

**TEST REPORT**

**Report No.:** B3407.01-801-47

**Rendered to:**

CROFT, LLC.  
Magnolia, Mississippi

**PRODUCT TYPE:** 75/95/97  
**SERIES/MODEL:** Aluminum Fixed Window

**SPECIFICATION:** AAMA/WDMA/CSA 101/1.S.2/A440-08, *NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights*

<b>Title</b>	<b>Summary of Results</b>
Primary Product Designator	Class R -PG40 1499 x 1499 (59 x 59) - FW
Design Pressure	±1920 Pa (±40.10 psf)
Air Infiltration	0.4 L/s/m <sup>2</sup> (0.08 cfm/ft <sup>2</sup> )
Water Penetration Resistance Test Pressure	290 Pa (6.06 psf)

**Test Completion Date:** 09/27/11

Reference must be made to Report No. B3407.01-801-47, dated 10/07/11 for complete test specimen description and detailed test results.

**Test Dates:** 09/27/11  
**Through:** 09/27/11  
**Report Date:** 10/07/11  
**Test Record Retention Date:** 09/27/15

**1.0 Report Issued To:** Croft, LLC.  
1080 Highway 51  
Magnolia, Mississippi 39652

**2.0 Test Laboratory:** Architectural Testing, Inc.  
2865 Market Loop  
Southlake, Texas 76092  
(817) 410-7202

**3.0 Project Summary:**

**3.1 Product Type:** Aluminum Fixed Window

**3.2 Series/Model:** 75/95/97

**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 R –PG40 1499 x 1499 (59 x 59) – FW rating.

**3.4 Test Dates:** 09/27/11 – 09/27/11

**3.5 Test Location:** Croft, LLC. test facility in Magnolia, Mississippi. Calibration of test equipment was performed by Architectural Testing in accordance with AAMA 205-01 "In-Plant Testing Guidelines for Manufacturers and Independent Laboratories".

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

**3.7 Drawing Reference:** The test specimen drawings have been reviewed by Architectural Testing and are representative of the test specimen 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.

**3.8 List of Official Observers:**

<u>Name</u>	<u>Company</u>
Jim Bitz	Croft, LLC.
Paul Osbey	Croft, LLC.
Tony Brown	Architectural Testing, Inc.

**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:

Overall Area: 2.2 m <sup>2</sup> (24.2 ft <sup>2</sup> )	Width		Height	
	millimeters	inches	millimeters	inches
Overall size	1499	59	1499	59

### 5.2 Frame Construction:

Frame Member	Material	Description
Head, sill & jamb	Aluminum	Custom extruded

	Joinery Type	Detail
All corners	Coped & butted	Sealed and secured with two #8 x 1/2" screws

**5.3 Weatherstripping:** No weatherstripping was utilized.

### 5.4 Glazing:

Glass Type	Spacer Type	Interior Lite	Exterior Lite	Glazing Method
1/2" IG	Aluminum box spacer	1/8" annealed	1/8" annealed	Interior glazed against a backbedding material to the exterior & an aluminum screw-in glazing bead to the interior

Location	Quantity	Daylight Opening		Glass Bite
		millimeters	inches	
Fixed lite	1	1448 x 1448	57 x 57	0.25"

**5.5 Drainage:** No drainage was utilized.

**5.6 Hardware:** No hardware was utilized.

**5.7 Reinforcement:** No reinforcement was utilized.

**5.8 Screen Construction:** No screen 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 exterior of the window was sealed under the nailing fin. A 1 x 2 wood stop was sealed & secured over the nailing fin full perimeter

Location	Anchor Description	Anchor Location
Nailing fin	#8 x 1-1/4" screw	4" from corners, 12" o.c. thereafter
Wood stops	#8 x 1-1/2" screw	2" from ends and center

**7.0 Test Results:** The temperature during testing was 29°C (85°F). The results are tabulated as follows:

Title of Test	Results	Allowed	Note
<b>Air Leakage,</b> Infiltration per ASTM E 283 at 75 Pa (1.57 psf)	0.4 L/s/m <sup>2</sup> (0.08 cfm/ft <sup>2</sup> )	1.5 L/s/m <sup>2</sup> (0.3 cfm/ft <sup>2</sup> ) max.	1
<b>Water Penetration,</b> per ASTM E 547	N/A	N/A	2
<b>Uniform Load Deflection,</b> per ASTM E 330	N/A	N/A	2
<b>Uniform Load Structural,</b> per ASTM E 330	N/A	N/A	2
<b>Forced Entry Resistance,</b> per ASTM F 588, Type: A - Grade: 10	Pass	No entry	
<b>Optional Performance</b>			
<b>Water Penetration,</b> per ASTM E 547 at 290 Pa (6.06 psf)	Pass	No leakage	
<b>Uniform Load Deflection,</b> per ASTM E 330 taken at jamb +1920 Pa (+40.10 psf) -1920 Pa (-40.10 psf)	<1 mm (0.01") <1 mm (<0.01")	Report Only Report Only	3, 4, 5
<b>Uniform Load Structural,</b> per ASTM E 330 taken at jamb +2880 Pa (+60.15 psf) -2880 Pa (-60.15 psf)	<1 mm (0.01") <1 mm (<0.01")	2 mm (0.06") max. 2 mm (0.06") max.	4, 5



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

*Note 3: 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 4: Loads were held for 10 seconds.*

*Note 5: Tape and film were not used to seal against air leakage during structural testing.*

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.



Digitally Signed by: Anthony D. Brown

Tony Brown  
Technician



Digitally Signed by: Andy Cost

Andy Cost  
Laboratory Manager

TB:hd

Attachments (pages): This report is complete only when all attachments listed are included.

Appendix-A: Alteration Addendum (1)

Appendix-B: Drawings (10)

This report produced from controlled document template AT1 00438, issued 04/26/11.