

TECHNICAL DATA SHEET

Bonndeco Silicone Shield

Modified Acrylic Silicone Resin

Product Description

Protect High-tech Protective Coating with a well balance of Poly (dimethyl siloxane) and Acrylic Resin, giving the protective film hydrophobic to water (Lotus Effect), but allowing water vapor to pass through (Water Vapor Permeable), reduce the chance of water staying below paint film to weaken the protection and causing mould & algae to grow.

Features & Benefits

- Good Weather Resistance
- Good UV Resistance
- Good Scrub Resistance
- Good Alkaline Resistance
- Good Adhesive strength
- Good Water Resistance
- Seal up the substrate as barrier to carbon dioxide and moisture

| Typical Painting System                        |         |                                   |
|------------------------------------------------|---------|-----------------------------------|
| Preparation                                    | System  |                                   |
| Surface should be smooth, clean and dust free. | Sealer  | Bonndeco Ultra Sealer (1 coat)    |
|                                                | Topcoat | Bonndeco Silicone Shield (2 oats) |

| Properties                                                     |                                                                              |
|----------------------------------------------------------------|------------------------------------------------------------------------------|
| Condition in container                                         | There shall be no lumps, no separation and no coagulation of the ingredients |
| Low temperature stability @-5°C                                | Unchanged                                                                    |
| Coating appearance                                             | Normal                                                                       |
| Drying time @20°C                                              | ≤ 2 hours                                                                    |
| Color contrast (White and light)                               | ≥ 0.96                                                                       |
| Dirt resistance (%)                                            | 15 %                                                                         |
| Washability (2000 times)                                       | No damaged                                                                   |
| Alkali resistance (48 hours)                                   | Unchanged                                                                    |
| Water resistance (96 hours)                                    | Unchanged                                                                    |
| Weatherability (400 hours)                                     | Appearance: No peel off, No crack<br>Chalking 0<br>Discoloration 0           |
| Quantifying dirt collection ASTM D3719                         | Total dirt: 95.24<br>Imbedded dirt: 95.55                                    |
| Determination of resistance of fungal growth on painted panels | There were no fungal grew on the panels and the rating is 0.                 |

Remarks:-

1. The recommended coverage rates, including those of normal wastage, are for reference only. Actual coverage may vary depending on the working condition of the site, the degree of evenness and smoothness of the substrate surface, and the pattern of the texture sample as selected and approved by the architect or client.
2. We reserve the right to change or adjust the composition of material used in the specification of our products due to our constant research and development to improve of the quality of our products.



Application Surfaces

It is suitable for the application to exterior /interior surfaces of the following substrates:-

- Precast Concrete
- Poured in Place Concrete
- Plaster (Mortar), Stucco, GRC
- Tile Filler, Existing paint film

Application Locations

It is suitable for the application to exterior/interior surface of the following locations:-

- Walls and columns
- Ceilings and beams
- Fence walls, Roof parapets, Bends, etc.

Application

- Roller, Spray, Brush

Glossiness

- Matt, Semi-glossy, Glossy

Color

- Standard color chart from Bonndeco
- tailor made color

Package available

- 20kg/can

Thinning ratio

- 5 ~ 10%

Drying time

- At least two (2) eight (8) hours, depending on the weather condition at the time of application.

Theoretical spreading ratio

- Approximately 70-85/ 2 coats/can

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### Surface Treatment & Condition Requirement

#### New Surface

- a. Substrates must be properly cured before applications.
- b. Application surface must be smooth and free of voids or sharp projections.
- c. Any application surface such as precast concrete, with excess pinholes, honeycomb, cracks, uneven or porous condition, should be filled up prior to the application.
- d. Any application surface, with laitance, efflorescence, dust, rust, oil grease, curing agent etc. must be removed completely by brushing, sanding or other effective means.
- e. Recheck surface after repair to assure satisfactory condition prior to Bonndeco application.

#### Old Surface

- a. All loose coating on the application surface should be removed by wire brushing, Sanding or other effective means.
- b. Any laitance, efflorescence, dust, rust or oil grease must be removed completely by brushing, sanding or other effective means.
- c. All defective areas, hollow plasters and spoiling concrete must be hacked off.
- d. Defective wall surfaces must be repaired by filling cracks or re-plastering of hacked off portions.
- e. To paint areas must be cleansed by high pressure water jet at 1,500 psi and all surfaces should be of the sound, clean, dry and sufficiently smooth that accepted as an appropriate substrate for the application of Bonndeco Products.

### Fungus

Remove by high-pressure water jet wash and treated with anti-fungus solutions. Allowed to dry before painting.

### Grease

Clean Off with mild detergent and a little solvent. Wash thoroughly to remove all trace.

### Application Procedure

- Shake and stir thoroughly to get a complete dispersion of pigment.
- Use standard practice, either by rolling, brush or spraying, to ensure conformance to the specification requirement.
- Drying time may take at least two (2) or eight (8) hours at 10°C-20°C
- Workers, applying in confined areas, are required to wear protection masks and exhaust ventilation should be properly supplied to the confined area.

### Precautions in use

#### Handling and storage

- Do not use near flames
- All workplaces to always have specific ventilating equipment in operation.
- Particular precautions to be taken for good ventilation during application and while drying, and precautions taken to avoid any inhaling of fumes.
- During handling, precautions to be taken to avoid any skin contact and as necessary, gas mask against organic gas or fresh air supplying masks to be worn and also use head towels, wear protective eyeglasses, long sleeved protective gowns, neck protecting towels, protective gloves, etc.
- When coat is spilled, wipe with waste cloths to be kept stored in water filled containers.
- Until final disposal, all waste cloths that have been exposed to coat, hardeners or thinners, and leftover coat, spray dust, etc. for disposal shall be kept doused in water filled containers.
- After handling or application, hands to be thoroughly washed and extensive gargling is advised.
- The handles on the upper part of the tin containers are solely for carrying the tins. Please do not use ropes and hooks on the handles for hanging the tins.
- During storage, containers are to be tightly sealed and stored out of any direct sunlight or any exposure to rain, in a cool, well ventilated area.
- Please store away from any foreign instruction by third parties and out of the reach of children.

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Job Reference

| Project                                                                               | Main Contractor /Owner          | Year      |
|---------------------------------------------------------------------------------------|---------------------------------|-----------|
| 黃道益 No. 83 Fuk Yi Street, Yuen Long Industrial Estate                                 | Wongtoyick Company Ltd          | 2018-2019 |
| 海傲灣 One East Coast, 1 Lei Yue Mun Path, Yau Tong                                      | Kowloon Development Company Ltd | 2018-2019 |
| No. 66 Robinson Road, Hong Kong                                                       | Pilot Building Services Ltd     | 2017-2018 |
| 英皇駿景酒店 Emperor Hotel, 373 Queen's Road East, Wan Chai                                 | Emperor Group                   | 2017-2018 |
| 東華三院馬錦燦紀念小學 TWGHs Ma Kam Chan Memorial Primary, 2 Ching Shing Road, Sheung Shui, N.T. | Tung Wah Group of Hospitals     | 2016-2017 |
| 聖士提反書院 St. Stephen's College, 22 Tung Tau Wan Road, Stanley                           | St. Stephen's College           | 2016-2017 |
| 116 Johnstone Road, Wanchai, Hong Kong                                                |                                 | 2015-2016 |

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