Architectural Testing

TEST REPORT

Report No.: D7908.01-501-47

Rendered to:

VEKA INC.
Fombell, Pennsylvania

PRODUCT TYPE: PVC Fixed Window
SERIES/MODEL: SH57W

SPECIFICATION: AMMA/WDMA/CSA 101/I.S.2/A440-11, *NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights*

AAMA/WDMA/CSA 101/I.S.2/A440-08, *NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights*

Title	Summary of Results
Primary Product Designator	Class CW-PG50 1829 x 1829 (72 x 72) - FW
Design Pressure	±2400 Pa (±50.13 psf)
Air Infiltration	0.1 L/s/m^2 (0.01 cfm/ft^2)
Water Penetration Resistance Test Pressure	360 Pa (7.52 psf)

Test Completion Date: 05/09/2014

Reference must be made to Report No. D7908.01-501-47, dated 05/20/14 for complete test specimen description and detailed test results.

1.0 Report Issued To: Veka Inc.
100 Veka Drive
Fombell, Pennsylvania 16123-025

2.0 Test Laboratory: Architectural Testing, Inc.
1140 Lincoln Avenue
Springdale, Pennsylvania 15144
724-275-7100

3.0 Project Summary:

3.1 Product Type: PVC Fixed Window

3.2 Series/Model: SH57W

3.3 Compliance Statement: Results obtained are tested values and were secured by using the designated test method(s). The specimen tested successfully met the performance requirements for a **Class CW-PG50 1829 x 1829 (72 x 72) - FW** rating.

3.4 Test Dates: 05/08/2014 – 05/09/2014

3.5 Test Record Retention End Date: All test records for this report will be retained until May 9, 2018.

3.6 Test Location: Veka Inc. test facility in Fombell, Pennsylvania. Calibration of test equipment was performed by Architectural Testing in accordance with AAMA 205-01 "In-Plant Testing Guidelines for Manufacturers and Independent Laboratories".

3.7 Test Sample Source: The test specimen was provided by the client. Representative samples of the test specimen(s) will be retained by Architectural Testing for a minimum of four years from the test completion date.

3.8 Drawing Reference: The test specimen drawings have been reviewed by Architectural Testing and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Architectural Testing per the drawings located in Appendix B. Any deviations are documented herein or on the drawings.

3.9 List of Official Observers:

Name	Company
Doug Merry	Veka Inc.
Cornell Charles	Veka Inc.
Joseph Allison	Architectural Testing, Inc.

4.0 Test Specification(s):

AMMA/WDMA/CSA 101/I.S.2/A440-11, *NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights*

AAMA/WDMA/CSA 101/I.S.2/A440-08, *NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights*

5.0 Test Specimen Description:

5.1 Product Sizes:

Overall Area: 3.3 m^2 (36.0 ft^2)	**Width**		**Height**	
	millimeters	**inches**	**millimeters**	**inches**
Overall size	1829	72	1829	72

5.2 Frame Construction:

Frame Member	**Material**	**Description**
Head, sill, jambs	PVC	Extruded

	Joinery Type	**Detail**
All corners	Mitered	Thermally welded

5.3 Weatherstripping: No weatherstripping was utilized.

5.4 Glazing: *No conclusions of any kind regarding the adequacy or inadequacy of the glass in any glazed test specimen(s) can be made.*

Glass Type	**Spacer Type**	**Interior Lite**	**Exterior Lite**	**Glazing Method**
1" IG	Rectangular shaped steel, single sealed	3/16" annealed	3/16" annealed	Set from the interior against a double-sided adhesive tape and secured with rigid vinyl glazing beads

Location	**Quantity**	**Daylight Opening**		**Glass Bite**
		millimeters	**inches**	
Frame	1	1715 x 1715	67-1/2 x 67-1/2	1/2"

5.0 Test Specimen Description: (Continued)

5.5 Drainage:

Drainage Method	Size	Quantity	Location
Weepslot with flap	1" wide by 1/4" high	2	Exterior sill face, one 2-1/2" in from each end
Weephole	3/8" wide by 1/8" deep	2	Glazing channel, one 2-1/2" from each end

5.6 Hardware: No hardware was utilized.

5.7 Reinforcement: No reinforcement was utilized.

6.0 Installation:

The specimen was installed into a Spruce-Pine-Fir wood buck. The rough opening allowed for a 1/8" shim space. The nail fin perimeter was sealed to the wood buck with a silicone sealant.

Location	Anchor Description	Anchor Location
Integral nail fin	#8 x 2" long truss head fastener	Nominally spaced at 9" on center, and beginning at each corner

7.0 Test Results: The temperature during testing was 21°C (69°F). The results are tabulated as follows:

Title of Test	Results	Allowed	Note
Air Leakage, Infiltration per ASTM E 283 at 75 Pa (1.57 psf)	0.1 L/s/m² (0.01 cfm/ft²)	1.5 L/s/m² (0.3 cfm/ft²) max.	1
Water Penetration, per ASTM E 547	N/A	N/A	3
Uniform Load Deflection, per ASTM E 330	N/A	N/A	3
Uniform Load Structural, per ASTM E 330	N/A	N/A	3
Forced Entry Resistance, per ASTM F 588, Type: D - Grade: 40	Pass	No entry	
Thermoplastic Corner Weld	Pass	Meets as stated	
Optional Performance			
Water Penetration, per ASTM E 547 at 360 Pa (7.52 psf)	Pass	No leakage	2
Uniform Load Deflection, per ASTM E 330 taken at the right jamb +2400 Pa (+50.13 psf) -2400 Pa (-50.13 psf)	 0.5 mm (0.02") 0.8 mm (0.03")	 1.3 mm (0.05") max. 1.3 mm (0.05") max.	4, 5, 6
Uniform Load Structural, per ASTM E 330 taken at the right jamb +3600 Pa (+75.19 psf) -3600 Pa (-75.19 psf)	 0.3 mm (0.01") 0.5 mm (0.02")	 0.8 mm (0.03") max. 0.8 mm (0.03") max.	5, 6

Note 1: The tested specimen meets (or exceeds) the performance levels specified in AAMA/WDMA/CSA 101/I.S.2/A440 for air leakage resistance.

Note 2: Without insect screen.

Note 3: The client opted to start at a pressure higher than the minimum required. Test results are reported under Optional Performance.

Note 4: The deflections reported are not limited by AAMA/WDMA/CSA 101/I.S.2/A440 for this product designation. The deflection data is recorded in this report for special code compliance and information only.

Note 5: Loads were held for 10 seconds.

Note 6: Tape and film were not used to seal against air leakage during structural testing.

Architectural Testing will service this report for the entire test record retention period. Test records that are retained such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation will be retained by Architectural Testing, Inc. for the entire test record retention period.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen(s) tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, Inc.

Joseph E. Allison
Digitally Signed by: Joseph E. Allison

Joseph E. Allison
Senior Technician

Lynn George
Digitally Signed by: Lynn George

Lynn George
Director – Regional Operations

JEA:sld

Attachments (pages): This report is complete only when all attachments listed are included.
Appendix-A: Alteration Addendum (1)
Appendix-B: Drawings (1) Complete drawings packet on file with Architectural Testing Inc.

Revision Log

Rev. #	Date	Page(s)	Revision(s)
1	05/28/14	Summary Page, Page 1	Corrected model number from PI54W to SH57W.

Appendix A

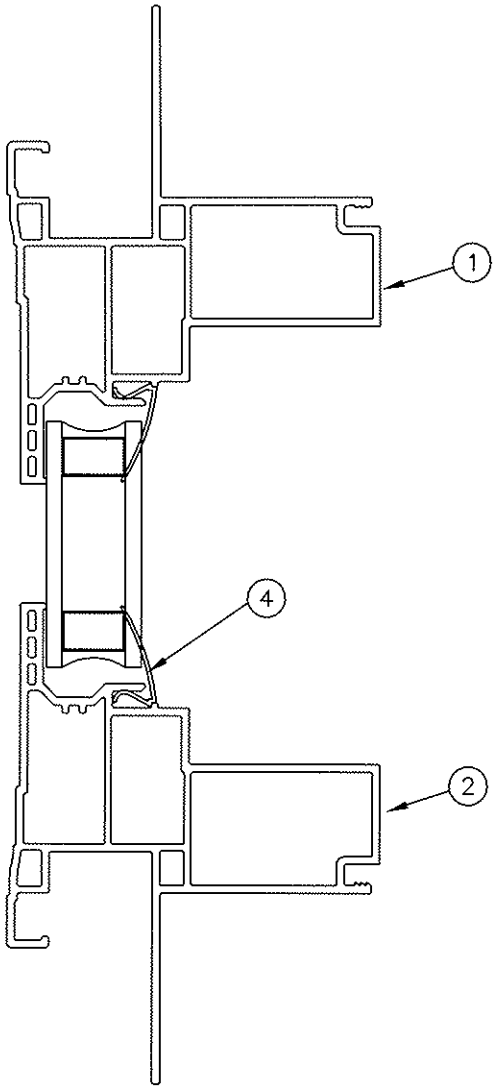
Alteration Addendum

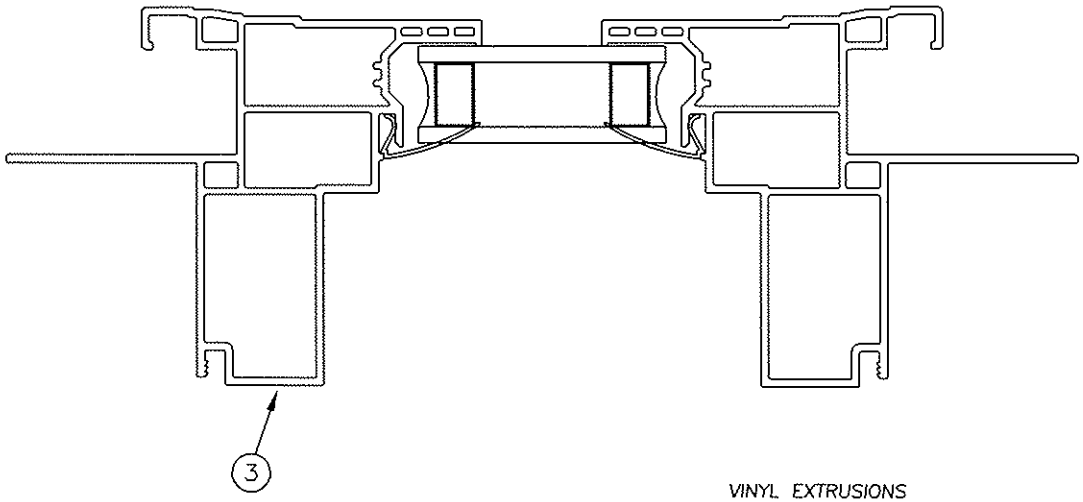
***Note**: No alterations were required.*

Appendix B

Drawings

Note: *Complete drawings packet on file with Architectural Testing, Inc.*





VINYL EXTRUSIONS

1	SH5702	FRAME HEAD
2	SH5702	FRAME SILL
3	SH5702	FRAME JAMB
4	V-716	GLAZING BEAD

Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report D7905

Date 5/13/19 Tech

REV	ECN.	CHANGE	BY	DATE
B		UPDATED PROFILE SH5702	BJF	03/27/09
A	XXXX	UPDATED PROFILE SH5702	BJF	12/20/04

VEKA INC.
100 VEKA DRIVE
FOMBELL, PA 16123

DESCRIPTION: SH57W SERIES
PICTURE WINDOW LAYOUT

B-SIZE	BY: BJF	DATE: 11/5/04
SCALE: FULL	DWG #: SH57W	

SH57W