Farabaugh Engineering and Testing Inc.

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.
1005 TONNE RD.
ELK GROVE VILLAGE, IL 60007

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8/10/06
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.
Project No. T198-06

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)

<table>
<thead>
<tr>
<th>Test Pressure (psf)</th>
<th>D1</th>
<th>D2</th>
<th>D3</th>
<th>D4</th>
<th>D5</th>
<th>D6</th>
</tr>
</thead>
<tbody>
<tr>
<td>124.8</td>
<td>0.214</td>
<td>0.539</td>
<td>0.227</td>
<td>0.515</td>
<td>0.212</td>
<td>0.476</td>
</tr>
<tr>
<td>187.2</td>
<td>0.362</td>
<td>0.885</td>
<td>0.415</td>
<td>0.802</td>
<td>0.340</td>
<td>0.753</td>
</tr>
<tr>
<td>0 (Perm. Set)</td>
<td>0.156</td>
<td>0.227</td>
<td>0.185</td>
<td>0.206</td>
<td>0.146</td>
<td>0.205</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Test Pressure (psf)</th>
<th>D1</th>
<th>D2</th>
<th>D3</th>
<th>D4</th>
<th>D5</th>
<th>D6</th>
</tr>
</thead>
<tbody>
<tr>
<td>124.8</td>
<td>0.133</td>
<td>0.906</td>
<td>0.214</td>
<td>0.849</td>
<td>0.276</td>
<td>0.923</td>
</tr>
<tr>
<td>187.2</td>
<td>0.146</td>
<td>0.933</td>
<td>0.234</td>
<td>0.885</td>
<td>0.303</td>
<td>0.953</td>
</tr>
<tr>
<td>0 (Perm. Set)</td>
<td>0.007</td>
<td>0.009</td>
<td>0.004</td>
<td>0.009</td>
<td>0.007</td>
<td>0.010</td>
</tr>
</tbody>
</table>

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