

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

Rendered to:

MASTER WINDOW SYSTEMS, INC.

**SERIES/MODEL: Master 2000 Sliding Window
PRODUCT: PVC Horizontal Sliding Window**

Title	Summary of Results
Rating	HS-R25 69 x 48
Operating Force	N/A
Air Infiltration	N/A
Water Resistance Test Pressure	N/A
Uniform Load Deflection Test Pressure	± 25.0 psf
Uniform Load Structural Test Pressure	± 37.5 psf
Forced Entry Resistance	N/A

Reference should be made to ATI Report No. 68520.02-501-47 for complete test specimen description and data.



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

Rendered to:

MASTER WINDOW SYSTEMS, INC.
2060 DeFoor Hills Road, N.W.
Atlanta, Georgia 30318

Report No.: 68520.02-501-47
Test Date: 10/18/06
Report Date: 09/13/07
Expiration Date: 09/27/09

Project Summary: Architectural Testing, Inc. (ATI) was contracted by Veka, Inc. to witness testing on a Series/Model DS11WW, PVC horizontal sliding window at their test facility located in Fombell, Pennsylvania. The sample tested successfully met the performance requirements for an HS-R25 69 x 48 rating. This report is a reissue of the original Report No. 68520.01-501-47. This report is reissued in the name of Master Window Systems, Inc. through written authorization of Veka, Inc. Test specimen description and results are reported herein. Reference ATI Report Number 60220.01-501-47 for gateway performance test results.

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

Test Specimen Description:

Series/Model: Master 2000 Sliding Window

Product Type: Poly Vinyl Chloride (PVC) Horizontal Sliding Window

Overall Size: 5' 9" wide by 4' 0" high

Operable Sash Size (2): 2' 10" wide by 3' 8-1/2" high

Overall Area: 23.0 ft²

Finish: All vinyl was white.

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" clear annealed glass and a butyl spacer material with stainless steel substrate, single sealed. Each insulating glass unit was set against a double-sided adhesive tape and secured with rigid vinyl glazing beads.

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
0.187" backed by 0.260" high pile with center fin	2 Rows	Top and bottom rails
0.187" backed by 0.260" high pile with center fin	1 Row	Jamb stile
0.187" backed by 0.280" high pile with center fin	2 Rows	Head, sill, jambs
0.187" backed by 0.280" high pile with center fin	1 Row	Lock stile
0.187" backed by 0.500" high pile with center fin	2 Rows	Keeper stile

Frame Construction: The PVC frame was constructed using mitered and welded corner construction. Rigid PVC roller tracks were applied to the sill.

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

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Metal cam lock and keeper	2	Lock stile, one 8" in from ends, with mating keeper on the fixed stile
Single metal roller with plastic housing	4	Bottom rail, one at each end

Test Specimen Description: (Continued)

Drainage:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
1" wide by 1/4" high weepslot (with flap)	2	Exterior base of the sill, one at each end
1" wide by 3/16" high weepslot	4	Intermediate sill wall, one at each interior sill track, one at each end
1/2" wide by 3/16" high weepslot	2	Sill screen track, one at each end
1/4" diameter weephole	2	Exterior sill track, one at each end

Reinforcement: The lock stile, keeper stile, and handle stiles contained an extruded aluminum reinforcement measuring 0.870" by 0.846" by 0.135", reference Drawing No. RFSE1347AOM.

Installation: The unit was installed in a wood buck constructed of Spruce-Pine-Fir construction lumber and sealed at the interior and exterior perimeter with a silicone sealant, with the exception of an approximate 6" void at each interior sill corner. The unit was secured to the buck through the frame with six #8 x 2-1/2" long screws, one each at the top and bottom of each jamb, and two at approximate 1/4 points of the head. A nominal 1/8" space was maintained at the perimeter between the buck and window frame.

Test Results: The results are tabulated as follows:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
<u>Optional Performance</u>			
2.1.4.1	Uniform Load Deflection per ASTM E 330 (Deflections reported were taken on the exterior meeting stile) (Loads were held for 10 seconds)		
	25.0 psf (positive)	0.46"	See Note #1
	25.0 psf (negative)	0.69"	See Note #1
 <i>Note #1: The Uniform Load Deflection test is not a requirement of ANSI/AAMA/NWDA 101/I.S.2-97 for this product designation. The deflection data is recorded in this report for special code compliance and information only.</i>			
2.1.4.2	Uniform Load Structural per ASTM E 330 (Permanent sets reported were taken on the exterior meeting stile) (Loads were held for 10 seconds)		
	37.5 psf (positive)	0.03"	0.178" max.
	37.5 psf (negative)	0.05"	0.178" max.

This report is reissued in the name of Master Window Systems, Inc. through written authorization of Veka, Inc. to whom the original report was rendered. The original Veka, Inc. Report No. is 68520.01-501-47.

Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by Architectural Testing, Inc. for a period of four years from the original test date. The results herein were secured by using the designated test methods and they indicate compliance with the performance requirements of the referenced specification. This report does not constitute certification of this product, which may only be granted by the certification program administrator. This report may not be reproduced, except in full, without the approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC.:

Lynn George
Project Manager

Michael L. Mackereth
Director - Operations

LG:jld

Attachments (pages):

Appendix-A: Alteration Addendum (1)

Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
0	09/13/07	N/A	Original report issue - Reissue of Report No. 68520.01-501-47 in the name of Master Window Systems, Inc.

Appendix A

Alteration Addendum

***Note:** No alterations were required.*