

Fenestration Testing Laboratory, Inc.

10235 8th Street, Rancho Cucamonga, CA 91730

Report T25-066

REPORT SUMMARY

REPORT #

T25-066

TESTED FOR

Fleetwood Windows & Doors

1 Fleetwood Way

Corona, CA 92879

SERIES & PRODUCT TYPE

Edge | p | Mull to Edge | f | - Thermally Broken Aluminum Pivot Door with Sidelites

CONFIGURATION

O-X-0

FRAME SIZE

4064.00 mm x 3416.30 mm (160.00" x 134.50")

SPECIFICATION

NAFS - North American Fenestration Standard/specification for windows, doors, and skylights

AAMA/WDMA/CSA 101/I.S.2/A440-22

PRIMARY DESIGNATOR

SP - PG20 4064.00 x 3416.30 mm (160.00 x 134.50 in) - Pivot Door

TEST COMPLETION DATE

December 15, 2025

REPORT DATE

February 17, 2026

Fenestration Testing Laboratory, Inc.

10235 8th Street, Rancho Cucamonga, CA 91730

Report T25-066

1.0 Tested For: Fleetwood Windows & Doors
1 Fleetwood Way
Corona, CA 92879

2.0 Purpose:

The purpose of this report is to present the testing methods employed and the test results obtained during the performance testing of one (1) Thermally Broken Aluminum Pivot Door with Sidelites described in paragraph 5.0 of this report.

3.0 Test References:

3.1 NAFS - North American Fenestration Standard/specification for windows, doors, and skylights
AAMA/WDMA/CSA 101/I.S.2/A440-22

4.0 Compliance Statement: The test results in paragraph 6.0 indicate that the test sample described in paragraph 5.0 of this report met the performance requirements of the above specifications for the performance grade shown in 4.1 below.

4.1 SP - PG20 4064.00 x 3416.30 mm (160.00 x 134.50 in) - Pivot Door

5.0 Sample Submitted:

5.1 Product Type: Thermally Broken Aluminum Pivot Door with Sidelites

5.2 Series: Edge | p | Muller to Edge | f |

5.3 Configuration: 0-X-0

5.4 Product Dimensions:	Millimeters	Inches
Total Frame:	4064.00 x 3416.30	160.00 x 134.50
Pivot Panel:	3621.02 x 2982.72	74.88 x 129.00

5.5 Glass and Glazing:

<i>IGU Thickness</i>	<i>Spacer Size</i>	<i>Interior Lite</i>	<i>Exterior Lite</i>	<i>Glazing method</i>
1.25" overall wide	0.75"	6mm Tempered	6mm Tempered	<p style="text-align: center;">PIVOT PANEL</p> <p>The pivot panel IGU was wet glazed to aluminum glazing wedge on the inside and outside perimeters with Sikasil 785. The stiles and rails slid over the glazing wedges. A cap bead was applied full perimeter of glass to rails and stiles on the interior.</p> <p style="text-align: center;">FIXED SIDELITES</p> <p>The sidelites were outside dry gasket glazed to their respective sill, head and jambs. The inside glazing leg contained a hollow bulb as did the exterior snap-in glazing stop. The pivot mullion and lock mullion were wet glazed to their respective IGU with Sikasil 785.</p>

Fenestration Testing Laboratory, Inc.

10235 8th Street, Rancho Cucamonga, CA 91730

Report T25-066

5.6 Weepage:

The pivot door and fixed sidelite weep systems consisted of an aluminum tank with a vertical leg on all sides. This tank was embedded in the floor substrate. The fixed lite sills each sat in their respective tank and the pivot door sill contained a "subsill" that sat in the pivot door tank with only the inside vertical leg visible on the surface. This subsill vertical leg and tank inside leg ran parallel with a gap between them forming the interior linear drain. Water getting inboard of the panel would drain into the linear drain and into the tank.

The fixed lite tanks and pivot door tank each contained threaded pipe connectors in two configurations.

The door passed the air infiltration and exfiltration, and water penetration with both configurations. Configuration #1 - ½" pipe coming out the front face of the tank. The spacing is shown on page 1 of 3 on the attached drawings.

Configuration #2 - 1" pipe weeping vertically through the bottom of the tank at the same spacing as configuration #1. The spacing is shown on page 1 of 3 on the attached drawings.

Weep locations: Each fixed tank had a weep 8" from each end. The pivot door tank had a weep at the following locations as measured from the left side of the window assembly: 71.87", 111.53" and 126.22".

5.7 Pressure balancing: None

5.8 Weather-stripping:

<i>Type</i>	<i>Quantity</i>	<i>Location</i>
Item #10 on BOM Large Bulb Vinyl	Twelve (12) strips	At fixed head, sill and jamb around a fixed lite for dry glazing. One strip facing in and one facing out.
0.500" overall high polypile	Two (2) strips	Pivot panel bottom rail had two strips facing down.
0.290" overall high polypile with center fin.	Six (6) strips	The pivot mullion and the lock mullion each had two strips facing the pivot panel stiles. The head above the pivot panel had two strips facing down.
Item #13 on BOM Flexible Bulb Vinyl	Four (4) Strips	The pivot mullion had two strips facing out and the lock mullion had two strips facing in.
Item #20 on BOM Q-Ion foam seal	Four (4) strips	Each fixed lite sill had one strip facing out and one strip facing in.

5.9 Sealants:

- All frame sill to jamb and head to jamb corners were sealed.
- The entire frame assembly was sealed to the rough opening on the interior and exterior.
- The pivot mullion and the lock mullion were sealed to the frame at top and bottom.
- The head of each fixed lite was sealed to the abutting head of the pivot door.
- The fixed lite tanks were each sealed to the pivot tank.
- Each fixed lite tank was sealed to its respective fixed lite sill full length on the interior and exterior.

5.10 Hardware:

<i>Type</i>	<i>Quantity</i>	<i>Location</i>
Rixon Pivot at bottom and corresponding top pivot	One (1) pair	The pivot point was located approximately 7" from the left side of the pivot panel embedded in the floor under panel and connected to the panel bottom rail and the top pivot located in the head and connected to the panel top rail.
Metal V-Lock (Power activated)	Two (2)	One lock 24" from each end of the lock stile.

Fenestration Testing Laboratory, Inc.

10235 8th Street, Rancho Cucamonga, CA 91730

Report T25-066

5.11 Construction:

<i>Location</i>	<i>Joinery Type</i>	<i>Number of Fasteners</i>	<i>Fastener Size</i>
Frame jambs to heads of fixed	Mechanically joined with screws	Two (2) per corner	#10 x 1" PPH screws
Pivot panel stile to rail corners	Mechanically joined with screws	Two (2) per corner	#10 x 2" PFH screws

5.12 Reinforcement: None

5.13 Installation:

The head and jambs were anchored to the 2x10 lumber rough opening with #10 PPH screws with at least 0.75" embedment and located at 8" from ends and 36" on center.
The tanks for the fixed lites and the pivot door were embedded in the substrate and supported by the substrate.

6.0 - Test procedures and results: All testing procedures were performed in accordance with the performance requirements of the test specifications referenced in paragraph 3.0 of this report. The number preceding each test listed below refers to the corresponding sections in the NAFS.

8.3.1 - Operation Force (ASTM E2068-00(2022))

Test Description	Results	Allowed	Comments
Maximum force to initiate and motion	48.0 N (10.8 lbf)	Report only	1
Latching device force to operate – Not applicable due to the locks being power operated.			

9.3.2 - Air Infiltration (ASTM E283-04(2012)) (With both weep configurations)

Test Description	Results	Allowed	Comments
75 Pa differential pressure	1.1. L/s*m ²	1.5 L/s*m ²	
1.57 psf differential pressure	0.22 cfm/ft ²	0.30 cfm/ft ²	
The tested specimen meets/exceeds the performance levels specified in AAMA/WDMA/CSA 101/I.S.2/A440 for air leakage resistance.			

9.3.2 - Air Exfiltration (ASTM E283-04(2012)) (With both weep configurations)

Test Description	Results	Allowed	Comments
75 Pa differential pressure	0.65 L/s*m ²	1.5 L/s*m ²	
1.57 psf differential pressure	0.13 cfm/ft ²	0.30 cfm/ft ²	
The tested specimen meets/exceeds the performance levels specified in AAMA/WDMA/CSA 101/I.S.2/A440 for air leakage resistance.			

9.3.3 - Water Penetration (ASTM E547-00(2016)) (With both weep configurations)

Test Description	Results	Allowed	Comments
DP20 - 150 Pa (3.13 psf)	No water penetration	No water penetration	1

9.3.4.2 - Uniform Load Deflection at Design Pressure (ASTM E330-14)

Test Description	Results	Allowed	Comments
DP20 - 960 Pa (20.05 psf)Pos	10.67 mm (0.42")	Report only	2
DP20 - 960 Pa (20.05 psf)Neg	15.75 mm (0.62")	Report only	2

Fenestration Testing Laboratory, Inc.

10235 8th Street, Rancho Cucamonga, CA 91730

Report T25-066

9.3.4.3 – Uniform Load Structural at 1.5 x Design Pressure (ASTM E330-14)

Test Description	Results	Allowed	Comments
OL for DP20 - 1440 Pa (30.08 psf)Pos	0.25 mm (0.01")	12.70 mm (0.50")	2
OL for DP20 - 1440 Pa (30.08 psf)Neg	2.79 mm (0.11")	12.70 mm (0.50")	2

Comment #1 – No insect screen provided

Comment #2 – Deflection measurement taken from the pivot mullion which was on the left as seen from outside.

Testing was witnessed by: Jim Cruz with FTL and Corey Jones with Fleetwood Windows & Doors.

For a complete description of the tested sample, refer to the attached three (3) pages consisting of a bill of materials, cross section drawings, and individual part drawings. This report is complete only when all the above referenced bill of materials and drawings are attached.

The bill of materials, cross section drawings, and individual part drawings of frame and sash members are on file and have been compared to the sample submitted. Test sample sections, bill of materials, drawings and a copy of this report will be retained at the test laboratory for four years.

This test report may not be modified in any way without the written consent of Fenestration Testing Laboratory, Inc. (FTL).

The preceding test results relate only to the tested specimen and were obtained by using the applicable test methods listed in section 3.0 and 6.0 above. This report does not constitute certification of this product or an endorsement by this laboratory. It is the property of the client named in section 1.0 above. Certification can only be granted by an approved administrator and/or validator.

TEST COMPLETION DATE: December 15, 2025

REPORT DATE: February 17, 2026



Jim Cruz – Laboratory Manager



Breanne Cruz – Quality Manager

- TEST SPECIMEN**
1. SERIES / MODEL: EDGE 101 MULLED TO EDGE 111
 2. PRODUCT TYPE: PIVOT/FIXED COMBINATION
 3. CONFIGURATION: ONO

- GLAZING**
- DETAIL 01: 1.25" CLEAR RMW - 1.075 AIR CLEAR RMW - 1" WET GLAZED, SIKASIL 785
 DETAIL 02: 1.25" CLEAR RMW - 1.075 AIR CLEAR RMW - 1" WET GLAZED, SIKASIL 785
 DETAIL 03: 1.25" CLEAR RMW - 1.075 AIR CLEAR RMW - 1" WET GLAZED, SIKASIL 785

- GENERAL NOTES**
1. BUILDING OPENINGS & BUILDING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER LOADS TO THE STRUCTURE AND TO BE REVIEWED BY BUILDING OFFICIAL.
 2. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & MAY VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS.
 3. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL, SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF AIAA AND BUILDING CODE.

PAGE #
DETAIL #

CORNERS CONSTRUCTION

1. FRAME CORNER: THE HEAD AND SILL AS ARE BUTTED TO THE JAMBS AND ATTACHED WITH #10RT PWP SCREWS.
2. PANEL CORNER: THE TOP AND BOTTOM RAILS ARE BUTTED TO THE VERTICAL STILES AND ATTACHED WITH #10RT SCREWS.

HARDWARE

1. 2 VLOOKS, 2" FROM END OF PANEL

WEEP HOLES

1. FIXED PANEL
2. WEEP HOLES, # FROM EACH END
3. WEEP HOLE SIZE: WIDTH = 1", HEIGHT = 3/16"

ANCHORING

1. PIVOT FOOT
 2. WEEP HOLE SIZE: # FROM EACH END
 3. WEEP HOLE SIZE: WIDTH = 1", HEIGHT = 7/8"
- ANCHORING: #10 MIN. EMBEDMENT OF 0.75"
 SCREWS: # FROM ENDS, 2" O.C.
 JAMBS: # FROM ENDS, 2" O.C.

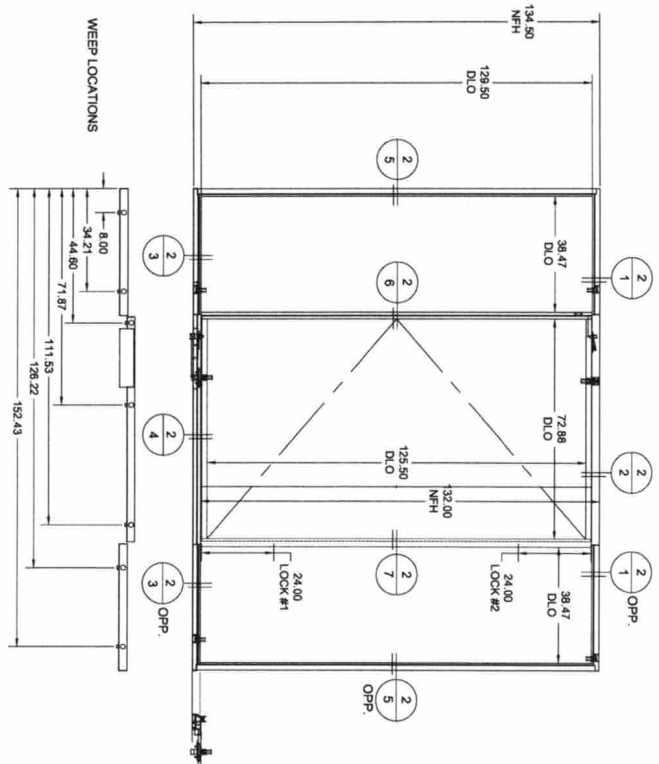


TABLE OF CONTENTS

DRAWING NO.	DESCRIPTION
1	GENERAL NOTES AND SPECIMEN ELEVATION
2	CROSS SECTIONAL DETAILS
3	CROSS SECTIONAL DETAILS
4	BILL OF MATERIALS AND GLAZING DETAILS

PANEL & PANEL DLO: WIDTH X HEIGHT

PANEL 1: 41.66" X 134.50" DLO 1: 38.43" X 129.50"
 PANEL 2: 74.875" X 129.00" DLO 2: 72.875" X 125.50"
 PANEL 3: 41.66" X 134.50" DLO 3: 38.43" X 129.50"

FENESTRATION TESTING LAB

REPORT NO: 725-066

DATE: 2/26/26

FLEETWOOD WINDOWS & DOORS 1 FLEETWOOD WAY CORONA, CA 92879 www.fleetwoodusa.com	MATERIAL: ALUMINUM	DRAWN BY: CJ	DATE: 12/1/25	REVISIONS:	DATE:	DRAWN BY:	COMMENTS:
	CUSTOMER:	JOB NUMBER: 593800					
SCALE: N/A							
DRAWING NO: (1)							
SHEET: 1 OF 3							

FENESTRATION TESTING LAB

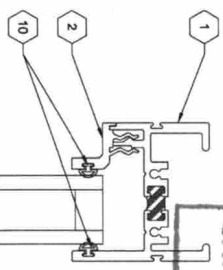
REPORT NO:

725-066

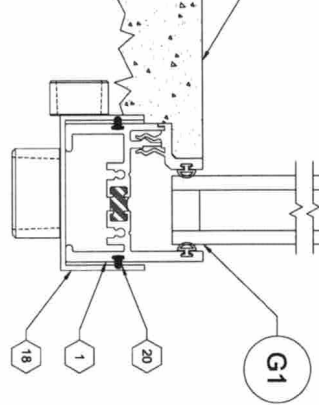
DATE:

2-26-26

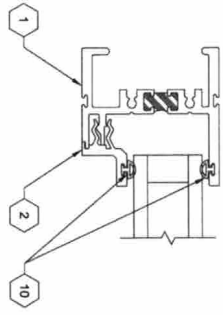
1 FIXED HEAD
SCALE FULL SIZE



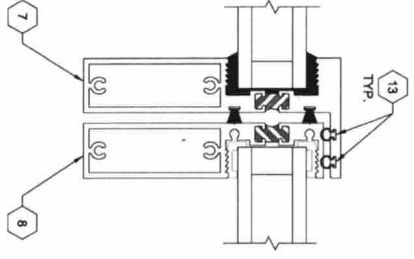
2 PIVOT HEAD
SCALE FULL SIZE



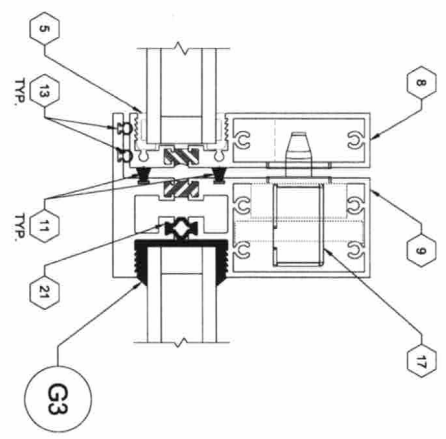
3 FIXED SILL
SCALE FULL SIZE



4 PIVOT SILL
SCALE FULL SIZE

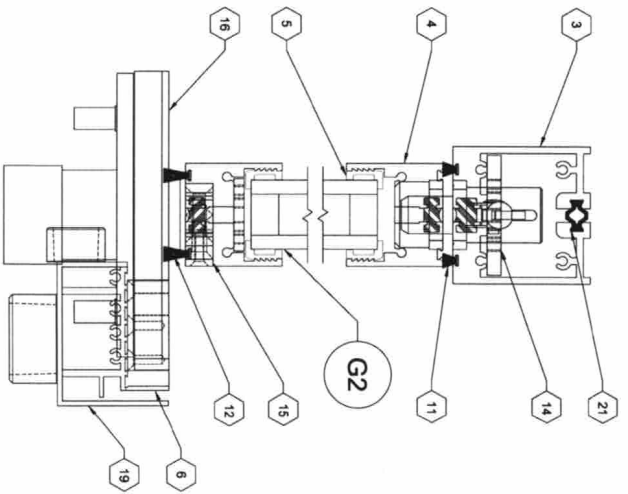


5 FIXED JAMB
SCALE FULL SIZE



6 PIVOT MULLION
SCALE FULL SIZE

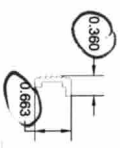
7 LOCK MULLION
SCALE FULL SIZE



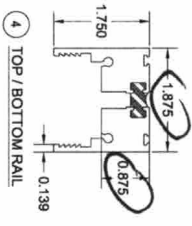
FLEETWOOD WINDOWS & DOORS 1 FLEETWOOD WAY CORONA, CA 92879 www.fleetwoodusa.com	MATERIAL: ALUMINUM	DRAWN BY: C	DATE: 12/1/25	REVISIONS:	DATE:	DRAWN BY:	COMMENTS:
	CUSTOMER:	JOB NUMBER: 593800					
JOB NAME:							

SCALE: 1/4" = 1'-0"
DRAWING NO: (2)
SHEET: 1
2 OF 3

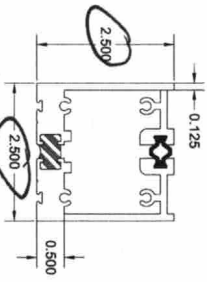
5 GLASS KEY



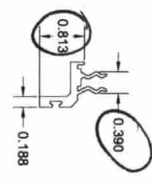
4 TOP / BOTTOM RAIL



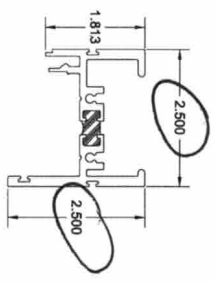
3 HEAD



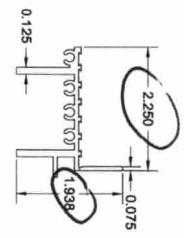
2 1.25" WEDGE



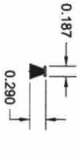
1 HEAD / SILL / JAMB



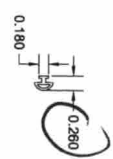
6 SILL



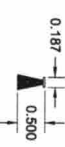
11 FIN SEAL MOHAIR



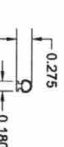
10 LARGE BULB VINYL



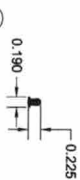
12 MOHAIR



13 FLEXIBLE BULB VINYL



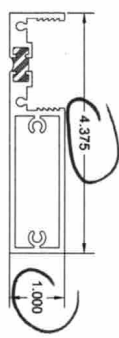
20 O-LON FOAM SEAL



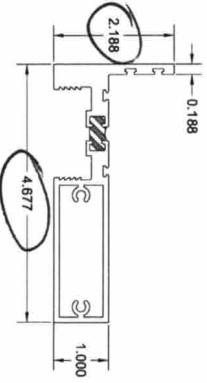
21 I-STRUT



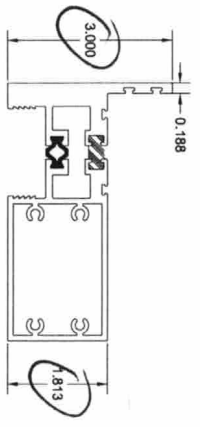
8 LEAD STYLE



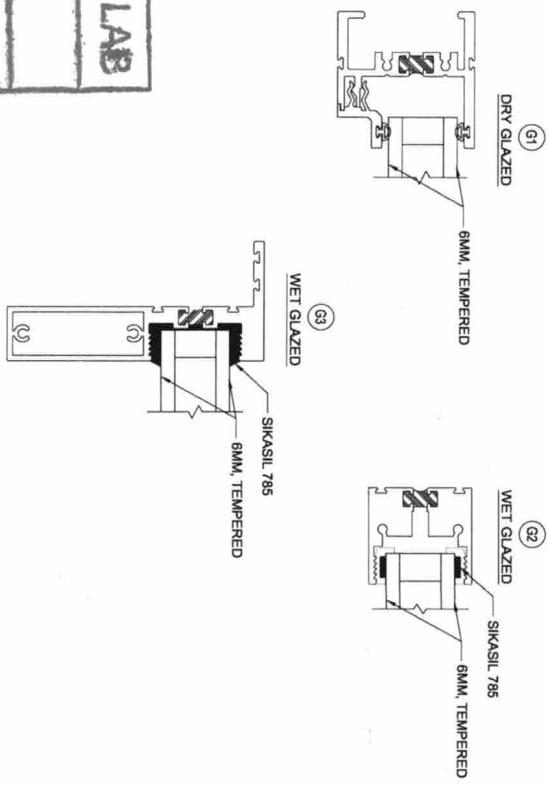
7 MULLION



9 HP MULLION



GLAZING DETAILS(S)



BILL OF MATERIALS

EXTRUSIONS				
ITEM NO.	FWD #	DESCRIPTION	VENDOR	VENDOR PART NO.
1	EF0009	HEAD / SILL / JAMB		
2	EF0006	1.25" WEDGE		
3	EP001	HEAD		
4	EP003	TOP / BOTTOM RAIL		
5	ES0002	GLASS KEY		
6	4411	SILL		
7	EP005	MULLION		
8	ES0008	LEAD STYLE		
9	EP004	HP MULLION		
HARDWARE				
ITEM NO.	FWD #	DESCRIPTION	VENDOR	VENDOR PART NO.
10	29031	LARGE BULB VINYL	TREMCO	TX1988E
11	-	FIN SEAL MOHAIR	AMESBURY	3401 8745BKGB
12	27421	MOHAIR	AMESBURY	5001 8745BKGP
13	26233	FLEXIBLE BULB VINYL	TREMCO	TR-29007P
14	26476	TOP PIVOT	D&B	249-190
15	27188	LOAD ARM	D&B	249-303
16	27412	RIXSON PIVOT	RIXSON	-
17	27401	V-LOCK	ASSA	ES8100
18	-	FIXED ARCHE-DUCT	LUNDBLADE	CUSTOM
19	25188	PIVOT ARCHE-DUCT	LUNDBLADE	CUSTOM
20	25188	O-LON FOAM SEAL		
21	29065	I-STRUT		

FENESTRATION TESTING LAB

REPORT NO:

725-066

DATE:

2-26-26



1 FLEETWOOD WAY
CORONA, CA 92879
www.fleetwoodusa.com

MATERIAL: ALUMINUM
CUSTOMER:
JOB NAME:

DRAWN BY: C
DATE: 12/1/25
JOB NUMBER: 593800

REVISIONS	DATE	DRAWN BY	COMMENTS

SCALE: 1/4" = 1"
DRAWING NO: (3)
SHEET: 3 OF 3