

# NATIONAL CERTIFIED TESTING LABORATORIES

1464 GEMINI BOULEVARD • ORLANDO, FLORIDA 32837  
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## STRUCTURAL PERFORMANCE TEST REPORT

REPORT NO: NCTL-210-1949-2  
TEST DATE: 06-20-97  
REPORT DATE: 07-15-97

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

**TEST SPECIMEN:** Florida Extruders International Incorporated's Series "1500" Single Hung Aluminum Prime Window. (DH-R55)

**TEST SPECIFICATION:** AAMA/NWWDA 101/I.S. 2-97, "Voluntary Specifications for Aluminum vinyl (PVC) and Wood Windows and Glass Doors".

### TEST SPECIMEN DESCRIPTION

**GENERAL:** One (1) sample tested was a single hung tilt aluminum prime window flange to flange measuring 48-1/2" wide by 84-1/2" high overall. The fixed lite was glazed to the frame members providing a viewing area of 44-1/8" wide by 50-3/4" high. The active sash measured 50-1/2" 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 spiral balance in each interior jamb track. One cam-type sweep lock was located at each end of the active sash meeting rail. One (1) rigid vinyl tilt latch with thumb actuator 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:** Both the fixed lite and sash were interior glazed using 3/16" clear annealed glass with a rigid vinyl glazing bead and an adhesive back bedding.

**WEATHERSTRIP:** Double strips of Polypile weatherstrip (0.150" high) were located at each active sash stile. A single strip of polypile weatherstrip (0.150" high) was located at the active sash and meeting rail. A single strip of bulb vinyl weatherstrip was located at the top of the interior vertical sill leg. (high sill only) A single strip of single leaf weatherstrip was located at the active sash bottom 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.

*Bayo Perina*  
2/2/02

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

**INSECT SCREEN:** An insect screen measuring 45" wide by 29-3/4" high was of square cut with corner construction. Two (2) pull tabs; two (2) spring screen retainers.

**INSTALLATION FASTENERS:** The specimen was fastened into the wood test buck using ten (10) (# 8 x 1") flat head screws; two (2) (# 8 x 1") were used at the head, four (4) (# 8 x 2") at the fixed lite jambs; two (2) per jamb. Four (4) (# 8 x 1") were used at the active sash jambs, two (2) per jamb.

**TEST RESULTS**

<b><u>PARAGRAPH NO</u></b>	<b><u>TITLE OF TEST</u></b>	<b><u>MEASURED</u></b>	<b><u>ALLOWED</u></b>
2.2.1.6.1	Operating Force Active Sash	25# Max.	35#
2.1.2	Air Infiltration 1.57 psf (25 mph)	0.11 CFM/FT	0.37" CFM/FT
2.1.3	* Water Resistance (5.0 GPH/FT <sup>2</sup> ) WTP = 2.86 psf	No Entry	No Entry
3.4.1	Uniform Load Structural 22.5 psf Exterior 22.5 psf Interior	0.084" 0.091"	0.202" 0.202"
2.2.3.6.2	Deglazing Test Active Sash Meeting Rail (70#) 7.4% Bottom Rail (70#) 2.8% Left Stile (50#) 1.8% Right Stile (50#) 2.2%	0.037" 0.014" 0.009" 0.011"	< 100% < 100% < 100% < 100%

*Bayo Palma  
2/2/02*

**OPTIONAL PERFORMANCE**

4.3	* Water Resistance - 5.0 GPH/FT <sup>2</sup> WTP = 6.75 psf	No Entry	No Entry
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**NOTE:** At this point in testing, an identical testing specimen utilizing a (high sill) was tested for water resistance and the following results were obtained.

4.3	* Water Resistance - 5.0 GPH/FT <sup>2</sup> WTP = 12.40 psf	No Entry	No Entry
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4.4.2	Uniform Load Structural 82.5 psf exterior 82.5 psf interior	0.179" 0.182"	0.202" 0.202"
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**TEST COMPLETED: 06-20-97**

\* Testing with and without insect screen.

This test specimen meets the performance criteria level of DH-R55 of the AAMA/NWWDA 101/I.S.2-97 specification.

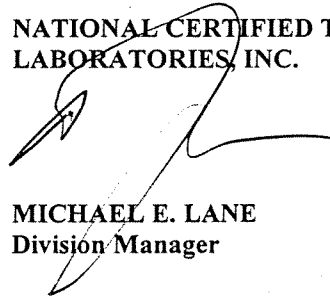
Permanent set measured readings recorded using a Mitutoyo dial indicator.

Two (2) mill visqueen was used for uniform static loads and did not effect the specimen performance.

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.

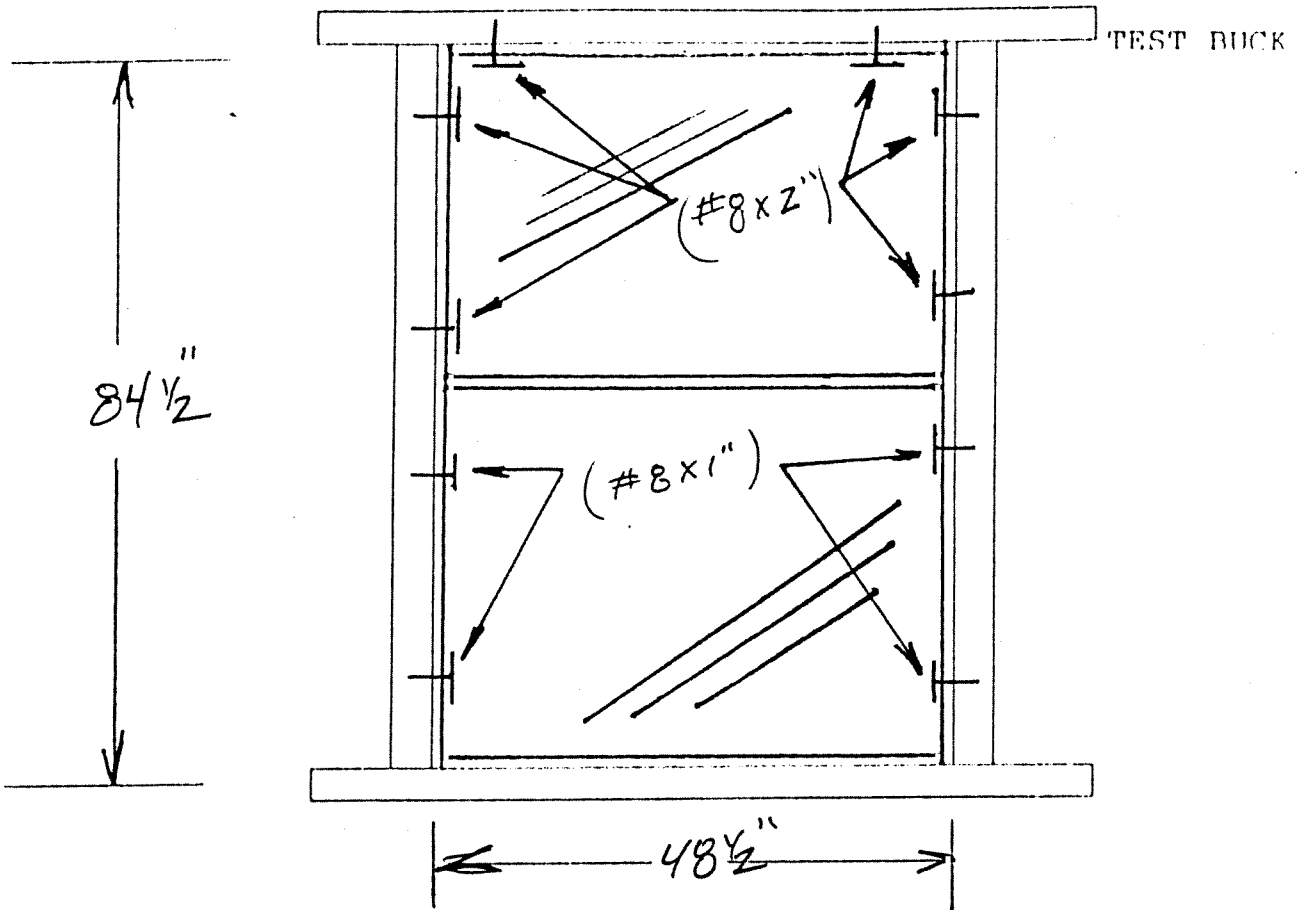
**NATIONAL CERTIFIED TESTING  
LABORATORIES, INC.**

**MICHAEL E. LANE**  
Division Manager



*Dayo Palino*  
*2/22/02*

PASTENER LOCATIONS



The test specimen was mounted to the test buck using TEN (10) (#8) screws at location shown.

METRO-DADE COUNTY REQUIRED

NATIONAL CERTIFIED  
TESTING LABORATORIES

JOB NO.: NCTL-210-1949-2  
COMPANY: FLORIDA EXTRUDERS INTL INC  
TEST DATE: 6-20-97

*Bary P. ...*  
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