommend using a paint suit, respirator mask and latex or nitrile gloves.

### **Outfit/Applicators:**



### **Application information**

The SI11/SI12/SI21/SI22/SI31/SI13/SI15 coatings can be applied directly or indirectly on all surfaces (porous and non-porous) such as concrete, steel, wood, acrylic, gypsum, painted or unpainted surfaces, indoors, or outdoors. The surface underneath will be superbly protected against erosion and corrosion and will stay cleaner longer. Cleaning becomes guicker, easier, and less expensive, as special cleaning agents are unnecessary.

#### Preparation

Make sure the surface is free from any contamination and dirt. A zinc rich primer can be used in case of problems with the substrate. Warning the surface must be completely dry before application and must stay dry for 6 hours after application after application!

#### The 2-Component Permanent Coating System

Mix the can SI11B-SI12B-SI21B-SI22B-SI31B-SI13B with the can of SI11A-SI12A-SI21A-SI22A-SI31A-SI13A by pouring can B into can A, or measure exactly by net weight in a ratio of 7:3 and mix very well. Mix the can of SI21B with the can of SI21A by pouring can B into can A, or measure exactly by net weight in a ratio of 9:1 and mix thoroughly with a power agitator. Carefully pour the mixed contents into a professional paint sprayer, and spray in thin layers until the surface reaches your required thickness. Let the surface dry for 24 hours. It is touch-dry in 1 hours, after 4 hours, 85% cured, and the remaining 15% (transformation into ceramics) is fully cured after 7 days. Be aware that the mixed contents cannot be stored longer than 3 hours. The surface can simply be maintained with a high pressure washer at 80 bar using our biologically degradable Reactivating Shampoo.

### Tool cleaning

The individual components, as well as the mixing system of the paint sprayer, can be diluted and cleaned using our THIN Thinner Solvent.



## for all types of our ceramic paint & coating

Article Nr.

: SOLV0400 14oz / 0.8 lbs

All our paints and coatings are ready to use, for certain spray applications, especially dark colors who require more than average color pigments, it may be necessary to use a little thinner solvent to achieve optimum flowability.

# RETA/ACCL Retarder Accelerator

### slow down flash time or speed up curing

Article Nr.

If your application need longer flash time (longer time to build up the layer with a second or third coat you can add the RETA Retarder. In case you want to spead up the curing process you can add the high efficient ACCL Accelerator.

## **E-Warranty**

Guarantee of quality and reliability of NANO-CERAMIC is guaranteed for 10 years if applied to the maximum thickness as indicated on the product page This limited product warranty covers the purchaser for installation in a new building application when installed professionally and supervised by an approved installer. The warranty applies only to newly constructed concrete wall applications, and warrant only against discoloration, peeling, cracking or delaminating. No warranty caused by surface/concrete cracks. All claims caused by cleaning chemicals, other than our SHRE Pure Shine Shampoo will be rejected. The warranty is valid only if registered by one of our approved installers through our Dealership Electronic Warranty registration form on our website.

Nitrile gloves

**Professional Paint Sprayer** 1.3-1.7mm / 0.05-0.06" nozzle

**NANO-CERAMIC®** 

Paint Suit





:RETA0400 14oz / 0.85 lbs ACCL0200 7oz / 0.4 lbs

SIX1 2-Component (2K)

## **Primer Micro Zinc Grey** surface modifier



Fast Repaintable

Excellent adhesion

es

SIX1 is a solvent based micro zinc primer. This primer is used for corrosion protection on stainless, galvanized, carbon and alloy steel, aluminum in corrosive conditions and has excellent adhesion to all organic substrates and to one of our ceramic topcoats. The primer can be applied at a relative humidity of 40-80% and can be painted over within 8 hours 85°F, 1 hours 140°F

SIX2 1-Component (1K)

## **Primer Wood Grain Filler** surface modifier



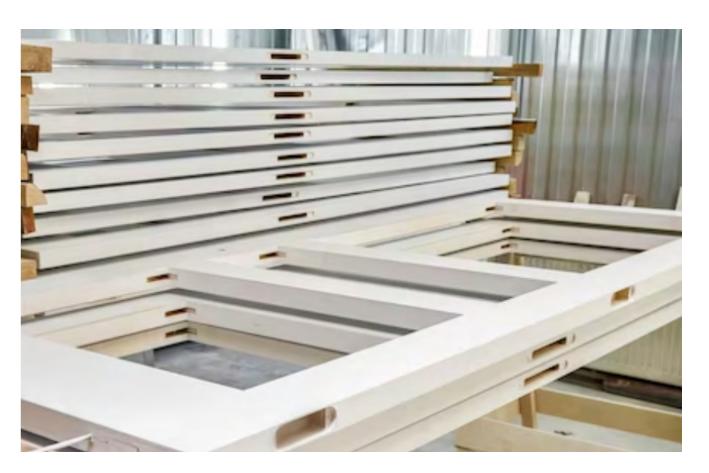
Article Nr.	: SIX22000 67oz / 7 lbs
Consumption	: 2 layers 0.04lbs/ft <sup>2</sup> - 0.64oz/ ft <sup>2</sup> = 2 mil/140ft <sup>2</sup>
Reachable area	:1 layer 0.02lbs/ft <sup>2</sup> - 0.32oz/ ft <sup>2</sup> = 1 mil/210ft <sup>2</sup>
Hardness	:H4
Used on	: Wood
Application area	: Buildings, marine, airports, bridges

SIX2 is a waterborn wood grain filler. This primer is used as surface modification to reduce capillary absorption and has an excellent adhesion to all organic substrates and towards one of our ceramic top coats. The primer can be applied at a relative humidity of 40-80%.





## **Micro Zinc & Wood Grain Filler**



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### **NANO-CERAMIC®**



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## Scan QR Code for TDS and SDS

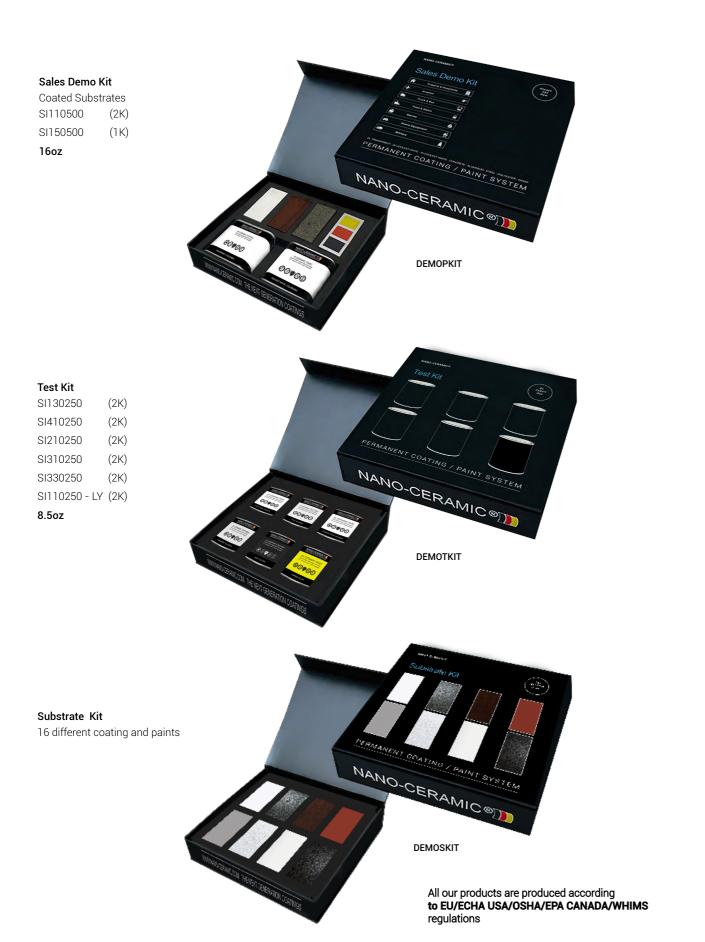




## **Video Application & Test Results**

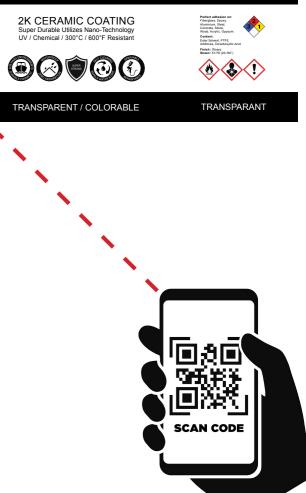






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## The Leader in Durability

### Did you know?

That our coatings are made of pure silica sand, which is the most common element on Earth? Dealer

