

## **NATIONAL CERTIFIED TESTING LABORATORIES**

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### **STRUCTURAL PERFORMANCE TEST REPORT**

Report No: NCTL-210-2319-1A  
Test Date: 03-24-00  
Report Date: 04-22-00

**Client:** Florida Extruders International Incorporated  
2540 Jewett Lane  
Sanford, FL 32771-1600

**Test Specimen:** Florida Extruders International Incorporated's Model "Milestone 1000" Single Hung Aluminum Prime Window (DH-R55) with high sill (53-1/8" x 72").

**Test Specifications:** AAMA/NWWDA 101/I.S. 2-97 Voluntary Specifications for Aluminum Vinyl (PVC) and Wood Windows and Prime Windows and Sliding Glass Doors." ASTM E 283-01, Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen. ASTM E 330-90, Test Method for Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference. ASTM E 331-93, Test Method for Water Penetration of exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference. ASTM E 547-93, Test Method for Water Penetration of Exterior Windows, Curtain Walls and Doors by Cyclic Static Air Pressure Differential.

### **TEST SPECIMEN DESCRIPTION**

**General:** The sample tested was a single hung side load aluminum prime window flange to flange measuring 53-1/8" wide by 72" high overall. The fixed lite was glazed to the frame members providing a viewing area of 48-1/2" wide by 37" high. The active sash measured 51" wide by 31-3/4" high. Frame and sash members were not thermally broken. The fixed meeting rail was fastened at each jamb with two (2) screws. The active sash was removable via a single block and tackle balance system in each interior jamb track. One metal cam-type sweep lock was located at each end of the active sash meeting rail. A rigid vinyl sash stop was snap-fitted at the top of each interior jamb track. Frame members were of double screw coped corner construction. The active sash members were of double screw coped corner construction.

**Glazing:** The fixed lite was glazed using 3/16" thick clear glass with a silicone back-bedding and a snap-in rigid glazing bead. The sash was glazed with 1/8" (DSB) thick clear glass with a silicone back-bedding and a snap-in rigid glazing bead.

*Ray Perkins*  
2/21/02

**Installation Fasteners:** The specimen was mounted to the wood test buck using ten; six (6) (# 8 x 1") and four (4) (# 8 x 2"); two (2) (# 8 x 1") used at the head and two (2) (# 8 x 1") used at the top of jamb head; and two (2) (# 8 x 1") 16-3/8" down from head in jambs; four (4) (# 8 x 2") used below the fixed rail; two (2) in each jamb.

**Weatherstrip:** A single strip of polypile weatherstrip (0.150" high) was located at each active sash jamb. A single strip of polypile weatherstrip (0.150" high) was located in the meeting rail of the active sash. A single strip of flap vinyl weatherstrip was located at the active sash bottom left rail stile and a single strip at the active sash meeting rail.

**Weeps:** One weep hole measuring 1-1/2" x leg height was located at each end of the sill's vertical screen retainer leg.

**Interior & Exterior Surface Finish:** White painted aluminum.

**Sealant:** The jamb/sill corners were sealed with a small-joint sealant.

**Insect Screen:** No insect screen employed.

### TEST RESULTS

<u>Par. No.</u>	<u>Title of Test</u>	<u>Measured</u>	<u>Allowed</u>
**2.2.1.6.1	Operating Force Active Sash	36 lbs. max.	45 lbs. max.
**2.1.2	Air Infiltration (ASTM E-283) 1.57 psf (25 mph)	0.18 cfm/ft	0.03 cfm/ft
2.1.3	* Water Resistance - ASTM E547 (5.0 gph/ft <sup>2</sup> ) WTP = 2.86 psf	No Leakage	No Leakage
**2.1.4.2	Uniform Load Structural - ASTM E330 45.0 psf Exterior 45.0 psf Interior	0.053" 0.057"	0.204" 0.204"

*Gregory Parkins*  
2/21/02

**OPTIONAL PERFORMANCE**

4.3	* Water Resistance - ASTM E547 (5.0 gph/ft <sup>2</sup> ) WTP = 13.50 psf (high sill)	No Leakage	No Leakage
**4.4.2	Uniform Load Structural - ASTM E330 82.5 psf Exterior 82.5 psf Interior	0.168" 0.191"	0.204" 0.204"

Test Completed: 03-24-00

\*\*Reference parent test report no. NCTL-210-2319-1 for test results and qualifications.

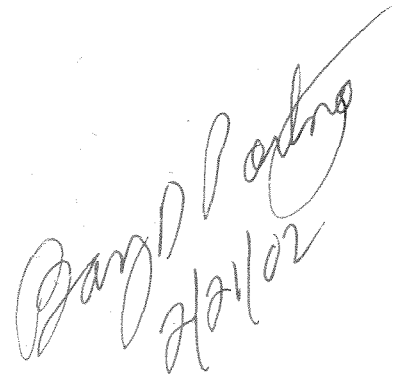
\* Tested with and without insect screen.

*This test specimen meets (or exceeds) the performance criteria levels specified in Table 2.1 of AAMA/NWWDA 101/I.S. 2-97 for air infiltration. The listed results were secured by using the designated test methods and indicate compliance with the performance requirements of the referenced specification paragraphs for the of H-R55 with high sill (53-1/8" x 72") product designation.*

*Detailed drawings were available for laboratory records and compared 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 NCTL for a period of four (4) years. The results obtained apply only to the specimen tested. No conclusions of any kind regarding the adequacy or inadequacy of the glass in the test specimen may be drawn from this test. This report does not constitute certification of the product which may only be granted by a certification program validator.*

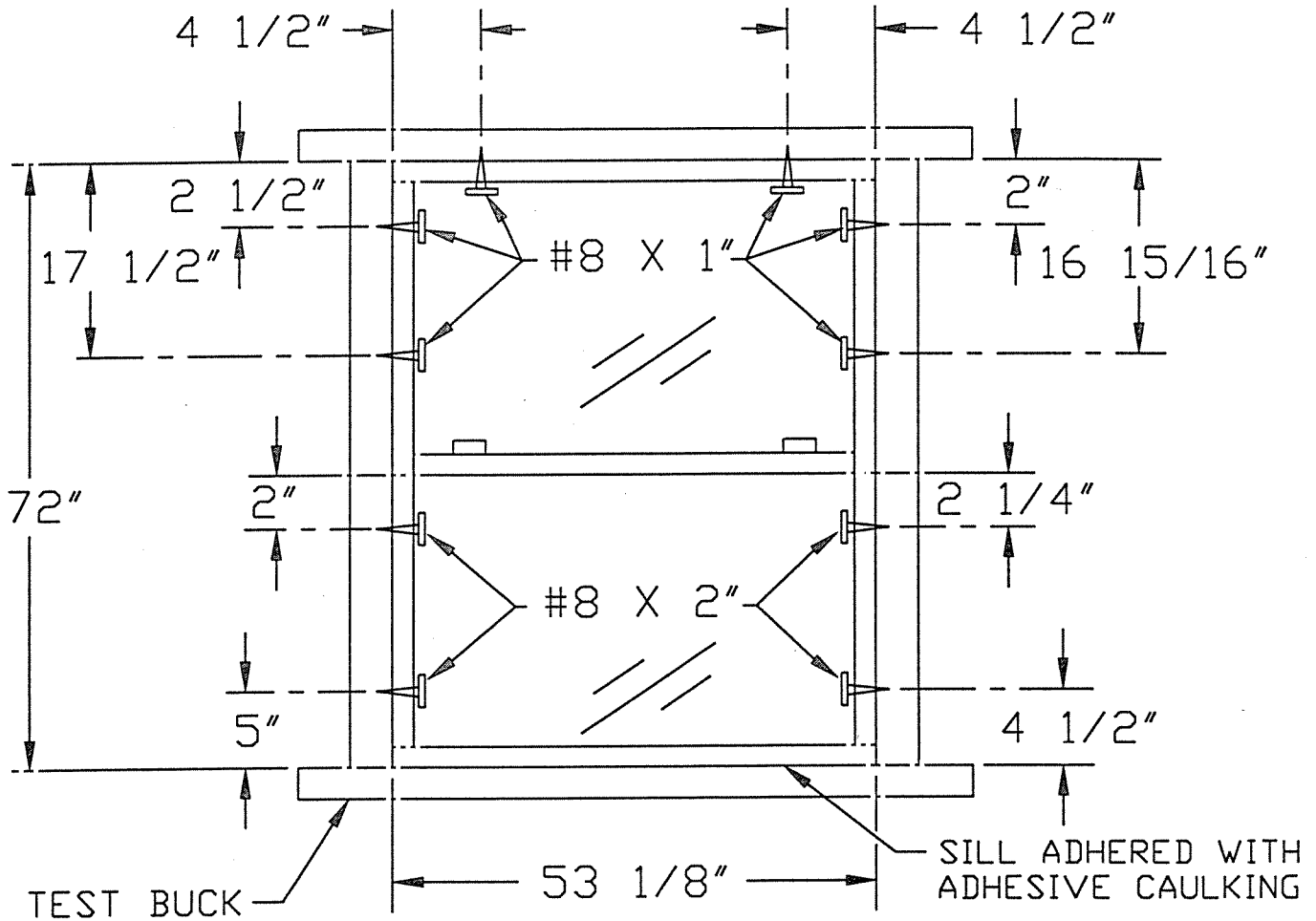
NATIONAL CERTIFIED TESTING LABORATORIES, INC.

MICHAEL LANE  
Division Manager



David Perkins  
2/21/02

## FASTENER LOCATIONS



Dimensions shown from buck.

The test specimen was mounted to the test buck using ten (10) #8 screws.

Fastener locations shown cover all windows over 62" buck height, up to 71" buck height.

NOTE: Jamb screws below meeting rail (4) #8 x 2"

Jamb & head screws above meeting rail (6) #8 x 1"

▬ - DENOTES SCREW

*Handwritten signature*

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JOB NO. : NCTL-210-2319-1,1A

COMPANY : FLORIDA EXTRUDERS

TEST DATE : 3-24-00