

รายงานผลทดสอบ

การทดสอบหาค่าความสามารถในการรับน้ำหนักบรรทุกของ
แป้สำเร็จรูป Aluminium Zince Steel Purlin

เสนอต่อ

PROFAST ASIA CO., LTD.

โดย

สาขาวิชาวิศวกรรมโยธา คณะวิศวกรรมศาสตร์

มหาวิทยาลัยเทคโนโลยีพระจอมเกล้าธนบุรี

22 มีนาคม 2553



STRUCTURAL AND MATERIAL TESTING LABORATORY
CIVIL ENGINEERING DEPARTMENT, KMUTT

TEST OF STEEL PURLIN

SPECIMEN FROM : PROFAST ASIA CO., LTD.
TYPE OF SPECIMEN : PURLIN (HIGH TENSILE STEEL G550) ยึดด้วยสกรู # 10 x 13 mm.
DATE OF TESTING : 8/5/2010

Applied Load kg/m ²	Mid - Span Deflection, mm.	
	Span 1	Span 2
0	0	0
25	0.59	0.34
50	0.91	0.88
75	1.15	1.11
100	1.41	1.48
125	1.79	1.85
150	2.01	2.31
175	2.26	2.65
200	2.57	3.13
225	2.79	3.35
250	2.99	3.70
275	3.26	4.10
300	3.54	4.31
325	3.77	4.65

Specimen No. 1

Data of Specimen

Product No. : แป้สำเร็จรูปโปรไฟาส์ท
Nominal Size : 61 x 27 x 0.55 mm.
Weight : 0.454 kg/m.

Test Condition

Type of loading : Uniform Load
Spacing of Purlin : 0.33 m.
Spacing of Rafter : 1.00 m.
Angle of Roofing : 25 deg.

Test Result

Load at 2.8 mm. Deflection = 204 kg/m²

Tested by :


(Aikachai Pattarawongpaibool)

Checked by :


(Chai Taturapitakul)
Head of Civil Engineering Department

Remarks : 1. The testing results are good only for those specimens tested.
2. Not valid unless signed and sealed.

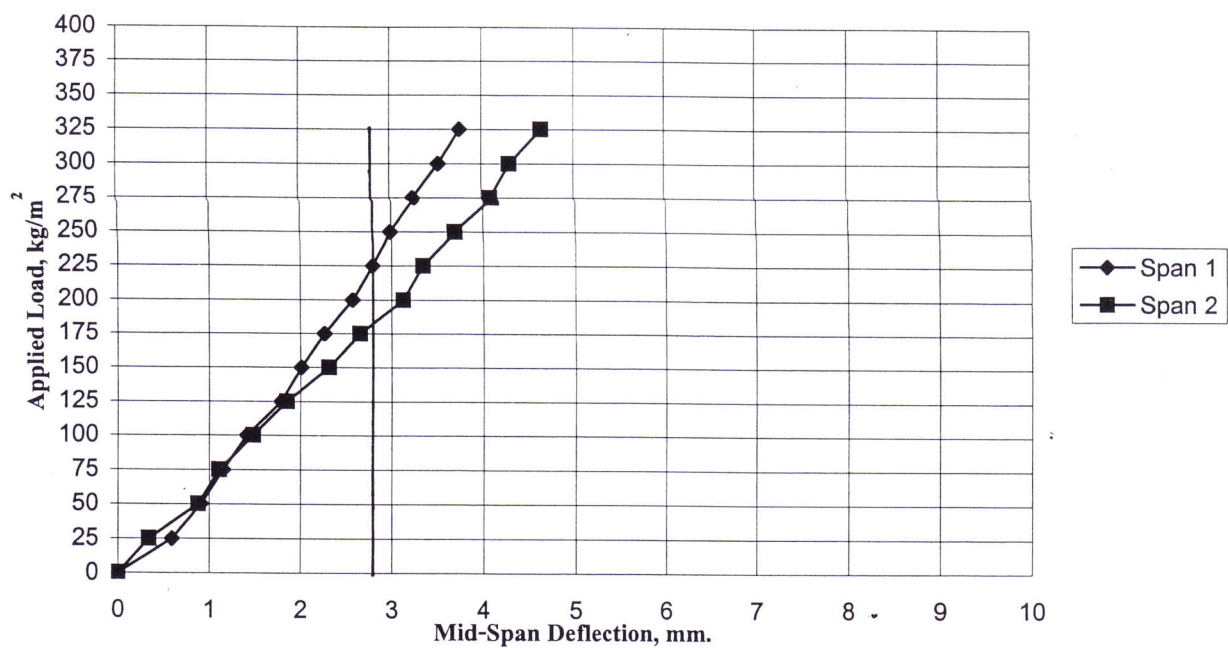


STRUCTURAL AND MATERIAL TESTING LABORATORY
CIVIL ENGINEERING DEPARTMENT, KMUTT

TEST OF STEEL PURLIN

SPECIMEN FROM : PROFAST ASIA CO., LTD.
TYPE OF SPECIMEN : PURLIN (HIGH TENSILE STEEL G550) ขนาด 10 x 13 มม.
DATE OF TESTING : 8/5/2010

Specimen No. 1



Tested by :


(Aikachai Pattarawongpaibool)

Checked by :


(Chai Jaturapitakul)
Head of Civil Engineering Department

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TEST OF STEEL PURLIN

SPECIMEN FROM : PROFAST ASIA CO., LTD.

TYPE OF SPECIMEN : PURLIN (HIGH TENSILE STEEL G550) ยึดด้วยสกรู # 10 x 13 mm.

DATE OF TESTING : 8/5/2010

Applied Load kg/m ²	Mid - Span Deflection, mm.	
	Span 1	Span 2
0	0	0
25	0.39	0.34
50	0.89	0.73
75	1.19	1.13
100	1.60	1.51
125	2.05	1.97
150	2.35	2.34
175	2.86	2.74
200	3.32	3.01
225	3.60	3.44
250	4.06	3.85
275	4.54	4.28
300	5.02	4.72
325	5.33	4.99

Specimen No. 2

Data of Specimen

Product No. : แปสำเร็จรูปโปรไฟล์ท

Nominal Size : 61 x 27 x 0.55 mm.

Weight : 0.454 kg/m.

Test Condition

Type of loading : Uniform Load

Spacing of Purlin : 0.33 m.

Spacing of Rafter : 1.00 m.

Angle of Roofing : 37 deg.

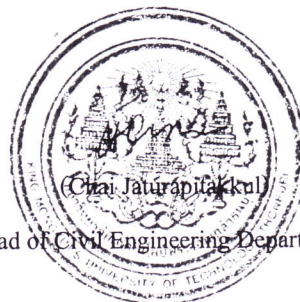
Test Result

Load at 2.8 mm. Deflection = 175 kg/m²

Tested by :


(Aikachai Pattarawongpaibool)

Checked by :



Head of Civil Engineering Department

Remarks : 1. The testing results are good only for those specimens tested.

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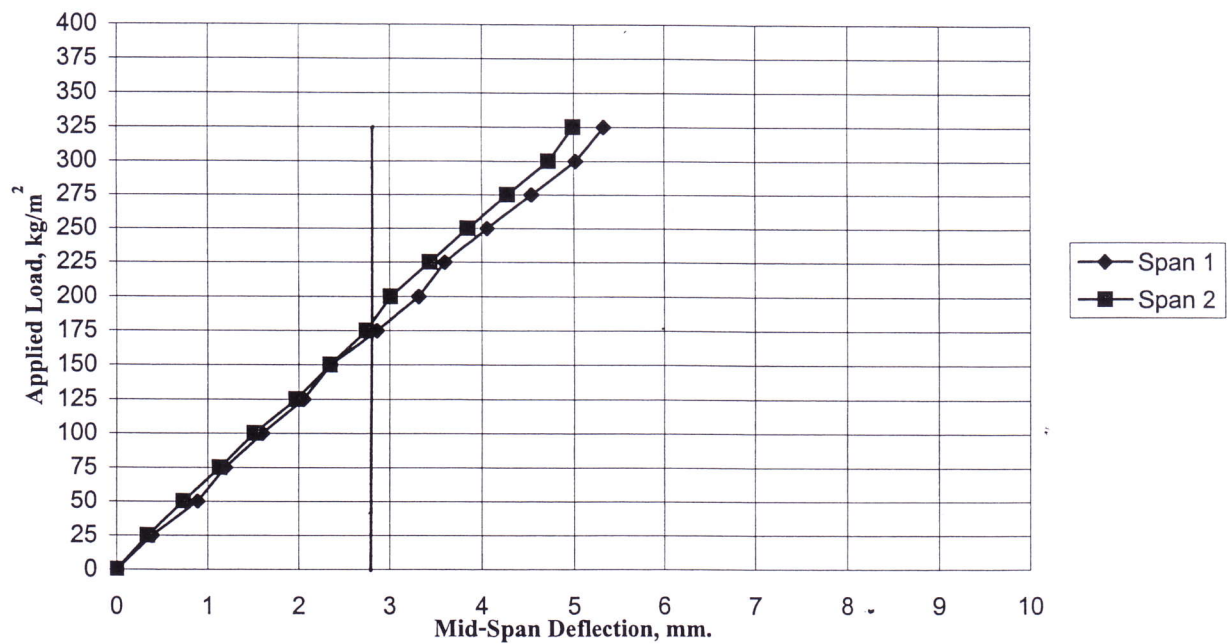


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TEST OF STEEL PURLIN

SPECIMEN FROM : PROFAST ASIA CO., LTD.
TYPE OF SPECIMEN : PURLIN (HIGH TENSILE STEEL G550) ยึดด้วยสกรู # 10 x 13 mm.
DATE OF TESTING : 8/5/2010

Specimen No. 2



Tested by :


(Aikachai Pattarawongpaibool)

Checked by :


(Chai Jaturapitakul)
Head of Civil Engineering Department

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TEST OF STEEL PURLIN

SPECIMEN FROM : PROFAST ASIA CO., LTD.

TYPE OF SPECIMEN : PURLIN (HIGH TENSILE STEEL G550) ยึดด้วยสกรู # 10 x 13 mm.

DATE OF TESTING : 8/5/2010

Applied Load kg/m ²	Mid - Span Deflection, mm.	
	Span 1	Span 2
0	0	0
25	0.52	0.53
50	0.98	0.99
75	1.41	1.41
100	1.84	1.93
125	2.43	2.40
150	2.88	2.83
175	3.25	3.27
200	3.90	3.74
225	4.42	4.26
250	4.96	4.72
275	5.51	5.15
300	6.00	5.71
325	6.49	6.25

Specimen No. 3

Data of Specimen

Product No. : แปสำเร็จรูปโปรไฟล์

Nominal Size : 61 x 27 x 0.55 mm.

Weight : 0.447 kg/m.

Test Condition

Type of loading : Uniform Load

Spacing of Purlin : 0.33 m.

Spacing of Rafter : 1.10 m.

Angle of Roofing : 25 deg.

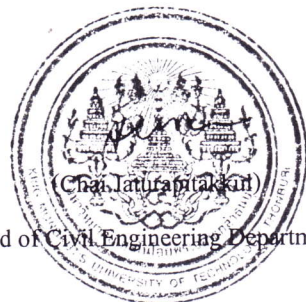
Test Result

Load at 3.0 mm. Deflection = 158 kg/m²

Tested by :

(Aikachai Pattarawongpaibool)

Checked by :



Head of Civil Engineering Department

Remarks : 1. The testing results are good only for those specimens tested.

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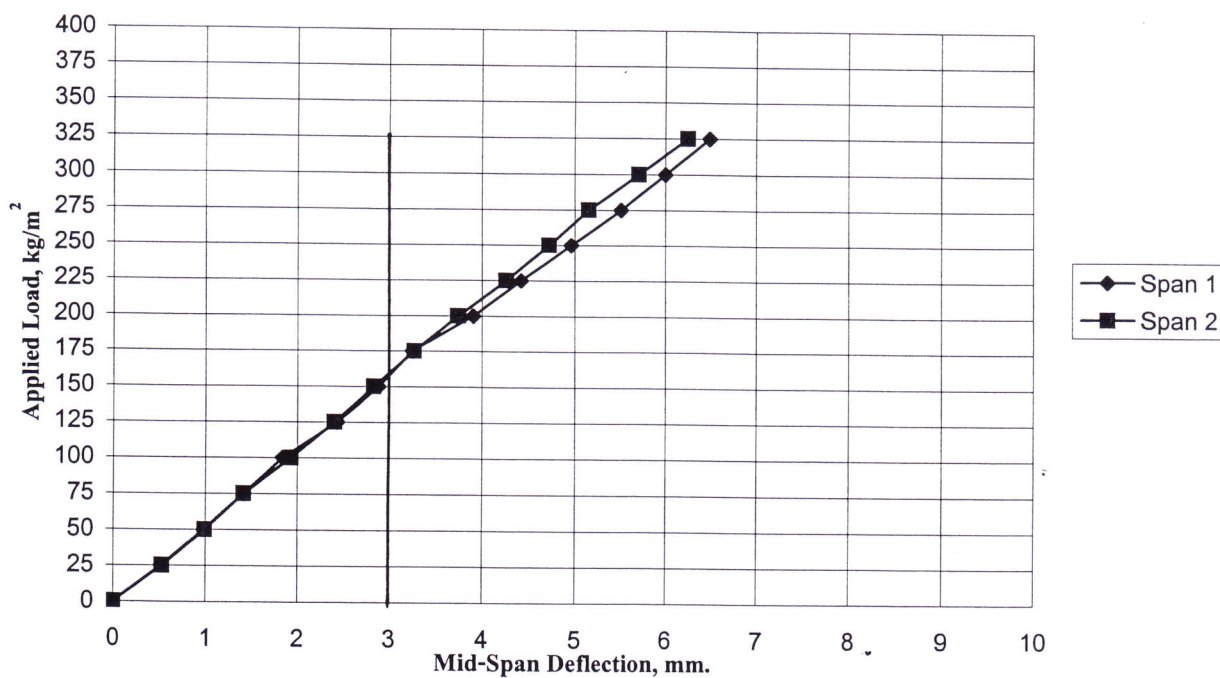


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TEST OF STEEL PURLIN

SPECIMEN FROM : PROFAST ASIA CO., LTD.
TYPE OF SPECIMEN : PURLIN (HIGH TENSILE STEEL G550) ยึดด้วยสลัก # 10 x 13 mm.
DATE OF TESTING : 8/5/2010

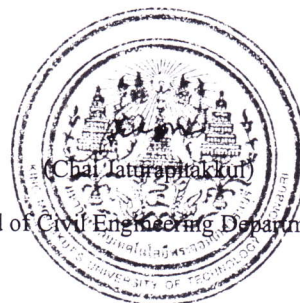
Specimen No. 3



Tested by :

(Aikachai Pattarawongpaibool)

Checked by :



Head of Civil Engineering Department

Remarks :
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STRUCTURAL AND MATERIAL TESTING LABORATORY

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TEST OF STEEL PURLIN

SPECIMEN FROM : PROFAST ASIA CO., LTD.

TYPE OF SPECIMEN : PURLIN (HIGH TENSILE STEEL G550) ยึดด้วยสกรู # 10 x 13 mm.

DATE OF TESTING : 8/5/2010

Applied Load kg/m ²	Mid - Span Deflection, mm.	
	Span 1	Span 2
0	0	0
25	0.66	0.69
50	1.15	1.49
75	1.65	2.06
100	2.24	2.61
125	2.74	3.16
150	3.31	3.71
175	3.96	4.46
200	4.52	5.20
225	5.26	5.71
250	5.96	6.57
275	6.69	7.43
300	7.30	8.00
325	7.93	8.58

Specimen No. 4

Data of Specimen

Product No. : แปสำเร็จรูปโปรไฟล์

Nominal Size : 61 x 27 x 0.55 mm.

Weight : 0.444 kg/m.

Test Condition

Type of loading : Uniform Load

Spacing of Purlin : 0.33 m.

Spacing of Rafter : 1.10 m.

Angle of Roofing : 37 deg.

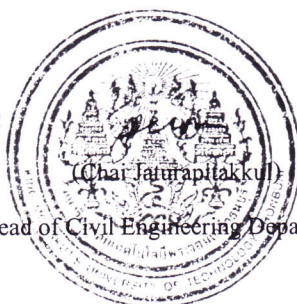
Test Result

Load at 3.0 mm. Deflection = 126 kg/m²

Tested by :

(Aikachai Pattarawongpaibool)

Checked by :



Head of Civil Engineering Department

Remarks : 1. The testing results are good only for those specimens tested.

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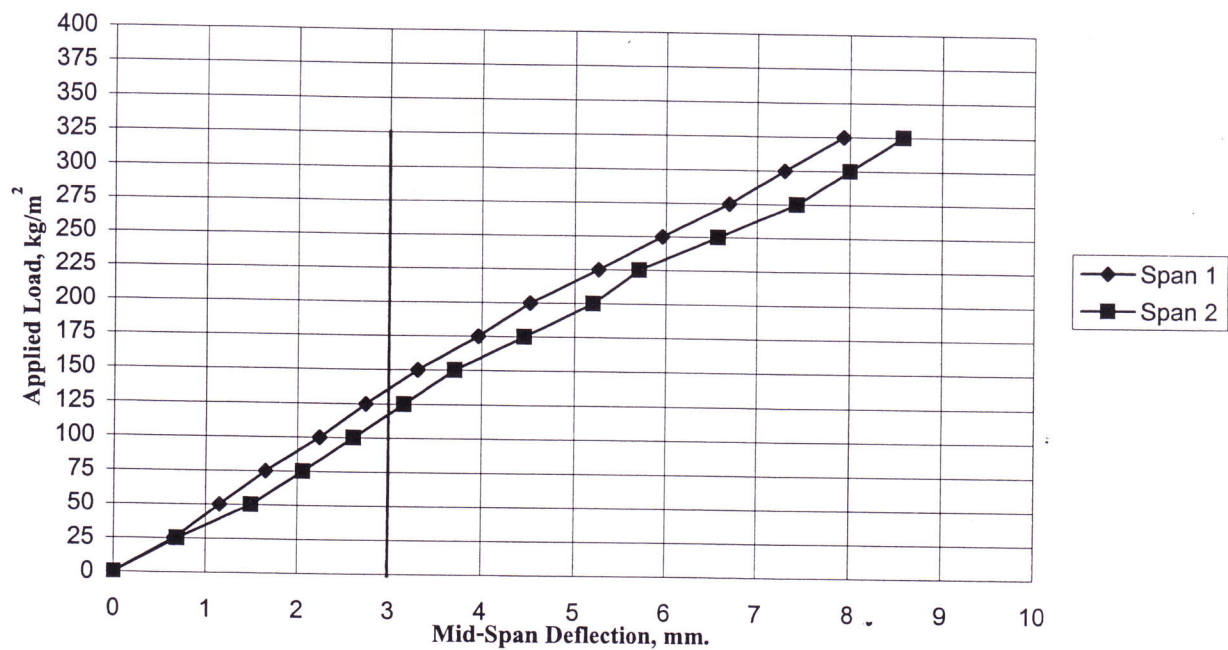


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TEST OF STEEL PURLIN

SPECIMEN FROM : PROFAST ASIA CO., LTD.
TYPE OF SPECIMEN : PURLIN (HIGH TENSILE STEEL G550) ยึดด้วยสกรู # 10 x 13 mm.
DATE OF TESTING : 8/5/2010

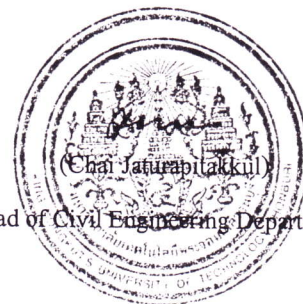
Specimen No. 4



Tested by :

(Aikachai Pattarawongpaibool)

Checked by :



Head of Civil Engineering Department

Remarks :
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2. Not valid unless signed and sealed.