

Document Title:

Structural Performance Certification Authorization Report

Doc No:		FRM	1 B1-	02	
Rev No:	7	Page:	1	Of:	1

Required By:

PRO B1-03

CAR & Product ID Number: 757 - 105.0

Issue Date: 7/8/2013
Revision Date: 3/19/2019
Expiration Date: 4/20/2024

Company Code: 757

This Certification Authorization Report (CAR) is issued by Keystone Certifications, Inc. (KCI) after full validation review, and is based on a standardized evaluation of the product conducted by an independent accredited laboratory in accordance with the specified referenced standard. Actual fenestration product performance may vary based on many factors, including installation, condition of the wall/roof substrate and the age of the product and installation components.

This report indicates the product is eligible for the application of Keystone Certification Program certification labels. Licensee stipulates in affixing certification labels to products, that those products are representative of the specimen evaluated and documented for certification authorization. Only products bearing such a certification label shall be considered certified. The information in this report can be verified at www.keystonecerts.com.

Licensee Information:	Product Information:
Pocahontas Aluminum Company, Inc.	Model: PI46 PVC NC Picture Window
2001 Industrial Drive, PO Box 756	Operator Type: FW
Pocahontas, AR 72455	Config: No
USA	Max Width: 60
	Max Height: 84

Referenced Standard:	Product Rating:
AAMA/WDMA/CSA 101/I.S.2/A440-08	Class R-PG50 1524x2134 (60x84)-Type FW

Qualifying Test Information:		
Test Report No:	ATI-A9289.06-501-47	
Test Report Expiration:	4/20/2024	

Authorized Signature:

Deir Just

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Keystone Certifications, Inc.

145 Limekiln Rd. Suite 100B New Cumberland, Pennsylvania 17070



Structural Performance Certification **Authorization Report**

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	Rev No:	7	Page:	1	Of:	1

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2001 Industrial Drive, PO Box 756	Operator Type: FW
Pocahontas, AR 72455	Config: No
USA	Max Width: 60
	Max Height: 84

Referenced Standard:	Product Rating:
AAMA/WDMA/CSA 101/I.S.2/A440-08	Class R-PG50 1524x2134 (60x84)-Type FW Neg DP=55

Qualifying Test Information:		
Test Report No:	ATI-A9289.06-501-47	
Test Report Expiration:	4/20/2024	

Authorized Signature:

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Licensee Information:	Product Information:
Pocahontas Aluminum Company, Inc.	Model: PI46 PVC NC Picture Window
2001 Industrial Drive, PO Box 756	Operator Type: FW
Pocahontas, AR 72455	Config: No
USA	Max Width: 48
	Max Height: 72

Referenced Standard:	Product Rating:
AAMA/WDMA/CSA 101/I.S.2/A440-08	Class R-PG50 1219x1829 (48x72)-Type FW Neg DP=60

Qualifying Test Information:		
Test Report No:	ATI-A9289.06-501-47	
Test Report Expiration:	4/20/2024	

Authorized Signature:

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Required By:

PRO B1-03

CAR & Product ID Number: 757 - 108.0

> Issue Date: 7/8/2013 Revision Date: 3/19/2019 **Expiration Date:** 4/20/2024

Company Code: 757

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Licensee Information:	Product Information:
Pocahontas Aluminum Company, Inc.	Model: PI46 PVC Rep Picture Window
2001 Industrial Drive, PO Box 756	Operator Type: FW
Pocahontas, AR 72455	Config: No
USA	Max Width: 48
	Max Height: 72

Referenced Standard:	Product Rating:
AAMA/WDMA/CSA 101/I.S.2/A440-08	Class R-PG50 1219x1829 (48x72)-Type FW Neg DP=70

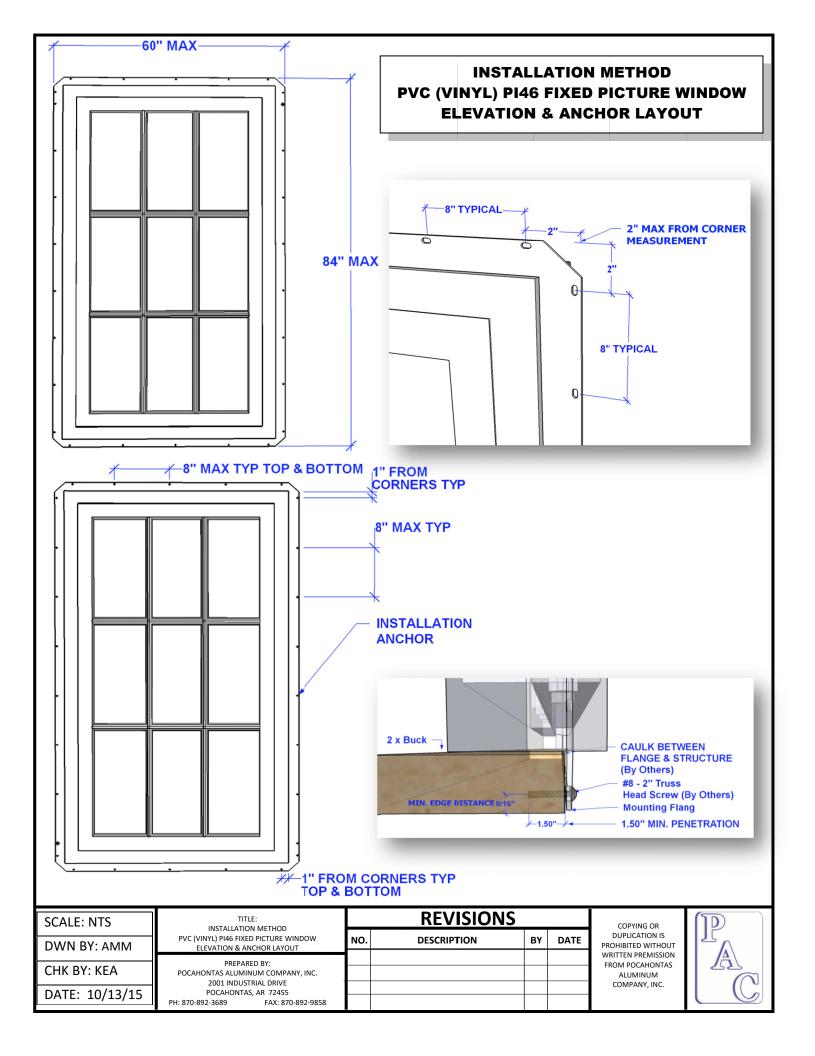
Qualifying Test Information:		
Test Report No:	ATI-A9289.06-501-47	
Test Report Expiration:	4/20/2024	

Authorized Signature:

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Keystone Certifications, Inc.

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TEST REPORT

Report No.: A9289.06-501-47

Rendered to:

POCAHONTAS ALUMINUM COMPANY, INC. Pocahontas, Arizona

PRODUCT TYPE: PVC Fixed Window **SERIES/MODEL**: PI46 Picture Window

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

Test Dates: 04/18/11 **Through**: 04/20/11

Report Date: 06/06/13

Test Record Retention Date: 04/20/15



Summary of Results

	Summary of Results				
	Test Specimen #1	Test Specimen #2			
Title	New Construction Frame	Replacement Frame			
	(With 3/16" glass)	(With 3/16" glass)			
Primary Product	Class CW-PG50 1524 x 2134	Class CW-PG50 1524 x 2134			
Designator	(60 x 84) - FW	(60 x 84) - FW			
Design Pressure	+2400 Pa (+50.13 psf)	+2400 Pa (+50.13 psf)			
Negative Design Pressure	-2400 Pa (-50.13 psf)	-2640 Pa (-55.14 psf)			
Air Infiltration	0.5 L/s/m ² (0.01 cfm/ft ²)	N/A			
Water Penetration Resistance Test Pressure	360 Pa (7.52 psf)	N/A			

	Summary of Results			
	Test Specimen #3	Test Specimen #4		
Title	New Construction Frame	Replacement Frame		
	(With 1/8" glass)	(With 1/8" glass)		
Drimary Draduct Degignator	Class R-PG50 1219 x 1829	Class R-PG50 1219 x 1829		
Primary Product Designator	(48 x 72) - FW	(48 x 72) - FW		
Design Pressure	+2400 Pa (+50.13 psf)	+2400 Pa (+50.13 psf)		
Negative Design Pressure	-2880 Pa (-60.15 psf)	-3360 Pa (-70.18 psf)		
Air Infiltration	0.5 L/s/m ² (0.01 cfm/ft ²)	N/A		
Water Penetration Resistance Test Pressure	360 Pa (7.52 psf)	N/A		

Test Completion Date: 04/20/2011

Reference must be made to Report No. A9289.06-501-47, dated 06/06/13 for complete test specimen description and detailed test results.

Report Date: 06/06/13

Test Record Retention End Date: 04/20/15

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1.0 Report Issued To: Pocahontas Aluminum Company

2001 Industrial Drive, P.O. Box 756 Pocahontas, Arizona 72455-0756

2.0 Test Laboratory: Architectural Testing, Inc.

1140 Lincoln Avenue

Springdale, Pennsylvania 15144

724.275.7100

3.0 Project Summary:

Architectural Testing

3.1 Product Type: PVC Fixed Window

3.2 Series/Model: PI46 Picture Window

Compliance Statement: Results obtained are tested values and were secured by using the designated test method(s). The specimens tested successfully met the performance requirements for the following ratings: Test Specimen #1: Class CW-PG50 1524 x 2134 (60 x 84) - FW; Test Specimen #2: Class CW-PG50 1524 x 2134 (60 x 84) - FW; Test Specimen #3: Class R-PG50 1219 x 1829 (48 x 72) - FW; Test Specimen #4: Class R-PG50 1219 x 1829 (48 x 72) - FW.

This product was originally tested as the Veka Inc. Series/Model SH46W, PVC Fixed Window and is a reissue of the original Report No. A9289.01-501-47. This report is reissued in the name of Pocahontas Aluminum Company, Inc., through written authorization by Veka Inc.

- **3.3 Test Dates**: 04/19/2011 04/20/2011
- **3.4 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".
- **3.5 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.
- **3.6 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.

3.7 List of Official Observers:

<u>Name</u> <u>Company</u>

Doug Merry Veka Inc. Cornell Charles Veka Inc.

Joseph Allison Architectural Testing, Inc.



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4.0 Test Specification(s):

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:

Test Specimens #1 and #2:

Overall Area:	Width millimeters inches		Height	
3.3 m ² (35.0 ft ²)			millimeters	inches
Overall size	1524	60	2134	84

Test Specimens #3 and 4:

Overall Area:	Width		Height	
2.2 m ² (24.0 ft ²)	millimeters inches		millimeters	inches
Overall size	1219	48	1829	72

The following descriptions apply to all specimens.

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.



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5.0 Test Specimen Description: (Continued)

5.4 Glazing:

Test Specimens #1 and #2:

	rest specimens #1 and #2.					
Glass Type	Spacer Type	Interior Lite	Exterior Lite	Glazing Method		
3/4" IG	Butyl spacer system embedded in sealant, single sealed	3/16" annealed	3/16" annealed	Set from the interior against a silicone sealant and secured with rigid vinyl glazing beads		

Location	ocation Quantity		Daylight Opening		
Location	Quantity	millimeters	inches	Glass Bite	
Frame	1	1410 x 2019	55-1/2 x 79-1/2	1/2"	

Test Specimens #3 and #4:

Glass Type	Spacer Type	Interior Lite	Exterior Lite	Glazing Method
3/4" IG	Butyl spacer system embedded in sealant, single sealed	1/8" annealed	1/8" annealed	Set from the interior against a silicone sealant and secured with rigid vinyl glazing beads

Logation	Ougntity	Dayligh	t Opening	Glass Bite
Location	Quantity	millimeters	inches	Glass bite
Frame	1	1105 x 1715	43-1/2 x 67-1/2	1/2"

5.5 Drainage:

Drainage Method	Size	Quantit y	Location
Weepslot with flap	1" wide x 3/16" high	2	Exterior sill face, one 3-1/4" from each end of sill
Weepslot	3/4" wide x 3/16" deep	2	Sill glazing channel, one 3-3/4" from each end

5.6 Hardware: No hardware was utilized.



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5.0 Test Specimen Description: (Continued)

5.7 Reinforcement: No reinforcement was utilized.

6.0 Installation:

Test Specimens #1 and #3:

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 of the window was sealed with a silicone sealant.

Location	Anchor Description	Anchor Location
Nail fin	#0 2" t h d	Spaced nominally 8" on center,
perimeter	#8 x 2" truss head screws	and beginning at each corner.

Test Specimens #2:

The specimen was installed into a Spruce-Pine-Fir wood buck. The rough opening allowed for a 1/8" shim space. The exterior perimeter of the window was sealed with a silicone sealant. The sill was set onto a bed of silicone sealant.

Location	Anchor Description	Anchor Location
Iamba	#0 v 2" truce hand consure	Six per jamb, evenly spaced and
Jambs	#8 x 2" truss head screws	beginning 6" in from each end.
		Three per member, one 6" in
Head, sill	#8 x 2" truss head screws	from each end and one at
		midspan.

Test Specimens #4:

The specimen was installed into a Spruce-Pine-Fir wood buck. The rough opening allowed for a 1/8" shim space. The exterior perimeter of the window was sealed with a silicone sealant. The sill was set into a bed of silicone sealant.

Location	Anchor Description	Anchor Location
Jambs	#8 x 2" truss head screws	Five per jamb, evenly spaced
Jailius	#0 x Z truss fleati screws	and beginning 6" from each end.
	#8 x 2" truss head screws	Three per member, one 6" in
Head, sill		from each end and one at
		midspan.



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7.0 Test Results: The temperature during testing was 20°C (68°F). The results are tabulated as follows:

Test Specimen #1:

Test Specimen #1:				
Title of Test	Results	Allowed	Note	
Air Leakage,				
Infiltration per ASTM E 283	0.5 L/s/m ²	1.5 L/s/m ²		
at 75 Pa (1.6 psf)	(0.01 cfm/ft ²)	$(0.3 \text{ cfm/ft}^2) \text{ max.}$	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: 10	Pass	No entry		
Thermoplastic Corner Weld	Pass	Meets as stated		
C	ptional 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)	0.8 mm (0.03")	1.3 mm (0.05") max.		
-2400 Pa (-50.13 psf)	0.5 mm (0.02")	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)	0.3 mm (0.01")	0.5 mm (0.02") max.		
-3600 Pa (-75.19 psf)	0.3 mm (0.01")	0.5 mm (0.02") max.	5, 6	



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7.0 Test Results: (Continued)

Test Specimen #2:

1 cst specimen #2.			
Title of Test	Results	Allowed	Note
	Optional Performance		
Uniform Load Deflection,			
per ASTM E 330			
taken at the head			
+2640 Pa (+55.14 psf)	1.5 mm (0.06")	3.6 mm (0.14") max.	
-2640 Pa (-55.14 psf)	1.3 mm (0.05")	3.6 mm (0.14") max.	4, 5, 6
Uniform Load Structural,			
per ASTM E 330			
taken at the head			
+3960 Pa (+82.71 psf)	0.3 mm (0.01")	1.8 mm (0.07") max.	
-3960 Pa (-82.71 psf)	0.3 mm (0.01")	1.8 mm (0.07") max.	5, 6

Test Specimen #3:

Title of Test	Results	Allowed	Note
Air Leakage,			
Infiltration per ASTM E 283	0.5 L/s/m^2	1.5 L/s/m ²	
at 75 Pa (1.6 psf)	(0.01 cfm/ft^2)	$(0.3 \text{ cfm/ft}^2) \text{ max.}$	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: 10	Pass	No entry	
Thermoplastic Corner Weld	Pass	Meets as stated	



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7.0 Test Results: (Continued)

Test Specimen #3: (Continued)

rest specimen #3. (Continued)					
Title of Test	Results	Allowed	Note		
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					
+2880 Pa (+60.15 psf)	0.5 mm (0.02")				
-2880 Pa (-60.15 psf)	0.3 mm (0.01")	Report Only	4, 5, 6		
Uniform Load Structural,					
per ASTM E 330					
taken at the right jamb					
+4320 Pa (+90.23 psf)	0.3 mm (0.01")	0.8 mm (0.03") max.			
-4320 Pa (-90.23 psf)	0.3 mm (0.01")	0.8 mm (0.03") max.	5, 6		

Test Specimen #4: (Continued)

1 est specimen #4. (continueu)					
Title of Test	Results	Allowed	Note		
	Optional Performance				
Uniform Load Deflection,					
per ASTM E 330					
taken at the head					
+3360 Pa (+70.18 psf)	1.3 mm (0.05")				
-3360 Pa (-70.18 psf)	1.0 mm (0.04")	Report Only	4, 5, 6		
Uniform Load Structural,					
per ASTM E 330					
taken at the head					
+5040 Pa (+105.26 psf)	0.3 mm (0.01")	0.8 mm (0.03") max.			
-5040 Pa (-105.26 psf)	0.3 mm (0.01")	0.8 mm (0.03") max.	5, 6		



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7.0 Test Results: (Continued)

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.



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This report is reissued in the name of Pocahontas Aluminum Company, Inc., through written authorization of Veka Inc. to whom the original report was rendered. The original Veka Inc. Report No. is A9289.01-501-47.

The service life of this report will expire on the stated Test Record Retention End Date, at which time such materials as drawings, data sheets, samples of test specimens, copies of this report, and any other pertinent project documentation, shall be discarded without notice.

If test specimen contains glazing, no conclusions of any kind regarding the adequacy or inadequacy of the glass in any glazed test specimen(s) can be made. 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

Lynn George

Senior Technician

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.

This report produced from controlled document template ATI 00438, issued 02/28/11.



Report Date: 06/06/13 Test Record Retention End Date: 04/20/15

Appendix A

Alteration Addendum

Note: No alterations were required.

Architectural Testing



Test Report No.: A9289.06-501-47 Report Date: 06/06/13 Test Record Retention End Date: 04/20/15

Appendix B

Drawings

