



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

Rendered to:

GORELL ENTERPRISES, INC.

SERIES/MODEL: 5353

TYPE: PVC Horizontal Sliding Window (XOX)

Title of Test	Results
Rating	HS-R30 105 x 48
Overall Design Pressure	30 psf
Operating Force	5 lb max.
Air Infiltration	0.15 cfm/ft ²
Water Resistance	4.5 psf
Structural Test Pressure	+45.0 psf
Deglazing	Passed
Forced Entry Resistance	Grade 10

Reference should be made to Report No. 01-39989.01 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.


John C. McClane, Technician

JCM:nlb



Architectural Testing

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

Rendered to:

GORELL ENTERPRISES, INC.
1380 Wayne Avenue
Indiana, Pennsylvania 15701

Report No: 01-39989.01
Test Dates: 09/04/01
Through: 10/11/01
Report Date: 10/15/01
Expiration Date: 10/11/05

Project Summary: Architectural Testing, Inc. (ATI) was contracted to perform tests on a Series/Model 5353, PVC horizontal sliding window (XOX). The sample tested successfully met the performance requirements for an HS-R30 105 x 48 rating.

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: 5353

Type: PVC Horizontal Sliding Window (XOX)

Overall Size: 8' 9" wide by 4' 0" high

Active Sash Size (2): 2' 9-11/16" wide by 3' 7-3/4" high

Fixed Sash Size: 3' 1-7/8" wide by 3' 7-3/4" high

Finish: All PVC was white.

Glazing Details: The sash utilized 7/8" thick sealed insulating glass units fabricated from two sheets of 1/8" thick clear annealed glass and a spacer system. Each sash was exterior glazed against double-sided adhesive foam tape and secured with snap-fit glazing beads.

130 Derry Court
York, PA 17402-9405
phone: 717.764.7700
fax: 717.764.4129
www.archtest.com

**Test Specimen Description: (Continued)****Weatherstripping:**

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
0.230" high by 0.187" backed polypile with center fin	2 Rows	Top and bottom rails, and jamb stiles
0.230" high by 0.187" backed polypile with center fin	1 Row	Inactive meeting stiles

Frame Construction: The frame was constructed of extruded PVC members with mitered and welded corners. The sill utilized snap-fit PVC tracks.

Sash Construction: The sash were constructed of extruded PVC members with mitered and welded corners.

Screen Construction: The screen was constructed of extruded aluminum members with plastic keyed corners. The fiberglass screen mesh was secured with a flexible spline.

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Metal lock and keeper assembly	4	Meeting stiles, one 10" from each end
Roller assembly	6	One in each end of the bottom rails
Anti-lift block	2	One above each interior sash

Test Specimen Description: (Continued)**Drainage:**

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
3/8" wide by 3/8" deep weepslot	6	One in each end of the bottom rails draining the glazing cavity
1/2" wide by 1/4" weepslot	4	One in each end of the interior and exterior sill tracks draining the tracks into the sill hollow below
1-1/2" wide by 3/8" high weepslot	4	One in each end of the intermediate sill legs draining the sill hollows
1/4" wide by 3/8" deep weepslot	1	Midspan of the exterior sill track draining the track
1" wide by 1/4" high weepslot	2	Located under each meeting stile, through sill face
1-3/8" wide by 3/16" high weep flap	6	One at the center and in each end of the sill draining the exterior sill hollow and one in the center and in each end draining the interior sill hollow

Reinforcement: No reinforcement was utilized.

Installation: The test unit was installed into a 2 x 8 wooden test buck with wood blind stops on the interior and exterior. The stops were secured with brads every 6" on center. The exterior perimeter was sealed with silicone.

Test Results:

The results are tabulated as follows:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
2.2.2.5.1	Operating Force	5 lbs	20 lbs max.
2.1.2	Air Infiltration per ASTM E 283 (See Note #1) @ 1.57 psf (25 mph)	0.15 cfm/ft ²	0.3 cfm/ft ² max.

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)

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
2.1.3	Water Resistance per ASTM E 547 (with and without screen) WTP = 2.86 psf	No leakage	No leakage
2.1.4.2	Uniform Load Structural per ASTM E 330 (Measurements reported were taken on the exterior meeting stile) @ 22.5 psf (positive) @ 22.5 psf (negative)	0.02" 0.02"	0.17" max. 0.17" max.
2.2.2.5.2	Deglazing Test per ASTM E 987 In operating direction at 70 lbs Jamb/stiles Meeting stiles	0.06"/12% 0.06"/12%	0.50"/100% 0.50"/100%
	In remaining direction at 50 lbs Top rails Bottom rails	0.03"/6% 0.03"/6%	0.50"/100% 0.50"/100%
2.1.7	Welded Corner Test	Meets as stated	Meets as stated
2.1.8	Forced Entry Resistance per ASTM F 588-97 Type: A Grade: 10 Lock Manipulation Test Test A1 through A7 Lock Manipulation Test	No entry No entry No entry	No entry No entry No entry

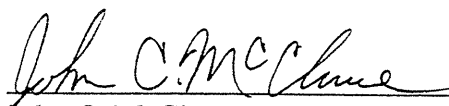


Test Results: (Continued)

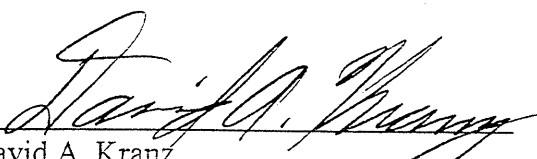
<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
<u>Optional Performance</u>			
4.3	Water Resistance per ASTM E 547 (with and without screen) WTP = 4.5 psf	No leakage	No leakage
4.4.2	Uniform Load Structural per ASTM E 330 (Measurements reported were taken on the exterior meeting stile)		
	@ 45.0 psf (exterior)	0.04"	0.17" max.
	@ 45.0 psf (interior)	0.02"	0.17" max.

Representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years. This report is the exclusive property of the client so named herein and is applicable to the sample tested. Results obtained are tested values and do not constitute an opinion or endorsement by this laboratory.

For ARCHITECTURAL TESTING, INC:



 John C. McClane
 Technician



 David A. Kranz
 Director - Product/Physical Testing

JCM:nlb
01-39989.01



DOCUMENT CONTROL ADDENDUM #01-39989.00

Current Issue Date: 10/15/01

Report No.: 01-39989.01

Requested by: Rich Gibson, Gorell Enterprises, Inc.

Purpose: AAMA/NWDA 101/I.S.2-97 testing of Series/Model 5353, PVC horizontal sliding window (XOX).

Issued Date: 10/15/01

Comments: