



Licence No. 032-020
Environmentally Friendly
Low-VOC Paint



CERT NO.: 92-2-0074
ISO 9001 : 2008



MIRAC SHIELD NANO

DIRT RESISTANT, ONE PACK WATER-BASED COATING
BY CERAMIC HYBRID NANO TECHNOLOGY



NANO

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DIRT RESISTANT, ONE PACK WATER-BASED COATING BY CERAMIC HYBRID NANO TECHNOLOGY

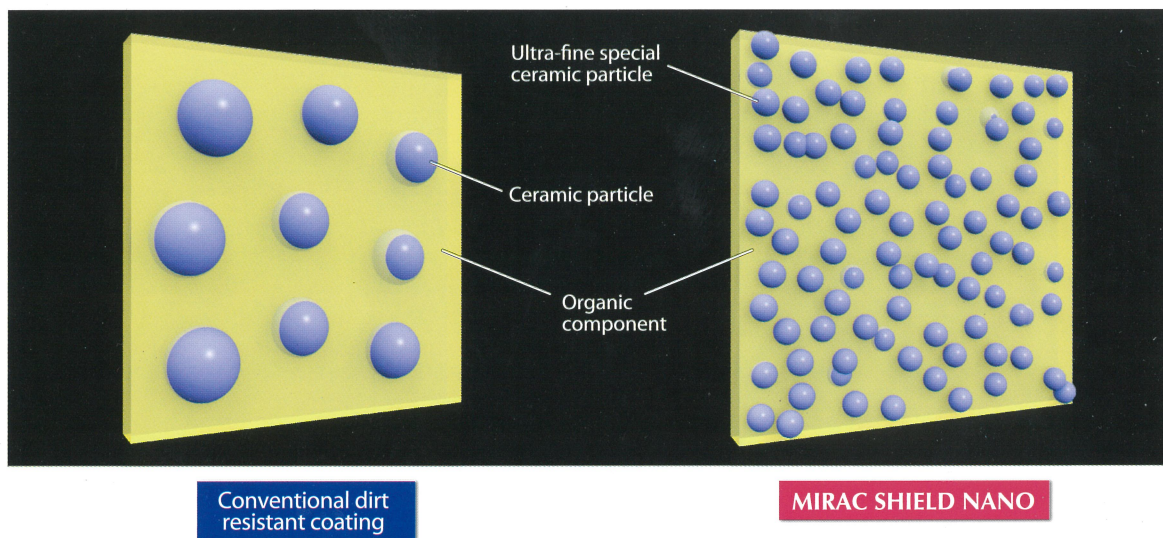
Processing the dirt resistant special ceramic component into ultra-fine particles through our unique nano technology, superior dirt resistant, one pack water-based coating, MIRAC SHIELD NANO has been developed.

Feature 1 Dirt Removal



Nano-size special ceramic particles form a fine hydrophilic paint film, which prevents dust and dirt from adhering.

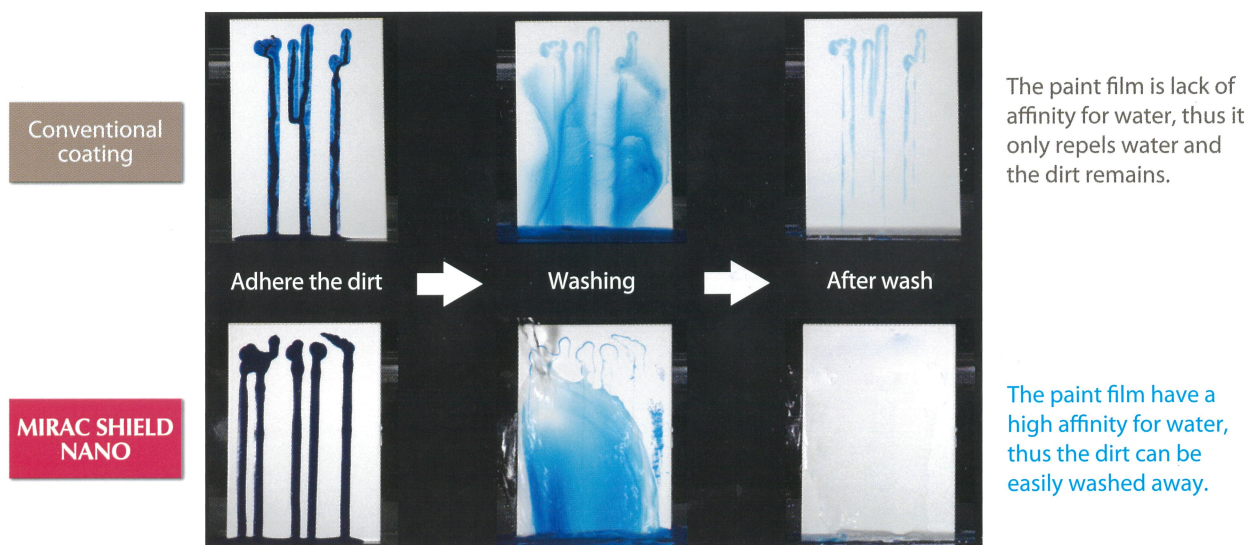
Image of forming a hydrophilic paint film by nano technology



The ultra-fine atomization of the special ceramic component increases the hydrophilic area formed in the paint film and improves the dirt resistant property.

Dirt removal test

Adhere the carbonate solution (dirt). After washing off with water, ascertain presence of dirt.



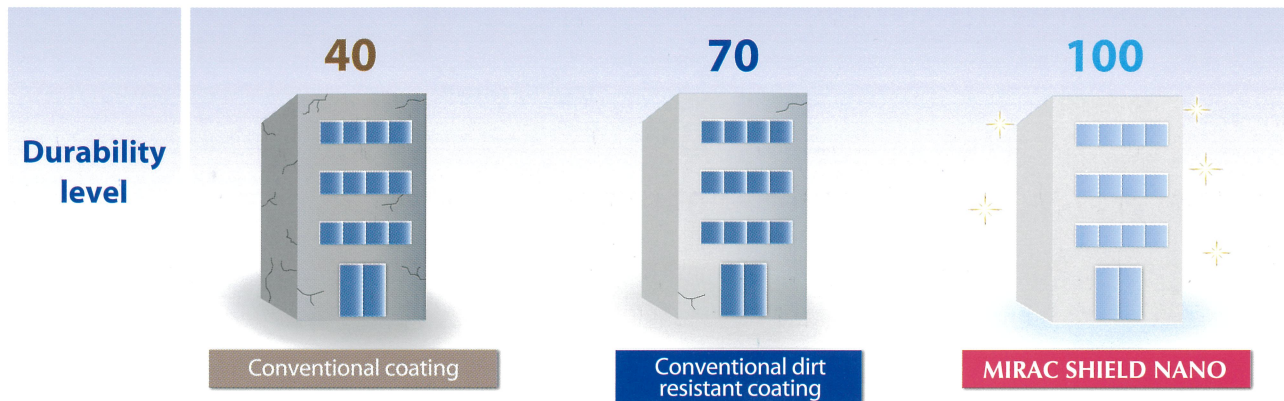
Feature 2

High Durability



A binder with highly durable acrylic silicon resin contributes to the longtime high durability, weather resistance and anti-colour fading.

Durability performance - Outdoor exposure test



* The value of durability level is a relative comparison when assuming the value of MIRAC SHIELD NANO is 100.

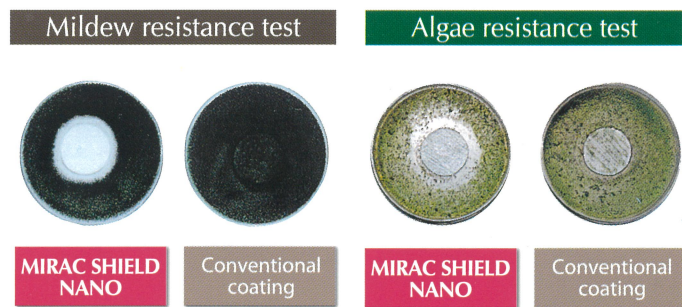
Feature 3

Mildew and Algae Resistance



Its special design enables strong resistance to microbial contamination such as mildew and algae.

Mildew and Algae resistance test

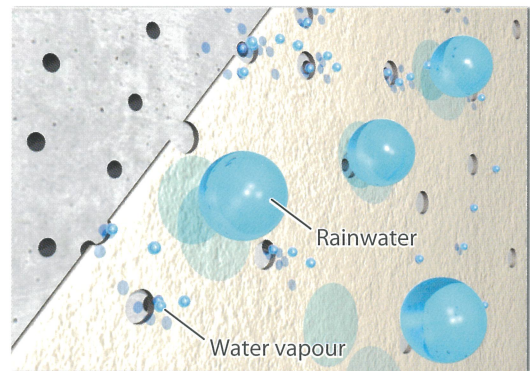


Feature 4

Moisture Permeability



Excellent water vapour permeability prevents paint film from blistering.



Feature 5

Elasticity



Feature 6

Heat reflection



Feature 7

Alkali resistance



Feature 8

Acid resistance



Standard Application Specification

| SMOOTH FINISH | | | | | | | | [23°C] | |
|-------------------|--|-------------------------|----------------------------------|------------|-----------------|-------------------|--------------|------------|---|
| Process | Material | Dilution ratio (wt.%) | Consumption (kg/m ²) | No.of coat | Interval (hr) | | | Remarks | |
| | | | | | In process | Between processes | Final curing | | |
| Surface treatment | ●Dry the surface thoroughly to bring water content to a maximum of 10% and pH to 10 or less. ●Completely remove any dirt, dust and repair unevenness, irregularities and scratches. | | | | | | | — | |
| 1 | Undercoat | ACRYLIC SEALER | 100 | 0.15-0.20 | 1 | — | 2 or more | — | Roller, Brush Airless spray gun Discharge : 600-1000ml/min Pattern width : 25-30cm |
| | | WATER | 0-15 | — | | | | | |
| 2 | Topcoat | MIRAC SHIELD NANO | 100 | 0.25-0.30 | 2 | 2 or more | — | 24 or more | Roller, Brush Airless spray gun Discharge : 800-1000ml/min Pattern width : 25-30cm |
| | | WATER | 0-15 | — | | | | | |

| SPRAY FINISH/PRESSED FINISH | | | | | | | | [23°C] | |
|-----------------------------|--|--|----------------------------------|------------|-----------------|-------------------|--|------------|---|
| Process | Material | Dilution ratio (wt.%) | Consumption (kg/m ²) | No.of coat | Interval (hr) | | | Remarks | |
| | | | | | In process | Between processes | Final curing | | |
| Surface treatment | ●Dry the surface thoroughly to bring water content to a maximum of 10% and pH to 10 or less. ●Completely remove any dirt, dust and repair unevenness, irregularities and scratches. | | | | | | | — | |
| 1 | Undercoat | ACRYLIC SEALER | 100 | 0.15-0.20 | 1 | — | 2 or more | — | Roller, Brush Airless spray gun Discharge : 600-1000ml/min Pattern width : 25-30cm |
| | | WATER | 0-15 | — | | | | | |
| 2 | Base coat | CT TILE | 100 | 1.3-1.7 | 1-2 | 2 or more | (Spray) 24 or more (Pressed) 30 min or less | — | TILE GUN(Tile-Tip) Nozzle : 6.5-10mm Pressure : 392-588kPa (4-6kgf/cm ²) |
| | | WATER | 0-5 | — | | | | | |
| (3) | Pressing | Press the surface with a plastic roller damped in PAINT THINNER A. | | | — | — | 24 or more | — | Plastic roller |
| 4 | Topcoat | MIRAC SHIELD NANO | 100 | 0.30-0.40 | 2 | 2 or more | — | 24 or more | Roller, Brush Airless spray gun Discharge : 800-1000ml/min Pattern width : 25-30cm |
| | | WATER | 0-15 | — | | | | | |

[Application precautions]

- *1 When applying the material to ALC, porous substrates, rough surfaces and other surfaces with problem, prepare the surface with appropriate filler.
- *2 When renovating or applying the material to the substrate with high absorption, make inquiries at the nearest sales office for more details.
- *3 BIOFINE SEALER, CLEAR SEALER are also available for undercoat.
- *4 The dilution ratio with water is 10 - 15 wt.% for spray application and 0 - 10 wt.% for roller and brush application.
- *5 Strictly follow the drying time (the final curing time) for topcoat. The expected dirt resistance may not be provided if the paint film surface keeps wet during drying for a long time due to raining after application. The expected dirt resistance is provided after drying. Therefore, in case it is expected to rain during application, protect the applied area from rain with sheets, etc. and follow the specified drying time.
- *6 Dirt resistance may not be fully provided depending on the area and condition. It is necessary to pay much attention especially for the lower part of sloping wall, the area without creasing such as coping, the area around window with insufficient creasing, and area not exposed to rain directly.
- *7 In order to provide the expected dirt resistance, it is important to follow the specified consumption. Pay close attention to the rough/uneven area so that materials are applied to the entire area.
- *8 Dirt resistance is not fully provided in case of contaminants caused by rusting of iron and sealant.
- *9 When applying directly on sealant, its type and age may affect the finish such as poor adhesion and stains. Consult your nearest sales office for details.
- *10 For renovation, solvent based undercoat may dissolve the existing paint film or cause lifting, shrinkage etc. So check it with a mock-up sample at a site prior to the actual application.
- *11 Scrubbing the surface of dark colours and vivid colours may cause the colour fading. Do NOT apply dark or vivid coloured materials on the area contacting clothes.
- *12 In case the colour of the topcoat is close to vivid colours such as yellow, red, blue, green, etc, apply the undercoat of the same colour as the topcoat to increase the hiding power.

Uses

Concrete, cement rendering, PC panels, ALC panels, siding boards, various kinds of existing paint films(sound film), etc.

Packing Style

ACRYLIC SEALER 20 ℓ / can
MIRAC SHIELD NANO 20 ℓ / can
CT-TILE 26 kg / can

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Tianjin, Changchun, Xi'an, Hefei, Henan
Dealer: SIKOKU KAKEN (SHANGHAI) CO., LTD.
First Main Branch
Factory: SHANGHAI FACTORY, LANGFANG FACTORY