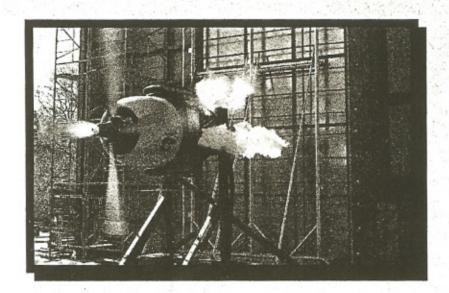


CONSTRUCTION CONSULTING LABORATORY, INTERNATIONAL



TEST REPORT:

AAMA PERFORMANCE TEST U.S. ALUMINUM, INC. SERIES 7400 ALUMINUM FIXED WINDOW REPORT #CCLI-02-160

January 16, 2003

Prepared for:

UNITED STATES ALUMINUM CORPORATION 200 Singleton Drive

Waxahachie, TX 75165

1601 Luna Road Carrollton, Texas 75006

S- UNITED, INC. A Quality Control Company Office: (972) 242-0556 FAX: (972) 245-6047



REPORT #CCLI-02-160

January 16, 2003

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2. INTRODUCTION

This report presents the performance results of U.S. Aluminum, Inc. Series 7400 Aluminum Fixed Window. Tests were conducted at the U.S. Aluminum, Inc. testing facility in Waxahachie, TX.

3. SCOPE

Construction Consulting Laboratory, *International* (**CCLI**) was requested to witness and report the testing results of U.S. Aluminum, Inc. Series 7400 Aluminum Fixed Window. Tests were performed in accordance with ANSI/AAMA/NWWDA 101-I.S.2-97 test specification.

4. SUMMARY

The U.S. Aluminum, Inc. Series 7400 Aluminum Fixed Window was tested in accordance with ANSI/AAMA/NWWDA 101-I.S.2-97 test specifications and achieved an Architectural Window Design F-AW95 classification.

5. TEST SPECIMEN

Product Type:

Aluminum Fixed Window, Product Drawings, Appendix A,

Series Model:

U.S. Aluminum, Inc. Series 7400

Publication No:

ANSI/AAMA/NWWDA 101-I.S.2-97 F-AW95 60 x 96

Frame Size:

5'-0" x 8'-0"

Configuration:

0

Refer to Mock-Up drawings in **Appendix A**. This report is not complete unless this laboratory symbol is stamped onto drawings.

Construction Consulting Laboratory, International

1601 Luna Road Carrollton, Texas 75006

Phone (972) 242-0556

Report # () Reviewed By_

Date: 11-21-13

Weather-Stripping: None

Hardware: None



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1. PROJECT DATA

Project:

AAMA Performance Test

Series 7400 Aluminum Fixed Window

Date of Testing:

October 8, 2002

Tested For:

U.S. Aluminum, Inc. 200 Singleton Drive

Waxahachie, TX 75165

Witnessed By:

(All or Partial Viewing)

Terry Hopgood

U.S. Aluminum, Inc.

Jeffrey Grump

Construction Consulting Laboratory, International



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Glass: 1" overall thickness sealed insulating glass: 2 pcs. 1/4" annealed glass with 1/2" air space.

Glazing: Interior glazed with 1/8" polyshim tape and silicone cap bead at exterior of glass with aluminum snap in glazing bead with drive in wedge gasket at interior of glass.

Weep Arrangement: None

Sealant: Narrow joint seam sealer at all frame corners.

Reinforcement: None

Installation Features: Test specimen was installed in a #2 (2" x 8") yellow pine wood test buck attached with #10 x 2 1/2" screws spaced 3" from each and 12" apart at interior of frame head, sill and jambs.

Other Features: Frame members are thermally broken using a 14.6 mm thermobar. Frame corners are coped and butted using two (2) #10 x 1" PHSMS.

Date testing started:

October 8, 2002

Date testing completed: October 8, 2002

Test performed at:

U.S. Aluminum testing facility in Carrollton, TX.

6. PERFORMANCE RESULTS

AAMA/NWWDA 101.S.2-97

Specification

Paragraph No Title Of Test **Test Method** Measured Allowed 2.1.2 Air Infiltration ASTM E 283-91 @6.24 PSF 0.086 cfm/sf 0.10 cfm/sf

(The tested specimen exceeds the performance levels in ANSI/AAMA/NWWDA 101/I.S.2-97 for air infiltration. Air values were reported at the request of the manufacturer.)

GATEWAY PERFORMANCE - DESIGN F-AW 40

2.1.3	Water Resistance @ 8.00 PSF	ASTM E 547 & 331-96 No Leakage No Leakage		
2.1.4.2	Uniform Structural -Exterior -Interior -Permanent Set	ASTM E 330-97	60.00 PSF 60.00 PSF 0.005	60.00 PSF 60.00 PSF 0.192"



FIXED WINDOW

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Specification Paragraph No	Title Of Test	Test Method	Measured	Allowed
OPTIONAL PERFO	DRMANCE - DESIGN F-AW	95		
4.3	Water Resistance @12.00 PSF	ASTM E 547 & 331	1-96 No Leakage	No Leakage
4.4.1	-Uniform Load Deflection @ 95 PSF -Exterior -Interior	ASTM E 330-97	.023" .018"	.069" .069"
4.4.2	Uniform Structural -Exterior -Interior -Permanent Set	ASTM E 330-97	142.50 PSF 142.50 PSF 0.005	142.50 PSF 142.50 PSF 0.192"
2.1.8	Forced Entry Resistar ASTM F 588-97 Grad		No Entry	No Entry

Detailed extrusion and assembly drawings indicating measured wall thickness and corner construction are on file and were compared to the test sample submitted. These records will be retained at **CCLI** for a period of four years.

7. CONCLUSION

The test specimen, U.S. Aluminum, Inc. Series 7400 Aluminum Fixed Window meets the Architectural Window F-AW95 performance requirements of the ANSI/AAMA/NWWDA 101 I.S.2-97 test specification. The above results were obtained by using the designated test methods and indicate compliance with the above specification. This report does not constitute certification of this product, which may only be granted by the program administrator.

Respectfully submitted,

CONSTRUCTION CONSULTING LABORATORY, INTERNATIONAL

TESTING TECHNICIAN

WESLEY A. WILSON TESTING MANAGER