

ALL WEATHER ARCHITECTURAL ALUMINUM TEST REPORT

SCOPE OF WORK

AAMA/WDMA/CSA 101/I.S.2/A440 TESTING ON 8150 SLIDING GLASS DOOR, NOMINAL SIZE 95 X 83

REPORT NUMBER

L4626.01-301-44 R0

TEST DATES

09/15/20 - 10/19/20

ISSUE DATE

04/16/21

RECORD RETENTION END DATE

10/19/30

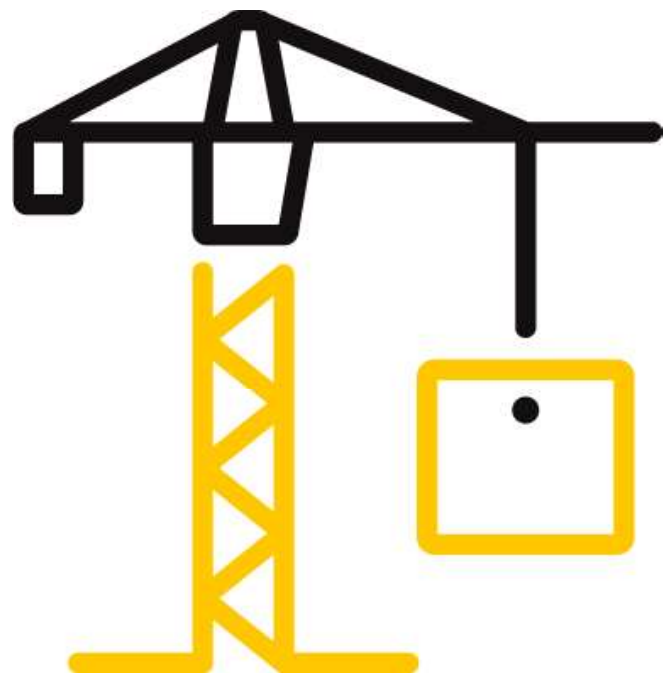
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TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM

Report No.: L4626.01-301-44 R0

Date: 04/16/21

REPORT ISSUED TO

ALL WEATHER ARCHITECTURAL ALUMINUM

777 Aldridge Road

Vacaville, California 95688

SECTION 1

SCOPE

Intertek Building & Construction (B&C) was contracted by All Weather Architectural Aluminum to perform testing in accordance with AAMA/WDMA/CSA 101/I.S.2/A440 on their 8150 Sliding Glass Door. Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted at the Intertek B&C test facility in Fresno, California. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

SECTION 2

SUMMARY OF TEST RESULTS

TITLE	RESULTS
AAMA/WDMA/CSA 101/I.S.2/A440-17	Class CW – PG35 Size Tested: 2402 x 2103 mm (95 x 83 in) Type SD
Air Infiltration	1.2 L/s/m ² (0.23 cfm/ft ²)
Canadian Air Infiltration/Exfiltration	A2 Operable
Water Penetration Resistance	260 Pa (5.43 psf)
Design Pressure	±1680 Pa (±35.09 psf)

For INTERTEK B&C:

COMPLETED BY: Ricardo Cortez

TITLE: Technician



Digitally Signed by: Ricardo Cortez

SIGNATURE:

DATE: 04/16/21

REVIEWED BY: Tyler Westerling, P.E.

TITLE: Operations Manager



Digitally Signed by: Tyler Westerling

SIGNATURE:

DATE: 04/16/21

RC:ms

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SECTION 3

TEST SPECIFICATION(S)/METHOD(S)

The specimens were evaluated in accordance with the following:

AAMA/WDMA/CSA 101/I.S.2/A440-17- *North American Fenestration Standard/Specification for Windows, Doors, and Skylights*

The following test methods were used during testing:

ASTM E2068-00(2016), *Standard Test Method for Determination of Operating Force of Sliding Windows and Doors*

ASTM E283-04(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 E547-00(2016), *Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Cyclic Static Air Pressure Difference*

ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

ASTM F842-17, *Standard Test Methods for Measuring the Forced Entry Resistance of Sliding Door Assemblies, Excluding Glazing Impact*

ASTM E987-88(2017), *Standard Test Methods for Deglazing Force of Fenestration Products*

SECTION 4

MATERIAL SOURCE/INSTALLATION

Test specimen was provided by the client. Representative samples of the test specimen(s) will be retained by Intertek B&C for a minimum of three years from the test completion date.

The specimen was installed into a Douglas-Fir wood buck. The rough opening allowed for a 1/4" shim space at Sill and right Jamb. and the exterior perimeter of the specimen was sealed to the test buck.

LOCATION	ANCHOR DESCRIPTION	ANCHOR SPACING
Head	#6 x 1-5/8" Philips flat head wood screw	1" from corner, 12" on center
Jambs	#6 x 1-5/8" Philips flat head wood screw	1" from corners, 11-1/2" on center
Sill	Set in sealant	Fully bedded

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SECTION 5

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Dennis Janzen	Intertek B&C
Tyler Westerling, P.E.	Intertek B&C

SECTION 6

TEST SPECIMEN DESCRIPTION

Product Type: Sliding Door

Series/Model: 8150 Sliding Glass Door

Product Sizes:

OVERALL AREA:	WIDTH		HEIGHT	
	Millimeters	Inches	Millimeters	Inches
5.05 m ² (54.4 ft ²)				
Overall size	2402	94-9/16	2103	82-13/16
Operable panel	1210	47-5/8	2055	80-7/8
Fixed Panel	1235	48-5/8	2055	80-7/8

Frame Construction:

MEMBER	MATERIAL	DESCRIPTION
Head, Sill, Jamb	Aluminum	Thermally broken
	JOINERY TYPE	DETAIL
All corners	Butted	Screwed and Sealed

Panel Construction:

MEMBER	MATERIAL	DESCRIPTION
Rails, Stiles	Aluminum	Thermally broken
	JOINERY TYPE	DETAIL
All corners	Butted	Screwed and Sealed

Reinforcement: *No reinforcement was utilized.*

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Weatherstripping:

DESCRIPTION	QUANTITY	LOCATION
Polypile with center fin	1 row	Perimeter of operable panel
Polypile with center fin	1 row	Fixed Meeting stile

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	LITE COMPOSITION	GLAZING METHOD
1" IG	Foam	3/16" tempered, Interior/Exterior	Rubber Glazing Bead, Interior and exterior wet glazed

LOCATION	QUANTITY	DAYLIGHT OPENING Millimeters	Inches	GLASS BITE
Panel	1 per panel	1060 x 1890	41-3/4 x 74-7/16	1/2"

Drainage:

METHOD	SIZE	QUANTITY	LOCATION
Weep with slot	1-1/4" wide by 1/4" high	2	1/2" from jamb, on sill

Hardware:

DESCRIPTION	QUANTITY	LOCATION
Lock and keeper	1	48" from sill, on lock jamb
Handle	1	41" from sill, lock stile
Roller Assembly	1 set	Operable panel – bottom rail
Roller track	1	Full span of operable panel channel sill

Screen Construction: *No screen was utilized.*

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SECTION 7

TEST RESULTS

The temperature during testing was 24°C (75°F) Controlled environment. The results are tabulated as follows:

TITLE OF TEST	RESULTS	ALLOWED	NOTE
Operating Force, per ASTM E2068	Initiate Motion: 125 N (28 lbf) Maintain Motion: 107 N (24 lbf) Latches: 62 N (14 lbf)	135 N (30.35 lbf) max 110 N (24.73 lbf) max Report only	
Air Leakage, Infiltration per ASTM E283 at 75 Pa (1.57 psf)	1.2 L/s/m ² (0.23 cfm/ft ²)	<u>Maximum</u> 1.5 L/s/m ² (0.3 cfm/ft ²)	1, 2
Air Leakage, Exfiltration per ASTM E283 at 75 Pa (1.57 psf)	1.0 L/s/m ² (0.20 cfm/ft ²)	<u>Maximum</u> 1.5 L/s/m ² (0.3 cfm/ft ²)	1, 2
Canadian Air Infiltration/Exfiltration Level	A2 Operable	N/A	
Water Penetration, per ASTM E547 at 260 Pa (5.43 psf)	Pass	No leakage	
Uniform Load Deflection, per ASTM E330 Deflections taken at <u>Interlock</u> +1680 Pa (+35.09 psf) -1680 Pa (-35.09 psf)	11.0 mm (0.44") 11.4 mm (0.45")	<u>Maximum:</u> 11.6 mm (0.46") 11.6 mm (0.46")	3,4
Uniform Load Structural, per ASTM E330 Permanent set taken at <u>Interlock</u> +2520 Pa (+52.63 psf) -2520 Pa (-52.63 psf)	0.4 mm (0.02") 0.3 mm (0.01")	<u>Maximum:</u> 8.1 mm (0.32") 8.1 mm (0.32")	3,4
Forced Entry Resistance, per ASTM F842, Type: A - Grade: 20	Pass	No entry	
Deglazing, per ASTM E987 Operating direction, 320 N (70 lbf) Remaining direction, 230 N (50 lbf)	Pass	Meets as stated	
	Pass	Meets as stated	

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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: Test Date 10/15/20 , Time: 12:52 PM

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

Note 4: *Tape and film were used to seal against air leakage during structural testing. In our opinion, the tape and film did not influence the results of the test.*

SECTION 8 ALTERATIONS

No alterations were required.

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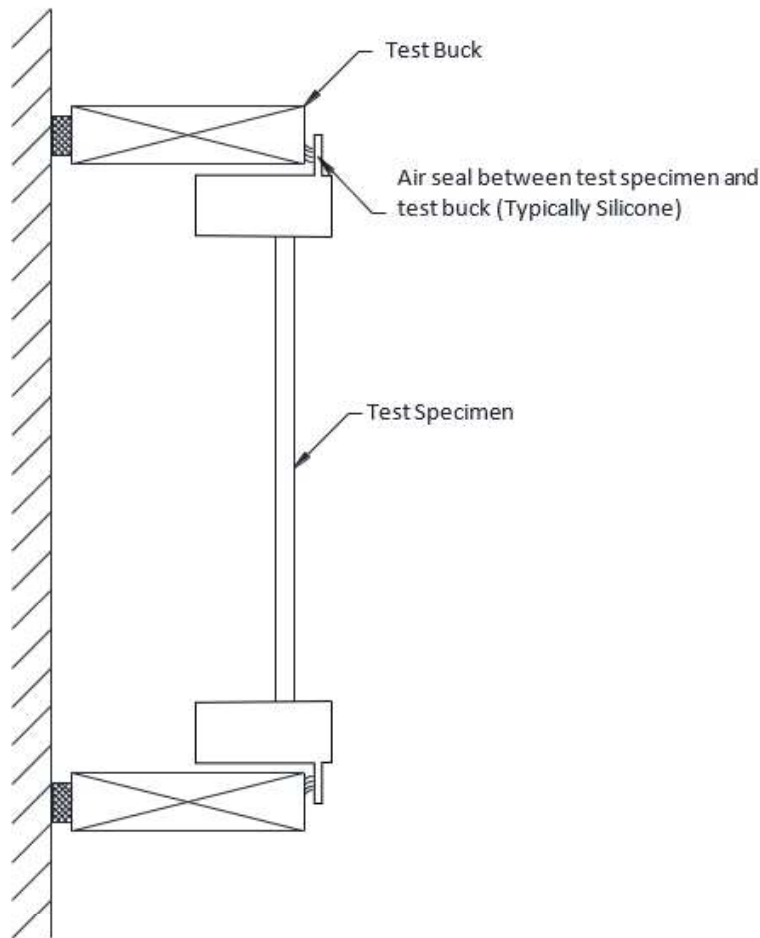
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SECTION 9

LOCATION OF AIR SEAL

The air seal between the test specimen and the test wall is detailed below. The seal is made of foam weatherstripping and is attached to the edge of the test specimen buck. The test specimen buck is placed against the test wall and clamped in place, compressing the weatherstripping and creating a seal.



SECTION 10

CONCLUSION

The specimen tested successfully met the performance requirements for the following rating:

Class CW – PG35 Size Tested: 2402 x 2103 mm (95 x 83 in) Type SD



Total Quality. Assured.

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SECTION 11 DRAWINGS

The test specimen drawings have been reviewed by Intertek B&C and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Intertek B&C per the drawings included in this report. Any deviations are documented herein or on the drawings.