

TESTED FOR

FLEETWOOD ALUMINUM, INC.

2485 Railroad Street
Corona, CA 91720

Report No. : A02F-209
Date : November 12, 2002
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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 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 - R20** 144 x 96

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: WESTWOOD 250

CONFIGURATION: OO

FRAME SIZE: 143.50" x 95.50"

FIXED SIZES: 68.75" x 92.25" 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" metal 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 corners with silicone applied three (3) inches in each direction under bulb gasket.

WEEPAGE: The sill exterior retaining leg 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:**
- 1) The frame corners were mechanically joined with a pair of screws.
 - 2) The vertical mullion was mechanically fastened to the frame with three (3) screws at each end.

CAULKING: All frame corners full profile.
Mullion to frame full profile.
The glass corners to frame under bulb gasket, 3" in each direction.

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) 1.57 PSF The tested specimen exceeds the performance levels specified in AAMA/NWWDA 101/I.S.2 - 97 for Air Infiltration.	0.00 CFM/Ft ²	0.3 CFM/Ft ²
2.1.3	Water Penetration (ASTM E 547) 2.86 PSF	No Leakage	No Leakage
2.1.4	Uniform Load Structural (ASTM E 330) 22.5 PSF POS 22.5 PSF NEG	0.08" 0.13"	0.38" Set 0.38" Set

5.3 **OPTIONAL PERFORMANCE GRADES**

<u>TEST RESULTS PARAGRAPH</u>	<u>TEST DESCRIPTION</u>	<u>MEASURED</u>	<u>ALLOWED</u>
4.3	Water Penetration (ASTM E 547) 3.00 PSF	No Leakage	No Leakage
4.4.1	Uniform Load Deflection (ASTM E 330) 20.0 PSF POS 20.0 PSF NEG	1.21" 1.42"	No Damage No Damage
4.4.2	Uniform Load Structural (ASTM E 330) 30.0 PSF POS 30.0 PSF NEG	0.15" 0.21"	0.38" Set 0.38" Set

5.4 **ADDITIONAL TESTING**

<u>TEST DESCRIPTION</u>	<u>MEASURED</u>	<u>ALLOWED</u>
Water Penetration (ASTM E 547) 10.00 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	A	Passed	Disassembly Test.
5.4.2	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: November 12, 2002
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Pete Cruz
Test Engineer

Melchor Ordaz
Test Technician