



Test No. 015/2001/YMC  
Sheet 1 of 6

**REPORT ON TESTS**

Sample : Six pieces of Antislip specimen and one Plain specimen with M8 Bolt  
From : Sunway Metal Manufactory Limited  
Job: \_\_\_\_\_

Scope of Test : Determine the max. load capacity before sliding  
Date Received: 19/11/2001 Date Tested: 23/11/2001

香港 九龍 紅磡  
Hung Hom Kowloon Hong Kong  
Telex 38964 Polyx Hk  
E-Mail polyu@polyu.edu.hk

潘宗光 教授  
President  
Prof. Poon Chung-kwong  
PhD, DSc, JP

講座教授及系主任  
李毓湘 教授  
Chair Professor and Head  
Prof. Li Yok-sheung  
Department of Civil &  
Structural Engineering  
Telephone (852) 2766 6069  
Fax (852) 2334 6389

**Test Results:-**

Dimension of stainless steel plate: 100 x 100 x 5mm Temperature at Test : 23° C  
Dimension of SUNWAY antislip washer SW-A2 : 20 x 30 x 4 mm

<u>M8 bolt tighten to 22Nm with antislip washer</u>		Max. load before slide(kN)	Displacement between previous 2 columns
	Loading for full contact(kN)		
M8-1	3.96	13.49	2.80
M8-2	3.91	13.85	2.30
M8-3	3.93	13.79	2.60

<u>M8 bolt tighten to 26Nm with antislip washer</u>		Max. load before slide(kN)	Displacement between previous 2 columns
	Loading for full contact(kN)		
M8-4	3.60	13.60	3.00
M8-5	3.38	13.75	2.50
M8-6	3.52	15.10	2.90

<u>M8 bolt tighten to 22Nm with plain washer</u>		Max. load before slide(kN)
M8-P		4.71

**Equipments:** Nike hydraulic hollow jack: Model No: CHF612A, s/n. 9611692  
Nike hydraulic pump: Model No: PHS70-700A, s/n. 6724  
Tokyo Sokki Kenkyujo Loadcell: Model No. KC-10M, s/n. KE5025  
Tokyo Sokki Kenkyujo Displacement Transducer: Model No. SDP-50C, s/n.613778

**Remarks:**

Loading for full contact- the load at which there is full contact between the antislip washers. The force-displacement relation is normal after this load.

Max. load before slide- maximum load measured from the force -displacement relation.

Y M Cheng  
Certified by : Dr. Y.M.Cheng  
Lecturer in Charge  
Department of Civil &  
Structural Engineering

Date : 6/12/2001



Test No. 015/2001/YMC

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**REPORT ON TESTS**

Sample : Six pieces of Antislip specimen and one Plain specimen with M10 Bolt

From : Sunway Metal Manufactory Limited

Job: \_\_\_\_\_

Scope of Test : Determine the max. load capacity before sliding

Date Received: 19/11/2001 Date Tested: 23/11/2001

香港 九龍 紅磡  
Hung Hom Kowloon Hong Kong  
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President  
Prof. Poon Chung-kwong  
PhD, D.Sc., JP

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李毓湘 教授  
Chair Professor and Head  
Prof. Li Yok-sheung  
Department of Civil &  
Structural Engineering  
Telephone (852) 2766 6069  
Fax (852) 2334 6389

**Test Results:-**

Dimension of stainless steel plate: 100 x 100 x 5 mm

Temperature at Test : 23° C

Dimension of SUNWAY antislip washer SW-A2 : 20 x 30 x 4 mm

<u>M10 bolt tighten to 43Nm with antislip washer</u>		Max. load before slide(kN)	Displacement between previous 2 columns
	Loading for full contact(kN)		
M10-1	3.36	23.97	2.60
M10-2	3.91	22.32	2.50
M10-3	3.04	20.91	2.40

<u>M10 bolt tighten to 52Nm with antislip washer</u>		Max. load before slide(kN)	Displacement between previous 2 columns
	Loading for full contact(kN)		
M10-4	3.83	20.98	2.70
M10-5	3.08	19.76	3.00
M10-6	3.13	20.85	2.30

<u>M10 bolt tighten to 43Nm with plain washer</u>		Max. load before slide(kN)
M10-P		7.23

Equipments: Nike hydraulic hollow jack: Model No: CHF612A, s/n. 9611692

Nike hydraulic pump: Model No: PHS70-700A, s/n. 6724

Tokyo Sokki Kenkyujo Loadcell: Model No. KC-10M, s/n. KE5025

Tokyo Sokki Kenkyujo Displacement Transducer: Model No. SDP-50C, s/n.613778

**Remarks:**

Loading for full contact- the load at which there is full contact between the antiwashers. The force-displacement relation is normal after this load.

Max. load before slide- maximum load measured from the force -displacement relation.

Certified by : Dr. Y.M.Cheng

Lecturer in Charge  
Department of Civil &  
Structural Engineering

Date : 6/12/2001





Test No. 015/2001/YMC

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**REPORT ON TESTS**

Sample : Six pieces of Antislip specimen and one Plain specimen with M12 Bolt

From : Sunway Metal Manufactory Limited

Job: \_\_\_\_\_

Scope of Test : Determine the max. load capacity before sliding

Date Received: 19/11/2001

Date Tested: 23/11/2001

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Hung Hom Kowloon Hong Kong  
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Chair Professor and Head  
Prof. Li Yok-sheung

Department of Civil &  
Structural Engineering  
Telephone (852) 2766 6069  
Fax (852) 2334 6389

**Test Results:-**

Dimension of stainless steel plate: 100 x 100 x 5 mm

Temperature at Test : 23° C

Dimension of SUNWAY antislip washer SW-A2 : 20 x 30 x 4 mm

<u>M12 bolt tighten to 76Nm with antislip washer</u>		Max. load before slide(kN)	Displacement between previous 2 columns
	Loading for full contact(kN)		
M12-1	5.49	28.90	3.00
M12-2	6.36	31.38	3.20
M12-3	6.09	28.68	2.90

<u>M12 bolt tighten to 91Nm with antislip washer</u>		Max. load before slide(kN)	
	Loading for full contact(kN)		
M12-4	7.65	29.51	2.50
M12-5	9.18	33.80	3.70
M12-6	8.04	33.33	3.70

<u>M12 bolt tighten to 76Nm with plain washer</u>		Max. load before slide(kN)
M12-P		7.89

Equipments: Nike hydraulic hollow jack: Model No: CHF612A, s/n. 9611692

Nike hydraulic pump: Model No: PHS70-700A, s/n. 6724

Tokyo Sokki Kenkyujo Loadcell: Model No. KC-10M, s/n. KE5025

Tokyo Sokki Kenkyujo Displacement Transducer: Model No. SDP-50C, s/n.613778

**Remarks:**

Loading for full contact- the load at which there is full contact between the antiwashers. The force-displacement relation is normal after this load.

Max. load before slide- maximum load measured from the force -displacement relation.

Certified by :

Dr. Y.M.Cheng

Lecturer in Charge  
Department of Civil &  
Structural Engineering

Date : 6/12/2001

Test No: 015/2001/YMC  
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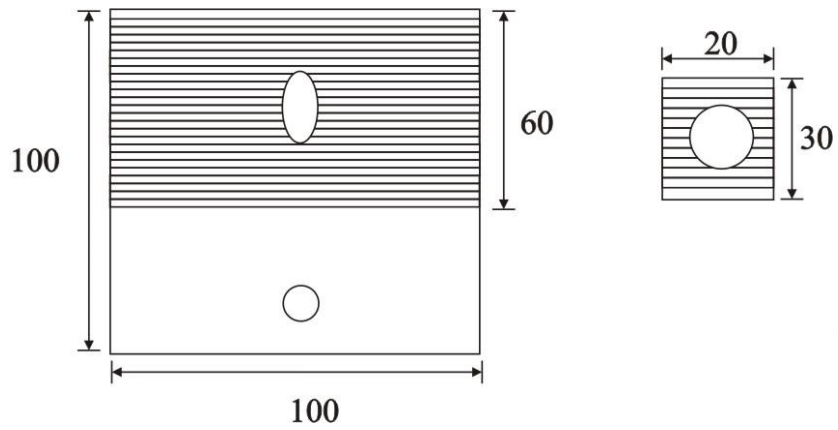


Figure 1a: Components of Antislip Bracket and Antislip Washer(SW-A2)

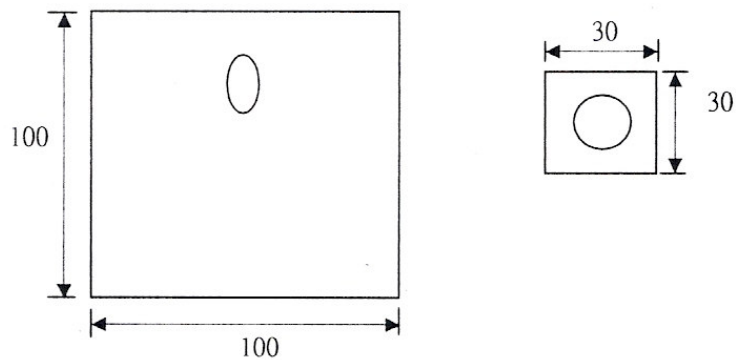


Figure 1b: Components of Stainless Steel Bracket and Plain Washer

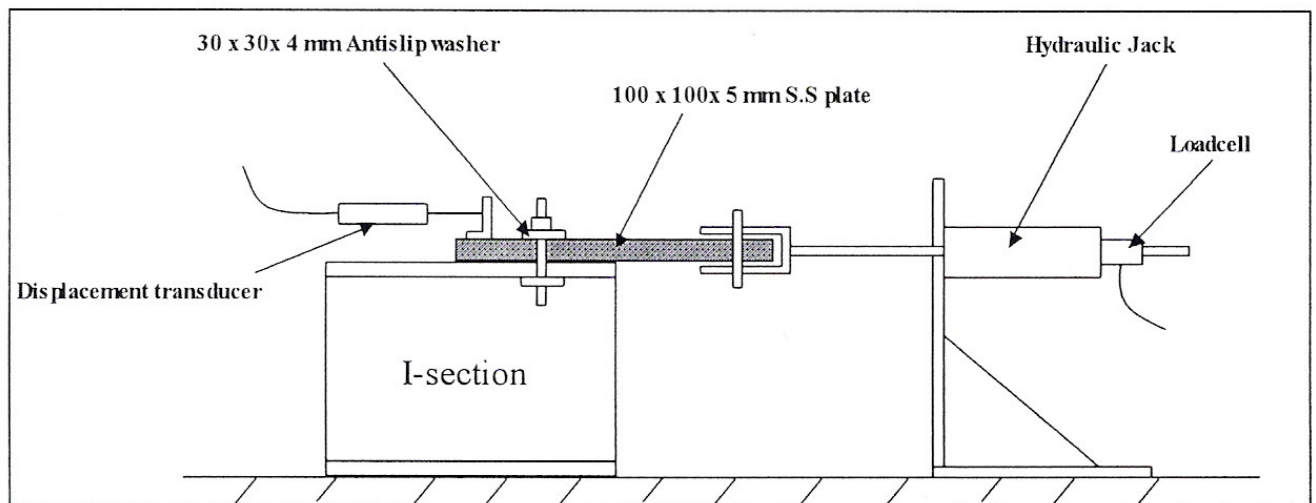
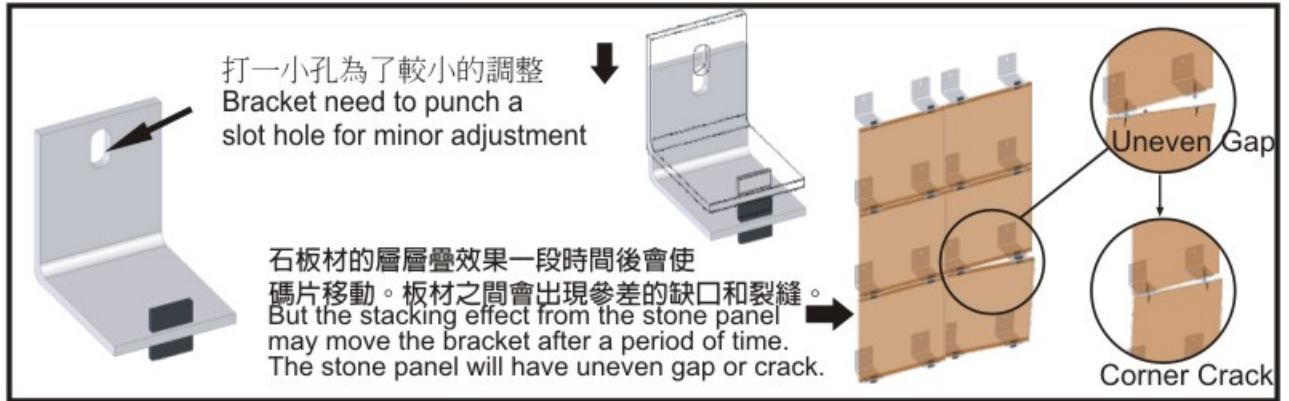


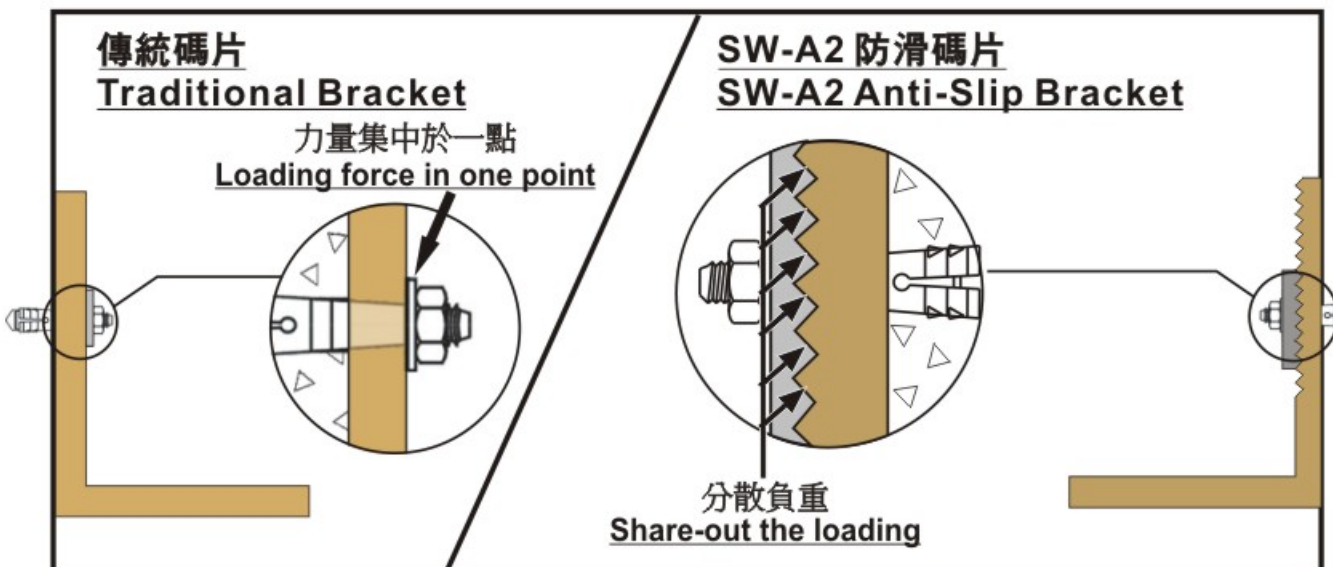
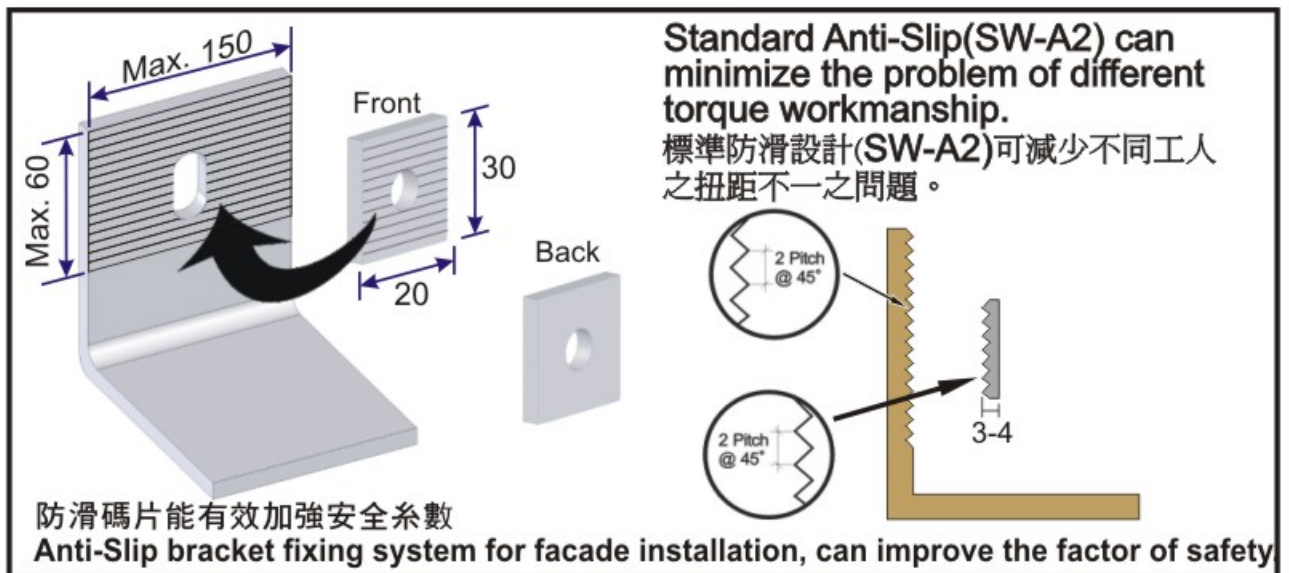
Figure 2: Setup testing for Antislip Bracket and Antislip Washer(SW-A2)

**SW-A2 防滑碼片**  
Anti-Slip Bracket [SW-A2]

傳統碼片 / Traditional Bracket



**SW-A2 防滑碼片 / SW-A2 Anti-Slip Bracket**





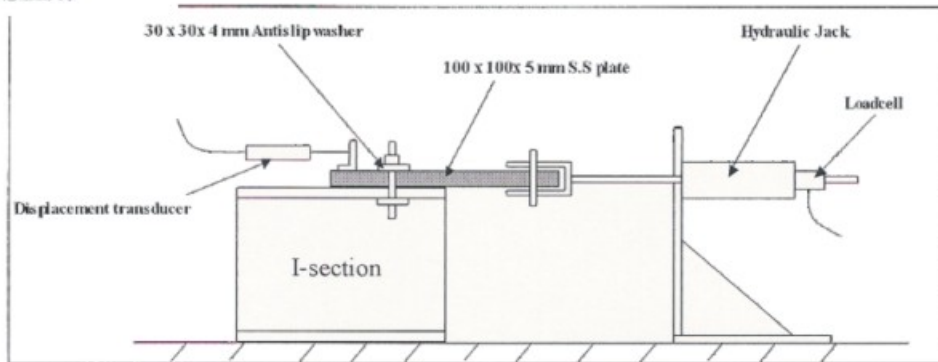
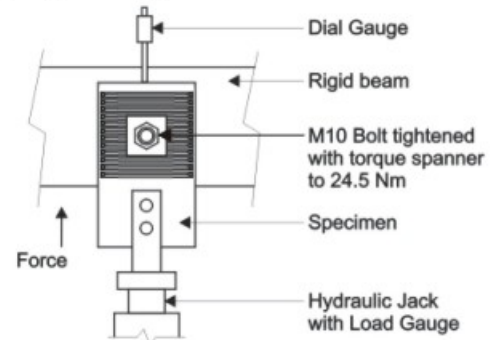
**測試結果：  
Test Report**

Test : To determine the max. load capacity before slipping taking place

Ref. No. : 015/2001/YMC(Polytechnic University)  
S-AS-99-08(Sunway)

Samples : 1) 100 x 100 x 5mm S.S. plate with  
20 x 30 x 4mm original washer.

2) 100 x 100 x 5mm S.S. plate with  
20 x 30 x 4mm SUNWAY  
Anti-Slip Washer - SW-A2.


**Result:**

S.S. Plate without anti-slip washer	
Sample No.	Max. Load before slide
1	372kg
2	367kg
3	378kg

S.S. Plate with Sunway SW-A2	
Sample No.	Max. Load before slide
1	1539kg
2	1502kg
3	1510kg

**Conclusion :**

The SW-A2 Anti-Slip Bracket can bear 300% more load as the without antislip washer

如需更多資料或有任何疑問，請與我們聯絡。

For more information, please contact us.

Tel : (852) 2873 2804 , E-mail : sung@sunwayltd.com.hk

Fax: (852) 2814 0776 , Website : <http://www.sunwaymetal.com/>