



SERIES 6100 WINDOW SYSTEM

PRODUCT SPECIFICATIONS | EXTRUSION DETAILS | TEST REPORTS



SERIES 6100 3 ¾" THERMALLY OPTIMIZED WINDOW SYSTEM



INTRODUCTION

Our Series 6100 window line is an outside glazed, project out window system designed to meet lofty energy and structural performance goals. It is a strutted system, meaning two separate aluminum profiles are mechanically joined using a glass fiber reinforced polyamide thermal break.

The Series 6100 window line is available in the following finishes:

- Class I Clear Anodized**
- Class I Bronze Anodized**
- ** Indicates Finishes In Stock.

TESTING

Our Series 6100 windows have been tested to the AAMA 101 performance grades listed below: (Test report copies are in the back of this section)

- Fixed CW60
- Casement CW60
- Awning CW30

CONSTRUCTION

The frame and vent corners are joined using top of the line European corner keys. We use both hollow and groove corner keys to provide maximum structural rigidity. TDL bars are attached using corner keys as well as screw-spline connections. The frame sill, vents and TDL bars contain weep provisions for water performance.

HARDWARE

Projected and Casement Windows: Both casements and awnings use heavy duty concealed hinges that are invisible when the window is closed. There are two operator options available: Truth Encore Roto and Fapim OUT limited opening. Both operators can be used in casements and awnings and can be mixed to meet project needs.

SCREENS

This system uses an extruded aluminum screen with corner key construction. Screens are retained using leaf springs at the corners and fit into a feature on the window frame. There is no fabrication required to attach screens.



GLAZING

The Series 6100 is available with 1" and 1.25" OA insulated glass units to yield a wide range of energy performance as needed.

WEATHER-STRIPPING

The 6100 Series windows all use foam bulb seals as well as a central gasket in casements/awnings. Operable units have 3 weather strip locations which creates excellent resistance to water penetration. All weatherstrip can be field serviced in the field should damage occur.

INSTALLATION GUIDELINES

- All windows must be installed in prepared openings in accordance with AAMA recommendations and the below-listed manufacturers' recommendations (If shop drawings are required, please refer to approved shop drawings for installation):
- All vent panels must be closed and locked.
- Each unit must be installed level, plumb and square with a ¹/₄" clearance on the jambs and the header of the window.
- Remove wet plaster, mortar, stucco and cement immediately. (Note: windows should only be cleaned with mild soap and water.)
- Do not set items on the sill.
- In nail-on applications, a bead of caulking material should be applied to the inside nail-on fin just before installation to insure a water tight seal between the building and the window. In an equal leg window a bead of caulking material should also be applied.
- Any attachment screws or bolts should be sealed during the process of installation.
- After installation is complete, building paper and stucco wire (if a stucco application) should overlap the window nail-on flange.

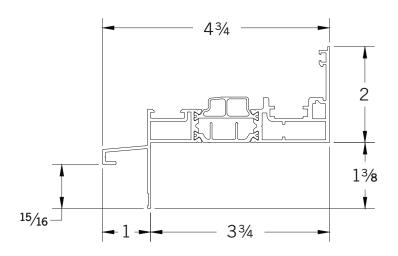
CARE & MAINTENANCE

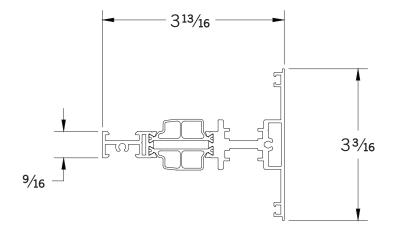
- Windows should be kept free of all dust, dirt, paint and plaster.
- The sill should be kept clean at all times. A vacuum cleaner with a crevice attachment is recommended.
- Window should only be cleaned with mild soap and water.
- **Caution:** Damage will occur to the frame finish, and to the sealed glass unit, if solvents, petroleum products, or caustic chemicals such as acetone or paint thinner are used to clean window frames. Damage caused by this type of abuse is not covered under warranty.





611 NAIL ON FRAME

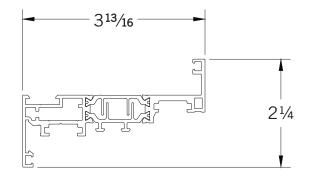


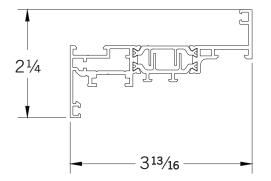




615 ENCORE VENT

614 FAPIM VENT

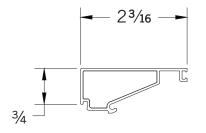


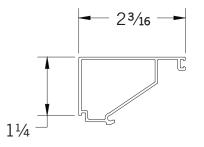






6182 SASH BEAD FOR 1" OA GLASS

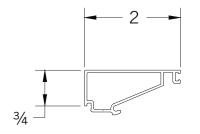


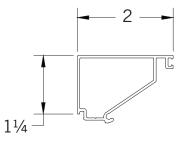






6180 SASH BEAD FOR 1.25" OA GLASS 6181 FRAME BEAD FOR 1.25" OA GLASS

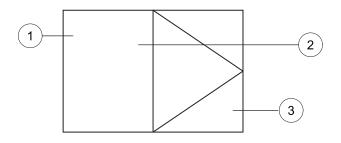


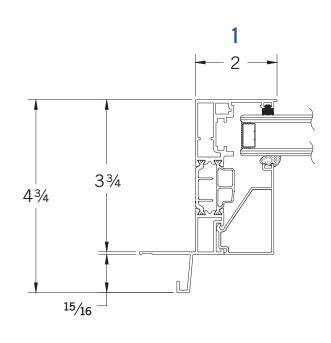


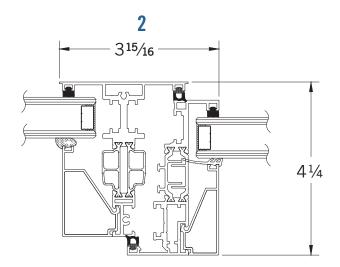


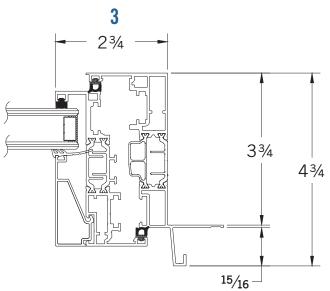
SERIES 6100 CONFIGURATIONS ASSEMBLY DRAWINGS

NAIL ON CASEMENT FIXED / CASEMENT





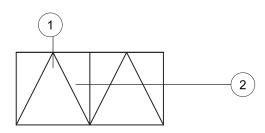


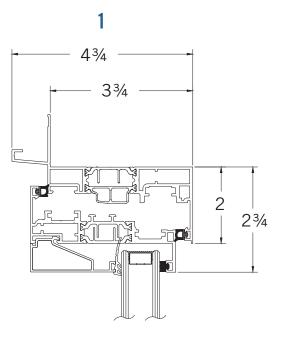




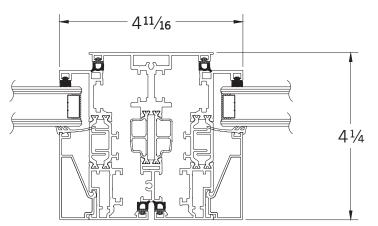
SERIES 6100 CONFIGURATIONS ASSEMBLY DRAWINGS

NAIL ON AWNING AWNING / AWNING





2





intertek Total Quality. Assured.

ALL WEATHER ARCHITECTURAL ALUMINUM TEST REPORT

SCOPE OF WORK

AAMA/WDMA/CSA 101/I.S.2/A440 TESTING ON SERIES 6100 CASEMENT WINDOW

REPORT NUMBER M0351.01-301-44-R1

TEST DATE 04/22/21

 ISSUE DATE
 REVISION 1 DATE

 07/30/21
 09/01/21

PAGES 19

DOCUMENT CONTROL NUMBER RT-R-AMER-Test-2804 (01/15/21) © 2017 INTERTEK



intertek

Total Quality. Assured.

2524 E. Jensen Ave Fresno, California 93706 Telephone: 559-233-8705

Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0351.01-301-44-R1 Date: 09/01/21

REPORT ISSUED TO

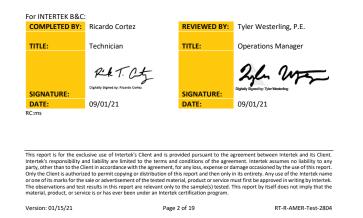
ALL WEATHER ARCHITECTURAL ALUMINUM 777 Aldridge Road Vacaville, CA 95688

SECTION 1 SCOPE

Architectural Testing, Inc. (an Intertek company) dba 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 Series 6100 Casement Window. 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.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. Intertek B&C will service this report for the entire test record retention period. The test record retention period ends ten years after the test date. Test records, such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained for two years after the test date

Unless differently required, Intertek reports apply the "Simple Acceptance" rule, also called "Shared Risk approach," of ILAC-G8:09/2019, Guidelines on Decision Rules and Statements of Conformity.





intertek

Total Quality. Assured.

Fresno, California 93706 Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

2524 E. Jensen Ave

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0351.01-301-44-R1 Date: 09/01/21

SECTION 2

SUMMARY OF TEST RESULTS

TITLE	RESULTS
AAMA/WDMA/CSA 101/I.S.2/A440-17	Class C – PG60 Size Tested: 800 x 1500 mm (32 x 59 in) Type C
Air Infiltration	0.2 L/s/m ² (<0.03 cfm/ft ²)
Canadian Air Infiltration/Exfiltration Level	A3
Water Penetration Resistance Test Pressure	440 Pa (9.19 psf)
Design Pressure	±1920 Pa (±40.10 psf)

Reference must be made to Intertek B&C Report No. M0351.01-301-44 R1, dated 09/01/21 for complete test specimen description and detailed test results.

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:

AAMA 205-15, In-Plant Testing Guidelines for Manufacturers and Independent Laboratories

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 F588-17, Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact

Page 3 of 19

intertek

Total Quality. Assured.

2524 E. Jensen Ave Fresno, California 93706

Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

RT-R-AMER-Test-2804

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0351.01-301-44-R1 Date: 09/01/21

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 two 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 and the exterior perimeter of the specimen was sealed to the test buck.

LOCATION	ANCHOR DESCRIPTION	ANCHOR SPACING
(Nail Fin) Head, Sill	#8 x 1-5/8" flat head screw	6" from corners, 12" on center
(Nail Fin) Jambs	#8 x 1-5/8" flat head screw	6" from corners, Midspan

SECTION 5

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Meng Vang	Intertek B&C
Tyler Westerling, P.E.	Intertek B&C

SECTION 6

TEST SPECIMEN DESCRIPTION Product Type: Casement Series/Model: Series 6100 Casement Window

Product Size(s):

OVERALL AREA:	WIDTH		HEIGHT		
1.20 m ² (12.9 ft ²)	Millimeters	Inches	Millimeters	Inches	
Overall size	800	31-1/2	1500	59-1/16	
Vent	773	30-7/16	1475	58-1/16	

Frame Construction:

Version: 01/15/21

MEMBER	MATERIAL	DESCRIPTION
Head, Jambs, Sill	Aluminum	Thermally broken
	JOINERY TYPE	DETAIL
All corners	Mitered	Corner Keys, Screwed, Sealed
Vent to Frame	Multi-Arm Hinge	Screwed, Sealed

Page 4 of 19

Version: 01/15/21



Total Quality. Assur	^{ed.} FOR ALL WEAT	HER ARCHIT	ECTURAL A	Fa	ephone: 559-233-8705 csimile: 717-764-4129 w.intertek.com/building
Report No.: M0 Date: 09/01/21)351.01-301-44-R	1			
Vent Constructi					
MEMBER	MATE			SCRIPTION	
Rails, Stiles	Alumi			ermally broken	
		RY TYPE		TAIL	
All corners	Mitere			ner Keys, Screwed, Sea	led
Reinforcement: Weatherstrippir	No reinforcemer	nt was utilized.			
DESCRIPTION	0	QUANTITY	LOCAT	ION	
Foam gasket		1 row		rails, stiles along therm	nal break
Hollow vinyl bu	b gasket	1 row		- head, jambs, sill facir	
Hollow vinyl bu	0	1 row		rails, stiles facing fram	•
test specimen(s) GLASS TYPE	SPACER TYPE Kodispace 4SG	LITE COMP 3/16" temp		GLAZING METHOD Glass set on setting blo	ocks Exterior
1" IG	Kodispace 4SG Thermoplastic	3/16" temp Interior / E		Glass set on setting blo glazed w/ aluminum si	
LOCATION	QUANTITY	DAYLIGHT		<u>.</u> ,	GLASS BITE
		Millimeter	s	Inches	
Vent	1	773 x 1475		30-7/16 x 58-1/16	1/2"
Drainage:					
METHOD SIZ	E	QUANT	ITY LOC	ATION	
Notch 7/8	3" wide by 1/8" h	igh 2	Fran	ne sill @ glazing bead 2-	-1/2" from jamb
Notch 1/2	2" x 1/8"	2	Ven	t – underside of bottom	rail
Hardware:					
DESCRIPTION		UANTITY		ATION	
Roto-dial	1			ne sill – 5-1/2" from hin	
Multi arm hinge				ne head/sill @ hinge jar	
Latch w/ lock ar	m 1		Fran	ne lock jamb 10" from s	ill
Lock arm	1		Fran	ne lock jamb full span	
Screen Construc	tion: No screen v	vas utilized.			

intertek

Total Quality. Assured.

2524 E. Jensen Ave Fresno, California 93706

Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

RT-R-AMER-Test-2804

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0351.01-301-44-R1 Date: 09/01/21

SECTION 7 TEST RESULTS

Version: 01/15/21

The temperature during testing was 24°C (75.4°F). The results are tabulated as follows:

TITLE OF TEST	RESULTS	ALLOWED	NOTE
	Initiate Motion:		
	40 N (8.9 lbf)	60 N (13.49 lbf) max	
Operating Force,	Maintain Motion:		
per ASTM E2068	22 N (5.0 lbf)	30 N (6.74 lbf) max	
	Latches:		
	58 N (13.15 lbf)	100 N (22.48 lbf) max	
Air Leakage,			
Infiltration per ASTM E283	<0.1 L/s/m ²	0.5 L/s/m ²	
at 75 Pa (1.57 psf)	(0.03 cfm/ft ²)	(0.1 cfm/ft ²) max.	1, 2
Air Leakage,			
Exfiltration per ASTM E283	<0.1 L/s/m ²	0.5 L/s/m ²	
at 75 Pa (1.57 psf)	(0.02 cfm/ft ²)	(0.1 cfm/ft ²) max.	1, 2
Canadian Air			
Infiltration/Exfiltration Level	A3	N/A	
Water Penetration,			
per ASTM E547			
at 440 Pa (9.19 psf)	Pass	No leakage	
Uniform Load Deflection,			
per ASTM E330			
Deflections taken			
Between vent snubbers			
+2880 Pa (+60.15 psf)	0.1 mm (0.01")	1.7 mm (0.07") max.	
-2880 Pa (-60.15 psf)	0.1 mm (0.01")	1.7 mm (0.07") max.	3,4
Uniform Load Structural,	1 1	, ,	
per ASTM E330			
Permanent set taken			
Between vent snubbers			
+4320 Pa (+90.23 psf)	0.1 mm (0.01")	1.2 mm (0.05") max.	
-4320 Pa (-90.23 psf)	0.1 mm (0.01")	1.2 mm (0.05") max.	3,4
Forced Entry Resistance,			
per ASTM F588,			
Type: B - Grade: 20	Pass	No entry	
Sash Vertical Deflection			
200 N (45 lbf)	7.0 mm (0.28")	15.5 mm (0.61") max.	
Distributed Load	1	No Damage	1

Page 6 of 19



intertek Total Quality: Assured.	2524 E. Jensen Ave Fresno, California 93706 Telephone: 559-233-8705 Facismile: 717-764-4129	Intertek Total Quality. Assured.	2524 E. Jensen A Fresno, California 937 Telephone: 559-233-87 Facsimile: 712-764-41
TEST REPORT FOR ALL WEATHER ARCHITECTURAL A Report No.: M0351.01-301-44-R1 Date: 09/01/21	www.intertek.com/building	TEST REPORT FOR ALL WEATHER ARCHITECTU Report No.: M0351.01-301-44-R1 Date: 09/01/21	www.intertek.com/buildi
Note 1: The tested specimen meets (or exceeds) AAMA/WDMA/CSA 101/I.S.2/A440 for air leakage resiston Note 2: Test Date 04/22/21, Time: 10:00 AM Note 3: Loads were held for 10 seconds. Note 4: Tape and film were used to seal against air le opinion, the tape and film did not influence the results of SECTON 8 AITERATIONS No alterations were required.	nce. akage during structural testing. In our		of the test specimen buck. The test specime



intertek	2524 E. Jensen Ave Fresno, California 93706	intertek	2524 E. Jensen Ave Fresno, California 93706
Total Quality. Assured.	Telephone: 559-233-8705 Facsimile: 717-764-4129	Total Quality. Assured.	Telephone: 559-233-8705 Facsimile: 717-764-4129
TEST REPORT FOR ALL WEATHER ARCHITECTURA Report No.: M0351.01-301-44-R1 Date: 09/01/21	www.intertek.com/building	TEST REPORT FOR ALL WEATHER ARCHITECTUP Report No.: M0351.01-301-44-R1 Date: 09/01/21	www.intertek.com/building
SECTION 10 CONCLUSION		SECTION 11	
The specimens tested successfully met the performan	ce requirements for the following ratings:	DRAWINGS	
Class C – PG60, Size Tested: 800 x 15	i00 mm (32 x 59 in) Type C	The test specimen drawings have been reviewed by test specimen(s) reported herein. Test specimen co the drawings included in this report. Any deviations	nstruction was verified by Intertek B&C per
		All drawings are on file with Intertek-ATI.	
Version: 01/15/21 Page 9 of 19	RT-R-AMER-Test-2804	Version: 01/15/21 Page 10 of	19 RT-R-AMER-Test-2804



inter Total Quality. Assu			2524 E. Jensen Ave Fresno, California 93706 Telephone: 559-233-8705 Facsimile: 717-764-4129 www.interek.com/building
Report No.: M Date: 09/01/2	0351.01-301-44-R1	R ARCHITECTURAL AI	UMINUM
SECTION 12 REVISION LOG			
REVISION #	DATE	PAGES	REVISION
0	07/30/21 09/01/21	N/A Page 5	Original Report Issue IG spacer type changed
		Page 19 of 19	RT-R-AMER-Test-2804

SERIES 6100

TESTING



intertek Total Quality. Assured.

ALL WEATHER ARCHITECTURAL ALUMINUM TEST REPORT

SCOPE OF WORK

AAMA/WDMA/CSA 101/I.S.2/A440 TESTING ON SERIES 6100 AWNING PROJECTED WINDOW

REPORT NUMBER M0352.01-301-44-R1

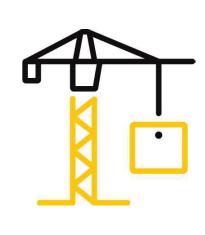
TEST DATES 03/17/21 - 03/23/21

 ISSUE DATE
 REVISION 1 DATE

 07/30/21
 09/01/21

PAGES 19

DOCUMENT CONTROL NUMBER RT-R-AMER-Test-2804 (01/15/21) © 2017 INTERTEK



intertek

Total Quality. Assured.

2524 E. Jensen Ave Fresno, California 93706 Telephone: 559-233-8705

Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0352.01-301-44-R1 Date: 09/01/21

REPORT ISSUED TO

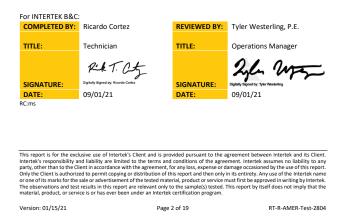
ALL WEATHER ARCHITECTURAL ALUMINUM 777 Aldridge Road Vacaville, CA 95688

SECTION 1 SCOPE

Architectural Testing, Inc. (an Intertek company) dba 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 Series 6100 Awning Projected Window. 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.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. Intertek B&C will service this report for the entire test record retention period. The test record retention period ends ten years after the test date. Test records, such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained for two years after the test date

Unless differently required, Intertek reports apply the "Simple Acceptance" rule, also called "Shared Risk approach," of ILAC-G8:09/2019, Guidelines on Decision Rules and Statements of Conformity.





intertek

Total Quality. Assured.

Fresno, California 93706 Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

2524 E. Jensen Ave

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0352.01-301-44-R1 Date: 09/01/21

SECTION 2

SUMMARY OF TEST RESULTS

TITLE	RESULTS
AAMA/WDMA/CSA 101/I.S.2/A440-17	Class C – PG60, Size Tested: 1200 x 800 mm (47 x 32 in) Type AP
Air Infiltration	<0.1 L/s/m ² (<0.01 cfm/ft ²)
Canadian Air Infiltration/Exfiltration Level	A3
Water Penetration Resistance Test Pressure	580 Pa (12.11 psf)
Design Pressure	±3360 Pa (±70.18 psf)
Reference must be made to Intertek B&C Rep	ort No. M0352.01-301-44 R1, dated 09/01/21 for

complete test specimen description and detailed test results.

SECTION 3

Version: 01/15/21

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:

AAMA 205-15, In-Plant Testing Guidelines for Manufacturers and Independent Laboratories

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 F588-17, Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact

intertek

Total Quality. Assured.

2524 E. Jensen Ave Fresno, California 93706

Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0352.01-301-44-R1 Date: 09/01/21

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 two 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 and the exterior perimeter of the specimen was sealed to the test buck.

LOCATION	ANCHOR DESCRIPTION	ANCHOR SPACING
(Nail Fin) Head, Sill	#8 x 1-5/8" flat head screw	6" from corners, 10" on center
(Nail Fin) Jambs	#8 x 1-5/8" flat head screw	6" from corners, midspan

SECTION 5

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Meng Vang	Intertek B&C
Tyler Westerling, P.E.	Intertek B&C

SECTION 6

TEST SPECIMEN DESCRIPTION

Product Type: Awning

Series/Model: Series 6100 Awning Projected Window

Product Size(s):
OVERALL AREA: WIDTH HEIGHT

0.96 m ² (10.3 ft ²)	Millimeters	Inches	Millimeters	Inches
Overall size	1200	47-1/4	800	31-1/2
Vent	1175	46-1/4	775	30-1/2

Frame Construction:		
MEMBER	MATERIAL	DESCRIPTION
Head, Jambs, Sill	Aluminum	Thermally broken
	JOINERY TYPE	DETAIL
All corners	Mitered	Corner Keys, Screwed, Sealed
Vent to Frame	Stay Arms	Screwed, Sealed

Page 4 of 19

Page 3 of 19

RT-R-AMER-Test-2804

Version: 01/15/21



Total Quality.	Assured.			Tele Fac	2524 E. Jensen Ave resno, California 93706 phone: 559-233-8705 csimile: 717-764-4129 v.intertek.com/building
	ORT FOR ALL WEATH M0352.01-301-44-R1 1/21		URAL A		
Vent Constr					
MEMBER		ERIAL		DESCRIPTION	
Rails, Stiles				Thermally broken	
All corners		ERY TYPE		DETAIL Corner Keys, Screwed, S	and a d
	ent: No reinforcement				
Weatherstr					
DESCRIPTIC		QUANTITY	LOCA		and the second
Foam gaske		row		- rails, stiles along therr	
		row		e – head, jambs, sill faci	-
Hollow viny	/l bulb gasket 1	row	Vent	 rails, stiles facing fram 	e
test specime	en(s) can be made.			or inadequacy of the gl	ass in any glazed
GLASS TYP		LITE COMPOS		GLAZING METHOD	
1" IG	Kodispace 4SG Thermoplastic	3/16" temper Interior / Exte		Glass set on setting t glazed w/ aluminum	
LOCATION	QUANTITY	DAYLIGHT OF		giazea wy alaminani	GLASS BITE
		Millimeters		Inches	
Vent	1	773 x 1475		30-7/16 x 58-1/16	1/2"
-					
Drainage: METHOD	SIZE	OLIANITITY	LOCA	TION	
		QUANTITY			/2ll freeze is such
Notch	7/8" wide by 1/8" hig			e sill @ glazing bead 2-1	
Notch	1/2" x 1/8"	2	Vent	 underside of bottom r 	ail
Hardware:					
DESCRIPTIO	ON C	QUANTITY		LOCATION	
Roto-dial	1			Frame Sill – Midspan	
Hinge Arms	5 2			Frame Head @ Jambs	
Latch	2			Frame Jambs – 10" from	n Sill
Screen Con	struction: No screen w	was utilized.			

intertek

Total Quality. Assured.

2524 E. Jensen Ave Fresno, California 93706

Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0352.01-301-44-R1 Date: 09/01/21

SECTION 7 TEST RESULTS

The temperature during testing was 21°C (69°F). The results are tabulated as follows:

TITLE OF TEST	RESULTS	ALLOWED	NOTE
	Initiate Motion:		
	26 N (5.78 lbf)	60 N (13.49 lbf) max	
Operating Force,	Maintain Motion:		
per ASTM E2068	18 N (3.95 lbf)	30 N (6.74 lbf) max	
	Latches:		
	18 N (4 lbf)	100 N (22.48 lbf) max	
Air Leakage,			
Infiltration per ASTM E283	<0.1 L/s/m ²	0.5 L/s/m ²	
at 75 Pa (1.57 psf)	(<0.01 cfm/ft ²)	(0.1 cfm/ft ²) max.	1, 2
Air Leakage,			
Exfiltration per ASTM E283	0.2 L/s/m ²	0.5 L/s/m ²	
at 75 Pa (1.57 psf)	(0.04 cfm/ft ²)	(0.1 cfm/ft ²) max.	1, 2
Canadian Air			
Infiltration/Exfiltration Level	A2	N/A	
Water Penetration,			
per ASTM E547			
at 580 Pa (12.11 psf)	Pass	No leakage	
Uniform Load Deflection,			
per ASTM E330			
Deflections taken at			
Vent Top Rail			
+2880 Pa (+60.15 psf)	<0.1 mm (<0.01")	6.1 mm (0.24") max.	
-2880 Pa (-60.15 psf)	0.4 mm (0.02")	6.1 mm (0.24") max.	3,4
Uniform Load Structural,		. ,	
per ASTM E330			
Permanent set taken at			
Vent Top Rail			
+4320 Pa (+90.23 psf)	<0.1 mm (<0.01")	4.3 mm (0.17") max.	
-4320 Pa (-90.23 psf)	0.1 mm (0.01")	4.3 mm (0.17") max.	3,4
Forced Entry Resistance,	0.1 mm (0.01)	4.5 mm (0.17 / max.	3,-
per ASTM F588,			
Type: B - Grade: 20	Pass	No entry	
Awning, Hopper, Projected			
Hardware Load Test]
70 N (15.74 lbf)	4.0 mm (0.16")	Report Only]

Page 6 of 19

Version: 01/15/21



Test REPORT FOR ALL WEATHER ARCHITECTURAL A Report No.: M0352.01-301-44-R1 Date: 09/01/21	2524 E. Jensen Ave Fresno, California 93706 Telephone: 559-233-8705 Facsimile: 717-76-4129 www.intertek.com/building	Test REPORT FOR ALL WEATHER ARCHITECT Report No.: M0352.01-301-44-R1 Date: 09/01/21	2524 E. Jense Fresno, California 9 Telephone: 559-233 Facsimile: 727-764 www.intertek.com/bui
Note 1: The tested specimen meets (or exceeds) AAMA/WDMA/CSA 101/1.5.2/A440 for air leakage resistan Note 2: Test Date 03/18/21, Time: 11:15 AM Note 3: Loads were held for 10 seconds. Note 4: Tape and film were used to seal against air lea opinion, the tape and film did not influence the results of SECTON 8 AITERATIONS No alterations were required.	nce. Ikage during structural testing. In our	<section-header></section-header>	ge of the test specimen buck. The test specir
Version: 01/15/21 Page 7 of 19	RT-R-AMER-Test-2804	Version: 01/15/21 Page 8	of 19 RT-R-AMER-Test



Example and the present of the pres	Example Construction S242.6 Januari Mage Event Second Eve
TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0352.01-301-44-R1 Date: 09/01/21 SECTION 10 CONCLUSION The specimens tested successfully met the performance requirements for the following ratings:	TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0352.01-301-44-R1 Date: 09/01/21 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.
CONCLUSION The specimens tested successfully met the performance requirements for the following ratings:	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.
	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.
	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.
	All drawings are on file with Intertek-ATI.



Total Quality. Assure				2524 E. Jensen Ave Fresno, California 93706 Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building
TEST REPORT I Report No.: M0 Date: 09/01/21	352.01-301-44-R		ECTURAL ALUMINUM	manual second banang
SECTION 12 REVISION LOG				
REVISION #	DATE	PAGES	REVISION	
0	07/30/21	N/A	Original Report Issue	
1	09/01/21	Page 5	IG Spacer Type Changed	
		Page 6	Uniform Load Structural A	llowable Corrected
Version: 01/15/21		Paį	ge 19 of 19	RT-R-AMER-Test-2804

777 Aldridge Road | Vacaville, CA 95688 | 800.680.5800 | www.allweatheraa.com

SERIES 6100

TESTING



intertek Total Quality. Assured.

ALL WEATHER ARCHITECTURAL ALUMINUM TEST REPORT

SCOPE OF WORK

AAMA/WDMA/CSA 101/I.S.2/A440 TESTING ON SERIES 6100 CASEMENT WINDOW WITH FAPIM HARDWARE

REPORT NUMBER M0455.01-301-44 R1

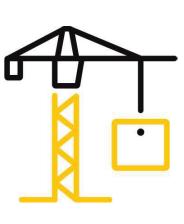
TEST DATES 04/22/21 - 04/23/21

 ISSUE DATE
 REVISION 1 DATE

 07/30/21
 09/01/21

PAGES

DOCUMENT CONTROL NUMBER RT-R-AMER-Test-2804 (01/15/21) © 2017 INTERTEK



intertek

Total Quality. Assured.

2524 E. Jensen Ave Fresno, California 93706

Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0455.01-301-44 R1 Date: 09/01/21

REPORT ISSUED TO

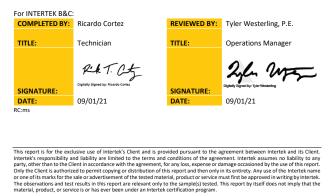
ALL WEATHER ARCHITECTURAL ALUMINUM 777 Aldridge Road Vacaville, CA 95688

SECTION 1 SCOPE

Architectural Testing, Inc. (an Intertek company) dba 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 Series 6100 Casement Window with Fapim Hardware. 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 Freso, California. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. Intertek B&C will service this report for the entire test record retention period. The test record retention period ends ten years after the test date. Test records, such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained for two years after the test date

Unless differently required, Intertek reports apply the "Simple Acceptance" rule, also called "Shared Risk approach," of ILAC-G8:09/2019, Guidelines on Decision Rules and Statements of Conformity.



Version: 01/15/21 Page 2 of 19 RT-R-AMER-Test-2804



intertek

Total Quality. Assured.

Fresno, California 93706 Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

2524 E. Jensen Ave

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0455.01-301-44 R1 Date: 09/01/21

SECTION 2

SUMMARY OF TEST RESULTS

TITLE	RESULTS
AAMA/WDMA/CSA 101/I.S.2/A440-17	Class C - PG80 Size Tested: 810 x 1500 mm (32 x 59 in)
Air Infiltration	<0.1 L/s/m ² (<0.01 cfm/ft ²)
Canadian Air Infiltration/Exfiltration Level	A3
Water Penetration Resistance Test Pressure	580 Pa (12.11 psf)
Design Pressure	±3840 Pa (±80.20 psf)
Reference must be made to Intertek B&C Report N	

Reference must be made to Intertek B&C Report No. M0455.01-301-44, dated 08/30/21 for complete test specimen description and detailed test results.

SECTION 3

Version: 01/15/21

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:

AAMA 205-15, In-Plant Testing Guidelines for Manufacturers and Independent Laboratories

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 F588-17, Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact

intertek

Total Quality. Assured.

2524 E. Jensen Ave Fresno, California 93706

RT-R-AMER-Test-2804

Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0455.01-301-44 R1 Date: 09/01/21

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 two 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 and the exterior perimeter of the specimen was sealed to the test buck.

LOCATION	ANCHOR DESCRIPTION	ANCHOR SPACING
(Nail Fin) Head, Sill	#8 x 1-5/8" flat head screw	6" from corners, 12" on center
(Nail Fin) Jambs	#8 x 1-5/8" flat head screw	6" from corners, Midspan

SECTION 5

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Meng Vang	Intertek B&C
Tyler Westerling, P.E.	Intertek B&C

SECTION 6

TEST SPECIMEN DESCRIPTION

Product Type: Casement Series/Model: Series 6100 Casement with Fapim Hardware

Product Size(s):

OVERALL AREA:	WIDTH	WIDTH				
1.22 m² (13.1 ft²)	millimeters	inches	millimeters	inches		
Overall size	810	31-7/8	1500	59-1/16		
Vent	775	30-1/2	1475	58-1/16		

Frame Construction:

Version: 01/15/21

Frame construction.		
MEMBER	MATERIAL	DESCRIPTION
Head, Jambs, Sill	Aluminum	Thermally broken
	JOINERY TYPE	DETAIL
All corners	Mitered	Corner Keys, Screwed, Sealed
Vent to Frame	Multi-Arm Hinge	Screwed, Sealed

Page 4 of 19

Page 3 of 19



Date: 09/01/2					
Vent Construct		ERIAL		DESCRIPTION	
Rails, Stiles		ninum		Thermally broken	
				DETAIL	
All corners	Mite	red		Corner Keys, Screwed, Sea	led
Weatherstripp DESCRIPTION	bing:	QUANT		ATION	
Foam gasket		1 row	Vent	– rails, stiles along therma	l break
Hollow vinyl bu	ulb gasket	1 row	Fram	ne – head, jambs, sill facing	vent
Hollow vinyl bu	ulb gasket	1 row	Vent	- rails, stiles facing frame	
	onclusions of any ccimen(s) can be SPACER TYPE	made.	arding the ade	quacy or inadequacy of th	e glass in any
glazed test spe GLASS TYPE 1" IG	SPACER TYPE Kodispace 4SG Thermoplastic	made. LITE 3/10 Inte	6" tempered, rior / Exterior	GLAZING METHOD Glass set on setting blo glazed w/ aluminum sn	cks Exterior ap-in bead.
glazed test spe	cimen(s) can be SPACER TYPE Kodispace 4SG	made. LITE 3/10 Inte DAY	COMPOSITION 6" tempered,	GLAZING METHOD Glass set on setting blo glazed w/ aluminum sn	cks Exterior
glazed test spe GLASS TYPE 1" IG	SPACER TYPE Kodispace 4SG Thermoplastic	made. LITE 3/1 Inte DAY	COMPOSITION 6" tempered, rior / Exterior /LIGHT OPENIN	GLAZING METHOD Glass set on setting blo glazed w/ aluminum sn G	cks Exterior ap-in bead.
glazed test spe GLASS TYPE 1" IG LOCATION Vent	ccimen(s) can be SPACER TYPE Kodispace 4SG Thermoplastic QUANTITY	made. LITE 3/1 Inte DAY	COMPOSITION 6" tempered, rior / Exterior /LIGHT OPENING imeters	GLAZING METHOD Glass set on setting blo glazed w/ aluminum sn G Inches	cks Exterior ap-in bead. GLASS BITE
glazed test spe GLASS TYPE 1" IG LOCATION Vent Drainage:	Extimen(s) can be SPACER TYPE Kodispace 4SG Thermoplastic QUANTITY 1	made. LITE 3/10 Inte DAY Mill 773	COMPOSITION 6" tempered, rrior / Exterior /LIGHT OPENING imeters x 1475	GLAZING METHOD Glass set on setting blo glazed w/ aluminum sn G Inches 30-7/16 x 58-1/16	cks Exterior ap-in bead. GLASS BITE
glazed test spe GLASS TYPE 1" IG LOCATION Vent Drainage: METHOD SI	Content of the second s	made. LITE 3/1 Inte DAY Mill 773	COMPOSITION tempered, rior / Exterior /LIGHT OPENING imeters x 1475 UANTITY LC	GLAZING METHOD Glass set on setting blo glazed w/ aluminum sn G Inches 30-7/16 x 58-1/16 CATION	cks Exterior ap-in bead. GLASS BITE 1/2"
glazed test spe GLASS TYPE 1" IG LOCATION Vent Drainage: METHOD SI Notch 7/	Extimen(s) can be SPACER TYPE Kodispace 4SG Thermoplastic QUANTITY 1	made. LITE 3/1 Inte DAY Mill 773	COMPOSITION 6" tempered, rrior / Exterior /LIGHT OPENING imeters x 1475 UANTITY LC Fra	GLAZING METHOD Glass set on setting blo glazed w/ aluminum sn G Inches 30-7/16 x 58-1/16	cks Exterior ap-in bead. GLASS BITE 1/2"
glazed test spe GLASS TYPE 1" IG LOCATION Vent Drainage: METHOD SI Notch 7/	Accimen(s) can be SPACER TYPE Kodispace 4SG Thermoplastic QUANTITY 1 1 ZE ZE Kodispace 4SG Thermoplastic QUANTITY 1	made. LITE 3/11 Inte DAN Mill 773 Q high 2	COMPOSITION 6" tempered, rrior / Exterior /LIGHT OPENING imeters x 1475 UANTITY LC Fra	GLAZING METHOD Glass set on setting blo glazed w/ aluminum sn G Inches 30-7/16 x 58-1/16 CATION ame sill @ glazing bead 2-	cks Exterior ap-in bead. GLASS BITE 1/2"

intertek

Total Quality. Assured.

2524 E. Jensen Ave Fresno, California 93706

Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0455.01-301-44 R1 Date: 09/01/21

Hardware:

DESCRIPTION	QUANTITY	LOCATION
Actuating Lever (with limit-arm, sliding lock arms and snubbers as a set)	1	Frame Lock Jamb – 21" from sill
- Limit-arm	1	Frame Lock Jamb – adjacent to lever
- Sliding lock arms	1 set	Vent – Lock stile, top / bottom rails
- Snubbers	1	Frame Head / Sill - midspan
Upper / Lower hinges	1 set	Frame Hinge Jamb at Head / Sill, adjacent to Vent hinge corners

Screen Construction: No screen was utilized.

SECTION 7

TEST RESULTS

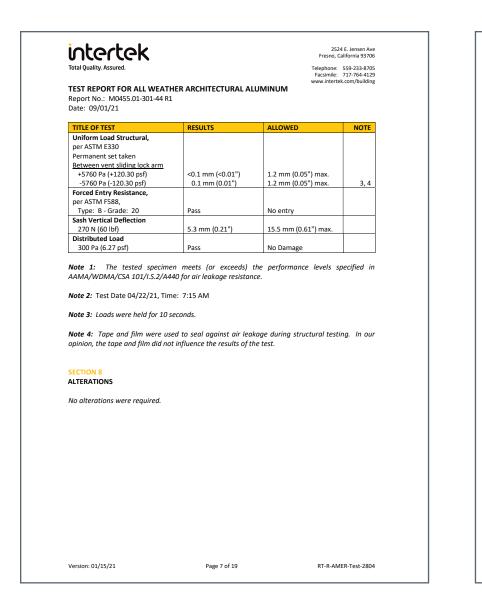
The temperature during testing was 23°C (74°F). The results are tabulated as follows:

TITLE OF TEST	RESULTS	ALLOWED	NOTE
	Initiate Motion:		
	38 N (8.6 lbf)	155 N (34.85 lbf) max	
Operating Force,	Maintain Motion:		
per ASTM E2068	37 N (8.5 lbf)	100 N (22.48 lbf) max	
	Latches:		
	32 N (7.2 lbf)	100 N (22.48 lbf) max	
Air Leakage,			
Infiltration per ASTM E283	<0.1 L/s/m ²	0.5 L/s/m ²	
at 75 Pa (1.57 psf)	(<0.01 cfm/ft ²)	(0.1 cfm/ft ²) max.	1, 2
Air Leakage,			
Exfiltration per ASTM E283	<0.1 L/s/m ²	0.5 L/s/m ²	
at 75 Pa (1.57 psf)	(<0.01 cfm/ft ²)	(0.1 cfm/ft ²) max.	1, 2
Canadian Air			
Infiltration/Exfiltration Level	A3	N/A	
Water Penetration,			
per ASTM E547			
at 580 Pa (12.11 psf)	Pass	No leakage	
Uniform Load Deflection,			
per ASTM E330			
Deflections taken			
Between vent sliding lock arm			
+3840 Pa (+80.20 psf)	0.9 mm (0.04")	6.1 mm (0.24") max.	
-3840 Pa (-80.20 psf)	0.9 mm (0.04")	6.1 mm (0.24") max.	3, 4

Page 6 of 19

Version: 01/15/21





intertek

Total Quality. Assured.

2524 E. Jensen Ave Fresno, California 93706

Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0455.01-301-44 R1 Date: 09/01/21

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.

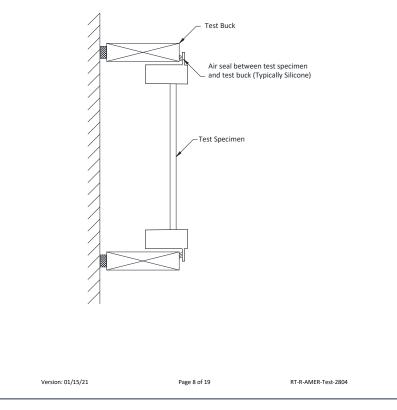




Image: Constraint of the second se	Test REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM L2524 E. Jensen Ave Test REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Telephone: 559-233-8705 Report No.: M0455.01-301-44 R1 Date: 09/01/21
SECTION 10 CONCLUSION The specimens tested successfully met the performance requirements for the following ratings: Class C – PG 80 Size Tested: 810 x 1500 mm (32 x 59 in) Type C	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. All drawings are on file with Intertek-ATI.
Version: 01/15/21 Page 9 of 19 RT-R-AMER-Test-2804	Version: 01/15/21 Page 10 of 19 RT-R-AMER-Test-2804



	red.	IER ARCHITECTURAL	2524 E. Jensen Ave Fresno, California 93706 Telephone: 559-233-8705 Facsimie: 717-764-4129 www.intertek.com/building	
Date: 09/01/22 SECTION 12 REVISION LOG	L			
REVISION #	DATE	PAGES	REVISION	
0	07/30/21	N/A	Original Report Issue	
1	09/01/21	Page 3	Performance Grade to Match	
		Page 5	IG Spacer Type Changed	

SERIES 6100

TESTING



intertek

ALL WEATHER ARCHITECTURAL ALUMINUM TEST REPORT

SCOPE OF WORK

AAMA/WDMA/CSA 101/I.S.2/A440 TESTING ON SERIES 6100 AWNING WINDOW WITH FAPIM HARDWARE

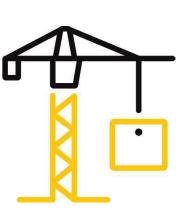
REPORT NUMBER M0456.01-301-44-R1

TEST DATES 03/17/21 - 03/22/21

ISSUE DATE **REVISION 1 DATE** 07/30/21 09/01/21

PAGES 19

DOCUMENT CONTROL NUMBER RT-R-AMER-Test-2804 (01/15/21) © 2017 INTERTEK



intertek

Total Quality. Assured

2524 E. Jensen Ave Fresno, California 93706

Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0456.01-301-44-R1 Date: 09/01/21

REPORT ISSUED TO

ALL WEATHER ARCHITECTURAL ALUMINUM 777 Aldridge Road Vacaville, CA 95688

SECTION 1 SCOPE

Architectural Testing, Inc. (an Intertek company) dba 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 Series 6100 Awning Window with Fapim Hardware. 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.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. Intertek B&C will service this report for the entire test record retention period. The test record retention period ends ten years after the test date. Test records, such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained for two years after the test date

Unless differently required, Intertek reports apply the "Simple Acceptance" rule, also called "Shared Risk approach," of ILAC-G8:09/2019, Guidelines on Decision Rules and Statements of Conformity.



Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample(s) tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program

Ver	sion: 01/15/21	Page 2 of 19	RT-R-AMER-Test-2804



intertek

Total Quality. Assured.

Fresno, California 93706 Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

2524 E. Jensen Ave

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0456.01-301-44-R1 Date: 09/01/21

SECTION 2

SUMMARY OF TEST RESULTS

0 Size Tested: 1200 x 800 mm ype AP
0.02 cfm/ft ²)
1 psf)
(0.08 psf)

Reference must be made to Intertek B&C Report No. M0456.01-301-44, dated 08/31/21 for complete test specimen description and detailed test results.

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:

AAMA 205-15, In-Plant Testing Guidelines for Manufacturers and Independent Laboratories

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 F588-17, Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact

Page 3 of 19

intertek

Total Quality. Assured.

2524 E. Jensen Ave Fresno, California 93706

RT-R-AMER-Test-2804

Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0456.01-301-44-R1 Date: 09/01/21

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 two 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 and the exterior perimeter of the specimen was sealed to the test buck.

LOCATION	ANCHOR DESCRIPTION	ANCHOR SPACING
(Nail Fin) Head, Sill	#8 x 1-5/8" flat head screw	6" from corners, 10" on center
(Nail Fin) Jambs	#8 x 1-5/8" flat head screw	6" from corners, midspan

SECTION 5

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Meng Vang	Intertek B&C
Tyler Westerling, P.E.	Intertek B&C

SECTION 6

TEST SPECIMEN DESCRIPTION

Product Type: Awning Series/Model: Series 6100 Awning Project Window with Fapim Hardware

Product Size(s):

OVERALL AREA:	WIDTH	WIDTH		
0.96 m ² (10.3 ft ²)	Millimeters	Inches	Millimeters	Inches
Overall size	1200	47-1/4	800	31-1/2
Vent	1175	46-1/4	775	30-1/2

Frame Construction:

Version: 01/15/21

MEMBER	MATERIAL	DESCRIPTION
Heads, Jambs, Sill	Aluminum	Thermally broken
	JOINERY TYPE	DETAIL
All corners	Mitered	Corner Keys, Screwed, Sealed
Vent to Frame	Stay Arms	Screwed, Sealed

Page 4 of 19

Version: 01/15/21



	rtek Assured.			Teleph Facsi	2524 E. Jensen Ave sno, California 93706 one: 559-233-8705 mile: 717-764-4129 ntertek.com/building
	RT FOR ALL WE M0456.01-301-4 1/21		ECTURAL A		ner tex.com/building
Vent Constr MEMBER		TERIAL		ESCRIPTION	
Rails, Stiles		ninum		nermally broken	
Runs, seres					
All corners	Mite			orner Keys, Screwed, Seal	ed
Reinforceme Weatherstri	ent: No reinforcer	nent was utilized			
DESCRIPTIC	IN	QUANTITY		TION	
Foam gaske	t	1 row		 rails, stiles along therm 	
	l bulb gasket	1 row		e – head, jambs, sill facing	; vent
Hollow viny	l bulb gasket	1 row	Vent	 rails, stiles facing frame 	
	conclusions of an n(s) can be made.		the adequacy	v or inadequacy of the glas	s in any glazed
GLASS TYPE				GLAZING METHOD	
1" IG	Kodispace 49 Thermoplast			Glass set on setting bloc glazed w/ aluminum sna	
LOCATION	QUANTITY	DAYLIGHT			GLASS BITE
		Millimeter 773 x 1475		Inches	4 /211
Vent	1	//3 X 14/3	5	30-7/16 x 58-1/16	1/2"
Drainage:					
METHOD	SIZE	QUANT		TION	
Notch	7/8" wide by 1/8	-		e sill @ glazing bead 2-1/2	-
Notch	1/2" x 1/8"	2	Vent	 underside of bottom rai 	

intertek

Total Quality. Assured.

2524 E. Jensen Ave Fresno, California 93706

Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0456.01-301-44-R1 Date: 09/01/21

DESCRIPTION	QUANTITY	LOCATION	
Actuating Lever (with limit-arm, sliding lock arms and snubbers as a set)	1	Frame Sill – Midspan	
- Limit-arm	1	Frame Sill – adjacent to lever	
- Sliding lock arms	1 set	Vent – Stiles, Bottom rails	
- Snubbers	1	Frame Jambs - midspan	
Left / Right Vent hinges	1 set	Frame Top rail both ends, adjacent to Vent hinge corners	

Screen Construction:

FRAME MATERIAL CORNER CONSTRUCTION MESH TYPE MESH ATTACHMENT METHOD

Plastic corner keys Vinyl ridged spline Aluminum Vinyl

SECTION 7 TEST RESULTS

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

TITLE OF TEST	RESULTS	ALLOWED	NOTE
	Initiate Motion:		
	26 N (5.78 lbf)	155 N (34.85 lbf) max	
Operating Force,	Maintain Motion:		
per ASTM E2068	18 N (3.95 lbf)	100 N (22.48 lbf) max	
	Latches:		
	19 N (4.25 lbf)	100 N (22.48 lbf) max	
Air Leakage,			
Infiltration per ASTM E283	0.1 L/s/m ²	0.5 L/s/m ²	
at 75 Pa (1.57 psf)	(0.02 cfm/ft ²)	(0.1 cfm/ft ²) max.	1, 2
Air Leakage,			
Exfiltration per ASTM E283	0.1 L/s/m ²	0.5 L/s/m ²	
at 75 Pa (1.57 psf)	(0.02 cfm/ft ²)	(0.1 cfm/ft ²) max.	1, 2
Canadian Air			
Infiltration/Exfiltration Level	A3	N/A	
Water Penetration,			
per ASTM E547			
at 580 Pa (12.11 psf)	Pass	No leakage	
Uniform Load Deflection,			
per ASTM E330			
Deflections taken			
Vent top rail between hinges			
+1440 Pa (+30.08 psf)	0.1 mm (0.01")	6.1 mm (0.24") max.	
	0.5 mm (0.02")	6.1 mm (0.24") max.	3,4

Version: 01/15/21



intertek Total Quality. Assured.			Fresno, California 93706 Telephone: 559-233-8705	
iotal Quality. Assured.	Facsimile:	717-764-4129		
TEST REPORT FOR ALL WEATH	HER ARCHITECTURAL AL		k.com/building	
Report No.: M0456.01-301-44-R1				
Date: 09/01/21				
TITLE OF TEST	RESULTS	ALLOWED	NOTE	
Uniform Load Structural, per ASTM E330				
Permanent set taken				
Vent top rail between hinges				
+2160 Pa (+45.11 psf)	<0.1 mm (<0.01")	1.2 mm (0.05") max.		
-2160 Pa (-45.11 psf)	<0.1 mm (<0.01) <0.1 mm (<0.01")	1.2 mm (0.05") max.	3,4	
Forced Entry Resistance,			5,.	
per ASTM F588,				
Type: B - Grade: 20	Pass	No entry		
Sash Vertical Deflection				
270 N (60 lbf)	5.1 mm (0.20")	15.5 mm (0.61") max.		
Distributed Load				
300 Pa (6.27 psf)	Pass	No Damage		
Note 2: Test Date 03/17/21 , Tin Note 3: Loads were held for 10 s Note 4: Tape and film were us	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	
Note 3: Loads were held for 10 s Note 4: Tape and film were us opinion, the tape and film did no SECTION 8 ALTERATIONS	econds. ed to seal against air lea		ng. In our	

intertek

Total Quality. Assured.

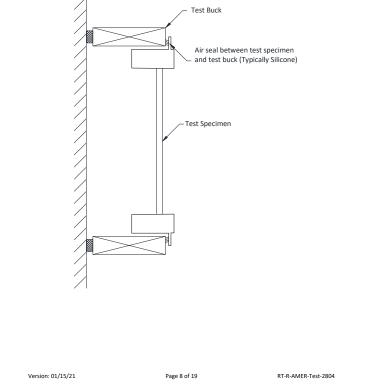
2524 E. Jensen Ave Fresno, California 93706

Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0456.01-301-44-R1 Date: 09/01/21

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.





intertek	2524 E. Jensen Ave Fresno, California 93706	intertek	2524 E. Jensen Ave Fresno, California 93706
Total Quality. Assured.	Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building	Total Quality. Assured.	Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building
TEST REPORT FOR ALL WEATHER ARCHITECTUR Report No.: M0456.01-301-44-R1 Date: 09/01/21		TEST REPORT FOR ALL WEATHER ARCHITECTUR Report No.: M0456.01-301-44-R1 Date: 09/01/21	
SECTION 10 CONCLUSION		SECTION 11	
The specimens tested successfully met the performa	ance requirements for the following ratings:	DRAWINGS	
Class C – PG30, Size Tested: 1200 x	800 mm (47 x 32 in) Type AP	The test specimen drawings have been reviewed by test specimen(s) reported herein. Test specimen co the drawings included in this report. Any deviations	onstruction was verified by Intertek B&C per
		All drawings are on file with Intertek-ATI.	
Version: 01/15/21 Page 9 of 1	9 RT-R-AMER-Test-2804	Version: 01/15/21 Page 10 of	19 RT-R-AMER-Test-2804



Total Quality. Assure			2524 E. Jensen Ave Fresno, California 93706 Telephone: 559-233-8705 Facsimile: 717-764-4129
Report No.: M04 Date: 09/01/21	OR ALL WEATHER 456.01-301-44-R1	R ARCHITECTURAL A	www.intertek.com/building
REVISION LOG			
REVISION #	DATE	PAGES	REVISION
0	07/30/21 09/01/21	N/A Page 5	Original Report Issue. IG Spacer Type Changed.

SERIES 6100

TESTING



intertek

ALL WEATHER ARCHITECTURAL ALUMINUM TEST REPORT

SCOPE OF WORK

AAMA/WDMA/CSA 101/I.S.2/A440 TESTING ON SERIES 6100 FIXED WINDOW

REPORT NUMBER M0355.01-301-44-R1

TEST DATES 03/22/21 - 03/23/21

ISSUE DATE **REVISION 1 DATE** 08/06/21 09/01/21

PAGES 16

DOCUMENT CONTROL NUMBER RT-R-AMER-Test-2804 (01/15/21) © 2017 INTERTEK



intertek

Total Quality. Assured

2524 E. Jensen Ave Fresno, California 93706 Telephone: 559-233-8705

Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0355.01-301-44-R1 Date: 09/01/21

REPORT ISSUED TO

ALL WEATHER ARCHITECTURAL ALUMINUM 777 Aldridge Road Vacaville, CA 95688

SECTION 1 SCOPE

Architectural Testing, Inc. (an Intertek company) dba 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 Series 6100 Fixed Window. 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.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. Intertek B&C will service this report for the entire test record retention period. The test record retention period ends ten years after the test date. Test records, such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained for two years after the test date

Unless differently required, Intertek reports apply the "Simple Acceptance" rule, also called "Shared Risk approach," of ILAC-G8:09/2019, Guidelines on Decision Rules and Statements of Conformity.



Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertex name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample(s) tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program

Version: 01/15/21 Page 2 c	16 RT-R-AMER-Test-2804
----------------------------	------------------------



intertek

Total Quality. Assured.

Fresno, California 93706 Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

2524 E. Jensen Ave

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0355.01-301-44-R1 Date: 09/01/21

SECTION 2

SUMMARY OF TEST RESULTS

TITLE	RESULTS
AAMA/WDMA/CSA 101/I.S.2/A440-17	Class LC – PG 70 - Size Tested: 1524 x 1524 mm (60 x 60 in) Type: FW
Air Infiltration	0.9 L/s/m ² (0.17 cfm/ft ²)
Canadian Air Infiltration/Exfiltration Level	A2
Water Penetration Resistance Test Pressure	580 Pa (12.11 psf)
Design Pressure	±3360 Pa (±70.18 psf)
Reference must be made to Intertek B&C Be	port No. M0355.01-301-44 R1. dated 09/01/21 for

complete test specimen description and detailed test results.

SECTION 3

Version: 01/15/21

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:

AAMA 205-15, In-Plant Testing Guidelines for Manufacturers and Independent Laboratories

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 F588-17, Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact

Total Quality. Assured.

2524 E. Jensen Ave Fresno, California 93706

Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR ALL WEATHER ARCHITECTURAL ALUMINUM Report No.: M0355.01-301-44-R1 Date: 09/01/21

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 two years from the test completion date.

The specimen was installed into a Douglas-Fir wood buck. The rough opening allowed for a $1/4^{\prime\prime}$ shim space and the exterior perimeter of the specimen was sealed to the test buck.

LOCATION	ANCHOR DESCRIPTION	ANCHOR SPACING
(Nail Fin) Head, Jambs, Sill	#8 x 1-5/8" flat head screw	6" from corners, 10" on center

SECTION 5

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Meng Vang	Intertek B&C
Tyler Westerling, P.E.	Intertek B&C

SECTION 6

TEST SPECIMEN DESCRIPTION

Product Type: Fixed Window Series/Model: Series 6100 Fixed Window

Product Size(s):						
OVERALL AREA:	WIDTH I		HEIGHT			
2.32 m ² (25.0 ft ²)	Millimeters	Inches	Millimeters	Inches		
Overall size	1524	60	1524	60		

Page 4 of 16

Frame Construction:					
	MEMBER	MATERIAL	DESCRIPTION		
	Head, Jambs, Sill	Aluminum	Thermally broken		
		JOINERY TYPE	DETAIL		
	All corners	Mitered	Corner Keys, Screwed, Sealed		

Reinforcement: No reinforcement was utilized.

Weatherstripping: No weatherstripping was utilized.

Page 3 of 16

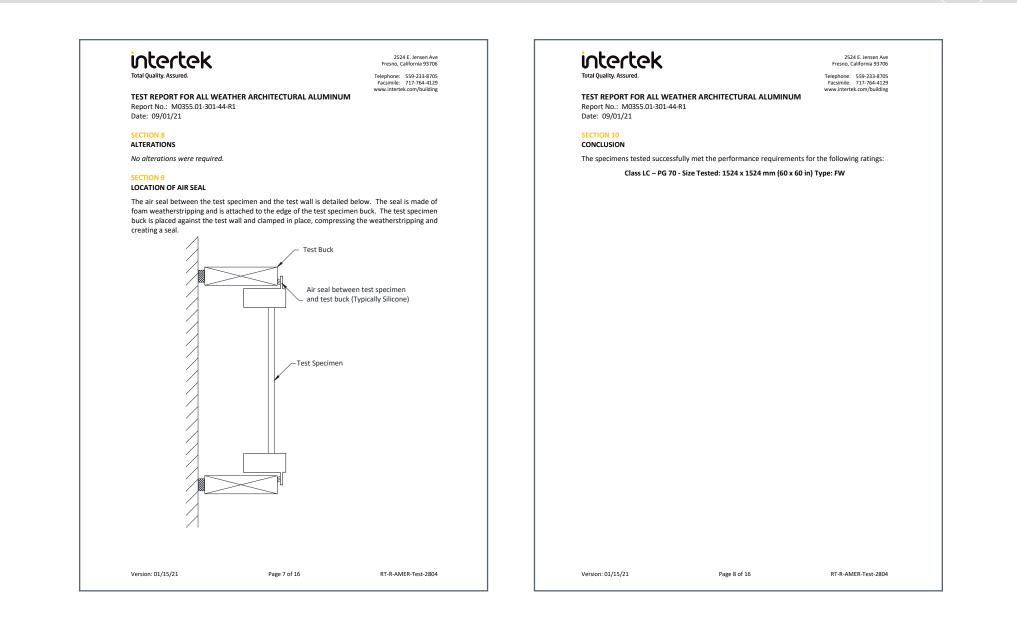
RT-R-AMER-Test-2804

Version: 01/15/21



intertek Total Quality. Assured.			Tel Fa	2524 E. Jensen Ave Fresno, California 93706 Telephone: 559-233-8705 Facsimile: 717-764-4129 www.interke.com/building		intertek Total Quality. Assured.		
	/0355.01-301-44-R1	ER ARCHITECTURAL		w.mereccon/bunding	TEST REPORT FOR ALL WEAT Report No.: M0355.01-301-44-F Date: 09/01/21		www.interte	ek.comy
	onclusions of any ki ecimen(s) can be mo		lacy or inadequacy of t	he glass in any	SECTION 7 TEST RESULTS			
GLASS TYPE	SPACER TYPE	LITE COMPOSITION			The temperature during testing	was 23°C (73.9°F). The res	ults are tabulated as follow	/s:
1" IG	Kodispace 4SG	3/16" tempered,	Glass set on setting		TITLE OF TEST	RESULTS	ALLOWED	N
	Thermoplastic	Interior / Exterior	glazed w/ aluminu		Air Leakage,			
LOCATION	QUANTITY	DAYLIGHT OPENING		GLASS BITE	Infiltration per ASTM E283	0.9 L/s/m ²	1.5 L/s/m ²	
		Millimeters	Inches		at 75 Pa (1.57 psf)	(0.17 cfm/ft ²)	(0.3 cfm/ft ²) max.	
Frame	1	1387 x 1387	54-5/8 x 54-5/8	1/2"	Air Leakage,	1.01/0/m2	1 5 1 /0/m2	
					Exfiltration per ASTM E283 at 75 Pa (1.57 psf)	1.0 L/s/m ² (0.19 cfm/ft ²)	1.5 L/s/m ² (0.3 cfm/ft ²) max.	
orainage:					Canadian Air	(0.19 (111)1()	(0.5 cim/it) max.	-
NETHOD	SIZE	QUANTI			Infiltration/Exfiltration Level	A2	N/A	
Notch	7/8" wide by 1/8"	high 2	Sill face - 2-1/	2" from jamb	Water Penetration,	112	19/5	1
					per ASTM E547			
ardware: No	hardware was utili	ized.			at 580 Pa (12.11 psf)	Pass	No leakage	
					Uniform Load Deflection,			
creen Constr	ruction: No screen	was utilized.			per ASTM E330			
					Deflections taken at			
					Between Anchors @ Jamb			
					+3360 Pa (+70.18 psf)	<0.1 mm (<0.01")	Report only	
					-3360 Pa (-70.18 psf)	0.3 mm (0.01")	-	
					Uniform Load Structural, per ASTM E330			
					Permanent set taken at			
					Between Anchors @ Jamb			
					+5040 Pa (+105.26 psf)	0.1 mm (0.01")	1.0 mm (0.04") max.	
					-5040 Pa (-105.26 psf)	<0.1 mm (<0.01")	1.0 mm (0.04") max.	
					Forced Entry Resistance,			
					per ASTM F588,			-
					Type: D - Grade: 10	Pass	No optimi	
							No entry	







Total Quality. Assured.	2524 E. Jensen Ave Fresno, California 93706 Telephone: 559-233-8705 Facsimile: 717-764-4129 www.intertek.com/building	Total Quality. Assur			2524 E. Jensen A Fresno, California 937 Telephone: 559-233-67 Facsimile: 717-764-11 www.intertek.com/buildi A I LIMINI IM
Report No.: M0355.01-301-44-R1 Date: 09/01/21			355.01-301-44-R1		
SECTION 11 DRAWINGS		SECTION 12 REVISION LOG			
The test specimen drawings have been reviewed test specimen(s) reported herein. Test specimer		REVISION #	DATE	PAGES	REVISION
the drawings included in this report. Any deviation	ons are documented herein or on the drawings.	0	08/06/21	N/A	Original Report Issue
		1	09/01/21	Page 5	IG Spacer Type Changed
All drawings are on file with Intertek-ATI.					Weep Locations Revised