



Bonntile Hong Kong Limited

System Code: BF-GT-SR

BONNFLOX GT-SR **COATING SYSTEM**

Technical Specification
&
Application Manual



Bonntile Hong Kong Limited

Content

1. Bonnflon GT-SR Coating System
2. Technical Specification
3. Test Report
4. Physical Properties of Bonnflon Paint
5. Surface Treatment & Condition Requirement
6. Application Manual



Bonntile Hong Kong Limited

“Bonnflon GT-SR Coating System

1. Material

Bonnflon GT-SR Coating System which consists of four (4) coatings:

- Bonntile New N-Sealer.....one (1) coat
- Bonntile Pen Compound (Texture Finish) (Optional).....one (1) coat
- Bonntile New QWG Topcoat.....one (1) coat
- Bonnflon GT-SR.....one (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.



Bonntile Hong Kong Limited

Test Report

Product Name	Bonnflon GT-SR
Standard	Company Standard

Test Result (Numerical values are standard values based on the actual performance)		
Test Items	Test Result	Standard
Storage stability Visual inspection	No lumps were found upon mixing	In-house Method
Low-temperature stability @-5°C	There was no change in quality	JIS K5400 5.1
Workability	There was no obstacle to apply materials twice by brush	JIS K5400 6.1
Drying time @20°C	Less than 2 hours	JIS K5400 6.5
Appearance	There was no change in the appearance of paint film, JIS K5400 7.1	There was no change in the appearance of paint film. JIS K5400 7.1
Hiding ability	0.99	JIS K5400 7.2
Specular gloss (60°C)	86	JIS K5400 7.6
Water resistance	After immersion in water for 96 hours, the gloss retention was 94% and there was no change in the paint film.	JIS K5400 8.19
Alkali resistance	After immersion in alkali for 7 days, the gloss retention was 85% and there was no change in the paint film.	JIS K5400 8.21
Washability	1000 times	JIS K5400 8.11
Heat resistance	The gloss retention was 84% and there was no change in the paint film.	JIS K5600-6-3
Condition in container	It was become uniform without lumps when mixing by stirring.	JIS K5400 4.1
Application properties (Recoatibility)	There was no impediment for brushing work when making twice coating	JIS K5400 4.1
Humidity and cool-heat cycling resistance	The gloss retention was 87% and there was no change in the paint film.	JIS K5400 9.4
Accelerated weathering resistance for 250 hours	Gloss retention - >99%	ASTM G53-88 4 hour UVA at 60°C / 4 hrs COND at 50°C for 250 hours.



Bonntile Hong Kong Limited

Product Name	Bonntile New QWG
Standard	Company Standard

Test Result (Numerical values are standard values based on the actual performance)		
Test Items	Test Result	Standard
Condition in container	No lumps and evenly mixed	JIS 5400: Clause 4.1
Film appearance	No cracking and peeling	JIS 5400: Clause 7.1
Fineness of grind	30 μ	BS3900: Part C6
Admixture	Mixed consistency	In-house Method
Dry time	About 3.5 hours	JIS K5400: Clause 6.5
Flexibility	No cracking and peeling	JIS K5400: Clause 8.1
Cross cut test	Class 1	JIS K5400: Clause 8.5
Impact test	No cracking and peeling	JIS K5400: Clause 8.3
Water permeability	0.3 ml	JIS K5400: Clause 8.3
Quantifying Dirt Collection	Total dirt 96.99% Imbedded dirt 94.48%	ASTM D3719-87
Weather resistant	Grey scale (Gade 5)	ASTM G53-96
Adesion Strength Test	Normal condition 199.9 N/cm ² Immersion in water 203.9 N/cm ²	JIS A6910:1988, Clause 5.8

Product Name	Bonntile Pen Compound (Texture Finish) (Optional)
Standard	Company Standard

Test Result (Numerical values are standard values based on the actual performance)		
Test Items	Test Result	Standard
Crazing resistance	Passed	No cracks shall be generated
Bond strength Normal	1.4	0.7 N/mm ² or above
Bond strength After Immersion	1.0	0.5 N/mm ² or above
Hot-cold repetition test	Passed	There shall be no peeling, cracks, blisters, nor outstanding color changes, gloss drops on the test specimen surface.



Bonntile Hong Kong Limited

Product Name	Bonntile New N-Sealer
Standard	Company Standard

Test Result (Numerical values are standard values based on the actual performance)		
Test Items	Test Result	Standard
Condition in Container	No lumps and evenly mixed	JIS K5400 4.1
Hardness	H	JIS K5400: Clause 8.4.2
Film appearance	No cracking and peeling	JIS K5400: Clause 7.1
Water resistance	Unchanged and no cracking and no peeling	JIS K5400: Clause 8.19
Alkali proof	Unchanged and no cracking and no peeling	JIS K5400: Clause 8.21.



Bonntile Hong Kong Limited

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.

Bonntile Hong Kong Limited

Application Manual

1. Package, Mixing, Coverage, and Application

1.1 Undercoat

i. Package, Thinning Ratio, and Coverage Rate

Material	Net Weight or Volume/can	Dilution	Theoretical Spreading Rate (Approx.)
Bonntile New N-Sealer	18 kg/can	50-100%	0.1 kg/m ² /coat

ii. Mixing Instructions

- Mix thoroughly in proportions as outlined above.

iii. Application Method

- Apply sealer with a roller or by conventional spray. (Do not apply below 5°C)

iv. Drying Time

- 20°C over 30 minutes
- Sealer becomes clear when dry.

1.2 Texture Coat (Optional)

i. Package, Thinning Ratio, and Coverage Rate

Material	Net Weight or Volume/can	Dilution	Theoretical Spreading Rate (Approx.)
Bonntile Pen Compound	20 kg/can	0-5%	Heavy Texture 1.3-1.7 kg/m ² /coat Medium Texture 0.8-1.0 kg/m ² /coat Fine Texture 0.5-0.7 kg/m ² /coat

ii. Mixing Instructions

- Mix Texture Compound thoroughly.
- Add water in proportions as outlined above
- Mix thoroughly again.
- Texture Compound is ready for immediate use after completion of the mixing procedures.

iii. Application Procedure

- Use Hopper Gun or an approved equipment only.
- Texture compound may be applied at any time when it is dry and above 5°C.
- After heavy rainfall, the surface should be allowed to dry thoroughly for at least 1-3 days before application of texture compound.
(Note: Do not expose the mixed texture compound to sunlight for a long period of time.)
- Sprayed Texture compound should be allowed to dry thoroughly for at least 16 hours prior to applying topcoat.

Bonntile Hong Kong Limited

- iv. Application Method
 - Use roller or spray
 - Mask all adjacent areas
 - Remove all over-spray immediately
- v. Drying Time
 - At least 16 hours prior to apply surfacer and topcoat.

1.3 Intermediate Coat

i. Package, Thinning Ratio, and Coverage Rate

Material	Net Weight or Volume/can	Dilution	Theoretical Spreading Rate (Approx.)
Bonntile New QWG Topcoat	15 kg/can	0-6%	0.13–0.16 kg/m ² /coat

ii. Mixing Instructions

- Mix thoroughly in proportions as outlined above.

iii. Application Procedure

- Shake and stir Topcoat thoroughly to get a complete dispersion of pigment.
- Use standard practice, either by rolling or spraying, to ensure conformance to specification requirement. Brush may be used for small areas or touch up only.
- For the application of topcoat in confined areas, workers are required to wear masks, and exhaust ventilation should be properly supplied to the confined areas.
- Drying Time: 4 to 8 hours.

1.4 Topcoat

ii. Package, Thinning Ratio, and Coverage Rate

Material	Net Weight or Volume/can	Dilution	Theoretical Spreading Rate (Approx.)
Bonnflon GT-SR	15 kg/can	0-5%	0.13–0.16 kg/m ² /coat

ii. Mixing Instructions

- Mix thoroughly in proportions as outlined above.

iii. Application Procedure

- Apply Bonnflon GT-SR with roller, brush or conventional spray unit after shaking and stirring thoroughly to get complete pigments disruption.
(Don 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 areas.
- Drying Time: 4 to 8 hours