



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

Rendered to:

SIMONTON WINDOWS

**SERIES/MODEL: 75-75
TYPE: PVC Double Hung Window
(with A2 Reinforcement)**

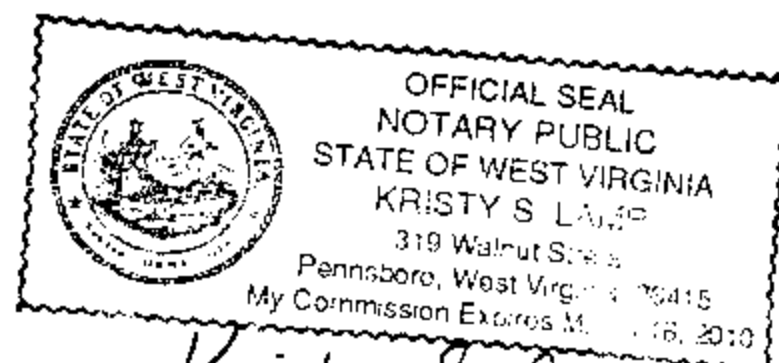
Title of Test	Results
Rating	H-R50 36 x 74*
Overall Design Pressure	50 psf
Operating Force	21 lb max.
Air Infiltration	0.12 cfm/ft ²
Water Resistance	8.25 psf
Structural Test Pressure	75.0 psf
Deglazing	N/A
Forced Entry Resistance	N/A

Reference should be made to Report No. 05-30227.01 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.

Lynn George, Project Manager

LG:tjp





Architectural Testing

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

Rendered to:

SIMONTON WINDOWS
One Cochrane Avenue
Pennsboro, West Virginia 26415

Report No: 05-30227.01
Test Date: 05/23/01
Report Date: 06/06/01
Expiration Date: 01/02/02

Project Summary: Architectural Testing, Inc. (ATI) was contracted by Simonton Windows to witness performance tests on a Series/Model 75-75, PVC double hung window at their facility in Pennsboro, West Virginia. The sample tested successfully met the performance requirements for an H-R50 36 x 74* rating. Test specimen description and results are reported herein.

General Note: *An asterisk (*) next to the performance grade indicates that the size tested for optional performance was smaller than the minimum test size for the product type and class. Refer to ETC Report No. 98-087-4924.0 for gateway performance test results.*

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: 75-75

Type: PVC Double Hung Window (with A2 reinforcement)

Overall Size: 3' 0" wide by 6' 2" high

Top Sash Size: 2' 7-3/4" wide by 2' 11-3/16" high

Bottom Sash Size: 2' 8-13/16" wide by 3' 0-1/4" high

Screen Size: 2' 7-11/16" wide by 3' 0-3/8" high

Finish: All vinyl was white.

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Test Specimen Description: (Continued)

Glazing Details: The sash were exterior glazed with 3/4" thick, sealed insulating glass fabricated from two sheets of 3/32" thick, annealed glass and a steel spacer system. The glass was set onto double-sided adhesive tape and secured with dual durometer snap-in vinyl glazing beads.

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
0.187" backed by 0.210" high pile with center fin	1 Row	Sill
0.187" backed by 0.250" high pile with center fin	1 Row	Top rail, lock rail, keeper rail and the exterior of the top stiles
0.187" backed by 0.250" high pile with center fin	2 Rows	Sash stiles
0.187" backed by 0.340" high pile with center fin	1 Row	Keeper rail and the exterior of the bottom stiles
7/16" diameter, offset vinyl jacket/hollow foam-filled bulb	1 Row	Bottom rail
5/8" high vinyl jacket/foam-filled C-fold bulb	1 Row	Bottom rail
0.187" backed by 0.300" high vinyl jacket/foam-filled bulb	1 Row	Head insert
0.187" backed by 0.300" high vinyl jacket/foam-filled bulb	2 Rows	Top sash rail

Frame Construction: The PVC frame was constructed using mitered and welded corner construction. A snap-in PVC insert was located at the head.

Sash Construction: The PVC sash were assembled utilizing mitered and welded corner construction.

Screen Construction: The screen was constructed from extruded aluminum. The corners were square cut and secured using plastic corner keys. The fiberglass mesh screen cloth was held-in-place with a flexible vinyl spline.



Test Specimen Description: (Continued)

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Metal cam lock and keeper	2	Lock rail, 8" in from each end with adjacent keepers on the exterior rail
Plastic tilt latch	4	Top corners of each sash
Metal pivot bar	4	Bottom corners of each sash
Constant force balance	4	One per jamb, two coils per balance

Drainage:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
1-1/16" wide by 1/8" high weepslot with flap	2	Exterior face of sill, one 3-1/16" in from each end
1" wide by 1/4" deep weepslot	2	One at each end of the sill/jamb intersection
1" wide by 3/16" high weepslot	2	Sill intermediate leg
3/16" diameter hole	4	Bottom rail and exterior interlock rail, one at each end

Reinforcement: The keeper rail contained a custom shaped, extruded aluminum reinforcement measuring 0.750" x 0.492" x 0.062" (Drawing No. 56110). The lock rail contained a rectangular shaped, extruded aluminum reinforcement measuring 0.796" x 0.989" x 0.062" (Drawing No. 60074 – Simonton Code A2).

Installation: The unit was installed in a 2" x 10" wood buck constructed of Spruce-Pine-Fir construction lumber. The unit was secured to the buck with four #8 x 2-1/2" long screws, one at the top and bottom of each jamb. The interior and exterior perimeter was sealed with a silicone caulking, with the exception of a 4" void at each interior sill corner.



Test Results:

The results are tabulated as follows:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
2.2.1.6.1	Operating Force		
	<u>Top Sash</u>		
	Opening	21 lbs	30 lbs max.
	Closing	17 lbs	30 lbs max.
	<u>Bottom Sash</u>		
	Opening	21 lbs	30 lbs max.
	Closing	20 lbs	30 lbs max.
2.1.2	Air Infiltration per ASTM E 283 (See Note #1) @ 1.57 psf (25 mph)	0.12 cfm/ft ²	0.3 cfm/ft ² max.

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

Optional Performance

4.3	Water Resistance per ASTM E 547 (with and without screen) WTP = 8.25 psf	No leakage	No leakage
4.4.2	Uniform Load Structural per ASTM E 330 (Measurements reported were taken on the fixed meeting rail)		
	@ 75.0 psf (exterior)	0.062"	0.127" max.
	@ 75.0 psf (interior)	0.019"	0.127" max.

Detailed drawings, representative samples of the test specimen, 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:

Lynn George
Project Manager

Scott A. Warner
Executive Vice President