

TECHNICAL DATA SHEET

Bonntile PU (WT#100) Topcoat

Emulsion of acrylic urethane

Product Description

With our advanced Cross-linking technology, Polyurethane Resin Base Coating surpasses the durability and performance of convention acrylic coating. The resin particles fuse together forming a markedly durable paint as the water evaporates, providing a highly dense colored film. For outdoor area of external wall that keeps buildings in original condition for more than 7 years.

Features & Benefits

- Excellent alkaline resistance
- Good weatherability resistance
- Good UV resistance
- Excellent water resistance
- Good washability
- Excellent adhesive strength
- Algae and Fungus resistant
- Safe to use, odourless
- Easy to apply

Typical Painting System		
Preparation	System	
Surface should be smooth, clean and dust free.	Sealer	Bonntile New N-Sealer (1 coat)
	Topcoat	Bonntile PU (WT#100) Topcoat (2 coats)

Surface Treatment & Condition Requirement

New Surface

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

Old Surface

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

Remarks:-

- 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.
- 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 Bonntile tailor made color

Package available

16kg/can

Thinning ratio

2 ~ 10%

Drying time

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

Theoretical spreading ratio

Approximately 45-50m2/ 2 coats/ can

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Properties	
Condition in container JIS K5400 4.1	It was become uniform without lumps when mixing by stirring.
Low temperature stability @ -5°C JIS K5400 5.1	No deterioration.
Drying time @ 20°C JIS K5400 6.5	Less than 2 hours.
Drying time @ 5°C JIS K5400 6.5	Less than 4 hours.
Application properties (Recoatibility) JIS K5400 4.1	There was no application difficulties when applied twice.
Specular gloss (60°) JIS K5400 7.6	82.
Appearance of film JIS K5400 7.1	There was normal in the appearance of paint film.
Opacity JIS K5400 7.2	0.99.
Water resistance JIS K5400 8.19	After immersion in water for 96 hours, the gloss retention was 99% and there was no change in the paint film.
Alkali resistance JIS K5400 8.21	After immersion in alkali (5 w/v% sodium hydroxide solution) for 7 days, the gloss retention was 87% and there was no change in the paint film.
Salt water resistance JIS K5400 8.23	After immersion in 3% sodium chloride solution for 168 hours, there was no change in the paint film.
Wet Scrub resistance (1000 times) JIS K5400 8.11	Passed
Humidity and cool-heat cycling resistance	The gloss retention was 97% and there was no change in the paint film.
Determination of resistance of fungal and mould growth JIS Z2911	There was no fungal grew on the panels and the rating is 0.
Accelerated weathering resistant for 480 hours ASTM G53-88	Gloss retention – 70% Degree of chalking - > 8 points Negligible change in color

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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Project	Year
香港科技大學 Renovation works for Wind Tunnel Building, Hong Kong University of Science and Technology	2018
香港科技大學 Renovation works for Tower A&B, Hong Kong University of Science and Technology	2017
香港城市大學專上學院 Design and Build of Renovation Works for Telford Annex for City University of Hong Kong	2016
煤氣青管站 JI3028 – Gas Pigging Station near Sung Ping Street, To Kwa Wan, Kowloon Lot No. KIL 11214	2015
深灣遊艇會 The Aberdeen Marina Club, 8 Sham Wan Road, Aberdeen	2014
荃灣工業中心 Major Renovation and Alteration and Addition Works at Tsuen Wan Industrial Centre, No. 220-248 Texaco Road, Tsuen Wan	2013
何文田公開大學 The Open University of Hong Kong at 30 Good Shepherd Street Ho Man Tin	2013
香港科技大學 Renovation Works for Academic Building, Hong Kong University of Science and Technology	2012
SS W318, District Open Space in Area 77, Tseung Kwan O at Local Open Space in Area 25, Falling / Sheung Shui	2011
羅湖懲教所 Lo Wu Correctional Institution, 163 Ho Sheung Heung Road, Kwu Tung, Sheung Shui	2010
SS W318 District Open Space in Area 77, Tseung Kwan O at Local Open Space in Area 25, Falling / Sheung Shui	2010
林大輝中學 Lam Tai Fai College, 25 Ngan Shing Street, Sha Tin	2009
香港培道中學 Pool To Middle School, 2-8 Inverness Road, Kowloon City	2009
屯門漁市場 Contract No. SSR314, Construction of Joint-User Complex and Wholesale Finish Market in Area 44, Tuen Mun	2009
城門之源 Main Contract of St. Stephen's Society Expansion, 50A Kung Kok Shan Road, Shing Mun Spring, Shatin, N.T.	2009
上水第31區小學 Contract No. SSR 308, Construction of a Primary School in Area 31, Sheung Shui, N.T.	2008
怡生工業大廈 Proposed External Renovation Works for East Sun Industrial Building, No. 20 Shing Yip Street, Kwun Tong, Kowloon	2007
永穩大廈 External Renovation Works for Ever Secure Mansion, No. 21-25 Ka Wo Street, Aberdeen, Hong Kong	2007
友光大廈 External Renovation Works for Yau Kwong Building, No. 418-430 Hennessy Road, Hong Kong	2007
覺盧 External Renovation Works for Louvre Court, No. 3-4 Fuk Kwan Avenue, Tai Hang	2007
正好工業大廈 External Renovation Works for Jing Ho Ind. Bldg., No. 78-84 Wang Lung Street, Tsuen Wan, N.T.	2007

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三匯大廈 External Renovation Works for Sum Way Mansion, 608-616 Queen's Road West, Hong kong	2007
上水火車站 J06008 – Provision of I&B Maintenance Depot at Sheung Shui Station	2007
崇富洋樓 External Renovation Works for Shung Fu Building, 22-32 Pak Kung Street, Hung Hom, Kowloon	2007
德昌大廈 External Renovation Works for Tak Cheong Building, No. 16-18 Kausu Street, Jordan, Kowloon	2007
元朗商會小學 Redevelopment of Yuen Long Chamber of Commerce Primary School at No. 225-244 Castle Peak Road, Yuen Long	2007
嘉鳴閣 External Renovation Works for Kerin Court, 1 Man Wan Road, Homantin, Kowloon	2007
香港城市大學專上學院 Design and Build of Renovation Works for Telford Annex for City University of Hong Kong	2007
年景樓 External Renovation of Lin King House, No. 28 Chik Chuen Street, Tai Wai	2007
宏富大廈 External Renovation of Wang Fu Building, No. 7 Chatham Court South, Tsim Sha Tsui	2007
華寶大廈 External Renovation of Wah Po Mansion, No.1 New Praya Kennedy Town, Hong Kong	2007
瓊峰台 Renovation Works for Kingsford Height, 17-19 Babington Path, Hong Kong	2007
富麗花園 Renovation Works for Wealthy Garden, 1-23 Tsuen Kwai Street, Tsuen Wan, N.T.	2007
長勝大廈 Renovation Works for Cheung Shing Building, 1-5 Cheung Sha Wan Road, Kowloon	2007
太子閣 Prince's Heights Stage 1, 277-277A Prince Edward Road West, Kowloon	2007
翠樺樓 External Renovation Works for Tsui Wah Building, 120-122 Hight Street, Sai Wan, Hong Kong	2007
觀塘官立小學 Construction of a Primary School at Hiu Kwong Street, Sau Mau Ping, Kwun Tong	2007
康輝大廈 Renovation Works for Hong Fai Building, 522-529 Shun Ning Road, Cheung Sha Wan, Kowloon	2007
電力站 Roofing Improvement Works for Wongneichung Gap 132KV Switching Station	2007