

## **TESTED FOR**

### **FLEETWOOD ALUMINUM, INC.**

2485 Railroad Street  
Corona, CA 91720

Report No. : A02F-177  
Date : October 2, 2002  
Page : 1 of 3

## **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) **Thermally Broken Aluminum Fixed Window** 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/I.S.2 - 97: **F - HC 60** 144 x 72
- 2.2** CAWM 301-90 Forced Entry Resistance Tests for Windows

## **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:** **KONA 3800 Fixed Window**

**CONFIGURATION:** OO

**FRAME SIZE:** 144.00" x 72.00"

**FIXED SIZES:** 69.25" x 69.00" Daylight Opening

**GLASS:** Each glass panel consisted of a 1" overall insulated unit containing a 1/4" clear annealed lite on each side and a 1/2" spacer.

**GLAZING:** Each glass pane was glazed from the exterior and onto a sanoprene bulb gasket. Snap-in extruded stops with sanoprene bulb gaskets secured the glass in place.

Each pane rested on setting blocks place at quarter points of each lite and was adhered to the frame with silicone applied full perimeter under bulb gasket.

**WEEPAGE:** The sill contained a 1" x 3/16" weep slots located at quarter points under each lite.

**WEATHERSTRIP:** Sanoprene bulb gasket on snap-in stops and frame full perimeter.

**HARDWARE:** None.

**CONSTRUCTION:** All of the frame corners were mechanically joined with three (3) screws.  
The vertical mullion was mechanically joined to the frame with two (2) screws at each end.

**CAULKING:** All frame corners full profile.  
Mullion to frame full profile.  
Glass to frame under bulb gasket full profile.

**ANCHORING:** The frame was mounted over a 2" x 6" wood rough opening and fastened with #10 x 2" screws every 16" on center through frame.

**5.0 TEST PROCEDURES AND RESULTS**

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

**5.2 TEST RESULTS**

<u>PARAGRAPH</u>	<u>TEST DESCRIPTION</u>	<u>MEASURED</u>	<u>ALLOWED</u>
2.1.2	Air Infiltration (ASTM E 283) 6.24 PSF The tested specimen exceeds the performance levels specified in AAMA/NWWDA 101/I.S.2 - 97 for Air Infiltration.	0.013 CFM/Ft <sup>2</sup>	0.3 CFM/Ft <sup>2</sup>
2.1.3	Water Penetration (ASTM E 547 & ASTM E 331) 6.00 PSF	No Leakage	No Leakage
2.1.4	Uniform Load Structural (ASTM E 330) 60.0 PSF POS 60.0 PSF NEG	0.04" 0.02"	0.28" Set 0.28" Set

**5.3 OPTIONAL PERFORMANCE GRADES**

**TEST RESULTS**

<u>PARAGRAPH</u>	<u>TEST DESCRIPTION</u>	<u>MEASURED</u>	<u>ALLOWED</u>
4.3	Water Penetration (ASTM E 547 & ASTM E 331) 9.00 PSF	No Leakage	No Leakage
4.4.1	Uniform Load Deflection (ASTM E 330) 60.0 PSF POS 60.0 PSF NEG	1.05" 0.92"	No Damage No Damage
4.4.2	Uniform Load Structural (ASTM E 330) 90.0 PSF POS 90.0 PSF NEG	0.10" 0.08"	0.28" Set 0.28" Set

**5.4 ADDITIONAL TESTING**

<u>TEST DESCRIPTION</u>	<u>MEASURED</u>	<u>ALLOWED</u>
Water Penetration (ASTM E 547 & ASTM E 331) 12.00 PSF	No Leakage	No Leakage

**6.0 2.1.8 CAWM 301 - 90 FORCED ENTRY TEST RESULTS**

2.4.5 Type "V" Window

	<u>TEST</u>	<u>RESULTS</u>	<u>DESCRIPTION</u>
5.4.1	<b>A</b>	Passed	Disassembly Test.
5.4.2	<b>B</b>	Passed	Hand and Tool Manipulation.

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.

This test report may not be modified in any way without the written consent of Fenestration Testing Laboratory.

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

Testing Completed: September 23, 2002

Report Completed: October 2, 2002

---

Pete Cruz  
Test Engineer

---

Melchor Ordaz  
Test Technician