Architectural Testing

AAMA/NWWDA 101/I.S. 2-97
TEST REPORT SUMMARY

Rendered to:

GREAT LAKES WINDOWS, INC.

SERIES/MODEL: GLW-PI-120 Picture Window
TYPE: PVC Fixed Window

Title of Test	Results
Rating	F-LC55 71 x 84
Overall Design Pressure	55.0 psf
Air Infiltration	0.01 cfm/ft^2
Water Resistance	10.50 psf
Structural Test Pressure	$\pm$ 82.5 psf
Forced Entry Resistance	Pass

Reference should be made to Report No. 07-30223.01 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.

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AAMA/NWWDA 101/I.S. 2-97 TEST REPORT

Rendered to:

GREAT LAKES WINDOW, INC.
30299 Tracy Road
P.O. Box 1896
Toledo, Ohio 43603-1896

Report No: 07-30223.01
Test Date: 12/14/01
Report Date: 12/17/01
Expiration Date: 12/14/05

Project Summary: Architectural Testing, Inc. (ATI) was contracted by Great Lakes Window to witness tests on a Series/Model GLW-PI-120 PVC Picture Window at their facility in Toledo, Ohio. The sample tested successfully met the performance requirements for an F-LC55 71 x 84 rating. Test specimen description and results are reported herein.

Test Specification: The test specimen was evaluated in accordance with AAMA/NWWDA 101/I.S.2-97, *"Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors."*

Test Specimen Description:

Series/Model: GLW-PI-120 Picture Window

Type: PVC Fixed Window

Overall Size: 5' 11" by 7' 0" high

Fixed Daylight Opening Size: 5' 3-1/2" wide by 6' 4-1/2" high

Glass Type: Nominal 7/8" thick insulating glass fabricated from two 3/16" thick annealed sheets with a spacer system.

Reinforcement: None.

Glazing Details: Unit was interior wet glazed and secured with interior PVC glazing beads.

Finish: All PVC was white.

Test Specimen Description (Continued)

Frame Construction: The frame was constructed from custom PVC extrusions. All corners were mitered and thermally welded.

Drainage:

Description	Quantity	Location
1-1/4" by 1/4" deep slots	2	Sill face with PVC flap, 4" from jambs
3/4" wide by 1/8" weep slots	2	Glazing track, draining into lower cavity
3/4" wide by 1/8" weep slots	2	Middle cavity draining into lower cavity, 4-3/4" from jambs

Installation: The window was fastened to a 2" by 8" #2 Southern yellow pine, exterior grade, wood test buck with #8 by 2-1/2" steel screws spaced 6" from corners, at midpoint, and centered equally between the two locations (five screws per head, sill, and jambs, total 20). The perimeter was secured with silicone on the exterior.

Test Results: The results are tabulated as follows.

Paragraph	Title of Test - Test Method	Results	Allowed
2.1.2	Air Infiltration per ASTM E 283-91 (See Note #1)		
	@ 1.57 psf (25 mph)	0.01cfm/ft^2	0.3 cfm/ft^2 max.
2.1.3	Water Resistance per ASTM E 547-96		
	WTP=3.75	No leakage	No leakage
	Water Resistance per ASTM-E 331-97		
	WTP= 3.75	No leakage	No leakage
2.1.4.2	Uniform Load Structural per ASTM E 330-97		
	(DP load was held for 52 seconds, PSF load held for 10 seconds)		
	@ 37.5 (exterior)	No damage	No damage
	@ 37.5 (interior)	No damage	No damage

***Note #1**: The tested specimen meets (or exceeds) the performance levels specified in AAMA/NWWDA 101/I.S. 2-97 for air infiltration.*

Test Results (Continued)

Paragraph	Title of Test – Test Method	Results	Allowed
2.1.7	Welded Corner Test	Meets as stated	Meets as stated
2.1.8	Forced Entry Resistance per ASTM F 588-97 Type D Grade 10		
	Hand and Tool Manipulation Test	No entry	No entry
Optional Performance			
4.3	Water Resistance per ASTM E547-96		
	WTP = 10.50 psf	No leakage	No leakage
	Water Resistance per ASTM E 331-97		
	WTP = 10.50 psf	No leakage	No leakage
4.4.2	Uniform Load Structural per ASTM E 330-97 (DP load held for 52 seconds, PSF load held for 10 seconds)		
	@ 82.5 psf (exterior)	No damage	No damage
	@ 82.5 psf (interior)	No damage	No damage

Detailed drawings, representative samples and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification. This report does not constitute certification of this product which may only be granted by the certification program administrator.

For ARCHITECTURAL TESTING, INC:

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Technician

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Regional Operations

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07-30223.01