



# PRI Construction Materials Technologies LLC

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## Laboratory Test Report

**Report for:** Tammy Tanksley  
Croft LLC  
1800 North Clark Avenue  
Magnolia, MS 39652

**Product Type:** Aluminum Fixed Window

**Product Series:** 75/95 Series

**Project No.:** 2189T0008.02

**Date(s) Tested:** July 2<sup>nd</sup>, 2020

**Results:** Class R-PG50 1448 x 1448mm (57 x 57in) - Fixed

75/95 Series Fixed (57x57) Summary	
Test Method Description	Summary of Results
AAMA/WDMA/CSA 101/1.S.2/A440-11	Class R-PG50 1448 x 1448mm (57 x 57in) - Fixed
Design Test Pressure:	±2400 Pa (±50.13 psf)
Air Leakage (Infiltration):	<0.1 L/s/m <sup>2</sup> (<0.01 cfm/ft <sup>2</sup> )
Water Penetration Resistance Test Pressure:	360 Pa (7.52 psf)
Forced Entry Resistance Grade Level:	Type "D" Grade 10

**Test Methods** Testing was completed as described in North American Fenestration Standard/Specification for windows, doors, and skylights (NAFS) AAMA/WDMA/CSA 101/1.S.2/A440-11. Test methods assigned or reference include, **ASTM E 283-04(2012)** Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen, **ASTM E 547-00(2009)** Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Cyclic Static Air Pressure Difference, **ASTM E 330-02(2010)** Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Difference, and **ASTM F 588-07** Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact.

<b>Report Date:</b> 08/18/2020	<b>Test Record Retention Date:</b> 08/18/2025
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Reference must be made to Project No., 2189T0008.02, dated 08/18/2020 for complete test specimen description and detailed results.

### 2189T0008.02

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- I. Product Manufacturer & Location** Croft LLC  
 1800 North Clark Avenue  
 Magnolia, MS 39652
- II. Accredited Testing Laboratory** PRI-Construction Materials Technologies, LLC  
 6412 Badger Drive  
 Tampa, FL 33610
- II.1.1. Testing Location: Testing was conducted at PRI-CMT located in Tampa, FL. Calibration of testing instrumentation was performed by a PRI-CMT representative in compliance with PRI-CMT In-House quality control program governed by ISO/IEC 17025-05.
- III. Product Type** Aluminum Fixed Window
- IV. Product Series/Model** 75/95 Series
- V. Test Specimen Details**
- V.1. Sizes
- V.1.1. Overall Unit Size: 1448 x 1448mm (57" x 57") 2.1m<sup>2</sup> (22.6ft<sup>2</sup>)
- V.2. Framing Members
- V.2.1. Head/Sill/Jamb: Extruded aluminum straight cut, butted, and mechanically attached thru the jambs and into the corresponding head/sill member with two (2) #8 x 1" screws per corner. Silicone sealant was applied to each corner prior to securing.

**V.3. Daylight Opening**

Size		Total Area		Quantity
mm	inches	m <sup>2</sup>	ft <sup>2</sup>	
1391 x 1403	54-3/4 x 55-1/4	2.0	21.0	1

**V.4. Glazing**

IGU Thickness	Spacer Type	Interior Pane	Exterior Pane	Glazing Method	Glazing Bite
Dual Glaze 13mm (1/2")	Metal U- Shaped Embedded in Sealant Single Sealed	3mm (1/8") Annealed	3mm (1/8") Annealed	The IGU was set from the interior, onto silicone adhesive, and secured with aluminum glazing beads. The beads were mechanically attached to the frame with sixteen (16) #6 x7/8 steel fasteners 4" from each end and evenly spaced thereafter.	10mm (3/8")

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V.5. Weeping System – “No Drainage”

V.6. Reinforcements – “No Reinforcement”

V.7. Hardware Components – “No Hardware”

V.8. Screen – “No Screen”

V.9. Weatherstripping

Location	Member	Description	Quantity
Frame	Glazing Bead Exterior Face	4.8mm (3/16") backed, 3.0mm (0.120") tall flat EPDM weatherseal	1 row per member

V.10. Installation

The test specimen was installed into a nominal 2"x10" SYP wooden test buck. The rough opening maintained a clearance of 3mm (1/8") around the perimeter. Silicone sealant complying with AAMA 800 was applied behind the nailing fin, sealing the test specimen to the test buck.

Frame Member	Dimensional Location on Member	Anchor Description
Jamb Nailing Fin	Through the nail fin 76mm (3") from each end, and midspan. Six (6) total three (3) per jamb.	#8 x 1-1/2" pan head screw

**VI. Equipment Utilized:**

- VI.1. Computer controlled reversible blower with pressure transducers
- VI.2. Linear distance transducers
- VI.3. Water spray rack
- VI.4. Gas mass with LFE
- VI.5. Load Cell

Official list of Witnesses:                      Company:  
 Tim Efaw    PRI-CMT  
 Tim Willsey                                         PRI-CMT

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**VII. Test Results:** Conditions at the beginning of testing were 23°C (73°F) with 50% Rh.

Test Method	Test Pressure	Allowable	Recorded Measurement	Result
Air Infiltration ASTM E283	75 Pa (1.57 psf)	1.5 L/s/m <sup>2</sup> (0.3 cfm/ft <sup>2</sup> )	<0.1 L/s/m <sup>2</sup> (<0.01 cfm/ft <sup>2</sup> )	Pass <sup>1</sup>
Water Intrusion ASTM E547	360 Pa (7.52 psf)	No penetration of water beyond innermost plane, excluding trim and hardware.	No Leakage	Pass <sup>2</sup>
Uniform Load Deflection ASTM E330 <sup>3,4</sup>	±2400 Pa (±50.13 psf)	Report Only	Positive 0.5mm (0.02") Negative 2.8mm (0.11")	Pass
Uniform Load Structural ASTM E330 <sup>3,4</sup>	±3600 Pa (±75.19 psf)	5.8mm (0.23")	Positive 0.5mm (0.01") Negative 2.8mm (0.02")	Pass
Forced Entry Resistance ASTM F588	N/A	No Entry	Type: "D" Grade: 10	Pass

Notes:

1. The tested specimen meets (or exceeds) the performance levels specified in AAMA/WDMA/CSA 101/I.S.2/A440 for air leakage resistance.
2. Tested without screen.
3. Loads were held for 10 seconds.
4. Deflection and permanent set values were captured on the sill. Unsupported span measured 1448mm (57").

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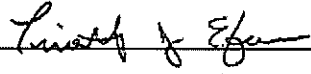
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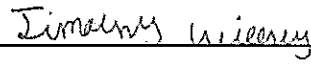
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**Statement of Compliance:**

Testing was conducted in accordance with methods designated in AAMA/WDMA/CSA 101/I.S.2 A440-11 North American Fenestration Standard/Specification for Windows, Doors, and Skylights. Upon completion of testing the test specimen met the minimum performance requirements outlined for a Class R-PG50 1448 x 1448mm (57 x 57in) – Fixed. The laboratory test results presented in this report are representative of the specimen supplied. This report does not constitute certification of this product which may only be granted by the certification program administrator.

Detailed drawings showing wall thickness of all members, corner construction and hardware application are on file and have been compared to the sample submitted. A test sample will be retained at the test laboratory for a period of 2 years electronic documentation will be retained for a period of 10 years. A copy of this report has been forwarded to the Validator. Manufacturer's drawings and bill of materials are contained in Appendix A.

Signed:   
Timothy Efaw  
Manager

Signed:   
Timothy Willsey  
Technician

Date: August 18<sup>th</sup>, 2020

Date: August 18<sup>th</sup>, 2020

**Report Issue History:**

Issue #	Date	Pages	Revision Description (if applicable)
Original	08/18/2020	13	NA

*Appendix Follows*

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