Submitted By: United States Aluminum Corp.  
200 Singleton Dr.  
Waxahachie, TX  75185

Attn: Mr. Greg Hall

Date: October 20, 1998

Report No. 27905

REPORT

SUBJECT: Performance testing in accordance with ASTM E 283-91 (Air Infiltration), ASTM E 331-96 (Water Resistance), and ASTM E 330-96 (Uniform Load Deflection & Structural).

Product Type: Aluminum Window Wall

Series Model: OS-2

Overall Size: 12'1-3/4" x 8'0" (3.70m x 2.44m)

Configuration: O.O.O

O.O.O

DESCRIPTION OF UNIT TESTED

Weatherstripping: None.

Glass: 1/4" annealed (6.35mm)

Glazing: One vertical mullion, structural butt glazed with vinyl gasket (part #SP450) at the interior of glass and foam backer rod and structural silicone at the heal of glass. Other vertical mullion and all horizontals, capture glazed with vinyl gasket (part #NP-225) at the interior and exterior of glass.

Weep Arrangement: 1"x3/16" (25.40mm x 4.76mm) weep slot 12" (30.48cm) from center line of each vertical member at frame sill.

Sealant: Perimeter caulked with foam backer rod and structural sealant. Silicone sealant at the frame head, sill and vertical member end dams. Silicone sealant at vertical to horizontal members and cap seal frame attachment bolts. Silicone sealant in the glazing vinyl boss 1" (25.40mm) in each direction from each corner, butter seal at each end of glazing vinyl and sealant at the corner of glazing vinyl to glass at the interior and exterior of test specimens. Silicone sealant at the head and sill to vertical member connections.
**Other Features:** Face cap (part #OG439) at the head and sill and (part #OG434) at center horizontal. Frame attached to wood buck with 1/4"x2" (6.35mm x 50.80mm) lag bolts 6" (15.24cm) from center line of vertical members and center line of lite at frame head and sill. Center horizontal member attached to shear blocks with one (1) #10x3/4" (#10x19.05mm) screw. Shear block attached to frame vertical members with two (2) #12x2" (#12x50.80mm) screws.

**Date Testing Started:** September 29, 1998

**Date Testing Completed:** September 29, 1998

**Testing Peformed At:** United States Aluminum Corp. testing facility in Waxahachie, Texas.

### SUMMARY OF TEST RESULTS

<table>
<thead>
<tr>
<th>TITLE OF TEST</th>
<th>TEST METHOD</th>
<th>MEASURED</th>
<th>ALLOWED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Infiltration @ 1.57 psf (7.66 Kg/m²)</td>
<td>ASTM E 283-91</td>
<td>0.03 CFM/Ft²</td>
<td>0.06 CFM/Ft²</td>
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<tr>
<td></td>
<td></td>
<td>(0.014 liter/sec.)</td>
<td>(0.028 liter/sec.)</td>
</tr>
<tr>
<td>Water Resistance @ 8.00 psf (39.06 Kg/m²)</td>
<td>ASTM E 331-96</td>
<td>No Leakage</td>
<td>No Leakage</td>
</tr>
<tr>
<td>Uniform Load Deflection @ 25.00 psf* (122.05 Kg/m²)</td>
<td>ASTM E 330-96</td>
<td>0.305&quot; (7.75mm)</td>
<td>0.536&quot; (13.61mm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.305&quot; (7.75mm)</td>
<td>0.536&quot; (13.61mm)</td>
</tr>
<tr>
<td>Uniform Load Structural</td>
<td>ASTM E 330-96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Exterior</td>
<td></td>
<td>37.5 psf *</td>
<td>37.5 psf *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(174.29 Kg/m²)</td>
<td>(174.29 Kg/m²)</td>
</tr>
<tr>
<td>- Interior</td>
<td></td>
<td>37.5 psf *</td>
<td>37.5 psf *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(174.29 Kg/m²)</td>
<td>(174.29 Kg/m²)</td>
</tr>
<tr>
<td>- Permanent Set</td>
<td></td>
<td>Negligible</td>
<td>0.375&quot; (9.53mm)</td>
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</tbody>
</table>

* No glass breakage, permanent deformation, or any other condition exists that caused any damage to the unit.

The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specifications.

**DALLAS LABORATORIES, INC.**

**TESTING LABORATORY**

[Signature]

**DIRECTOR, WINDOW & DOOR TESTING**

Andy Wilson

AW:td