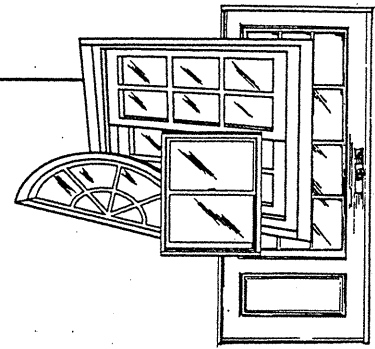


CERTIFIED TESTING LABORATORIES

Architectural Division • 7252 Narcoossee Rd. • Orlando, FL 32822
(407) 384-7744 • Fax (407) 384-7751
Web Site: www.ctlarch.com
E-mail: ctlarch.com



Report Number: CTLA-639W
Report Date: December 18, 2000

STRUCTURAL PERFORMANCE TEST REPORT

Client: Specialty Window of Florida
690 Heinberg Street
Pensacola, Florida 32501

Product Type and Series: Series 1400 Vinyl Flange Frame Casement Window C-R 30 (110" x 72")

Test Specifications: AAMA/NWWDA 101/1.S. 2-97 "Voluntary Specification for Aluminum Vinyl (PVC) and Wood Window and Glass Door".

Test Specimen

Frame: The vinyl flange frame measured 110" x 72" overall, miter and welded corner construction. The two (2) vinyl "T"-mullions were secured to the main frame head and sill with three (3) # 8 x 1" phillips pan head in each end.

Configuration: X0X

Ventilator: All three (3) vents measured 34.625" x 70.5" overall, miter and welded corner construction.

Weather Stripping: Main Frame: Two (2) continuous strips of bulb vinyl .300dia., located in the two (2) interior pockets of the frame.

VINYL "T" Mullion: Four (4) strips of bulb vinyl .300dia., located in the two (2) interior pockets on each side of mullion.

Vents: One (1) continuous strips of vinyl with .250" fin molded into exterior leg on vent.

Hardware & Location

<u>Quantity</u>	<u>Description</u>	<u>Location</u>
2	E'lan Roto Operators	One (1) in each vent bottom rail
4	Ashland 14" adjustable track	One (1) in head and sill of main frame vents
4	Ashland 14" stainless steel hinges	One (1) in each vent top and bottom rails
6	Snubbers	Three (3) in each main frame jamb 18" from each end and mid-span
2	63" Lock bar with 3 point locking	One (1) in each vent lockstile
6	lock bar keepers	Three (3) in each main frame jamb 18" from each end and mid-span

- Glazing:** Insulated unit, consisting of two (2) lites of 1/8" annealed glass with .625" air space. Interior dry glazed, captured with a vinyl snap in glazing stops.
- Sealant:** Silicone caulk was used on perimeter of main frame
Silicone cap bead on exterior of all glass.
- Weepholes:** N/A
- Reinforcement:** Two (2) extruded aluminum T- mullion, one (1) in each vinyl T- mullion.
- Additional Description:** N/A
- Screen:** N/A
- Installation:** Twenty Eight (28) # 10 x 3" phillips pan head were used to secure the specimen to the wooden test buck. Nine (9) in the head and sill located 6" from each end 18" on center thereafter. Five (5) in each jamb located 6" from each end 18" on center thereafter.
- Surface Finish:** White

Performance Test Results

<u>Paragraph No</u>	<u>Title of Test</u>	<u>Method</u>	<u>Measured</u>	<u>Allowed</u>
2.1.2	Air Infiltration @ 6.24 psf The tested specimen exceeds the performance levels specified in AAMA/NWDA 101/1.S. 2-97 for Air Infiltration.	ASTM E283-91	.12 cfm/ft ²	.3 cfm/ft ²
2.1.3/4.3	Water Resistance 5.0 gph/ft ² WTP=12PSF	ASTM E547-93 Four (4), five minute cycles ASTM E331-93 Fifteen (15)minute duration	No Entry No Entry	No Entry No Entry
2.1.4.2/4.4.2	Uniform Load Structural Permanent Deformation @ 45.0 psf Positive @ 52.5 psf Negative	ASTM E330-90 Ten (10) seconds loads	.031" .037"	.288" .288"
2.1.7	Corner Weld Test	AAMA 101/I.S.2-97	Passed	Passed
2.1.8	Force Entry Resistance Test A Test B Test C Test D.E.F Test G	AAMA 1302.5-76	0" 0" 0" 0" 0"	1/2" 1/2" 1/2" 1/2" 1/2"
2.2.5.6.1	Vertical Deflection Test	AAMA 101/IS2-97		PASSED

2.2.5.6.2 Hardware Load Test AAMA101/IS2-97 PASSED

Test Date: November 14, 2000

Test Completion Date : November 28, 2000

Remarks: Detailed drawings were available for laboratory records and comparison to the test specimen at the time of this report. A copy of this report along with representative sections of the test specimen will be retained by CTL for a period of four (4) years. The results obtained apply only to the specimen tested.

This test report does not constitute certification of this product, but only that the above test results were obtained using the designated test methods and they indicate compliance with the performance requirements (paragraphs as listed) of the above referenced specifications.

Certified Testing Laboratories assumes that all information provided by the clients is accurate and that the physical and chemical properties of the components as stated by the manufacture.

Certified Testing Laboratories, Inc.



Christopher Bennett
Lab Manager
Architectural Division

Ramesh Patel P.E.
12/22/00

cc NAMI (2)
Specialty (2)
Ramesh Patel P.E.
File