

TECHNICAL DATA SHEET

Bonndeco Elastic Shield

Modified Acrylic Elastomeric

Product Description

Bonndeco Elastic Shield is made of acrylic elastomer emulsion with core-shell structure. High elastic stretch functions to cover slight cracks, protect and decorative the wall. It is also has excellent weather resistant and temperature-denatured, alkali-resistant, carbon-resistant, anti-fouling and extremely high water vapor permeability. It is suitable for exterior wall coating of various high-end buildings.

Features & Benefits

- Better elasticity and tensile strength to cover small cracks in the wall and to withstand the thermal expansion and contraction of the substrate.
- Excellent breathing ability and water vapor permeability prevent moisture from accumulating in the substrate, to prevent bubble and peel off.
- The paint surface has good scrubbing resistance and is easy to clean and maintain
- Good anti-mold and anti-algae performance, can effectively inhibit the growth of mold and algae, and maintain the decorative effect for a long time.
- Excellent substrate adaptability and good compatibility with various types of primers.

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

Properties	
Condition in container	There shall be no lumps, no separation and no coagulation of the ingredients
Drying time @20°C	≤ 2 hours
Color contrast (White and light)	≥ 0.90
Low temperature stability @-5°C	Unchanged
Salt resistance (48 hours)	Unchanged
Water resistance (96 hours)	Unchanged
Weatherability (400 hours)	Appearance: No peel off No crack Chalking ≤1 Discoloration ≤2
Hot and cold resistant (3 cycle)	Unchanged
Dirt resistance (%)	≤25
Tensile Strength/MPa	Standard condition ≥2.0
Elongation break (%)	Standard condition ≥150 0° >35 -10°C ≥35

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, Brush

Glossiness

- Matt, Semi-glossy, Glossy

Color

- Standard color chart from Bonndeco
- tailor made color

Package available

- 20kg/can

Thinning ratio

- 0 ~ 10%

Drying time

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

Theoretical spreading ratio

- 30-45m2/ 2 coats / can

TECHNICAL DATA SHEET

Bonndeco Elastic Shield

Modified Acrylic Elastomeric

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 the quality of our products.

TECHNICAL DATA SHEET

Bonndeco Elastic Shield

Job Reference

Project	Main Contractor /Owner	Year
律政中心 Renovation Works for the West Wing of the Former Central Government offices for office use by the Department of Justice and Low-Related Organizations	Architectural Service Department	2018-2019
Contract No.14/WSD/14 Civil Engineering Works at Sheung Shui, Tai Po Tau, Ma On Shan and Tseung Kwan O & Mainlaying Works at Magazine Gap	Civil Engineering and Development Department	2017-2018
Construction of Annex Building at Telegraph Bay Fresh Water Pumping Station	Water Supplies Department	2016-2017
招商局物流中心 China Merchants Logistics Centre, 38 Tsing Yi Hong Wan Road, Tsing Yi	China Merchants Ltd	2016-2017

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.