

TESTED FOR

FLEETWOOD ALUMINUM PRODUCTS, INC.
2485 Railroad Street
Corona, CA 91720

Report No. : A99D-083
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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 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/LS.2 - 97: **SGD - C 30** 180 x 94

2.2 CAWM 300 - 96 Forced Entry Resistance 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: 1000 - 1 Sliding Glass Door

CONFIGURATION: OXO

FRAME SIZE: 180.06" x 94.38"

SASH SIZE: 61.81" x 92.88"

FIXED SIZE: 59.69" x 93.38"

DEAD PANEL SIZE: 58.75" x 93.38"

GLASS: All panels consisted if 1" overall insulated glass with 1/4" tempered glass on both sides and a 1/2" aluminum spacer.

GLAZING: All panels were channel glazed with vinyl gasket.

WEEPAGE: None.

WEATHERING: The following contained Amesbury 300270-60 overall high polypile:

- a) At the head, four (4) strips, two (2) per channel.
- b) At the sill, one (1) strip facing out on the inside leg.
- c) One (1) strip each at the fixed and active interlocks.

WEATHERING: The false jamb contained three (3) strips of Amesbury 230270-66 overall high polypile to weather to the lock stile.

The end jambs and false jamb each contained a strip of two-finger vinyl facing outward in their respective fixed channels.

The active panel's bottom rail contained a vinyl sweep.

HARDWARE: The active panel contained the following:

- a) A tandem steel adjustable roller at each end of the bottom rail.
- b) An Adams Rite Mortice lock on the lock stile 40 inches from the bottom. The hook of the lock engaged a steel keeper in the false jamb. The keeper was a steel reinforced slot in the jamb.

The sill contained a stainless steel track.

CONSTRUCTION: The frame corners were each joined with a pair of screws. The panel corners each joined with one (1) screw. The false jamb was fastened to the frame at the sill with an L aluminum clip 1.42" x 1.42" x 1/8" thick. The clip was fastened with a pair of screws to the sill and to the false jamb respectively. The false jamb was fastened to the dead panel stile at the bottom only with a #8 x 3/4" screw from the inside.

The dead panel's end jamb stile was fastened to the jamb from the inside with a #8 x 3/4" screw at the bottom only.

The fixed panel's interlock was secured to an aluminum block on the sill with a #10 x 2 1/2" screw. The block was fastened to the sill with a pair of screws. The fixed panel's jamb stile was fastened to the jamb from the inside with a #8 x 3/4" screw at the bottom only.

A snap-in aluminum cap was inserted in the head fixed channel between the false jamb and the fixed interlock.

CAULKING:

- a) The frame corners were sealed full profile.
- b) All glazing corners were caulked on the outside.
- c) The false jamb was sealed to the buck full perimeter on the inside and outside.

ANCHORING: The frame was set in a 2" x 6" wood buck and fastened with screws as follows:

- a) Three (3) screws per jamb.
- b) One (1) screw every 16 inches at the head and sill.

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
PARAGRAPH

<u>TEST DESCRIPTION</u>	<u>MEASURED</u>	<u>ALLOWED</u>
2.2.19.5.1 Operating Force Breakaway Motion	26 lbf. 6 lbf.	30 lbf. 20 lbf.
2.1.2 Air Infiltration (ASTM E 283) 1.57 PSF The tested specimen meets the performance requirements specified in AAMA/NWWDA 101/I.S.2 for Air Infiltration.	0.22 CFM/Ft ²	0.3 CFM/Ft ²
2.1.3 Water Penetration (ASTM E 547) 4.50 PSF With/without screens	No Leakage	No Leakage
2.1.4 Uniform Load Structural (ASTM E 330) 45.0 PSF POS 45.0 PSF NEG	0.10" 0.06"	0.37" Set 0.37" Set
2.2.19.5.2 Deglazing (ASTM E 987) 70 lbf. Stiles 50 lbf. Rails	2% 1%	Less than 100% Less than 100%

6.0 2.1.8 CAWM 300-96 FORCED ENTRY RESISTANCE FOR SLIDING GLASS DOORS

2.3.1 Type "I" Sliding Glass Door

6.1.2 **Results of Operable Panel**

<u>TEST</u>	<u>RESULTS</u>	<u>DESCRIPTION</u>
6.1.1	Passed	Disassembly
6.1.2.1 A	Passed	800# parallel to the plane of the glass that would tend to open the door.
6.1.2.2 B	Passed	Test A with additional 200# perpendicular to the plane of the glass toward the interior.
6.1.2.3 C	Passed	Test A with additional 200# perpendicular to the plane of the glass toward the exterior.
6.1.2.4 G	Passed	Hand and Tool Manipulation.
6.1.2.5 D	Passed	Test A with operable panel lifted upward and applying 50# load at bottom rail near meeting stiles toward the interior for inside sliding panels or toward the exterior for outside sliding panels.
6.1.2.6 E	Passed	Test B with operable panel lifted upward with lifting force at the midspan of the bottom rail.
6.1.2.7 F	Passed	Test C with operable panel lifted upward with lifting force at the midspan of the bottom rail.
6.1.2.8 G	Passed	Hand and Tool Manipulation.

6.1.5 **Results of Fixed Panel**

6.1.5.1 A	Passed	300# at midspan parallel to the plane of the glass that tends to remove the fixed panel from the jamb of pocket.
6.1.5.2 B	Passed	Test A with fixed panel in direction perpendicular to the plane of the glass which tends to disengage the meeting stiles.
6.1.5.3 C	Passed	Test A with fixed panel lifted upward, not to exceed 150# at the bottom of the exterior face of the meeting stile.
6.1.5.4 G	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 without the written consent of Fenestration Testing Laboratory.

The above 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/ Validator.

Testing Completed: May 14, 1999

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Test Engineer

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