

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 coats)

### 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 Chalking 0 Discoloration 0	
Quantifying dirt collection ASTM D3719	Total dirt: 95.24 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.	



### 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

#### 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.

TECHNICAL DATA SHEET

## Bonndeco Silicone Shield

Modified Acrylic Silicone Resin

### 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.

#### 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.