

■ **ENESTRATION**
TESTING
LABORATORY

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TESTED FOR

FLEETWOOD ALUMINUM

2485 Railroad Street
Corona, CA 91720

Report No. : A97D-096-1
Date : June 17, 1997
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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/I.S.2 - 97: **SGD - HC 40** 180 x 96

2.2 CAWM 300-89 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: XXO

FRAME SIZE: 179.50" x 95.88"

SASH SIZE: Locking Panel, 61.63" x 94.00" - Center Panel, 60.75" x 94.00"

FIXED SIZE: 59.63" x 94.00"

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: 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 three (3) #10 x 3/4" PPH screws per corner. The panels were mechanically joined with a #10 x 2" PPH screw per corner. The fixed panel was secured in the frame as follows:

- a) An aluminum L-clip, 1/8" thick, at each end of the interlock stile. Each clip was fastened with two (2) #10 x 3/4" screws on each leg.
- b) The fixed stile was fastened to the jamb with a #10 x 3/4" screw.
- c) The top rail was fastened to the head with a #10 x 3/4" screw.

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.

CAULKING: All frame corners were sealed full profile.

All glazing corners were sealed inside and outside.

The L-clips used to secure the fixed interlock to the frame were sealed to the frame.

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

- a) Jambs, sets of three (3) screws every 16".
- b) Head, sets of three (3) screws every 16".
- c) Sill, sets of six (6) screws set every 16".

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	0.24 CFM/FtSq	0.3 CFM/FtSq
	The tested specimen meets/exceeds the performance levels specified in AAMA/NWWDA 101/I.S.2 for Air Infiltration.		

TEST RESULTS (cont'd)

<u>PARAGRAPH</u>	<u>TEST DESCRIPTION</u>	<u>MEASURED</u>	<u>ALLOWED</u>
2.1.3	Water Penetration (ASTM E 547 & ASTM E 331) 6.0 PSF With/without screen	No Leakage	No Leakage
2.1.4	Uniform Load Structural (ASTM E 330) 60.00 PSF POS 60.00 PSF NEG	0.00" 0.00"	0.37" Set 0.37" Set
2.2.19.5.1	Operating Force Breakaway Motion	25 lbf. 13 lbf.	40 lbf. 25 lbf.
2.2.19.5.2	Deglazing (ASTM E 987) 70 lbf. Stiles 50 lbf. Rails	0% 0%	Less than 100% Less than 100%

.0 CAWM 300-89: FORCED ENTRY RESISTANCE FOR SLIDING GLASS DOORS

*The door locks in the same fashion as a Type "I" Door described in the CAWM 300-89

Type "I" Sliding Glass Door

TEST RESULTS OF OPERABLE PANEL

A	Passed	800# parallel load in direction to open panel.
B	Passed	Repeat Test "A" with additional 200# perpendicular load, toward the interior.
C	Passed	Repeat Test "A" with additional 200# perpendicular load, toward the exterior.
D	Passed	Repeat Test "A" with operable panel lifted upward and applying 50# load at bottom rail near meeting stiles toward interior for inside slide and toward exterior for outside slide.
E	Passed	Repeat Test "B" with operable panel lifted upward.
F	Passed	Repeat Test "C" with operable panel lifted upward.
G	Passed	Hand manipulation test.

TEST RESULTS FOR FIXED PANEL

A	Passed	300# parallel tube.
B	Passed	300# parallel tube with an additional 150# perpendicular load.
C	Passed	Repeat Test "A" with the fixed panel lifted upward to its full limit.
G	Passed	Hand manipulation test.

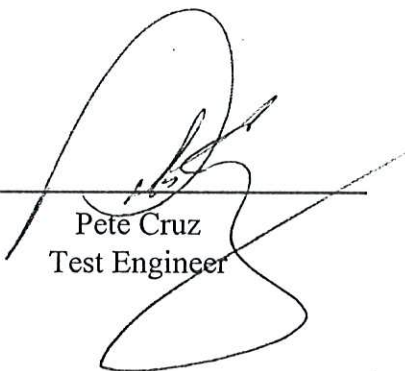
For a complete description of the tested sample refer to the attached cross section drawings.

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.

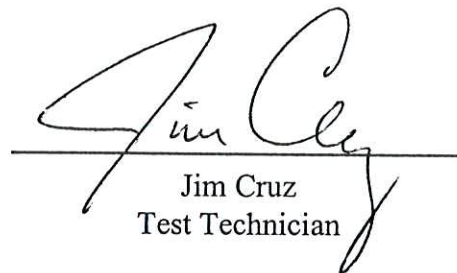
The preceding test results were obtained by using the applicable ASTM and CAWM Test Methods. This report does not constitute Certification of this product. Certification can only be granted by an approved Administrator/Validator.

Testing Completed: May 30, 1997

Report Completed: June 17, 1997



Pete Cruz
Test Engineer



Jim Cruz
Test Technician