



**Farabaugh Engineering and Testing Inc.**

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Project No. T198-06

Report Date: 7-17-06

No. of Pages: 5

PERFORMANCE TEST REPORT

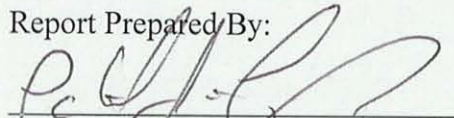
ASTM E330 UNIFORM LOAD TEST

FLUSH PANEL  
12" WIDE X 22 GA STEEL

FOR

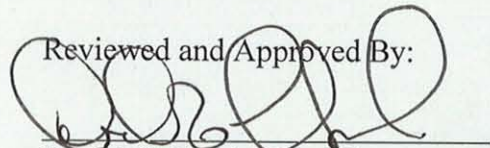
PETERSEN ALUMINUM CORP.  
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8/10/06

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**SUBJECT:**

Petersen Aluminum Corp. Flush Panel, 22 ga (nominal) steel, 12" wide

**INTRODUCTION:**

Uniform load tests were conducted on the subject panels on July 6, 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, 22 ga steel (measured 0.030" 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: 7-6-06

Specimen: Petersen Aluminum Flush Panel , 22 ga steel, 12" wide

Span Condition: 10 Spans @ 1' oc

Uniform Load: Negative ( Design Load = 124.8 psf, Proof Load = 187.2 psf)

Deflections (in)

Test Pressure (psf)	D1	D2	D3	D4	D5	D6
124.8	0.214	0.539	0.227	0.515	0.212	0.476
187.2	0.362	0.885	0.415	0.802	0.340	0.753
0 (Perm. Set)	0.156	0.227	0.185	0.206	0.146	0.205

Uniform Load: Positive ( Design Load = 124.8 psf, Proof Load = 187.2 psf)

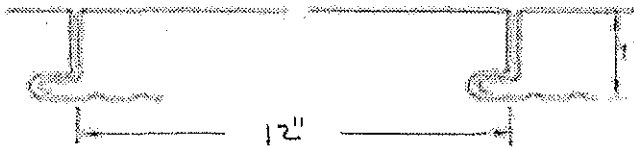
Deflections (in)

Test Pressure (psf)	D1	D2	D3	D4	D5	D6
124.8	0.133	0.906	0.214	0.849	0.276	0.923
187.2	0.146	0.933	0.234	0.885	0.303	0.953
0 (Perm. Set)	0.007	0.009	0.004	0.009	0.007	0.010

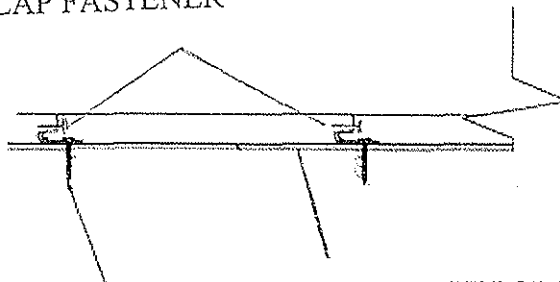
**Results:**

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

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



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

16 GA SUPPORT MEMBER