Testing Evaluation Laboratories, Inc.
2002 Wood Court Suite 1 – Plant City, FL 33563
Phone: 813-754-9887

AAMA/WDMA/CSA/101/I.S.2/A440-08
AAMA/WDMA/CSA/101/I.S.2/A440-11
(A440S1-09)

TEST REPORT SUMMARY

Test Report Issued To:

Fleetwood Windows and Doors
1 Fleetwood Way
Corona, CA 92879

3900-T Aluminum Side Hinged Door - Outswing
Impact Rated

Title	Summary of Results
	Specimen 10 (O/OX)
Primary Product Designator	Class LC –PG50 2743 x 4267 (108 x 168) – Type SHD
Design Pressure	+ 2394 Pa / - 2633 Pa (+ 50.0 psf / - 55.0 psf)
Air Infiltration	0.30 L/s/m² (0.060 scfm/ft²) @ 75 Pa (1.57 psf)
Air Infiltration/Exfiltration (A440S1-09)	Level A3: < 1.50 L/s•m²
Water Resistance (Per ASTM E547-00)	467 Pa (9.75 psf)
Structural Test Pressure	+ 3591 Pa /- 3950 Pa (+ 75.0 psf / - 82.5 psf)
Forced Entry	No Entry

Reference should be made to Report No. TEL 01991345 for complete test specimen description and data.

For Testing Evaluation Laboratories, Inc.

Vivian K. Wright

Vivian K. Wright,
President

Testing Evaluation Laboratories, Inc.

2002 Wood Court Suite 1 – Plant City, FL 33563

Phone: 813-754-9887

AAMA/WDMA/CSA 101/I.S.2/A440-08 andA440-11 (A440S1-09)

Issued to:

Fleetwood Windows and Doors
1 Fleetwood Way
Corona, CA 92879

IAS Lab Certification Number TL-299

Report Number:	**TEL 01991345**
Test Date:	**April 23, 2015**
Report Date:	**June 26, 2015**

Project Summary: Testing Evaluation Laboratories, Inc. (TEL) was contracted to perform tests on a Fleetwood Windows and Doors 3900-T Aluminum Side Hinged Door at TEL's Plant City, FL test facility. The sample tested successfully met the performance requirements as follows:

Class LC–PG50 2743 x 4267 (108 x 168) – Type SHD – Specimen 10

Test Specifications: The test specimen was evaluated in accordance with the following:
AAMA/WDMA/CSA/101/I.S.2/A440-08 and A440-11 (A440S1-09)
Standard/Specification for Windows, Doors and Unit Skylights

Series / Model:	**3900-T Aluminum Doors**
Type:	**Impact Rated Outswing Glazed Door w/Sidelite and Transom (O/OX)**
Overall Size:	**2743 mm (108.00") x 4267 mm (168.00")**
Daylight Opening:	**914 mm (36.00") x 2769 mm (109.00") – Door** **1403 mm (55.25") x 2927 mm (115.25") – Sidelite** **2597 mm (102.25") x 1099 mm (43.25") – Transom**

For complete product description, see attached drawing L-7351 for details.

Test Results: **2743 mm (108.00") x 4267 mm (168.00") - Impact Rated Outswing Glazed Door**
Specimen 9 **w/Sidelite and Transom (O/OX)**

The test results are tabulated as follows:

Paragraph	Title of Test / Test Method	Results	Allowed
5.3.1.2.1	Force to Latch – Multipoint Locking Device	76N (17.0 lbf)	Report Only
5.3.2.1	Air Leakage Resistance (Infiltration) ASTM E283		
	Test conducted @ 75 Pa (1.57 psf)	0..30 L/s/m²	1.50 L/s/m²
		0.060 scfm/ft²	0.3 scfm/ft²
5.3.3.1	Water Penetration Resistance ASTM E547 & ASTM E331		
	Test conducted @ 467 Pa (9.75 psf) (Std. Weatherstrip)	No Leakage	No Leakage
5.3.4.2	Uniform Load Deflection Test @ Design Pressure ASTM E330		(See Note #1)
5.3.4.3	Uniform Load Structural Test @ 150% of Design Pressure ASTM E330		(See Note #1)
Note #1:	*(Client opted to start at a pressure higher than the minimum required. Those results are listed under "Optional Performance".)*		
5.3.5	Forced Entry Resistance AAMA 1304		
	1330 N (300 lbf) point load		
	Top lock stile corner	No Entry	No Entry
	Bottom lock stile corner	No Entry	No Entry
	Above lock	No Entry	No Entry

Optional Performance

5.3.4.2 Uniform Load Deflection Test @ Design Pressure ASTM E330

Load Range	Time (Sec)	Load Pa (psf)	Loc	Deflection mm (inches)	Set mm (inches)	Allowable mm (inches)
Half Test Positive	10	1197 (25.00)				
Test Positive	10	2394 (50.00)	1	22.098 (0.870)	NA	(See Note #2)
			2	16.002 (0.630)	NA	(See Note #2)
Half Test Negative	10	1317 (27.50)				
Test Negative	10	2633 (55.00)	1	37.871 (1.491)	NA	(See Note #2)
			2	17.475 (0.688)	NA	(See Note #2)

Note #2: *The deflections reported are not limited by AAMA/WDMA/CSA101/I.S.2/ A440-08 and A440-11(A440S1-09) for this product designation. The deflection data is recorded in this report for special code compliance and information only*

5.3.4.3 Uniform Load Structural Test @ 150% of Design Pressure ASTM E330

Load Range	Time (Sec)	Load Pa (psf)	Loc	Deflection mm (inches)	Set mm (inches)	Allowable mm (inches)
Half Proof Positive	10	1796 (37.50)				
Proof Positive	10	3591 (75.00)	1	52.248 (2.057)	8.484 (0.334)	10.465 (0.412)
			2	23.089 (0.909)	1.143 (0.085)	12.090 (0.476)
Half Proof Negative	10	1975 (41.25)				
Proof Negative	10	3950 (82.50)	1	67.437 (2.655)	10.236 (0.403)	10.465 (0.412)
			2	34.671 (1.365)	1.5.588 (0.220)	12.090 (0.476)

Note #3: *Deflection / Set for Locations 1 measured at center of horizontal mullion. Deflection/Set for Location 2 measured at center of vertical mullion.*

Paragraph	Title of Test / Test Method	Results	Allowed
5.3.2.1	Air Leakage Resistance (Exfiltration) ASTM E283	0.85 L/s/m²	
	Test conducted @ 75 Pa (1.57 psf)	0.169 scfm/ft²	0.3 scfm/ft²
	Air Leakage Resistance (Infiltration) ASTM E283	0.18 L/s/m²	
	Test conducted @ 299 Pa (6.24 psf)	0.035 scfm/ft²	0.3 scfm/ft²
	Air Leakage Resistance (Exfiltration) ASTM E283	1.42 L/s/m²	
	Test conducted @ 299 Pa (6.24 psf)	0.284 scfm/ft²	0.3 scfm/ft²

Conditions, Terms, and General Notes Regarding These Tests

The product tested Has Been compared to the detailed drawing, bill of materials and fabrication information supplied by the client so named herein. Our analysis, which includes dimensional and component description comparisons, indicate the tested product and engineering information supplied by the client "Are Equivalent".

The report and representative samples will be retained for four years from the date of initial test.

These test results were obtained by employing all requirements of the designated test methods with no Deviations unless explicitly noted in test report. The test results and specimen supplied for testing are in compliance with the reference.

The test results are specific to the product tested by this laboratory and of the sample supplied by the client named herein, and they relate to no other product either manufactured by the client, a fabricator of the client or of the client or of installed field performance.

This test report does not constitute certification of this product, but only that the above test results were obtained using the designated test methods and they indicate compliance with the performance requirements (paragraphs as listed) of the above referenced specifications.

Testing Evaluation Laboratories, Inc. makes no opinions or endorsements regarding this product and its performance. This report may not be reproduced or quoted in partial form without the expressed written approval of Testing Evaluation Laboratories, Inc.

Testing Evaluation Laboratories, Inc.'s letter, reports, its name or insignia or mark are for the exclusive use of the client so named herein and any other use is strictly prohibited. The report, letters and the name of Testing Evaluation Laboratories, Inc., its seal or mark shall not be used in any circumstance to the general public or in any advertising.

Limitation of liability: Due diligence was used in performing the tests and reporting the results. By acceptance of this report, this client agrees to hold harmless and indemnify Testing Evaluation Laboratories, Inc., its employees, sub-contractors and officers and owners against all claims and demands of any kind whatsoever, which arise out of or in any manner connected with the performance of work referred to herein.

Testing Evaluation Laboratories, Inc.

Vivian K. Wright,
President

Revision Log

Rev Number	Date	Pages	Revision(s)
0	6/26/2015	NA	Original Report Issue

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RW BUILDING CONSULTANTS, INC.
813.659.9197

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CHK. BY: LFS
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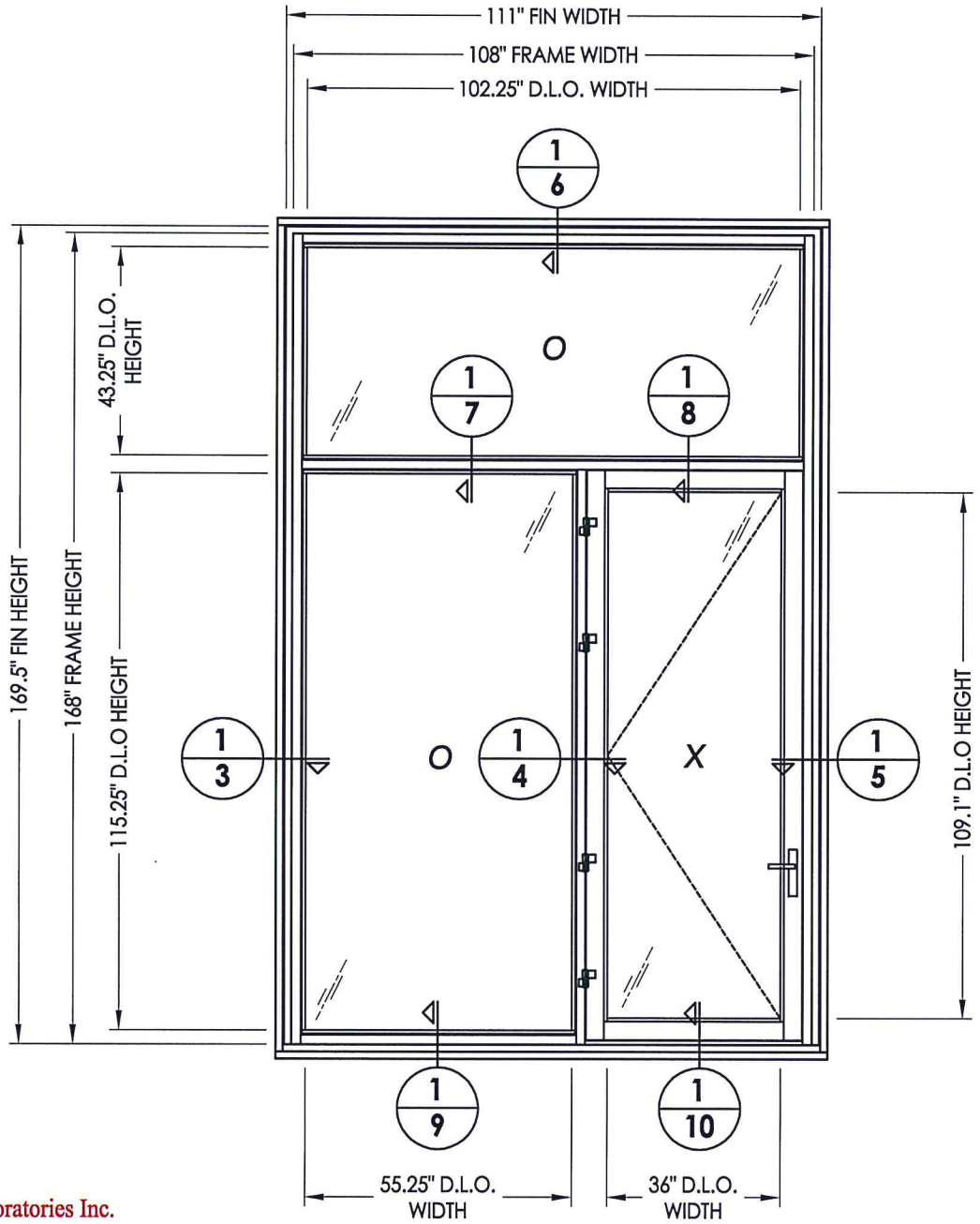

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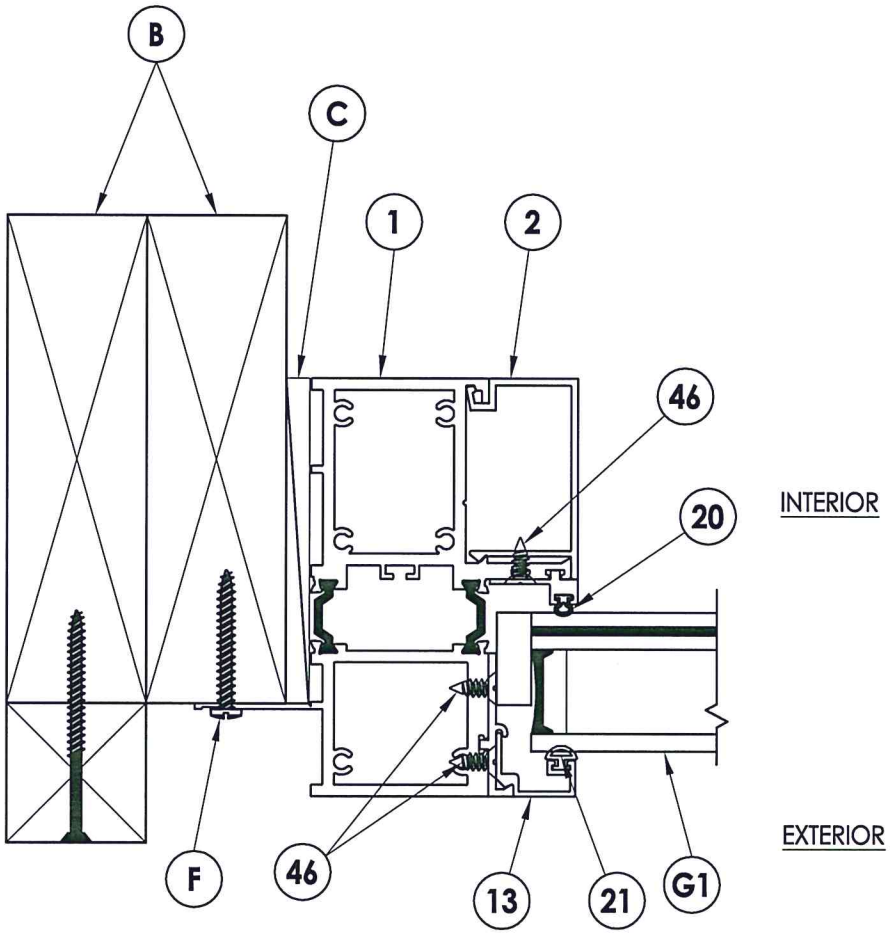

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1/3 **HORIZONTAL CROSS SECTION**

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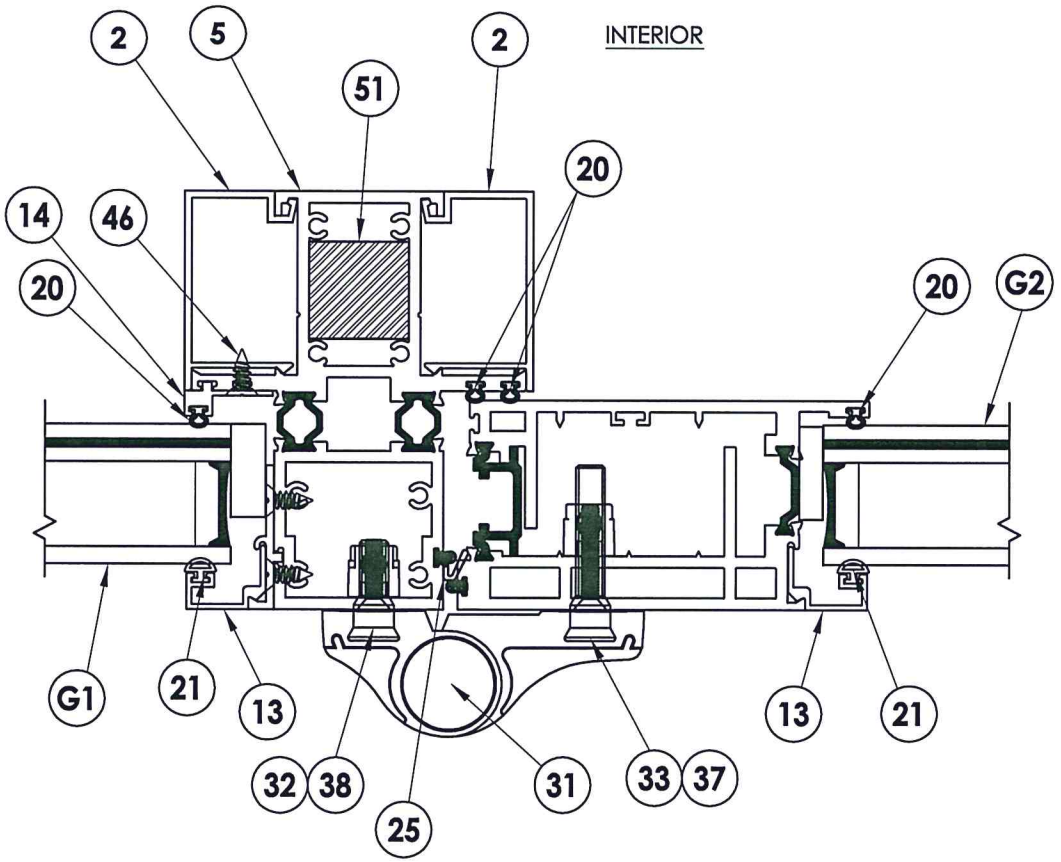

1/4 **HORIZONTAL CROSS SECTION**

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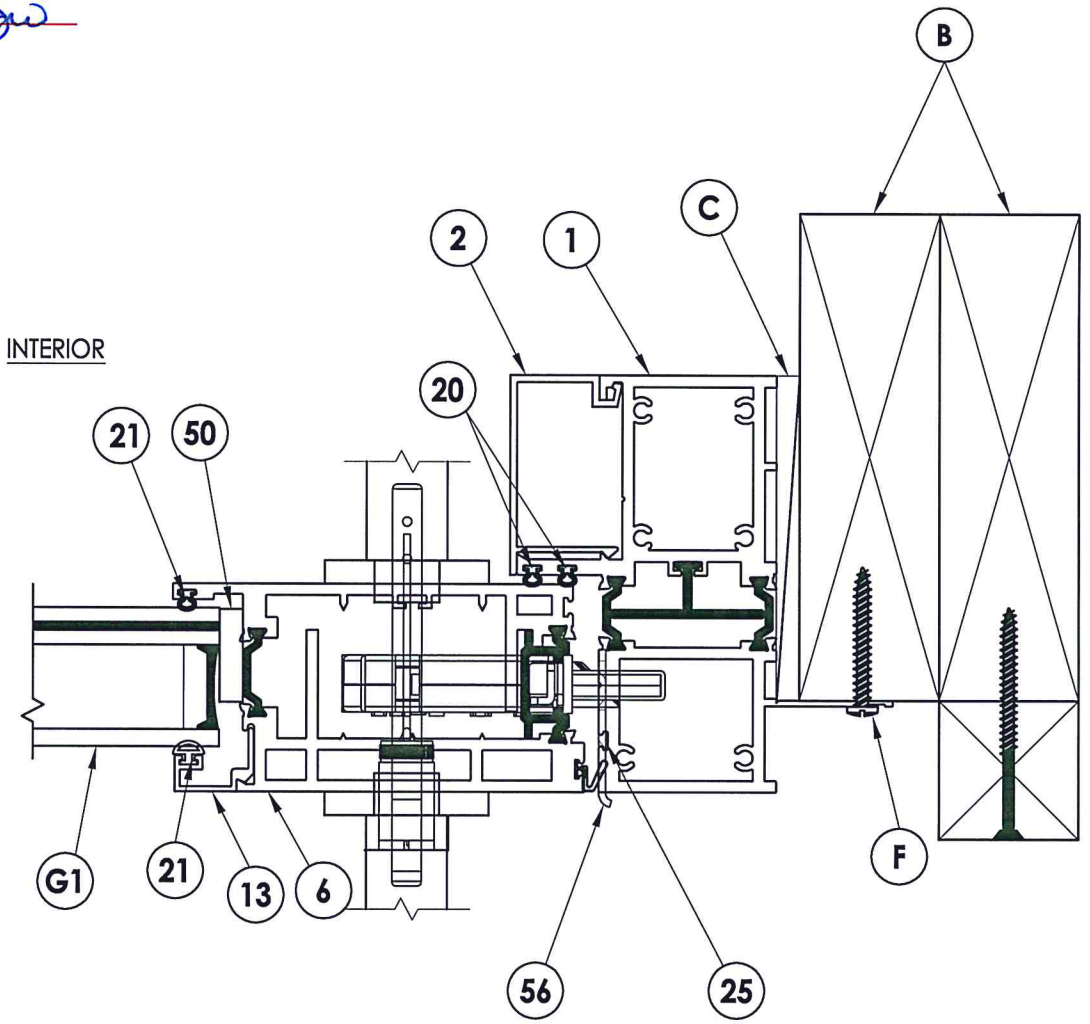

1/5 **HORIZONTAL CROSS SECTION**

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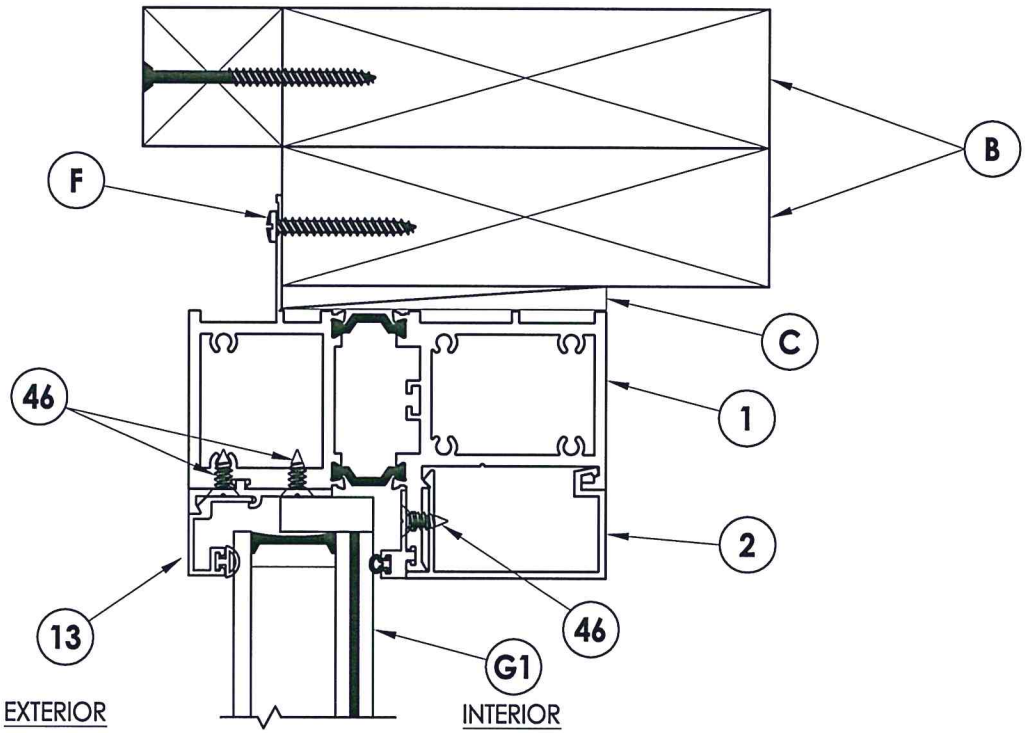

1/6 **VERTICAL CROSS SECTION**

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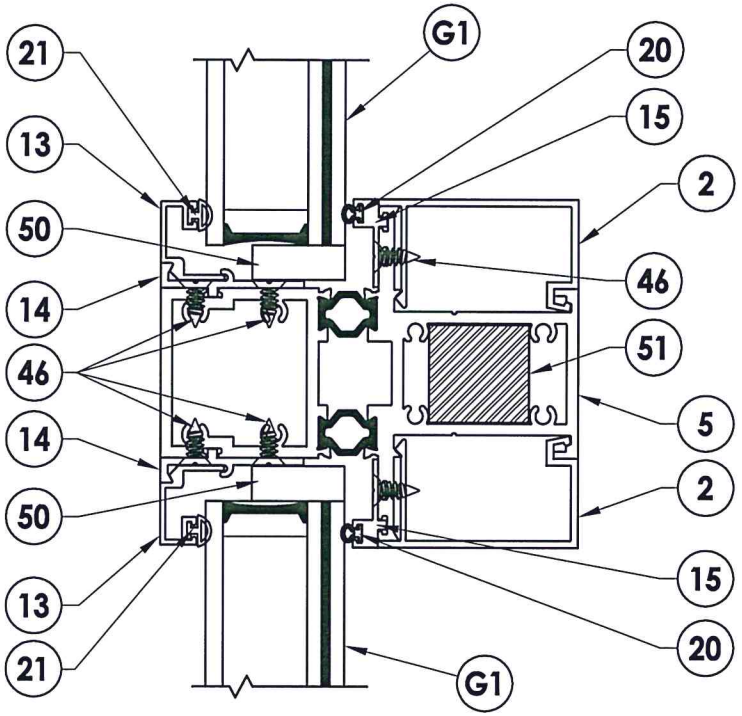

INTERIOR

1/7 **VERTICAL CROSS SECTION**

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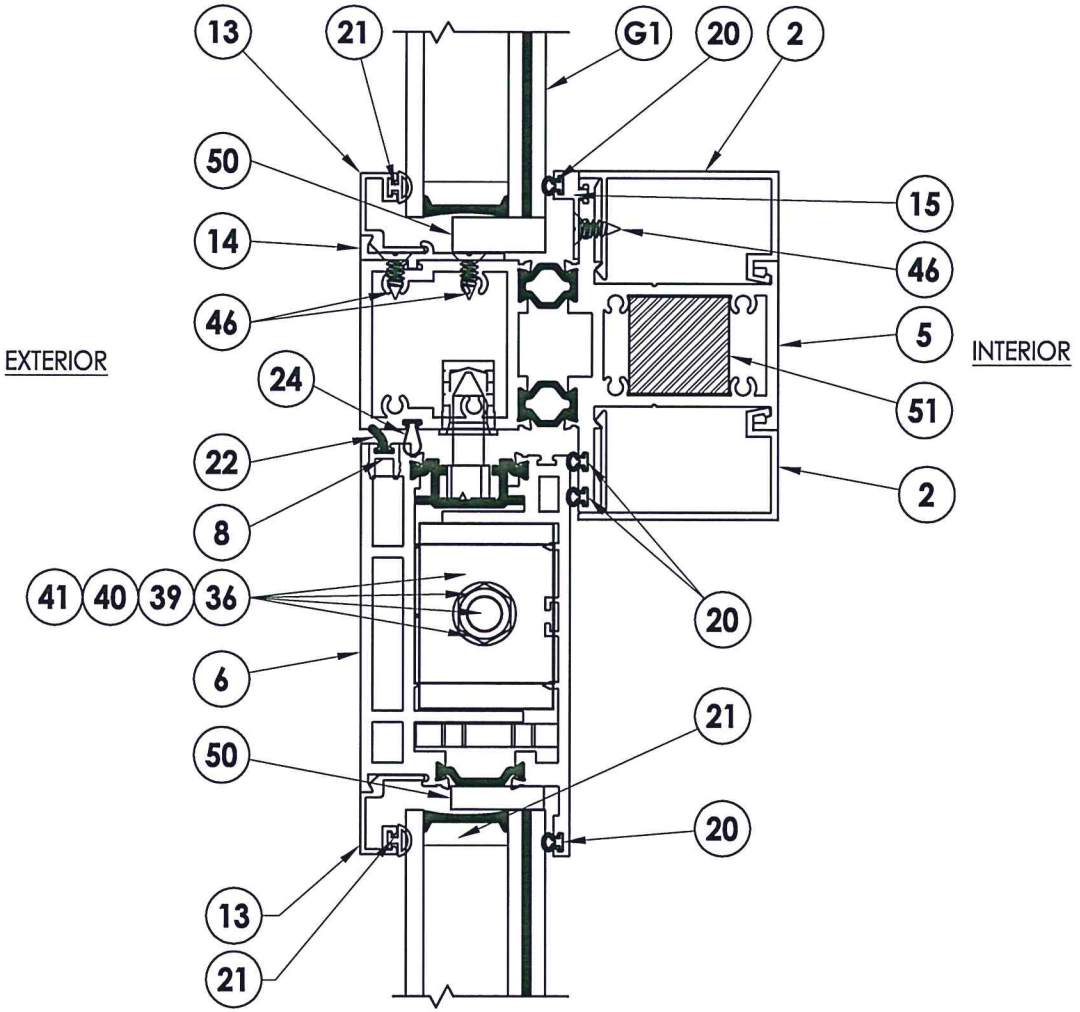

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1/8 **VERTICAL CROSS SECTION**

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Specimen Complies with Drawing
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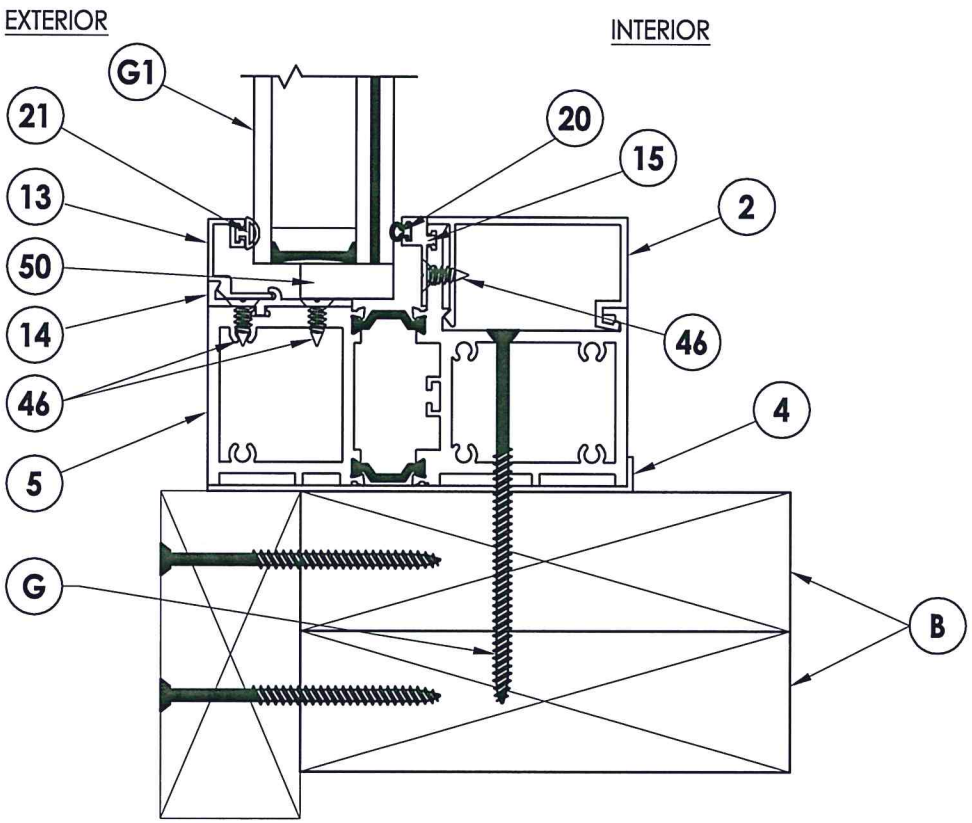

1/9 VERTICAL CROSS SECTION

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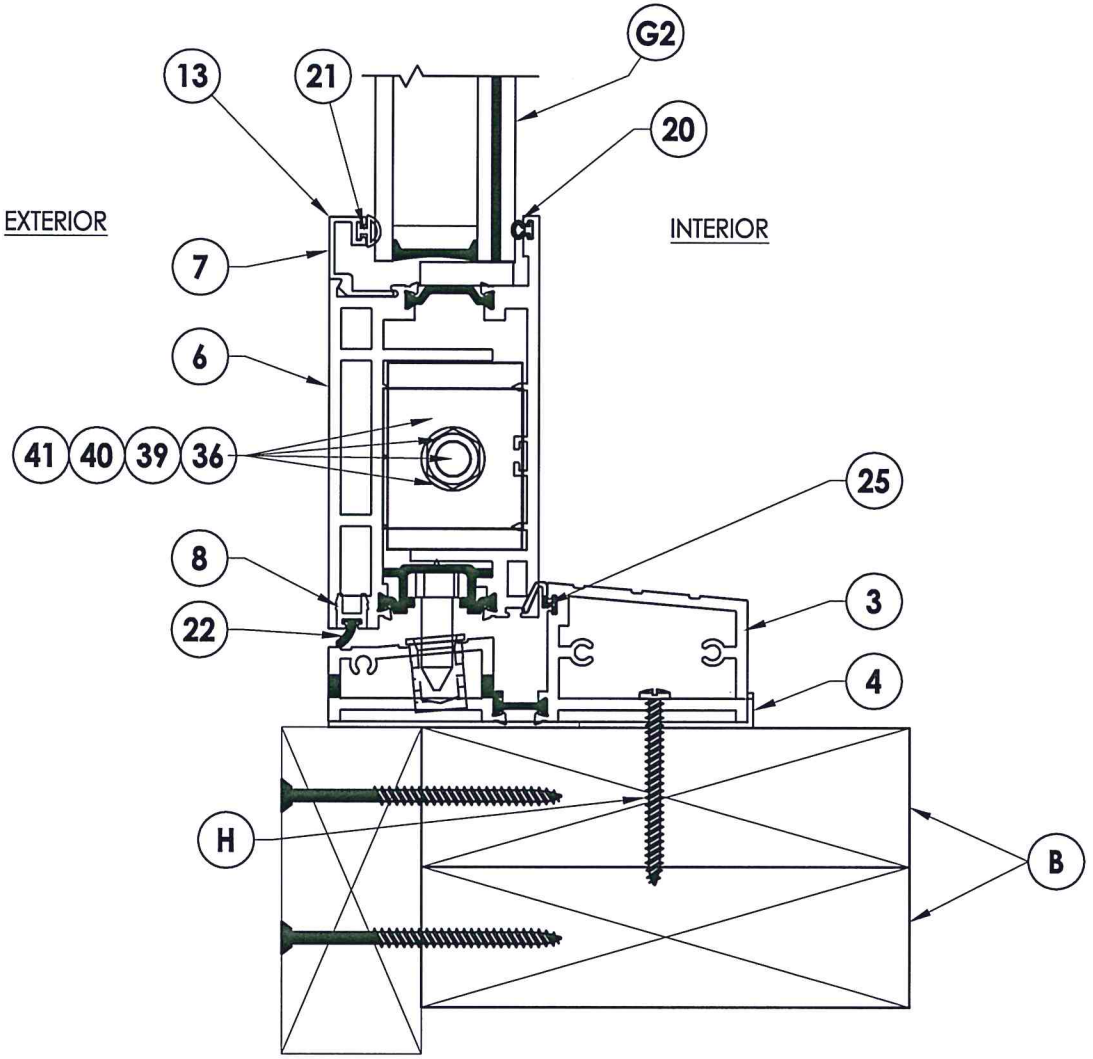

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1/10 **VERTICAL CROSS SECTION**

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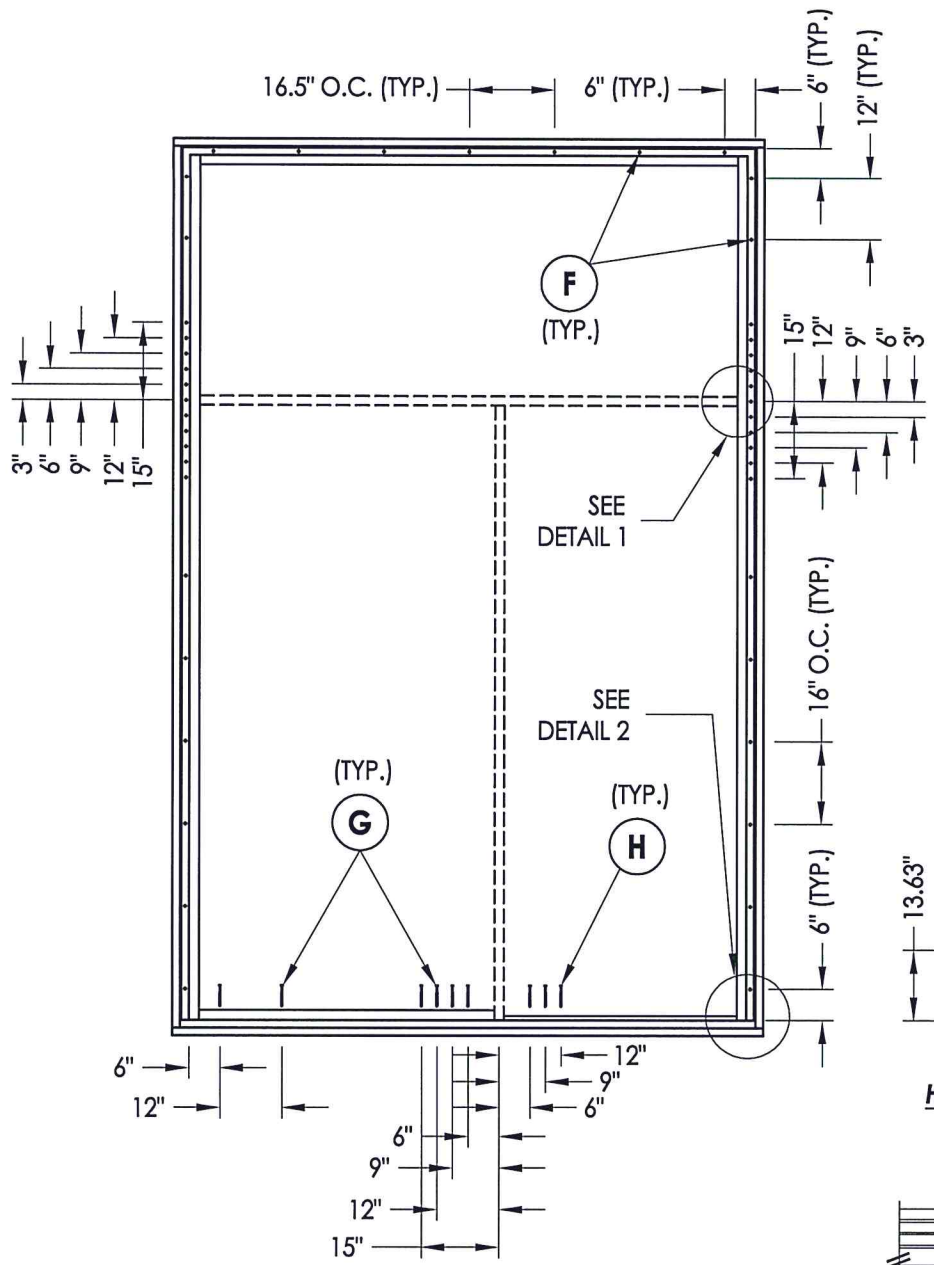
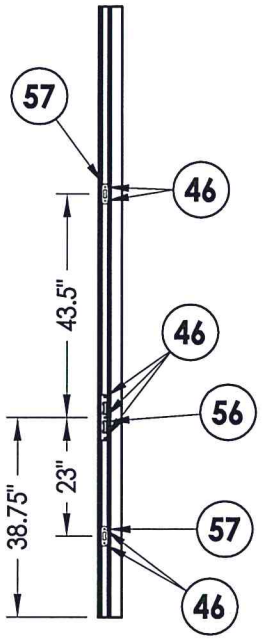


FRAME ANCHORING
(2X buck installation)



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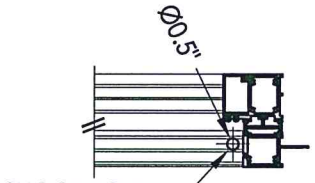
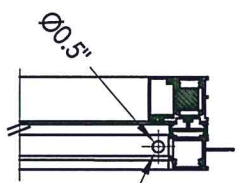


DETAIL 2

STRIKE DETAIL



DETAIL 1

Testing Evaluation Laboratories Inc.
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PRODUCT: FLEETWOOD SPEC. #10, 10A, 10B, 10C

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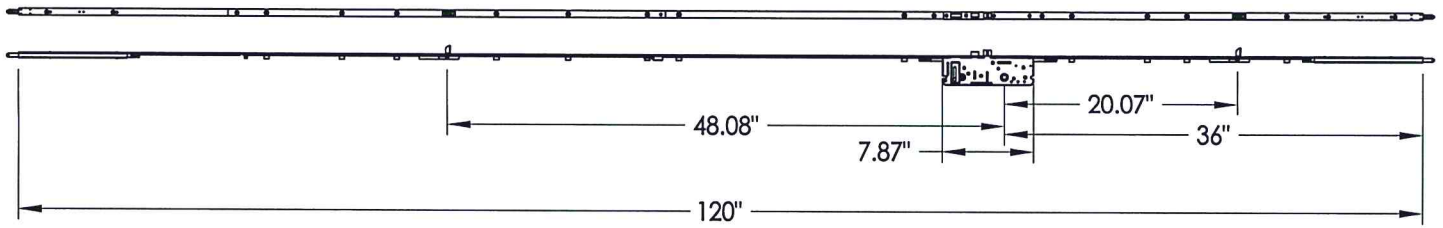
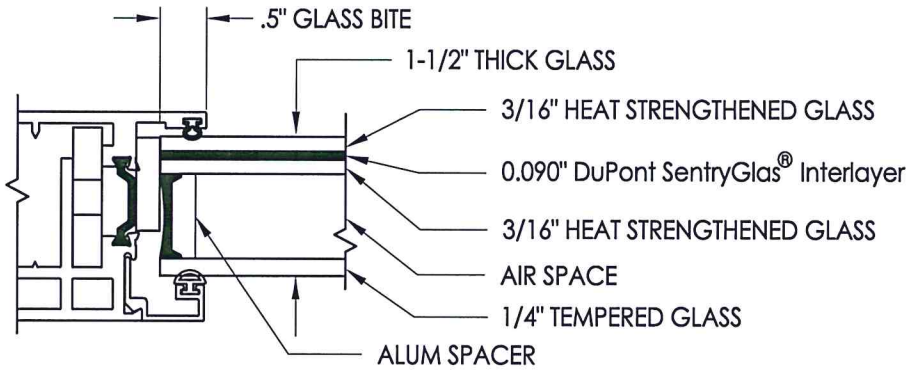
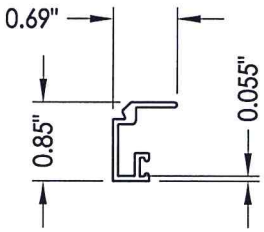


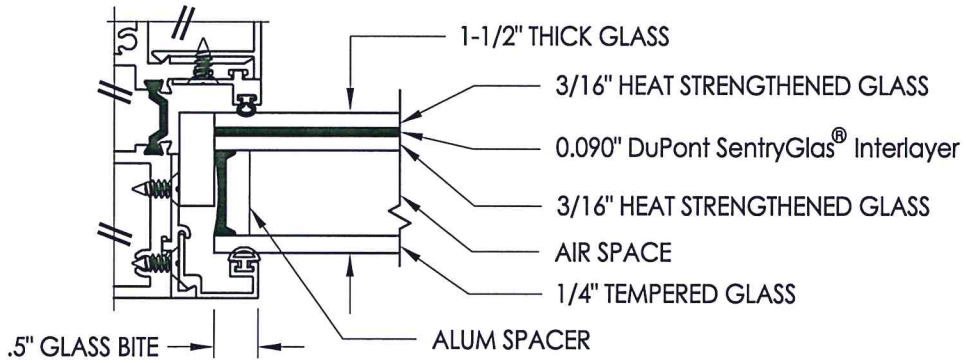
30 MULTI-POINT LOCK
TRUTH



G2 GLAZING DETAIL



13 1.5" GLASS STOP



G1 GLAZING DETAIL

Testing Evaluation Laboratories Inc.
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PRODUCT: FLEETWOOD SPEC. #10, 10A, 10B, 10C

PART OR ASSEMBLY: COMPONENTS AND GLAZING DETAIL

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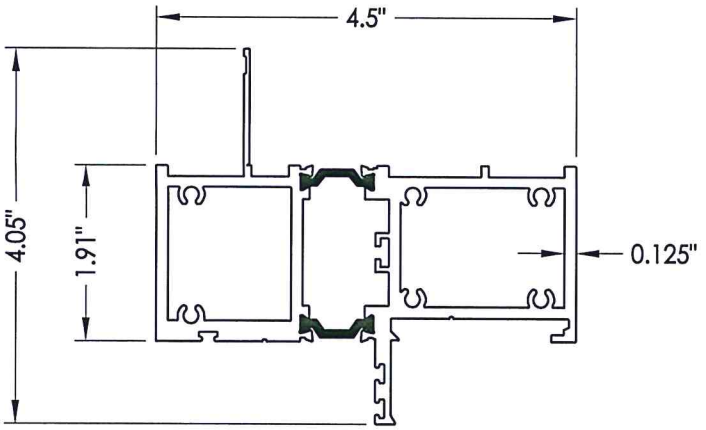

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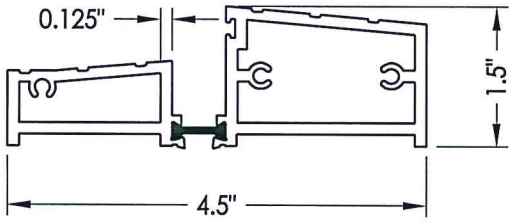

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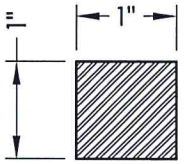
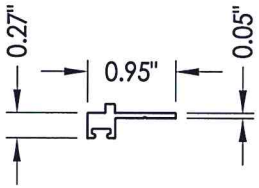
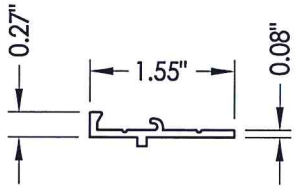


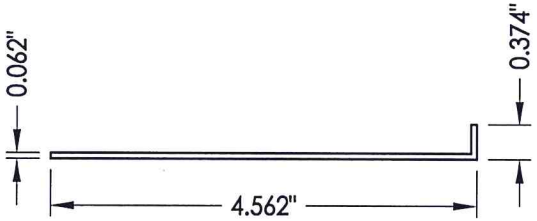
51 REINFORCEMENT



14 FIXED ADAPTOR

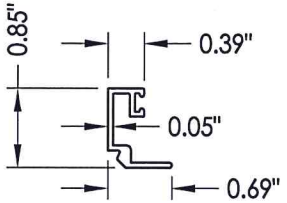


15 GLASS STOP ADAPTOR

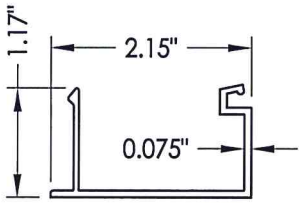


4 SILL PAN

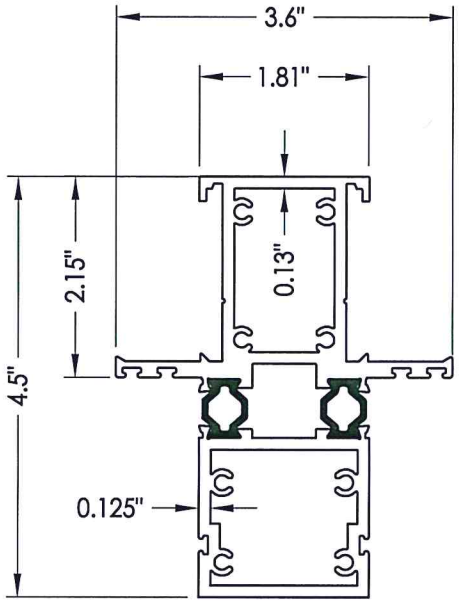
Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991345
Date 6/26/2015 Verified by JW



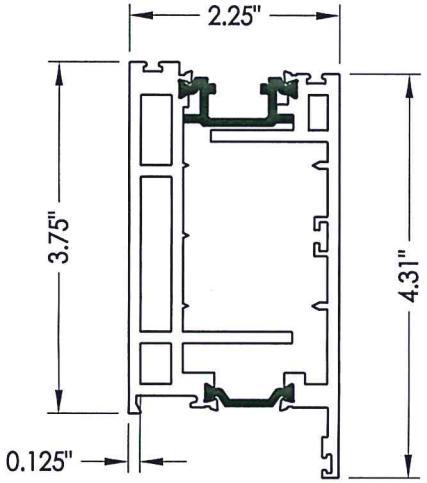
13 1-1/2" GLASS STOP



2 FRAME SNAP-IN



5 FRAME TEE BAR



6 SASH

PRODUCT: FLEETWOOD SPEC. #10, 10A, 10B, 10C

PART OR ASSEMBLY: COMPONENTS

NO.	DATE	REVISIONS	BY

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE:	3/17/15
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	L-7351
SHEET	13 OF 14

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BILL OF MATERIALS

ITEM #	DESCRIPTION	PART#	MATERIAL
B	2X BUCK SG >= 0.55	-	WOOD
C	1/4" MAX. SHIM SPACE	-	-
D	#10 x 2-3/4" PFH WOOD SCREW	-	STEEL
F	#10 x 1-1/2" PFH WOOD SCREW	-	STEEL
G	1/4" x 4" PFH ITW CONCRETE SCREW	-	STEEL
H	#10 x 2" PFH WOOD SCREW	-	STEEL
1	FRAME	3911	6063-T6 ALUM
2	FRAME SNAP-IN	3912	6063-T6 ALUM
3	OUT-SWING SILL	3202	6063-T6 ALUM
4	SILL PAN	-	SHEET METAL (ALUMINUM)
5	FRAME TEE BAR	3913	6063-T6 ALUM
6	SASH	3902	6063-T6 ALUM
8	ATLANTIC SEAL CLIP	3916	6063-T6 ALUM
9	CORNER BLOCK (CUT FROM 3906)	25167	6063-T6 ALUM
13	1-1/2" GLASS STOP	3908	6063-T6 ALUM
14	ATLANTIC NARROW FIXED ADAPTOR	3915	6063-T6 ALUM
15	ATLANTIC NARROW FIXED GLASS STOP ADAPTOR	3917	6063-T6 ALUM
20	BULB VINYL - MINI (EPDM 70 Durometer)	25199	TREMCO, # TX20801E
21	BULB VINYL - LARGE (EPDM 70 Durometer)	25031	TREMCO, # TX19638E
22	FOAM SEAL	25196	EMESBURY, # 32390
23	Q-LON FOAM SEAL	25189	SCHLEGEL CORP., # Q225T190
24	Q-LON FOAM SEAL	25058	SCHLEGEL CORP., # Q375T190
25	Q-LON FOAM SEAL	25059	SCHLEGEL CORP., # QEZ 376
30	LOCKING HARDWARE (5 point lock)	-	TRUTH
31	BUTT HINGE	-	SAVIO
32	BACK UP KIT	20535	SAVIO
33	HINGE BOLT, 8M X 48MM (FOR PANEL)	25026	SAVIO
36	BACK UP PLATE FOR CORNER BLOCK	25025	-
37	MACHINE SCREW NO 10-32, FHP 1.125"	25074	STAINLESS STEEL
38	MACHINE SCREW NO 10-32, FHP .75"	25073	STAINLESS STEEL
39	HEX HEAD CAP SCREW .375-16, 2.250"	25175	STAINLESS STEEL
40	.375-16 SS. HEX NUT	25023	STAINLESS STEEL
41	.375 SPLIT LOCK WASHER	25024	STAINLESS STEEL
42	.375-16 SS. HEX NUT	25176	STAINLESS STEEL
46	SCREW NO 10, UFHP .5"	20275	STAINLESS STEEL
50	4" LONG SETTING BLOCK	18620	-
51	REINFORCEMENT (1" X 1")	-	6061-T6 ALUM
56	LATCH AND DEADBOLT STRIKE PLATE	-	STAINLESS STEEL
57	STRIKE PLATE	-	STAINLESS STEEL

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991345
Date 6/26/2015 Verified by JW

PRODUCT: FLEETWOOD SPEC. #10, 10A, 10B, 10C

PART OR ASSEMBLY: BILL OF MATERIALS

NO.	DATE	BY

REVISIONS

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 3/17/15
SCALE: N.T.S.
DWG. BY: JK
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DRAWING NO.: L-7351
SHEET 14 OF 14

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