

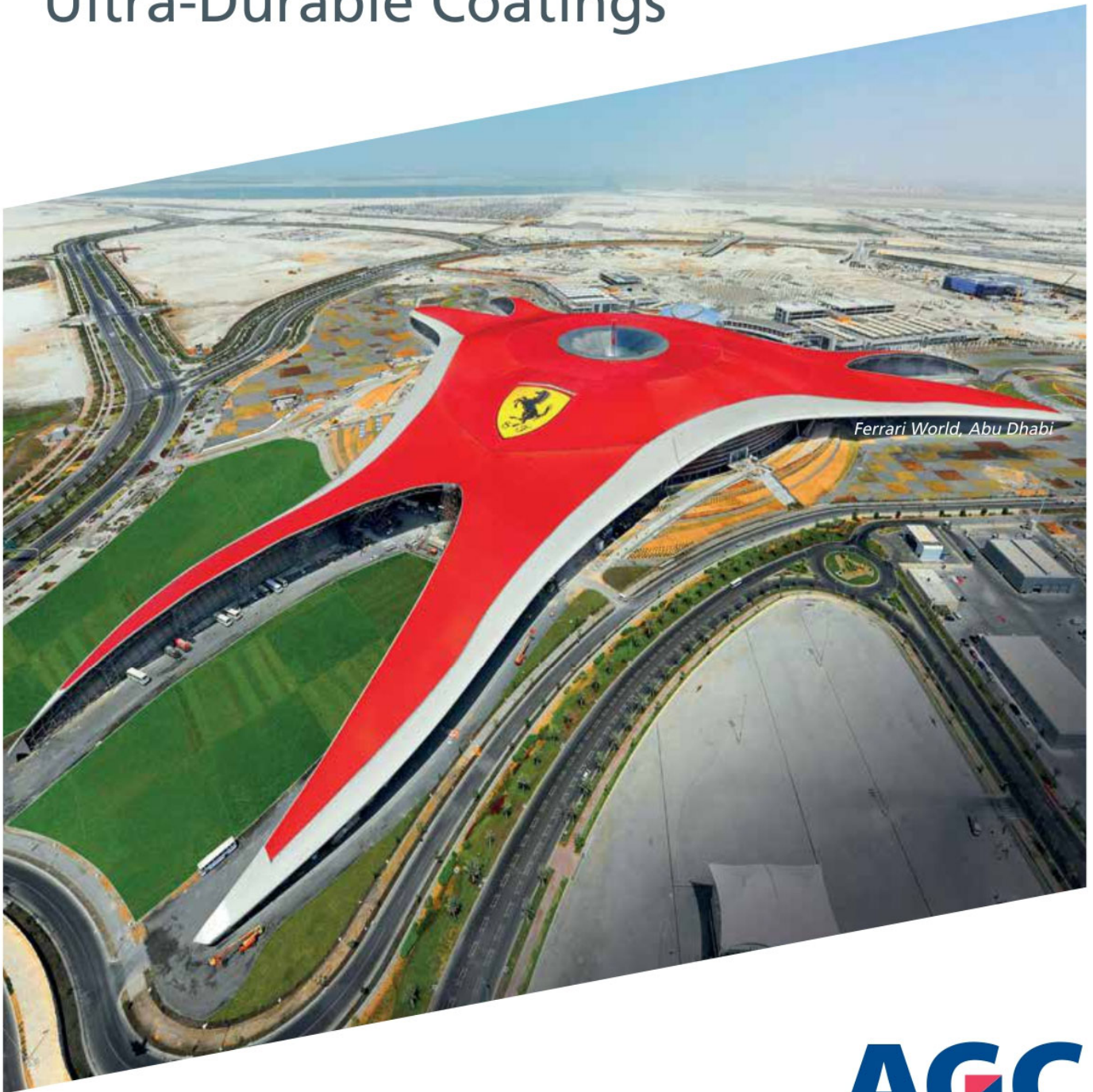
**LUMIFLON™**

## **BONNIFLON GT-SR**

Fluorinated Resins for  
Ultra-Durable Coatings



**BONNITILE HONG KONG LTD**  
邦盛建材香港有限公司



# **AGC**

Your Dreams, Our Challenge

## 様々な環境下で性能を発揮する 高性能フッ素樹脂塗料

# BONNFLOX GT

### ボンフロンGT (Great Tolerance) とは

Fluoropolymer-resin based coatings responded to particular status environment Explanation of GT (Great Tolerance) AGC Coat-tech, Co. Ltd., has improved about restraint of photocatalytic reaction of titanium oxide that had often been seen in particular status environment. In a particular status environment (Severe environments such as High temperature, High humidity, Coast areas, Isolated inlands), BONNFLOX GT enables the full performance of fluoropolymer coatings.

### ボンフロンGTの特長

AGC COAT-TECH CO., LTD has improved about restraint of photocatalytic reaction of titanium oxide that had often been seen in particular status environment. In a particular status environment (Severe environments such as UV exposed, High Temperature, High Humidity, Coast areas, isolated islands)

**ボンフロンGTは沿岸部・離島など厳しい環境下で建物をしっかりと保護**

紫外線

UV Exposed



塩害

Coast areas



高温

High Temperature



多湿

High Humidity



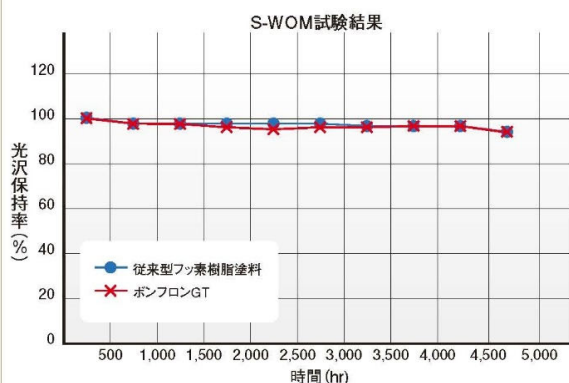


# 「ボンフロンGT」の性能データ

BONNFLOON GT shows the Improvement of remarkable weather resistance comparing with traditional coating under Super accelerated weathering test.

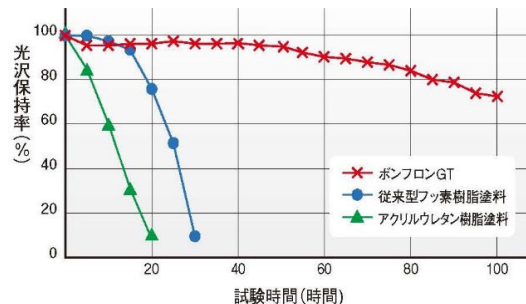
## 促進耐候性試験

Accelerated Weathering Test by S-WOM



## 光触媒劣化促進耐候性試験

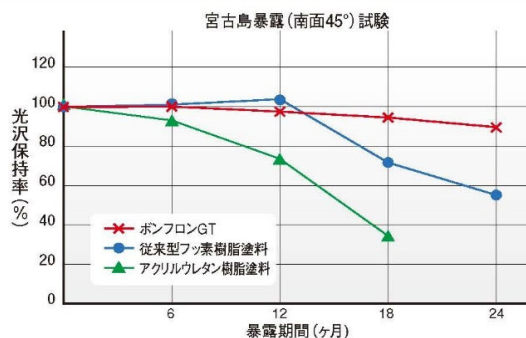
SUPER Accelerated Weathering Test by Xenon Lamp Used Hydrogen Peroxide



## 宮古島暴露試験

BONNFLOON GT shows the improvement of remarkable weather resistance cornering with BONNFLOON with the result of Super accelerated weathering test.

Therefore, BONNFLOON GT enables excellent weather resistance under several environment.



About Super Accelerated weathering test by Xenon lamp used Hydrogen Peroxide

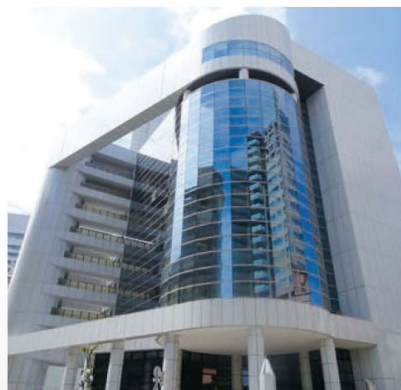
It is different from normal accelerated weathering test, and its test method forces titanium oxide used white pigments to deterioration of photocatalytic.

# 施工例

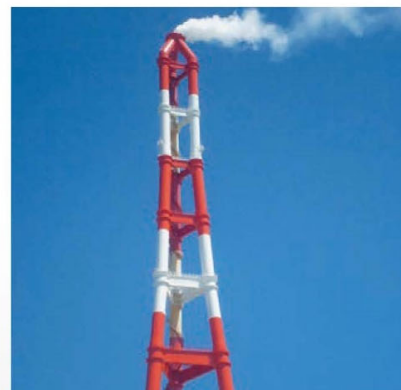
沿岸部(海に近い建物)や特殊環境(沖縄等)で効果を発揮します。



沖縄国際大学 5号館



神戸市総合教育センター



AGC鹿島工場煙突



Performance of BONNFLOX WATERBASE GT-SR Coating system

Testing Items	Result	Test Method
VOC content for multicomponent	58 g/L	USEPA Method 24
Spreading Rate	50m <sup>2</sup> / kg	BS3900:A169-86
Scrub Resistance	Trial 1, number of cycles to failure - 925	ASTM D2486-06 Method A
	Trial 2, number of cycles to failure - 956	
	Mean number of cycles to failure - 941	
Water resistance (Spot test for 4 hours at ambient)	No discernible change	ASTM D1308-02 (Reapproved 2013)
Adhesion test	Classification 4B (Small flakes of the coating are detached at intersections, less than 5% of the area is affected).	ASTM D3359-97
Abrasion Resistance	0.9 L/μm	ASTM D968-05 (Reapproved 2010) Method A – Failing sand Abrasion Test
Appearance	No change	JIS K 5658 4.6
The specular gloss (60 degree)	80	JIS K 5658 4.8
Adhesion	10 points	JIS K 5658 4.10 5mm x 4 squares
Shock resistance	No change	JIS K 5658 4.9 weight 300g height 500mm
Acid resistance	No change	JIS K 5658 4.12 7 days of 5% sulfuric aci
Alkaline resistance	No change	JIS K 5658 4.13 7 days of 5% Sodium hydroxide
Repeated warming and cooling resistance	No change	JIS K 5658 4.14 10 cycles
Accelerated weatherability	No change	JIS K 5658 4.16 SWOM 4000 hours
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
Heat resistance	The gloss retention was 84% and there was no change in the paint film.	JIS K5600-6-3
Dirt resistance	Colour change – 5 (Grey scale)	An unexposed control sample is brought to a site having the same coating system but with 1-year exposure. The dirt resistance of the coating is evaluated by comparing the visual difference (predominantly lightness difference) between the control and the 1-year exposure sample with the differences represented by the grey scale chart.





Performance of BONNFLON WATERBASE GT-SR Coating system

<b>Test required</b>		
1. Lead, Cadmium, Barium and Mercury content		
2. Chromium VI content		
3. Measurement of evolved formaldehyde from water reducible air-dry coatings		
4. Phthalates content (including BBP, DBP, DEHP, DINP, DIDP, DNOP)		
<b>Test Method used</b>		
1. Lead, Cadmium, Barium and Mercury content – USEPA Method 3051A / USEPA Method 6010		
2. Chromium VI content – USEPA Method 7196A		
3. Measurement of evolved formaldehyde from water reducible air-dry coatings – ASTM D6191-97R03		
4. Ref.. CPSC-CH-C1001-09.3		
<b>Testing Items</b>		<b>Result</b>
Lead content	% by wt.	<0.001
Cadmium content	% by wt.	<0.001
Barium content	% by wt.	0.007
Mercury content	% by wt.	<0.001
Chromium VI content	% by wt.	<0.001
Formaldehyde content	% by wt.	<0.001
Phthalates content	% by wt.	
Benzyl butyl phthalate (BB))		<0.1
Dibutyl phthalate (DBP)		<0.1
Di-(2-ethylhexyl) phthalate (DEHP)		<0.1
Diiisononyl phthalate (DINP)		<0.1
Diisodecyl phthalate (DIDP)		<0.1
Di-n-octyl phthalate (DNOP)		<0.1

Job Reference/Case Study  
Hong Kong Palace Museum  
香港故宮文化博物館

BONNFLON C GT-SR Coating System

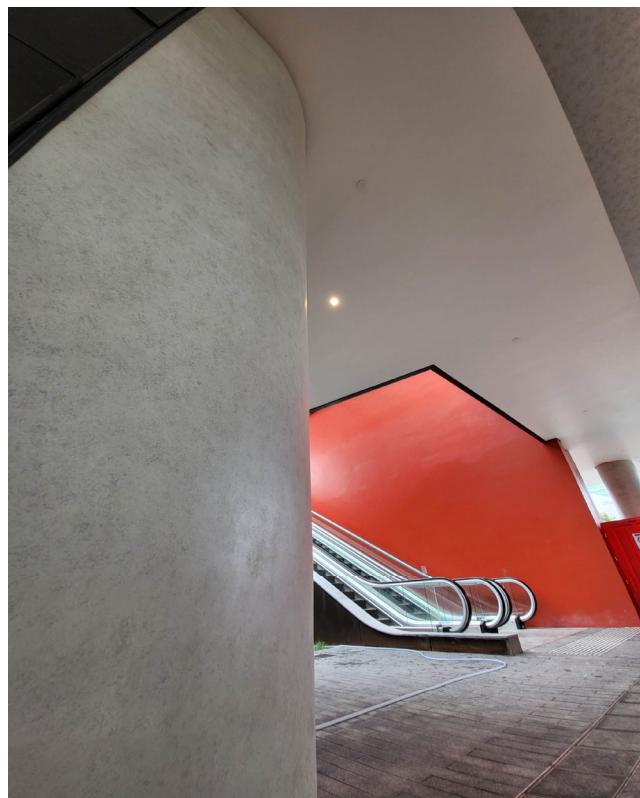
Performance of BONNFLON C coating system

Epoch-making high durability and high anti ultra violet ray

The high anti ultra violet and high weatherability which is the basic performance of Fluoropolymer-resin paint will prevent the degradation of painting.



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## Job Reference/Case Study

Baptist Lui Ming Choi Secondary School

浸信會呂明才中學

## BONNFLOON Roller Texture GT-SR Coating System

Performance of BONNFLOON Roller Texture GT-SR coating system

Excellent low stain coating

Bonnflon able the polluted material including oil components to low adherence from surface of the painting.



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Job Reference/Case Study

Bloom KKCA Academy

百卉九江書院

BONNFLOON Texture GT-SR Coating System

Performance of BONNFLOON C coating system

Excellent re-coating systems

The product has great re-coating by nature, it is possible to recoat over the same type of painting and it's easy to repair.



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Job Reference/Case Study  
The Henry Tan Sports Complex  
陳亨利運動綜合大樓



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BONNFLOON Texture GT-SR Coating System

Performance of BONNFLOON C coating system

Life cycle cost

Running cost becomes remarkably economical if you calculate the expense of every repainting cost comparing with acrylic silicone paints.





# Job Reference/Case Study

## The Portofino, Sai Kung

栢濤灣, 西貢

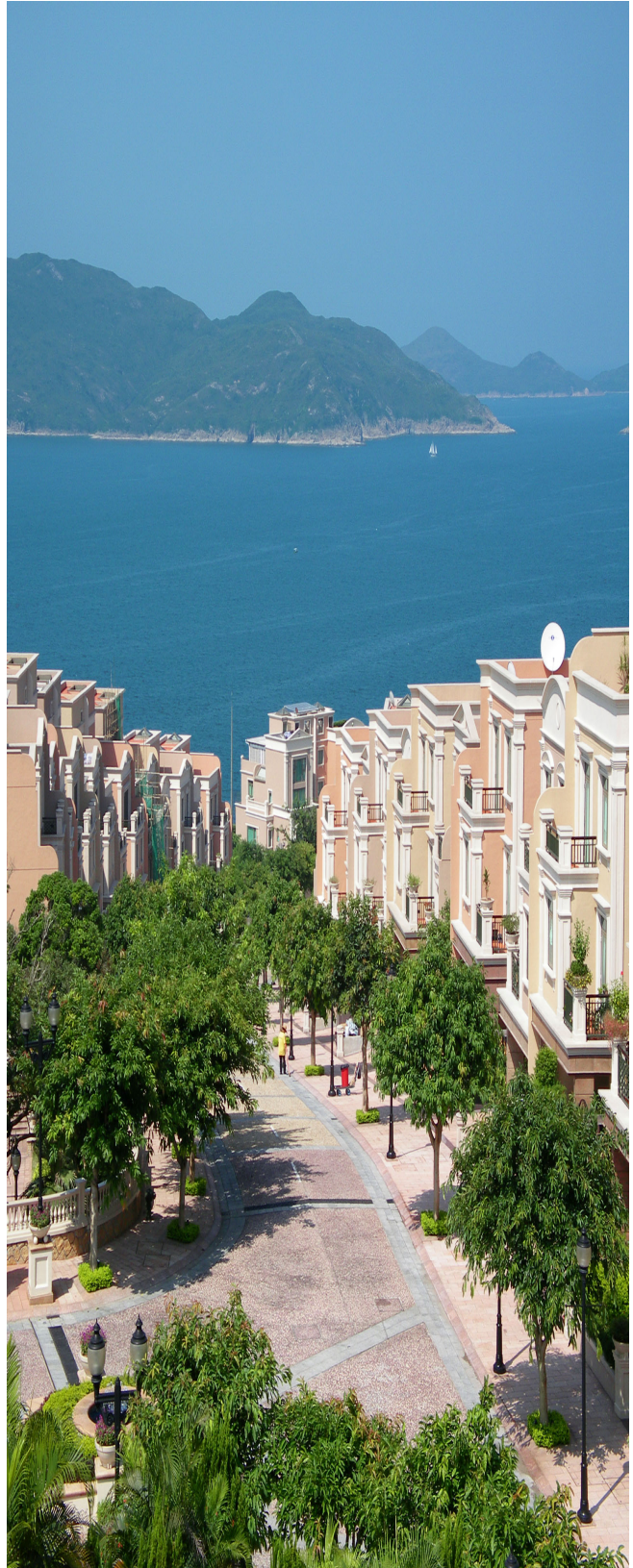
### BONNFLOON Stucco GT-SR Coating System

Performance of BONNFLOON Stucco GT-SR coating system

High weather ability: BONNFLOON has kept the gloss over 90% after 4000 hours of exposure by S-WOM test.



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# Job Reference/Case Study

## BONNFLOON Texture GT-SR Coating System

Performance of BONNFLOON Texture GT-SR Coating System

BONNFLOON has the special property to the chemical medicine and every solvent like alkaline and acid. BONNFLOON will demonstrate great effects to the cruel area such as chemical factory or salt polluted area by the coast etc.



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VTC Student Dormitory, Tsing Yi 職業訓練局學生宿舍, 青衣



Kellett School, Kowloon 啓力學校



Crawford House 卡佛大廈



Gleneagles Hospital 港怡醫院



Macau Monetary Authority Building 澳門金融管理局大樓



# Job Reference/Case Study

## BONNFLOON Stucco GT-SR Coating System

Performance of BONNFLOON Coating System

BONNFLOON has remarked high weatherability. Only 10% of gloss retention has lost by the 4000 hours of accelerated weather test by sunshine weather meter. This means 90% of gloss will be kept more than 20 years.

Also, by the emmaqatest which is natural exposure test tested in most cruel weather condition in Arizona (USA), BONNFLOON had no irregularity after irradiating 2 million Langley (equivalent to 20 years)



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St. Paul's Co-Educational College Primary School 聖保羅男女中學附屬小學



The Portofino, Sai Kung 栢濤灣, 西貢



# Job Reference/Case Study

## BONNFLOX Texture GT-SR Coating System

Performance of BONNFLOX Coating System

About super accelerated weathering test by Xenon lamp used hydrogen peroxide

It is different from normal accelerated weathering test, and its test method forces titanium oxide used white pigments to deterioration of photocatalytic.



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Victoria Shanghai Academy, Aberdeen 香港仔滬江維多利亞學校



Mega Box, Kowloon Bay



Che Wah Industrial Building, Kwai Chung 葵涌致華工業大廈



# Job Reference/Case Study

## BONNFLOX Texture GT-SR Coating System

Performance of BONNFLOX Coating System

The thoughts behind techniques devised for the reduction of stain stripes of coated surfaces by rain

In order to reduce the soiling of coated surfaces by urban polluted rainfall of oily contaminants, it is necessary to transform the coated surfaces to become hydrophilic and evaporate oily contaminants.



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Hotel Icon, Hung Hom 唯港薈, 紅磡



Peel Rise, The Peak



No.33 Cape Road, Chung Hom Kok 春磡角環角道33號



Rio Hotel, Macau 澳門利澳酒店