



Bonntile Hong Kong Limited

System Code: BF-WAC

BONNFLON WATER BASE AC **COATING SYSTEM**

Technical Specification
&
Application Manual



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“Bonnflon Waterbase AC Coating System

1. Material

Bonnflon Water Base AC Coating System which consists of four (3) coatings:

- Bonnflon Water Base AC Guard Coatone (1) coat
- Bonnflon Water Base AC Middle Coat.....one (1) coat
- Bonnflon Water Base SR Lastcoat IIone (1) coat

2. Application Surfaces

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

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

3. 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
- Mouldings
- Bends, etc.

4. Storage Requirement

In order to ensure product integrity prior to the application, it is mandatory to comply with the following requirements of storage:-

- Store materials away from open flames or excessive heat.
- Do not expose the material to sunlight for a long period of time.
- Keep all containers away from moisture.
- Do not subject materials to freezing conditions.
- Keep containers air-tightly sealed.

Remarks: _____-

We reserve the right to change or adjust the composition of material used in the application of our products due to our constant research and development to improve of the quality of our products.



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Technical Specification Of “Bonflon Water Base AC” Coating System

Commodity	Main Component	Function	Application Method
1. Undercoat	Water absorption resisting sealant <ul style="list-style-type: none"> • Silane compound 30.0% • Water soluble solvent 15.0% • Water 55.0% Total 100.0%	<ul style="list-style-type: none"> • To provide undercoat and adhesion 	Spray /Roll
2. Intermediate Coat	Fluorocarbon resin based clear coat <ul style="list-style-type: none"> • Fluorocarbon resin emulsion 46.0% • Water 48.0% • Additives 6.0% Total 100.0%	<ul style="list-style-type: none"> • To give protection coat against chemicals and weathering 	Spray /Roll
3. Finish Coat	Hydrophilic fluorocarbon resin based clear coat <ul style="list-style-type: none"> • Fluorocarbon resin emulsion 74.0% • Water 20.0% • Additives 6.0% Total 100.0%	<ul style="list-style-type: none"> • To provide a finishing coat with superior resistance to chemicals (salt, acid, alkali) and weathering. With self-cleaning property in addition by it's hydrophilic character. 	Spray /Roll



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Test Report

Product Name	Bonnflon Water Base AC Coating System
Standard	Company Standard

Test Result (Numerical values are standard values based on the actual performance)		
Test Items	Test Result	Standard
Adhesion	25/25	JIS K5600: X Cutting (4mmx4mm,n=25), Standard
	25/25	JIS K5600: X Cutting (4mmx4mm,n=25), Immerse in Water
Water permeability	0.20ml	JIS A6909-7-12: Permeability test B, After 1 day
	0.30ml	JIS A6909-7-12: Permeability test B, After 5 days
Water resistance	Unchanged	JIS K5600-6-2: Water resistance test, 20°C x 3 months
Repeated warming and cooling resistance	Unchanged	JIS A6909-7-10: Repeated warming and cooling test, 50 cycles
Alkaline Resistance	Unchanged	JIS K5600-6-1: Alkaline resistance test, 20°C x 1 months
Accelerated weatherability	Unchanged	JIS K5400: Accelerated weatherability 4000hrs, Appearance
	-2.59	JIS K5400: Accelerated weatherability 4000hrs, Yellowing Rate
	80%	JIS K5400: Accelerated weatherability 4000hrs, Gloss retention
Weatherability	Unchanged	JIS K5600-7-6: Weatherability, 5 years(Chiba)
	Unchanged	JIS K5600-7-6: Weatherability, 3 years(Okinawa)
Algae and Fungus Resistance	Unchanged	JIS Z 2911 : No Fungal or Algae Observe



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Surface Treatment & Condition Requirement

1. New Surface

- 1.1 Curing time for the following substrates: -
 - Plaster (mortar), stucco: two (2) weeks
 - Precast concrete: one (1) week minimum (forced curing)
 - Poured in place concrete: three (3) weeks minimum
 - Moisture content is less than 10% and alkaline pH content is less than 10
- 1.2 Application surface must be smooth and free of voids or sharp projections.
- 1.3 Any application surface such as precast concrete, with excess pinholes, honeycomb, cracks, uneven or porous condition, should be filled up prior to the application.
- 1.4 Any application surface, with laitance, efflorescence, dust, rust, oil grease, curing agent etc. must be removed completely by brushing, sanding or other effective means.
- 1.5 Apply Tile Filler/Skim Coat onto sound, clean, dry and sufficiently smooth that accepted as an appropriate substrate for the application of Bonntile products.
- 1.6 Curing time for Tile Filler/Skim coat: three (3) days minimum
 - Moisture content is less than 10% and alkaline pH content is less than 10

2. Old Surface

- 2.1 All loose coating on the application surface should be removed by wire brushing, sanding or other effective means.
- 2.2 Any laitance, efflorescence, dust, rust or oil grease must be removed completely by brushing, sanding or other effective means.
- 2.3 All defective areas, hollow plasters and spoiling concrete must be hacked off.
- 2.4 Defective wall surfaces must be repaired by filling cracks or re-plastering of hacked off portions.
- 2.5 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 Bonntile products.

Application Manual

1. Package, Mixing, Coverage, and Application

2.

1.1 Undercoat

i. Package, Thinning Ratio, and Coverage Rate

Material Name	Net Weight or Volume/can	Dilution	Theoretical Spreading Rate (Approx.)
Bonnflon Water Base AC Guard Coat	15 kg/can	-	(Roller) 0.12~0.18 kg/m ² /coat (Spray) 0.13~0.2 kg/m ² /coat

ii. Mixing Instructions

- Mix thoroughly in proportions as outlined above.

iii. Application Method

- Apply Bonnflon Water Base AC Guard Coat with a roller or by spray.
(Do not apply below 5°C)

iv. Drying Time

- 16 hours

1.2 Intermediate Coat

i. Package, Thinning Ratio, and Coverage Rate

Material	Net Weight or Volume/can	Dilution	Theoretical Spreading Rate (Approx.)
Bonnflon Water Base AC Middle Coat	15 kg/can	-	(Roller) 0.1~0.15 kg/m ² /coat (Spray) 0.11~0.17 kg/m ² /coat

ii. Mixing Instructions

- Mix thoroughly in proportions as outlined above.

iii. Application Procedure

- Apply Bonnflon Water Base AC Middle Coat with roller or conventional spray unit after shaking and stirring thoroughly to get complete pigments disruption.
(Do not apply below 5°C)

iv. Drying Time

- Allow Bonnflon Water Base AC Middle Coat to dry over 4 hours prior to applying Bonnflon Water Base AC Topcoat.

1.3 Topcoat

i. Package, Thinning Ratio, and Coverage Rate

Material	Net Weight or Volume/can	Dilution	Theoretical Spreading Rate (Approx.)
Bonnflon Water Base SR Lastcoat II	15 kg/can	-	(Roller) 0.08~0.12 kg/m ² /coat (Spray) 0.09~0.13 kg/m ² /coat

ii. Mixing Instructions

- Mix thoroughly in proportions as outlined above.

iii. Application Procedure

- Apply Bonnflon Water Base SR Lastcoat II with roller or conventional spray unit after shaking and stirring thoroughly to get complete pigments disruption.
(Do not apply below 5°C)

(Workers applying topcoat in confined areas are required to wear protection masks and exhaust ventilation should be properly supplied to the confined area.)