

WF Curtainwall Protective PP Hollow Board (UV resistance)



Technical Product Data

Chemical base	Polypropylene (PP)
Colour	Clear / White
Thickness	2mm – 4mm
Width x Length	1M x 2M
Thickness	1 mm
UV resistance	Excellent
Shelf Life	12 months
Storage	4°C to 38 °C; 50-95% R.H.

Description

PP (Polypropylene) Hollow Sheet is made of melted Polypropylene. It has extremely light weight properties of corrugated board which is widely used in packing, advertising, decoration and stationery. It has good toughness and breakdown endurance, high impact, resistance, low permeability, high temperature and UV resistance, good solvent resistance and high corrosion resistance. It is suitable to use for protecting internal or external Glass of new project, the Unitized Curtainwall System... etc.

Features

1. Light weight and easy process.
2. Moisture resistance and heat resistance.
3. Aging resistance and high tensile strength.
4. Chemical resistant and non-toxic.
5. Easy to clean and maintain.

Applications

1. Protection for building construction: protecting the glass, the finished frames or units before transportation arrangement and installation thereafter.
2. Packing: the toughness and hollow Sheet can easily be bent and cut, it can be designed as all kinds of transportation box, mailbox, display rack, partition, gift boxes, food packing etc.
3. Advertising: sign board, shop window displays, pop-up displays, exhibition boards, picture frame backing, digital printing and screen-printing.
4. Decoration: partitions, wall cladding, indoor or outdoor decoration, air conditioning ducts, windows and false ceilings.

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Client Ref.: --
Report No.: 155090ST151058

Page 1 of 2

REPORT ON ACCELERATED WEATHERING TEST-QUV TESTER**Information Supplied by Client**

Client : WAH FUNG (UNIVERSAL) BUILDING MATERIALS CO. LTD.
Project : Testing of WF UV Resistance Curtainwall Protective PP Hollow Board
Sample Description : WF UV Resistance Curtainwall Protective PP Hollow Board

Laboratory Information

Lab. Sample I.D. : ST151058/1-10
Date Received : 04 December 2015
Date Test Started : 07 December 2015
Date Test Completed : 11 December 2015
Test Method : ASTM G154-00

Test Results

Lab. Sample I.D.	Observation After Testing	Program of Testing for 168hrs		
		Exposure	Hours	Temperature (C°)
ST151058/1	No visible damage	UVA 340	4	60
ST151058/2	No visible damage			
ST151058/3	No visible damage			
ST151058/4	No visible damage			
ST151058/5	No visible damage			
ST151058/6	No visible damage	Condensation	4	50
ST151058/7	No visible damage			
ST151058/8	No visible damage			
ST151058/9	No visible damage			
ST151058/10	No visible damage			

Remarks:

- 1.) The test results relate only to the samples tested.
- 2.) The samples before and after test are shown in the photographs on page 2 of this report.

Checked by : Egor Date : 13 JAN 2016 Certified by : Chan Chun Wai Ivan Date : 13 JAN 2016
Manager (Product Testing Laboratory)

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Sample Before Test
Sample I.D.: ST151058/1-10



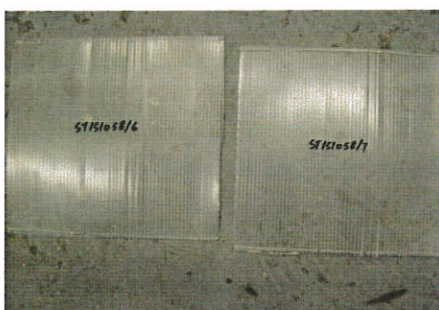
Sample After Test
Sample I.D.: ST151058/1-2



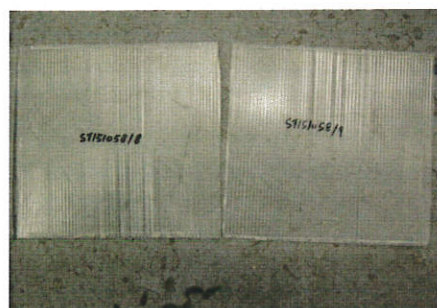
Sample After Test
Sample I.D.: ST151058/3-4



Sample After Test
Sample I.D.: ST151058/5-6



Sample After Test
Sample I.D.: ST151058/7-8



Sample After Test
Sample I.D.: ST151058/8-9



Sample After Test
Sample I.D.: ST151058/9-10

**** End of Report ****

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Report No.: 155090ST151058(2)

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REPORT ON DETERMINATION OF WIDE-WIDTH TENSILE STRENGTH AND ELONGATION AT BREAK (AFTER WEATHERING TEST)**Information Supplied by Client**

Client : WAH FUNG (UNIVERSAL) BUILDING MATERIALS CO. LTD.
Project : Testing of WF UV Resistance Curtainwall Protective PP Hollow Board
Sample Description : WF UV Resistance Curtainwall Protective PP Hollow Board

Laboratory Information

Lab. Sample I.D. : ST151058/21-30
Date Received : 03 November 2015
Date Tested : 15 December 2015
Speed Rate : 20mm/min.
Gauge Length : 100 mm
Test Method : BS EN ISO 10319 : 2008
Condition of Sample : After weathering test

Test Results

Lab. Sample I.D.	Direction	Thickness of Sample (mm)	Width of Sample (mm)	Maximum Force (N)	Tensile Strength (kN/m)	Elongation at Break (%)
ST151058/21	Machine	2.99	200	1487	7.44	517.0
ST151058/22	Machine	3.01	200	1455	7.28	547.0
ST151058/23	Machine	2.79	200	1446	7.23	90.50
ST151058/24	Machine	2.89	200	1596	7.98	88.90
ST151058/25	Machine	2.83	200	1582	7.91	93.10
			Average	1513	7.57	267.30
ST151058/26	Cross	2.78	200	1089	5.45	18.80
ST151058/27	Cross	2.86	200	1144	5.72	16.40
ST151058/28	Cross	2.86	200	1181	5.91	18.90
ST151058/29	Cross	2.74	200	1159	5.80	41.10
ST151058/30	Cross	2.82	200	1155	5.78	29.80
			Average	1146	5.73	25.00

Remarks:

- 1.) The test results relate only to the samples tested.
- 2.) The test configuration, samples before and after test are shown in the photographs on page 2 of this report.

Checked by : Egor Date : 13 JAN 2016 Certified by : Chan Chun Wai Ivan Date : 13 JAN 2016
Chan Chun Wai Ivan
Manager (Product Testing Laboratory)

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Test Configuration
Sample I.D.: ST151058/21-30



Sample Before Test
Sample I.D.: ST151058/21-30



Sample After Test
Sample I.D.: ST151058/21



Sample After Test
Sample I.D.: ST151058/22



Sample After Test
Sample I.D.: ST151058/23



Sample After Test
Sample I.D.: ST151058/24



Sample After Test
Sample I.D.: ST151058/25



Sample After Test
Sample I.D.: ST151058/26



Sample After Test
Sample I.D.: ST151058/27



Sample After Test
Sample I.D.: ST151058/28



Sample After Test
Sample I.D.: ST151058/29



Sample After Test
Sample I.D.: ST151058/30

**** End of Report ****

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Report No.: 155090ST151058(1)

Page 1 of 2

REPORT ON DETERMINATION OF WIDE-WIDTH TENSILE STRENGTH AND ELONGATION AT BREAK (BEFORE WEATHERING TEST)**Information Supplied by Client**

Client : WAH FUNG (UNIVERSAL) BUILDING MATERIALS CO. LTD.
Project : Testing of WF UV Resistance Curtainwall Protective PP Hollow Board
Sample Description : WF UV Resistance Curtainwall Protective PP Hollow Board

Laboratory Information

Lab. Sample I.D. : ST151058/11-20
Date Received : 03 November 2015
Date Tested : 14 December 2015
Speed Rate : 20mm/min.
Gauge Length : 100 mm
Test Method : BS EN ISO 10319 : 2008
Condition of Sample : Normal (Before weathering test)

Test Results

Lab. Sample I.D.	Direction	Thickness of Sample (mm)	Width of Sample (mm)	Maximum Force (N)	Tensile Strength (kN/m)	Elongation at Break (%)
ST151058/11	Machine	2.80	200	1490	7.45	63.1
ST151058/12	Machine	2.89	200	1430	7.15	133.1
ST151058/13	Machine	2.86	200	1542	7.71	625.0
ST151058/14	Machine	2.83	200	1472	7.36	655.0
ST151058/15	Machine	2.81	200	1455	7.28	112.0
			Average	1478	7.39	317.6
ST151058/16	Cross	2.75	200	685	3.43	18.0
ST151058/17	Cross	2.74	200	677	3.39	50.0
ST151058/18	Cross	2.71	200	955	4.78	95.0
ST151058/19	Cross	2.77	200	918	4.59	92.0
ST151058/20	Cross	2.67	200	1015	5.08	17.0
			Average	850	4.25	54.4

Remarks:

- 1.) The test results relate only to the samples tested.
- 2.) The test configuration, samples before and after test are shown in the photographs on page 2 of this report.

Checked by : Eg-v Date : 13 JAN 2016 Certified by : Chan Chun Wai Ivan Date : 13 JAN 2016
Chan Chun Wai Ivan
Manager (Product Testing Laboratory)

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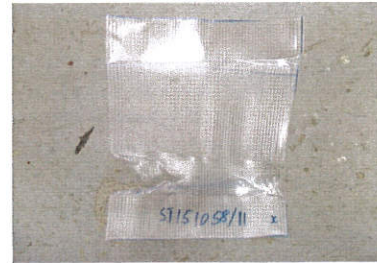
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Test Configuration
Sample I.D.: ST151058/11-20



Sample Before Test
Sample I.D.: ST151058/11-20



Sample After Test
Sample I.D.: ST151058/11



Sample After Test
Sample I.D.: ST151058/12



Sample After Test
Sample I.D.: ST151058/13



Sample After Test
Sample I.D.: ST151058/14



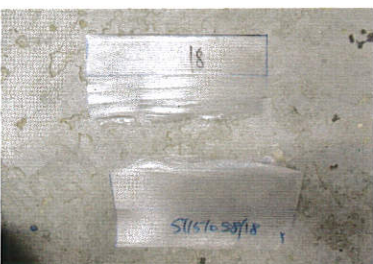
Sample After Test
Sample I.D.: ST151058/15



Sample After Test
Sample I.D.: ST151058/16



Sample After Test
Sample I.D.: ST151058/17



Sample After Test
Sample I.D.: ST151058/18



Sample After Test
Sample I.D.: ST151058/19



Sample After Test
Sample I.D.: ST151058/20

**** End of Report ****

Wah Fung (Universal) Building Materials Company Limited

PROJECT REFERENCES

Hong Kong and Macau



Job Reference

Project Name	Client	Product	
		WF Protective Hollow Board	WF Masking Tape
<u>Year 2017 – Year 2019</u>			
Project: IL9020 North Point Hotel, Hong Kong - Podium - C319	ACME Metal Works (Int'l) Limited	✓	✓
Project: No. 50 Island Road, Hong Kong - C321	ACME Metal Works (Int'l) Limited	✓	✓
Project: No. 50 Island Road, Hong Kong - C321	ACME Metal Works (Int'l) Limited	✓	✓
Cavendish Heights - 33 Perkins Rd, Jardine's Lookout	Billion Rise Engineering Limited		✓
The Xiqu Centre - 88 Austin Rd W, Tsim Sha Tsui	BWK Engineering Company Limited		
Hong Kong Children's Hospital	Eastern Growing Engineering Co., Ltd.		✓
Monterey - 23 Tong Chun St, Tseung Kwan O	Ecosky Engineering Limited	✓	
Proposed residential development at Tuen Mun Town Lot No. 427	Far East Aluminium Works Company Limited		✓
Proposed residential development at Tsing Lung Tau Lot No. 70	Far East Aluminium Works Company Limited	✓	
KML52 NO.23 Sung On Street	Goldenway Engineering Development Ltd.	✓	✓
The Beaumont II – Pak Shek Koi	Great Harvest Construction Engineering Ltd.		✓
Ocean Pride - Tsuen Wan West (TW5) Bayside Development	Hacely Facade Engineering Ltd.	✓	✓
Corinthia by the Sea - 23 Tong Yin St, Tseung Kwan O	Hacely Facade Engineering Ltd.	✓	
Ruby Court - 55 S Bay Rd, Repulse Bay	J&A Technical Works Ltd.		✓
Peel Street Mid Level – C0025	KPa Engineering (HK) Limited	✓	✓
Yoho Town – Yuen Long CDA15	Luen Co. Aluminium Engineering Co. Ltd.		✓
Hong Kong Boundary Crossing Facilities	Luen Ming Supreme Fabricator Co., Ltd.		✓
Kau To Shan – No. 68 Lai Ping Road	Million Hope Industries Limited	✓	✓
Hong Kong Institute of Vocational Education (Chai Wan)	Oriental Design (Metal Work) Engineering Co., Ltd.	✓	✓
Seven Victory Avenue – No. 7 Victory Ave, Ho Man Tin	Polyfair Construction & Engineering Ltd.	✓	✓
Project: Fanling Sheung Shui Town Lot No. 255	Polyfair Construction & Engineering Ltd.	✓	✓
Proposed residential development at Tuen Mun Town Lot No. 508	Polywin Aluminium Limited	✓	✓
Sham Mong Rd, Sham Shui Po	Silver Ball Engineering Co., Ltd.	✓	✓
Proposed Hotel Development at Nos.30-32 New Market Street	Win Star Engineering Ltd.	✓	✓

Proposed residential development at No. 21, Borrett Road	Wing Fat Aluminium Engineering Co., Ltd.		✓
Cavendish Heights - 33 Perkins Rd, Jardine's Lookout	Billion Rise Engineering Limited		✓
Tong Yan San Tsuen, Yuen Long, N.T.	Choi Kee Engineering(H.K.) Co.Ltd.		✓
Proposed residential development at No. 500 Tuen Mun Kwun Chui Road	Far East Aluminium Works Company Limited	✓	
School of Chinese Medicine, The Chinese University of Hong Kong	Far East Aluminium Works Company Limited	✓	
23 Robinson Road, Mid - Level	Chun Fung Construction Ltd.		✓
St Barths – No. 9 Yiu Sha Rd, Ma On Shan	Colmat Construction & Engineering Co., Ltd.		✓
Proposed residential development at Shek Mun Estate, Sha Tin	Goldenwall Engineering Limited	✓	✓
LP6 – No. 1 Lohas Park Rd, Lohas Park	Hacely Company Limited	✓	
WINGS AT SEA - LOHAS Park Phase 4	Kam Kee Steel's Works Ltd		✓
No. 4 Kin Fung Circuit, Tuen Mun	Ko Sing Engineering Ltd.		✓
My Central, No. 23 Graham Street, Central	KPA Engineering (HK) Limited	✓	✓
Hong Kong Boundary Crossing Facilities	Huen Ming Supreme Fabricator Co., Ltd.		✓
Christ the King Chapel - 33 Caroline Hill Rd Causeway Bay	Master Proofer Specialist Contracting Ltd	✓	
Proposed residential development at Lung Kui Road	Million Hope Industries Limited	✓	✓
Proposed residential development at LOHAS PARK Phase 6 & 7	Million Hope Industries Limited	✓	
One Kai Tak (II) - 8 Ma Tau Kwai St, Kai Tak	Polyfair Construction & Engineering Ltd.	✓	✓
Project: YUR - Ma Tau Pa Road Tsuen Wan	Shun Wing Aluminium Works Company Limited	✓	
33 Chai Wan Road	Wah Tung Facade Company Limited		✓
Hong Kong West Kowloon Station	Wai Hing Iron Works Ltd		✓
8 Peak Rd, Bowen Hill, The Peak	Win Lee Building Engineering Ltd	✓	✓
Proposed residential development at No. 5 Fei Ngo Shan Road, Clear Water Bay	Win Star Engineering Ltd.	✓	✓
Proposed residential development at Sha Tin Town Lot No. 601	Win Star Engineering Ltd.	✓	✓
Proposed Residential Development at IL3949 No. 21 – 25 Borrett Road	Wing Fat Aluminium Engineering Co., Ltd.	✓	
TMTL499, Tseng Choi Street, Tuen Mun, NT	Zenith (PMS) Ltd.		✓
43 Heung Yip Road, Wong Chuk Hang	Zenithal Co. Ltd.	✓	
Project: (16002) Nam Cheong Station PH2	YKK AP Facade Hong Kong Ltd.	✓	
Proposed residential development at LOHAS PARK Phase 7	AMC Limited		✓
Olympian City 2 - 18 Hoi Ting Rd, Mong Kok	Bravo Link Engineering Co.,Ltd.		✓

The Hong Kong Golf Club - Fanling	Chun Fung Construction Ltd.		✓
48-51 Connaught Road West, Sheung Wan	Cheers Hall Engineering Limited	✓	✓
Pamela Youde Nethersole Eastern Hospital	Double Gain Engineering Limited		✓
99 Pui To Road, Tuen Mun	FDB Facade Limited	✓	✓
Proposed residential development at Tuen Mun Town Lot No. 541. TMTL541	Far East Aluminium Works Company Limited	✓	✓
Proposed residential development at Tai Po Town Lot No. 221	Far East Aluminium Works Company Limited	✓	✓
1 Plantation Road, The Peak	Full Spirit Marble Factory Limited		✓
Proposed residential development at Oasis Kai Tak	Hacely Facade Engineering Ltd.	✓	✓
Kowloon East Regional Headquarters - 105 Concorde Road	Harvest Time Facade Ltd		✓
One Harbourfront - 18 Tak Fung St, Hung Hom	KPa Engineering (HK) Limited	✓	✓
South China Athletic Association - 88 Caroline Hill Rd, Causeway Bay	KPa Engineering (HK) Limited		✓
Project: A & A Works of Chevalier Engineering Service Centre 21 Sheung Yuet Road	Kobunshi Global Company Limited	✓	✓
Proposed residential development at Wetland Lot No. 34	Kam Yee Steel's Works Ltd		✓
AsiaWorld-Expo – Chek Lap Kok	Kai Shing (Asia) Engineering Limited		✓
Hong Kong Museum of Art - 10 Salisbury Rd, Tsim Sha Tsui	Luen Ming Supreme Fabricator Co., Ltd.		✓
Proposed residential development at TSWTL34, Area 115	Million Hope Industries Limited	✓	✓
65 Pok Fu Lam Road	Polyfair Construction & Engineering Ltd.	✓	✓
Project: URA - KTTC - Kwun Tong Town Centre Development	Polyfair Construction & Engineering Ltd.	✓	✓
The Peak Galleria - The Peak	Richly Engineering (HK) Limited		✓
Mount Regency - King Sau Ln, Tuen Mun	Silver Ball Engineering Co., Ltd.		✓
New World Construction Site, 24 Salisbury Road, Tsim Sha Tsui	Seele HongKong Ltd.	✓	
CUHK Medical Centre Site	Winload Construction Eng. Co. Ltd.	✓	
Chinese International School - 1 Hou Yuen Path	Wing Fat Engineering Construction Co. Ltd.	✓	
Altissimo - 11 Yiu Sha Rd, Ma On Shan	Win Star Engineering Ltd.	✓	
No. 48 Lion Rock Road, Kowloon	Well State Asia Ltd.	✓	✓
31 - 33 Mount Kellett Road, The Peak	Yip's Engineering Company		✓
The Salisbury - YMCA of Hong Kong	Yip's Engineering Company		✓
HKSTP Innocell Residential Institution at Junction of Chong San Road and Science Park Road	Zenith (PMS) Ltd.		✓

** Updated in Feb 2020