Farabaugh Engineering and Testing Inc.

Project No. T196-06

Report Date: 7-17-06

No. of Pages: 5

PERFORMANCE TEST REPORT

ASTM E330 UNIFORM LOAD TEST

FLUSH PANEL
12" WIDE X 0.032 ALUMINUM

FOR

PETERSEN ALUMINUM CORP.
1005 TONNE RD.
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8/10/06

Project No. T196-06

SUBJECT:
Petersen Aluminum Corp. Flush Panel, 0.032" (nominal) aluminum, 12" wide

INTRODUCTION:
Uniform load tests were conducted on the subject panels on July 5, 2006 at the test facility of Farabaugh Engineering and Testing, Inc. A description of the tests and summary of results are contained herein.

OBJECTIVE:
The purpose of the tests was to determine the uniform load capacity at specified test pressures on the test specimen mock-up.

TEST SPECIMENS:
The specimen mock-up was comprised of Flush Panel, 0.032" aluminum (measured 0.029" thick), 12" wide. The sidejoints were reinforced with #14 x 7/8" lap fasteners located at 12" oc.

TEST ASSEMBLY:
The Flush Panel assembly was as shown on the attached drawings.

TEST PROCEDURE:
The structural test was per ASTM E330-02 "Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference" and as provided in this report. A controlled blower provided a vacuum to uniformly load the specimen mock-up. A manometer was used to measure the pressure. Uniform load was applied in the positive and negative direction. A plastic barrier was placed between the panel specimen and the substrate.

RESULTS:
The results of the structural tests are shown on the attached tabulation of results.

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Summary of Test Results

Test Date: 7-5-06

Specimen: Petersen Aluminum Flush Panel , 0.032 aluminum, 12" wide

Span Condition: 10 Spans @ 1' oc

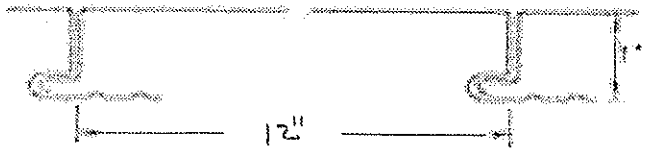
Uniform Load: Negative (Design Load = 17.3 psf, Proof Load = 26 psf)

	Deflections (in)					
Test Pressure (psf)	D1	D2	D3	D4	D5	D6
17.3	0.053	0.138	0.059	0.135	0.026	0.122
26	0.065	0.174	0.064	0.225	0.075	0.202
0 (Perm. Set)	0.005	0.003	0.018	0.007	0.013	0.039

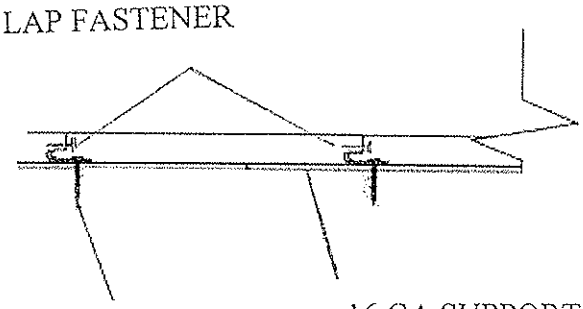
Uniform Load: Positive (Design Load = 17.3 psf, Proof Load = 26 psf)

	Deflections (in)					
Test Pressure (psf)	D1	D2	D3	D4	D5	D6
17.3	0.075	0.744	0.117	0.826	0.117	0.806
26	0.153	0.885	0.162	0.934	0.161	0.929
0 (Perm. Set)	0.091	0.024	0.011	0.016	0.001	0.056

Results:
Upon completion of the loading sequence of the panel specimen, there were no component failures.

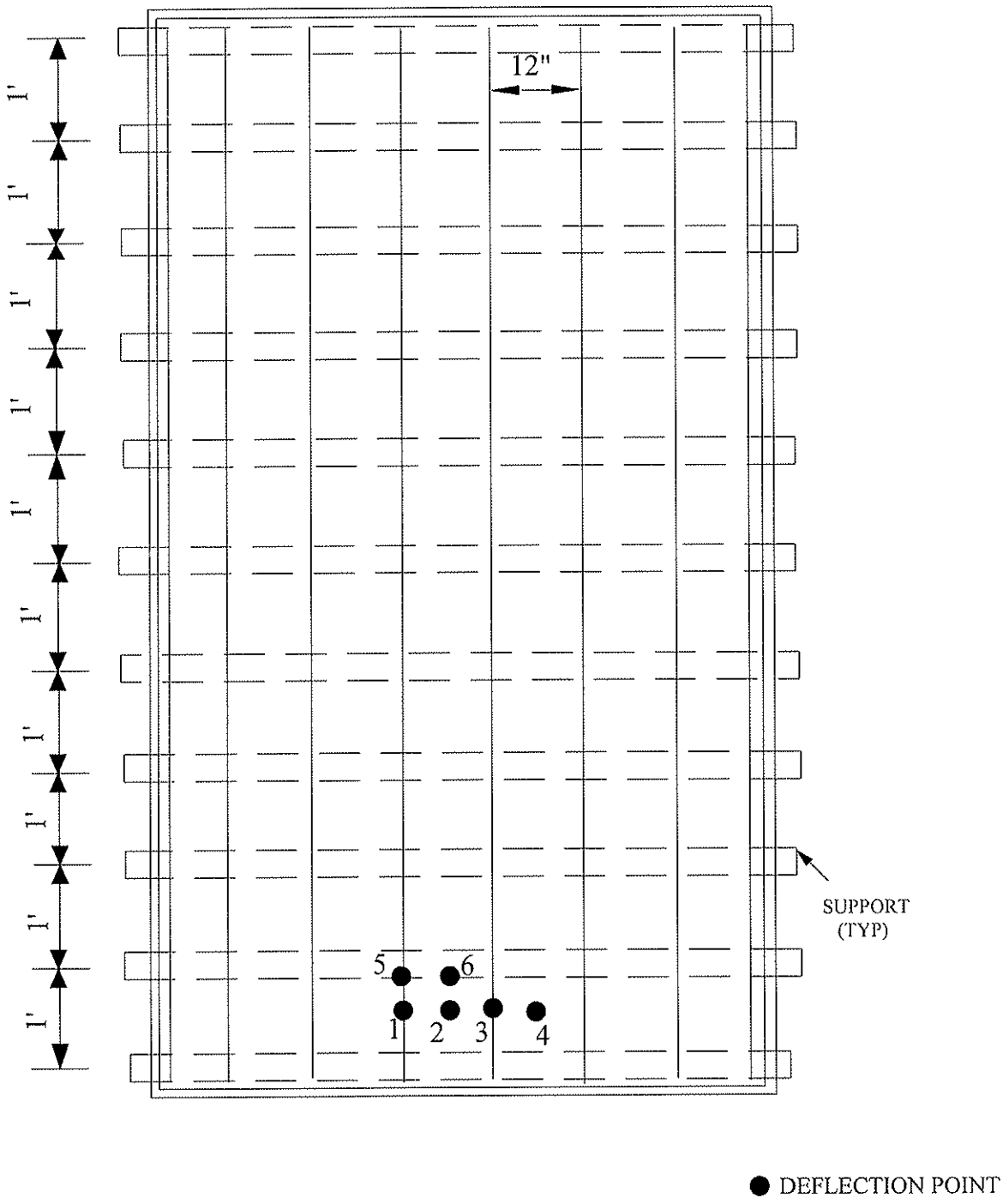


#14 x 7/8" LAP FASTENER
(12" OC)



#10 PANCAKE HEAD FASTENER
(AT EACH SUPPORT 12" OC)

16 GA SUPPORT MEMBER



SPECIMEN MOCK-UP