

TESTED FOR

FLEETWOOD ALUMINUM

2485 Railroad Street
Corona, CA 91720

Report No. : A97D-107-3
Date : June 18, 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/NWDA 101/I.S.2 - 97: **SGD - R 20** 182 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: XXX

FRAME SIZE: 181.62" x 95.88"

SASH SIZE: End Panels, 61.63" x 94.00" - Center Panel, 60.75" 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.

WEATHERING: Refer to the cross section drawings for a complete understanding of weatherstrip type and locations and back leg height of sill pan for this rating.

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. The bottom rail of each panel 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 sill contained a stainless steel snap-in roller track for each sliding panel. 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.

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

- a) Jamb, set of three (3) screws every 16".
- b) Head, set of three (3) screws every 16".
- c) Sill, set 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) 1.57 PSF The tested specimen meets/exceeds the the performance levels specified in AAMA/NWWDA 101/I.S.2 for Air Infiltration.	0.22 CFM/FtSq	0.3 CFM/FtSq
2.1.3	Water Penetration (ASTM E 547 & ASTM E 331) 2.86 PSF Without screen	No Leakage	No Leakage
2.1.4	Uniform Load Structural (ASTM E 330) 22.50 PSF POS 22.50 PSF NEG	0.00" Set 0.00" Set	0.37" Set 0.37" Set

TEST RESULTS (cont'd)

<u>PARAGRAPH</u>	<u>TEST DESCRIPTION</u>	<u>MEASURED</u>	<u>ALLOWED</u>
2.2.19.5.1	Operating Force		
	Breakaway	25 lbf.	30 lbf.
	Motion	13 lbf.	20 lbf.
2.2.19.5.2	Deglazing (ASTM E 987)		
	70 lbf. Stiles	0%	Less than 100%
	50 lbf. Rails	0%	Less than 100%

OPTIONAL PERFORMANCE GRADES

4.3	Water Penetration (ASTM E 547 & 331)		
	3.0 PSF	No Leakage	No Leakage
4.4.2	Uniform Load Structural (ASTM E 330)		
	30.0 PSF POS	0.00" Set	.37" Set
	30.0 PSF NEG	0.00" Set	.37" Set

6.0 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.

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: June 18, 1997
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Pete Cruz
Test Engineer



Jim Cruz
Test Technician