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 near-permanent 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 +/- 6°C), which effectively can reduce annual electricity cost and greenhouse gases.

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

Is NANO-CERAMIC Permanent Coating System available in colors?

NANO-CERAMIC permanent coating system is available in transparent and in white. Both can be tinted via our custom made computerized software program and color-tinting-machine.

NANO-CERAMIC high performance color coating provides excellent brilliance and color strength characterized by a perfect pigment dispersion. The dispersed particles in the formulations are selected without any compromise on quality.

A color card is available showing most common colors used for many applications like architectural, marine, military, wood varnish and many more.

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 public investments in place.
# Quality Comparison with traditional paints

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

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Acrylic Latex Wall</th>
<th>Epoxi Flooring</th>
<th>Polyurethane Waterproofing</th>
<th>SI11/SI12</th>
<th>SI13/SI15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy to Apply</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Apply Floor</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Apply Walls</td>
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<td>No</td>
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<tr>
<td>Apply Rooftop</td>
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<tr>
<td>Apply Concrete</td>
<td>Yes</td>
<td>Only Floor</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Apply Steel</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Apply Wood</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Apply Gypsum</td>
<td>Yes</td>
<td>No</td>
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<td>Apply Plastics/Epoxy Primer</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Moisture Sensitivity if Applicable</td>
<td>Yes</td>
<td>Yes</td>
<td>Poor</td>
<td>Poor</td>
<td>Excellent</td>
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<tr>
<td>Adhesion Strength</td>
<td>Poor</td>
<td>Good</td>
<td>Good</td>
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<td>Excellent</td>
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<tr>
<td>Cross Cut Test</td>
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<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Excellent</td>
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<tr>
<td>Abrasion Resistance</td>
<td>Average</td>
<td>Poor</td>
<td>Poor</td>
<td>Poor</td>
<td>Excellent</td>
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<tr>
<td>UV Radiation Resistance</td>
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<td>Good</td>
<td>Good</td>
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<tr>
<td>Artificial Atmospheric Agents</td>
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<td>Good</td>
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<td>Good</td>
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<td>Colour Stability</td>
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<td>Chemical Resistance</td>
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<td>Poor</td>
<td>Excellent</td>
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<td>Temperature Resistance</td>
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<td>Thermal Shock Resistance</td>
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<td>Carbon Dioxide Permeability</td>
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<td>Permeability water vapour</td>
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<td>Water Absorption Resistance</td>
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<td>Aging at 70°C</td>
<td>1%</td>
<td>Poor</td>
<td>2%</td>
<td>3%</td>
<td>0%</td>
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<tr>
<td>Adhesion Strenght Pull-off</td>
<td>Average</td>
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<td>Excellent</td>
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<tr>
<td>Anti Paint Cracking</td>
<td>Poor</td>
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<td>Excellent</td>
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<td>Impact Resistance</td>
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<tr>
<td>Anti-Corrosion</td>
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<td>Anti-Graffiti</td>
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<td>Anti-Termite (Wood)</td>
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<td>Anti-Algae</td>
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<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Anti-Pollution</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Hydrophobic Self Cleaning</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Easy to Clean</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Total Solar Reflectance (TSR)</td>
<td>60</td>
<td>Only Floor</td>
<td>60</td>
<td>88</td>
<td>88</td>
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</tbody>
</table>
| Lifetime Years                               | 5                  | 15             | 15                          | 20+/25+/30+ | 20+/25+/30+
Cross Section of Coating System

SI11 Ceramic Coating Transparent Gloss
SI12 Ceramic Coating Transparent Matte
SI13 Ceramic Paint Coolest White
SI15 Ceramic Paint Coolest White

Epoxy/Polyester
Acrylic
Polyurethane

Zinc Rich Primer
(if corrosive circumstances)

0.10mm
100 micron
0.20mm
200 micron
0.10mm
100 micron

Conventional paint

Conventional gelcoats are a mixture with Epoxy or polyester 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 and color retention (sun fading) being the most common problems in keeping the desired object at an aesthetically pleasing level.

QUV Accelerated Testing (ASTM D4587)

Color Retention

Gloss Retention
SI15 1-Component (1K)

Ceramic Paint White
for all types of surfaces

Article Nr: SI152250 2.25L / 4.500kg
Consumption: +/- 280gr / m² (depending on structure)
             Minimal thickness 0.20 mm 20 Year+
Reachable area: 16m²
Hardness: H7
Used for: The SI15 system 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
Application area: Buildings, airports, offshore structures, bridges, tunnels, hotels, private housing, etc.

SI15 is an incredibly strong 1-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.
- 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 suitable for making walls fire retardant and to make rooftops waterproof

Will last permanently for up to 20 year+.
Chemical + Temperature Resistant (300°C)
SI13  2-Component (2K)

Ceramic Paint White
for all types of surfaces

Article Nr:           : SI132500  2.5L / 5.000 gr
Consumption          : +/- 280gr / m² (depending on structure)
                       Minimal thickness 0.20 mm  25 Year+
Reachable area       : 18m²
Hardness             : H8
Used for             : The SI13 system 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
Application area     : Buildings, airports, offshore structures, bridges, tunnels, hotels, private housing, etc.

SI13 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.
• 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 suitable for making walls fire retardant and to make rooftops waterproof.

Will last permanently for up to 25 year+.
Passive Cooling - Isolating
SI12 2-Component (2K)

Ceramic Coating Transparent
for Matte surfaces

Article Nr: SI121000 1L / 1.050 gr Transparent matte
Consumption: +/− 350gr / m²
Mineral thickness 0.20 mm 30-Year+
Reachable area: 1L/3m²  2.5L/8m² (Covered)
Viscosity: 20
Hardness: H9
Used for: The system 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.
Application area: Buildings, airports, offshore structures, bridges, tunnels hotels, private housing, etc.

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.
- 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, suitable for making walls fire retardant and is most best solution to make rooftops waterproof

Will last permanently for up to 30 years+.
Super Strong - Self Cleaning
Article Nr: SI11000 1L / 1.050 gr Transparent Gloss
: SI112500 2.5L / 2.600 gr Transparent Gloss
Consumption: +/- 350gr / m²
Mineral thickness 0.20 mm 30-Year+
Reachable area: 1L/3m² 2.5L/8m² (Covered)
Viscosity: 20
Hardness: H9
Used for: The system 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.

Application area: Buildings, airports, offshore structures, bridges, tunnels, hotels, private housing, etc.

SI11 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.
- 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. suitable for making walls fire retardant and is most best solution to make rooftops waterproof

Will last permanently for up to 30 years+.
Super Strong - Anti-Corrosion
4 High Tech Coatings “Do The Job Right”

**System Transparent Permanent**
for glossy and / matte surfaces
SI111000 (2K) / SI112000 (2K)
1L / 1.050 gr
Minimal thickness:
0.20mm 30 Year+
Reachable area:
1m² 350 gram
3m² (covered)
Expected Lifetime:
30 Year+ (repaintable)

**System Transparent Permanent**
for glossy surfaces
SI122500 (2K)
2.5L / 2.600 gr
Minimal thickness:
0.20mm 30 Year+
Reachable area:
1m² 350 gram
3m² (covered)
Expected Lifetime:
30 Year+ (repaintable)

**System White Permanent**
color through the color card
SI132500 (2K)
2.5L / 5.000 gr
Minimal thickness:
0.20mm 25 Year+
Reachable area:
1m² 280 gram
18m² (covered)
Expected Lifetime:
25 Year+ (repaintable)

**System White Permanent**
color through the color card
SI151000 (1K)
2.25L / 4.500 gr
Minimal thickness:
0.20mm 20 Year+
Reachable area:
1m² 280 gram
16m² (covered)
Expected Lifetime:
20 Year+ (repaintable)
Tint your desired color at your place

Shaker

Dispencer

Colour card
Residential Coolest White with Maximum Reflection
Check our color chart for more available colors
# Military, Marine, Trendy and Industrial

## Military
- Battleship Grey
- Black
- NATO Green
- White
- Admiralty Grey
- Desert Sand
- Beige Camo
- Dark Grey Camo
- Dark Brown Camo
- Olive Drab
- Very Dark Drab
- Light Stone
- Bronze Green
- Brunswick Green
- Dark Sea Grey
- RAF Blue / Grey

## Marine
- White 3175
- Semi-Gloss White 3106
- Blue Glow White 3176
- Mediterranean 3164
- Hatteras Off-White 3108
- Hatteras Cream 3208
- Bronze Green
- Brunswick Green
- Dark Sea Grey
- RAF Blue / Grey
- Seattle Gray 3715
- Light Stone
- Blue Ice 3213
- Sea Foamgreen 3333
- Jade Green 3348
- Lady Yellow 3456
- Steel Gray 3720
- Sandstone 3518
- Grand Banks 3512
- Fire Red 3624
- Burgundy 3626
- Plutonium 3711
- Black 3801

## Trends
- Cameo Blue
- Blue Shell
- Fort
- Scroll
- Red Ochre
- Ohai Half
- Cobbler
- Sea Creature
- Hidden Depths
- Auburn Flair
- Beggar

## Industrial
- J.D. Yellow
- I.H. Red
- Matte Black
- Caterpillar Yellow
- J.J.D. Green

NANO-CERAMIC®
THE NEW GENERATION COATINGS
NANO-CERAMIC.COM
How to use our Permanent Coating System:

Application information
The SI11/SI12/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 quicker, 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 with the can of SI11A-SI12A 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 SI13B with the can of SI13A by pouring can B into can A, or measure exactly by net weight in a ratio of 9:1 and mix very well. Carefully pour the mixed contents into a professional paint sprayer, and spray in thin layers until the surface reaches a thickness of 200 μm / 0.2mm after drying. Depending on the surface, material and structure, different application techniques can be used (such as paint rollers or brushes). 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 Steril Cleaner.
E-Warranty

NANO-CERAMIC quality assurance and reliability are guaranteed with SI11/SI12 SI13/SI15 for 10 years if applied with a minimal thickness of 0.20 mm. This limited product warranty covers the purchaser of SI11/SI12 SI13/SI15 for use on new building applications when professionally installed by one of our approved installers on new paint on concrete walls only, against discoloration, peeling, or delaminating. There is no warranty caused by surface/concrete cracks. All claims caused by cleaning chemicals other than our NWAS / SHRE Shampoo will be rejected. Warranty is only valid if it is registered by one of our approved installers via our E-Warranty registration form on our website.
There is no better option than to use NANO-CERAMIC!

The Leader in Durability

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