Project No. T180-06
Report Date: 7-17-06
No. of Pages: 5

PERFORMANCE TEST REPORT

ASTM E330 UNIFORM LOAD TEST

FLUSH PANEL
12” WIDE X 0.040 ALUMINUM

FOR

PETERSEN ALUMINUM CORP.
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Project No. T180-06

SUBJECT:
Petersen Aluminum Corp. Flush Panel, 0.040" (nominal) aluminum, 12" wide

INTRODUCTION:
Uniform load tests were conducted on the subject panels on July 11, 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, 0.040" aluminum (measured 0.038" 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.
Summary of Test Results

Test Date: 7-11-06

Specimen: Petersen Aluminum Flush Panel, 0.040 aluminum, 12" wide

Span Condition: 10 Spans @ 1’ oc

Uniform Load: Negative  (Design Load = 48.5 psf, Proof Load = 72.8 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>48.5</td>
<td>0.135</td>
<td>0.164</td>
<td>0.080</td>
<td>0.367</td>
<td>0.133</td>
<td>0.202</td>
</tr>
<tr>
<td>72.8</td>
<td>0.220</td>
<td>0.389</td>
<td>0.164</td>
<td>0.531</td>
<td>0.189</td>
<td>0.357</td>
</tr>
<tr>
<td>0 (Perm. Set)</td>
<td>0.079</td>
<td>0.092</td>
<td>0.063</td>
<td>0.118</td>
<td>0.075</td>
<td>0.081</td>
</tr>
</tbody>
</table>

Uniform Load: Positive  (Design Load = 48.5 psf, Proof Load = 72.8 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>48.5</td>
<td>0.194</td>
<td>0.807</td>
<td>0.177</td>
<td>0.813</td>
<td>0.208</td>
<td>0.773</td>
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<tr>
<td>72.8</td>
<td>0.200</td>
<td>0.835</td>
<td>0.180</td>
<td>0.830</td>
<td>0.223</td>
<td>0.844</td>
</tr>
<tr>
<td>0 (Perm. Set)</td>
<td>0.000</td>
<td>0.001</td>
<td>0.000</td>
<td>0.010</td>
<td>0.009</td>
<td>0.004</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
SPECIMEN MOCK-UP