TESTED FOR

FLEETWOOD ALUMINUM
2485 Railroad Street
Corona, CA 91720

1.0 PURPOSE
The purpose of this report is to present the testing methods employed and the test results obtained during the performance testing of one (1) Aluminum Sliding Glass Door described in paragraph 4.0 of this report.

2.0 TEST REFERENCES
2.1 Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors: AAMA/NWWDA 101/IS.2 - 97 SGD - R 20. 182" x 96"
2.2 CAWM 300 - 96 Forced Entry Resistance Tests for Sliding Glass Doors.

3.0 SUMMARY
The test results in paragraphs 5.0 and 6.0 indicate that the test sample described in paragraph 4.0 of this report complied with the performance requirements of the above referenced specifications.

4.0 SAMPLE SUBMITTED
SERIES: 3070 EX
CONFIGURATION: XXP
FRAME SIZE: 181.63" x 95.88"
SASH SIZE: Locking Panel, 61.63" x 94.00" - Center Panel, 60.75" x 94.00"
POCKET SIZE: 59.25" x 91.75" Daylight opening of frame in pocket.
GLASS: All panels contained a single lite of 1/4" tempered glass.
GLAZING: All panels were channel glazed with vinyl gasket.
WEEPAGE: The sill sat on a sill pan that captured the water draining through the sill weep slots. Refer to the attached drawing for weep sizes and locations and required sill pan size.
WEATHERING: The head air barrier was not used. Refer to the cross section drawings for a complete understanding of weatherstrip type and locations.

HARDWARE: The lockstile contained an Adams Rite Mortice lock 45" from the bottom. When locked, the tongue of the lock engaged a keep which consisted of two (2) metal plates on either side of the jamb extrusion and fastened together with a single screw. Each active panel bottom rail contained an adjustable tandem steel roller at each end.

CONSTRUCTION: The frame was mechanically joined with two (2) #10 x 3/4" PPH screws per corner.

The sill contained a) a stainless steel snap-in roller track for each sliding panel and b) a PVC snap-in filler in the pile pockets such that when all panels are close, no pile is visible from the outside. The bottom rail of all panels contained a PVC stiffener full length.

The center panel interlocked with an aluminum fixed interlock fastened to a 2" x 6" nominal wood stud with a pair of screws every 20". The fixed interlock butted up to the sill and head. A reinforced plywood wall enclosed the remainder of the frame so that there was no fixed lite but rather a wall pocket.

CAULKING: All frame corners were sealed full profile.

All glazing corners were sealed inside and outside.

The fixed interlock was caulked full length to the supporting wood stud. The plywood wall was caulked full perimeter to the buck.

ANCHORING: The frame was fastened to the 2" x 8" wooden buck with #10 x 2" PPH screws as follows:

a) Jambs, sets of two (2) screws every 24".

b) Head, sets of two (2) screws every 24".

c) Sill, sets of two (2) screws every 24".

5.0 TEST PROCEDURES AND RESULTS

5.1 All testing procedures were performed in accordance with the performance requirements of the specifications referenced in paragraph 2.0 of this report.
5.2 TEST RESULTS

<table>
<thead>
<tr>
<th>PARAGRAPH</th>
<th>TEST DESCRIPTION</th>
<th>MEASURED</th>
<th>ALLOWED</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.2</td>
<td>Air Infiltration (ASTM E 283)</td>
<td>0.19 CFM/ft²</td>
<td>0.3 CFM/ft²</td>
</tr>
<tr>
<td></td>
<td>1.57 PSF</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The tested specimen meets/exceeds the performance levels specified in AAMA/NWWDA 101/LS.2 for Air Infiltration.</td>
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<tr>
<td>2.1.3</td>
<td>Water Penetration (ASTM E 547 &amp; ASTM E 331)</td>
<td>No Leakage</td>
<td>No Leakage</td>
</tr>
<tr>
<td></td>
<td>2.66 PSF With/without screen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.4</td>
<td>Uniform Load Structural (ASTM E 330)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>22.5 PSF POS +0.00&quot;</td>
<td>0.37&quot; Set</td>
<td></td>
</tr>
<tr>
<td></td>
<td>22.5 PSF NEG -0.00&quot;</td>
<td>0.37&quot; Set</td>
<td></td>
</tr>
<tr>
<td>2.2.19.5.1</td>
<td>Operating Force</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Breakaway Motion 26 lbf.</td>
<td>30 lbf.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12 lbf.</td>
<td>20 lbf.</td>
<td></td>
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<tr>
<td>2.2.19.5.2</td>
<td>Deglazing (ASTM E 937)</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>70 lbf. Stiles</td>
<td>0%</td>
<td>Less than 100%</td>
</tr>
<tr>
<td></td>
<td>50 lbf. Rails</td>
<td>0%</td>
<td>Less than 100%</td>
</tr>
</tbody>
</table>

5.3 OPTIONAL PERFORMANCE TEST

| 4.3 | Water Penetration (ASTM E 547) | No Leakage | No Leakage |
|     | 3.00 PSF With/without screen |         |         |

| 4.4.2 | Uniform Load Structural (ASTM E 330) |          |         |
|       | 30.0 PSF POS +0.00" | +0.37" Set |         |
|       | 30.0 PSF NEG -0.00" | -0.37" Set |         |

5.4 ADDITIONAL TEST

| Water Penetration (ASTM E 547) | No Leakage | No Leakage |
| 1.3 PSF (For sill pan at same height as sill inside leg). | | |

6.0 2.1.8 **CAWM 300 - 89 Forced Entry Resistance Tests for Sliding Glass Doors**

2.3.1 Type "I" Sliding Glass Door

6.1.2 Results of Operable Panel
6.1.1 TEST RESULTS: Description
6.1.1.1 Passed Disassembly
6.1.1.2 Passed 800# parallel load in direction to open panel.
6.1.1.3 Passed Repeat Test "A" with additional 200# perpendicular load, toward the interior.
6.1.1.4 Passed Repeat Test "A" with additional 200# perpendicular load, toward the exterior.
6.1.1.5 Passed Hand and Tool Manipulation Test
6.1.1.6 Passed Repeat Test "A" with operable panel lifted upward and applying 500# load at bottom rail near meeting stiles toward interior for inside slide and toward exterior for outside slide.
6.1.1.7 Passed Repeat Test "B" with operable panel lifted upward.
6.1.1.8 Passed Repeat Test "C" with operable panel lifted upward.
6.1.1.9 Passed Hand and Tool Manipulation

6.1.5 Type "I" Sliding Glass Door - Fixed Panel: Not Applicable. There was no fixed panel but rather a wall pocket.

For a complete description of the tested sample refer to the attached cross section drawings.

Assembly and die drawings of frame members are on file and have been compared to the sample submitted. Test sample sections, drawings, and a copy of this report will be retained at the test laboratory for four years.

The above and preceding test results were obtained by using the applicable ASTM Test Methods. This report does not constitute Certification of this product. Certification can only be granted by an approved Administrator/Validator.

NOTE: Based on AAMA Technical Interpretation #32, all products claiming ratings under the auspices of this test report must be glazed with the glass used in the test specimen described in this report without exception, unless it can be proven that a different glazing is equal to or better than what was tested.

Testing Completed: August 01, 1997
Report Completed: August 04, 1997

Pete Cruz
Test Engineer

Jim Cruz
Test Technician