



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 9 (O/OX)
Primary Product Designator	Class LC –PG50 2743 x 4267 (108 x 168) – Type SHD
Design Pressure	+ 2394 Pa / - 2394 Pa (+ 50.0 psf / - 50.0 psf)
Air Infiltration	0.68 L/s/m ² (0.136 scfm/ft ²) @ 75 Pa (1.57 psf)
Air Infiltration/Exfiltration (A440S1-09)	Level A2: < 1.50 L/s•m ²
Water Resistance (Per ASTM E547-00)	467 Pa (9.75 psf)
Structural Test Pressure	+ 3591 Pa /- 3591 Pa (+ 75.0 psf / - 75.0 psf)
Forced Entry	No Entry

Reference should be made to Report No. TEL 01991344 for complete test specimen description and data.

For Testing Evaluation Laboratories, Inc.

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 and A440-11 (A440S1-09)

Issued to:

Fleetwood Windows and Doors

1 Fleetwood Way

Corona, CA 92879

IAS Lab Certification Number TL-299

Report Number: TEL 01991344

Test Date: March 18, 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 9

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

<i>Series / Model:</i>	3900-T Aluminum Doors
<i>Type:</i>	Impact Rated Outswing Glazed Door w/Sidelite and Transom (O/OX)
<i>Overall Size:</i>	2743 mm (108.00") x 4267 mm (168.00")
<i>Daylight Opening:</i>	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-7346 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:

<u>Paragraph</u>	<u>Title of Test / Test Method</u>	<u>Results</u>	<u>Allowed</u>
5.3.1.2.1	Force to Latch – Multipoint Locking Device	80N (18.0 lbf)	Report Only
5.3.2.1	Air Leakage Resistance (Infiltration) ASTM E283 Test conducted @ 75 Pa (1.57 psf)	0.68 L/s/m ² 0.136 scfm/ft ²	1.50 L/s/m ² 0.3 scfm/ft ²
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)
<i>Note #1:</i>	<i>(Client opted to start at a pressure higher than the minimum required. Those results are listed under "Optional Performance".)</i>		
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

Test Results
Spec. 9
Cont:

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

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	36.220 (1.426)	NA	(See Note #2)
			2	17.653 (0.695)	NA	(See Note #2)
Half Test Negative	10	1197 (25.00)				
Test Negative	10	2394 (50.00)	1	36.297 (1.429)	NA	(See Note #2)
			2	18.593 (0.732)	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	55.880 (2.200)	5.385 (0.212)	10.465 (0.412)
			2	24.003 (0.945)	1.143 (0.046)	12.090 (0.476)
Half Proof Negative	10	1796 (37.50)				
Proof Negative	10	3591 (75.00)	1	50.292 (1.980)	5.512 (0.217)	10.465 (0.412)
			2	21.082 (0.830)	1.473 (0.058)	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.*

<u>Paragraph</u>	<u>Title of Test / Test Method</u>	<u>Results</u>	<u>Allowed</u>
5.3.2.1	Air Leakage Resistance (Exfiltration) ASTM E283	0.63 L/s/m ²	
	Test conducted @ 75 Pa (1.57 psf)	0.126 scfm/ft ²	0.3 scfm/ft ²

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

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

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9	Vertical cross sections
10	Vertical cross sections
11	Frame anchoring
12	Components and glazing details
13	Components
14	Bill of materials

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991344
Date 6/26/2015 Verified by gq

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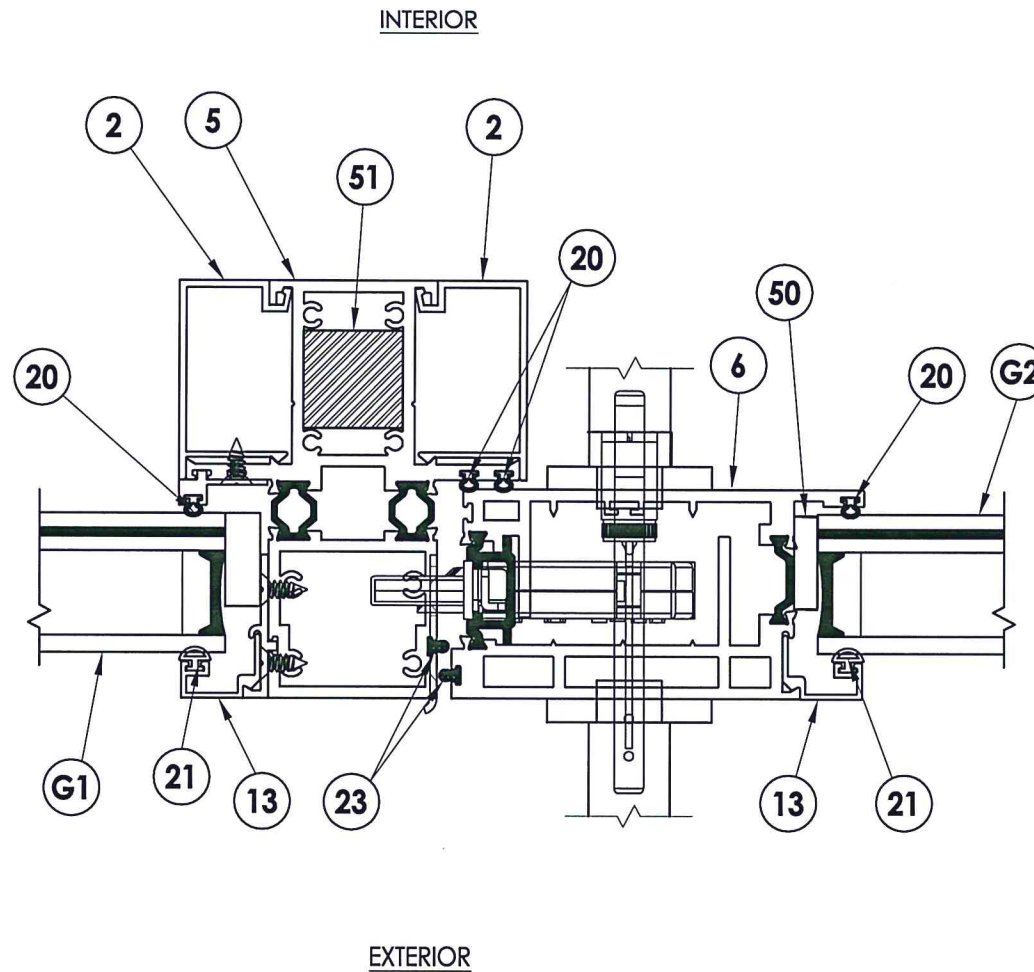
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Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991344
Date 6/26/2015 Verified by 

<div style="text-align: center;"> FLEETWOOD SPEC. #9, 9A </div>						<div style="text-align: center;"> TABLE OF CONTENTS </div>					
PRODUCT:						PART OR ASSEMBLY:					
						NO.		DATE		BY	
										REVISIONS	
<div style="border: 1px solid black; padding: 5px; text-align: center;">  BUILDING CONSULTANTS, INC. 813.659.9197 </div>											
DATE: 3/17/15											
SCALE: N.T.S.											
DWG. BY: JK											
CHK. BY: LFS											
DRAWING NO.:											
L-7346											
SHEET 1 OF 14											





1
4 **HORIZONTAL CROSS SECTION**

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991344
Date 6/26/2015 Verified by gw

PRODUCT: FLEETWOOD
SPEC. #9, 9A

PART OR ASSEMBLY:
HORIZONTAL
CROSS SECTIONS

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

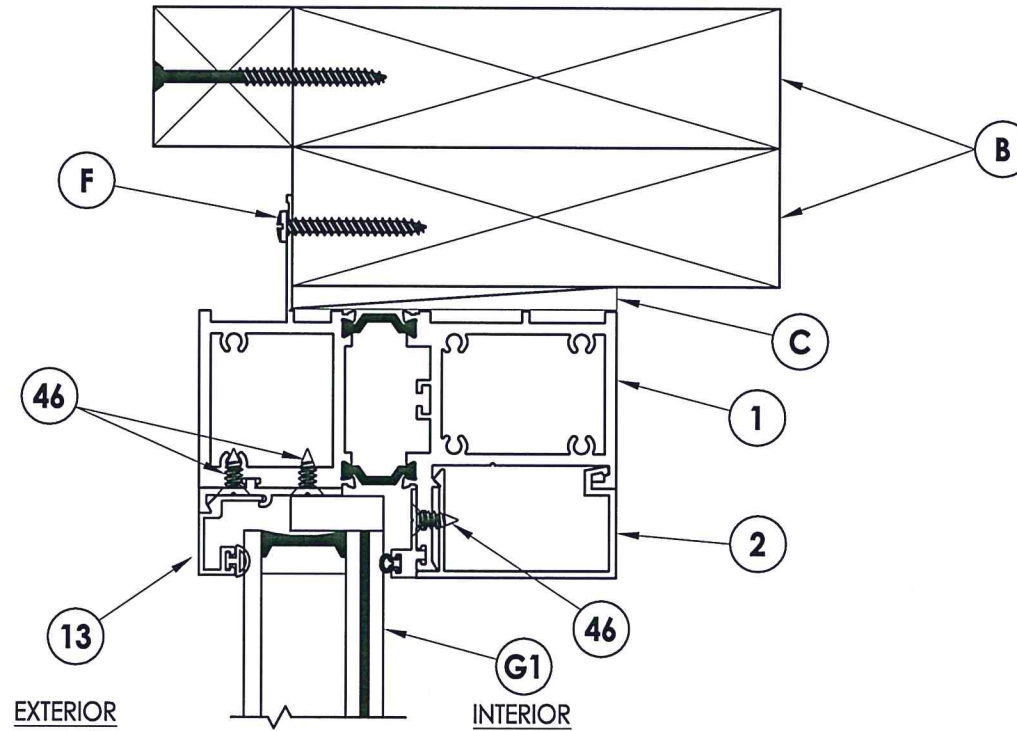
DRAWING NO.:
L-7346

SHEET 4 OF 14

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7346..dwg

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Testing Evaluation Laboratories Inc.
 Specimen Complies with Drawing
 Deviations Noted - TEL# 01991344
 Date 6/26/2015 Verified by *ga*



1
6 **VERTICAL CROSS SECTION**

PRODUCT:
 FLEETWOOD
 SPEC. #9, 9A

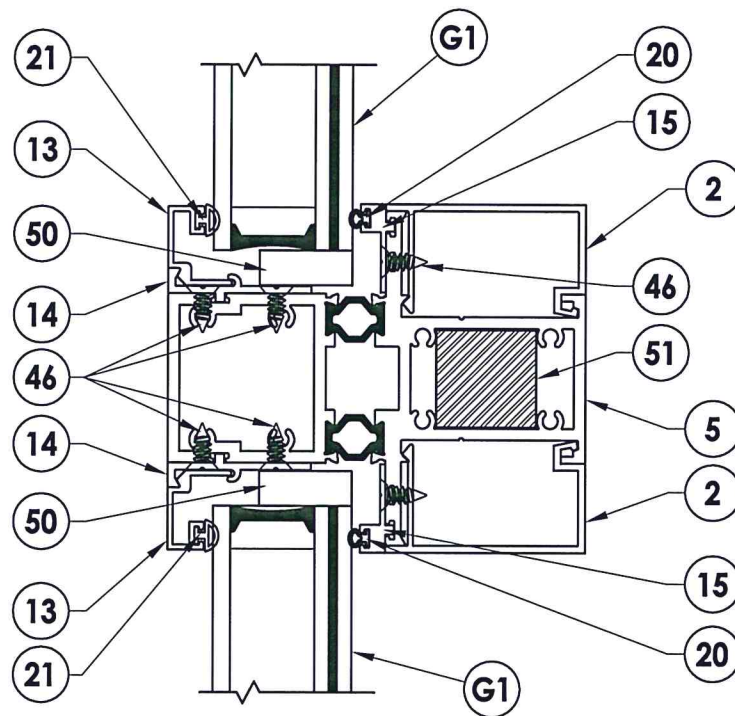
PART OR ASSEMBLY:
 VERTICAL
 CROSS SECTIONS

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-7346
 SHEET 6 OF 14

EXTERIOR



INTERIOR

1
7 **VERTICAL CROSS SECTION**

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991344
Date 6/26/2015 Verified by gn

PRODUCT:
FLEETWOOD
SPEC. #9, 9A

PART OR ASSEMBLY:
VERTICAL
CROSS SECTIONS

NO.	DATE	REVISIONS	BY

RW BUILDING
CONSULTANTS, INC.
813.659.9197

DATE: 3/17/15

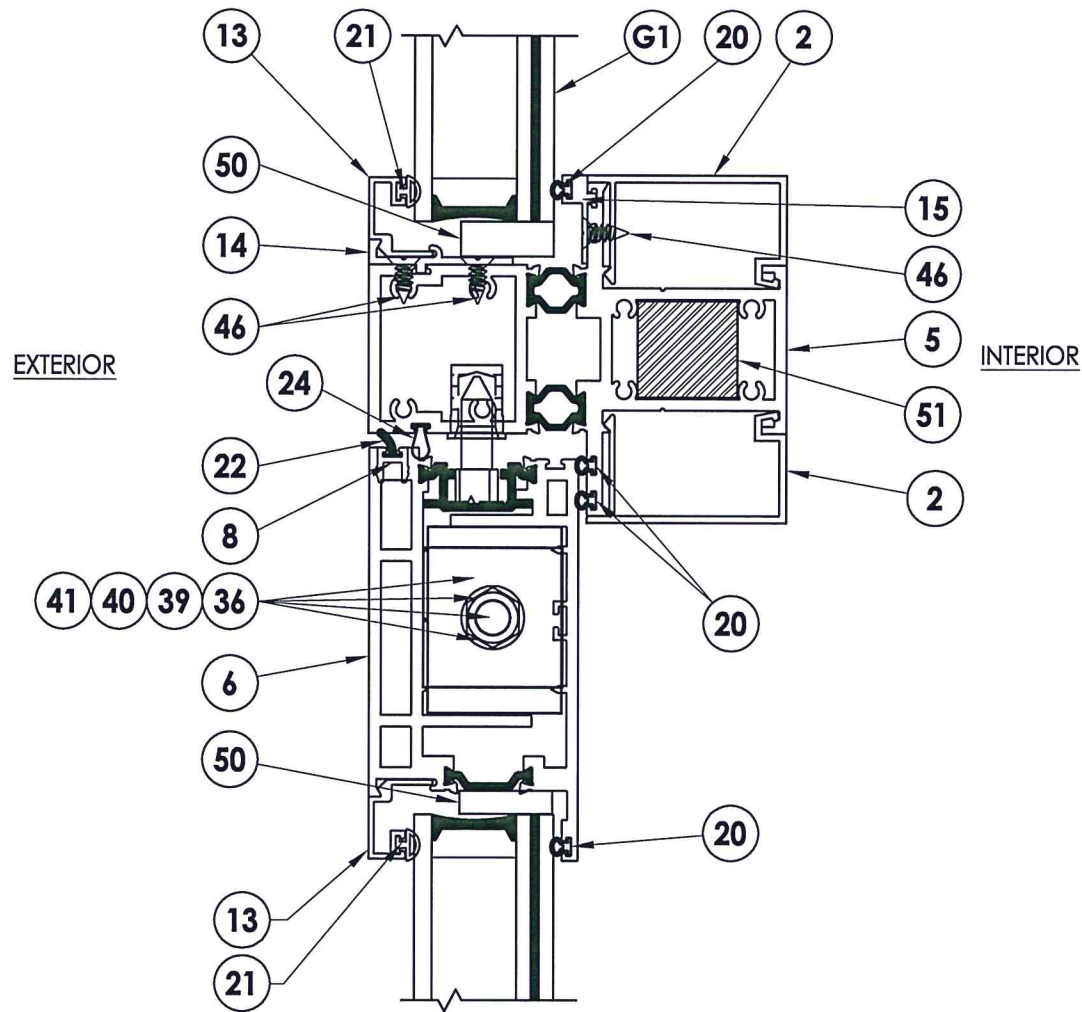
SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:
L-7346

SHEET 7 OF 14



Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991344
Date 6/26/2015 Verified by JD

1
8 **VERTICAL CROSS SECTION**

PRODUCT:
FLEETWOOD
SPEC. #9, 9A

PART OR ASSEMBLY:
VERTICAL
CROSS SECTIONS

NO.	DATE	REVISIONS	BY

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CONSULTANTS, INC.
813.659.9197

DATE: 3/17/15


SCALE: N.T.S.

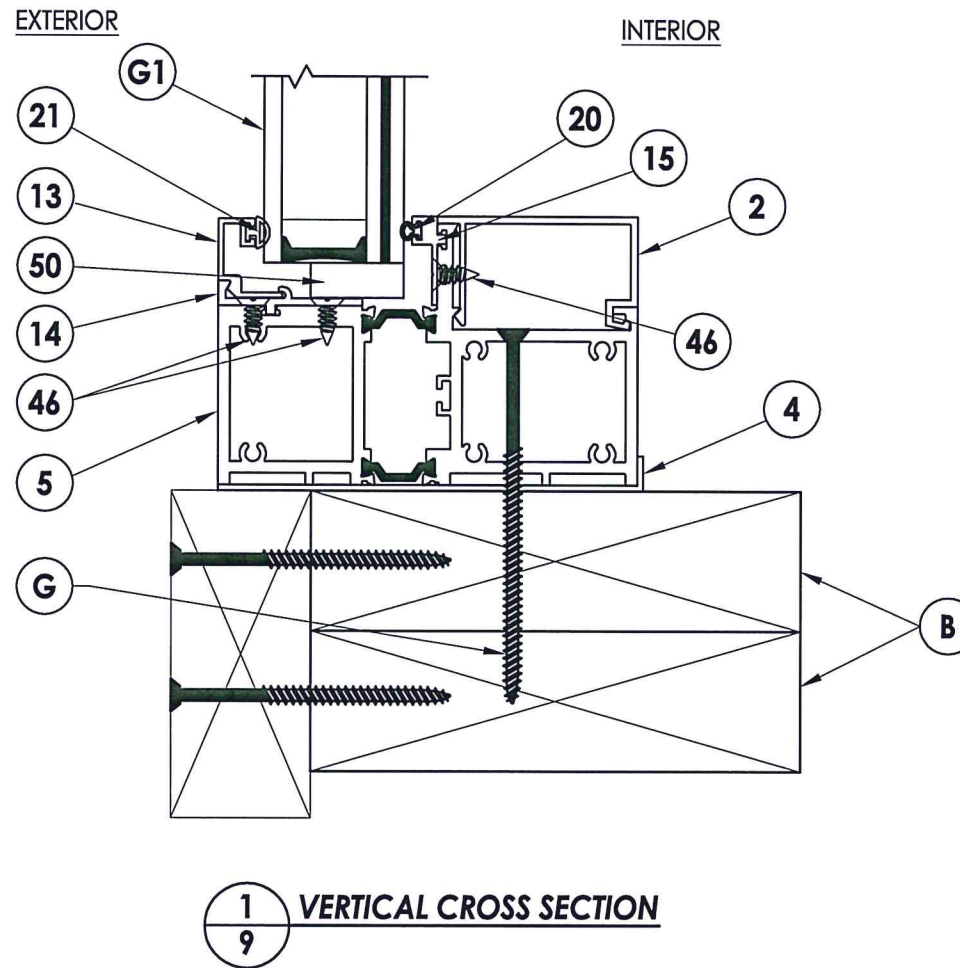
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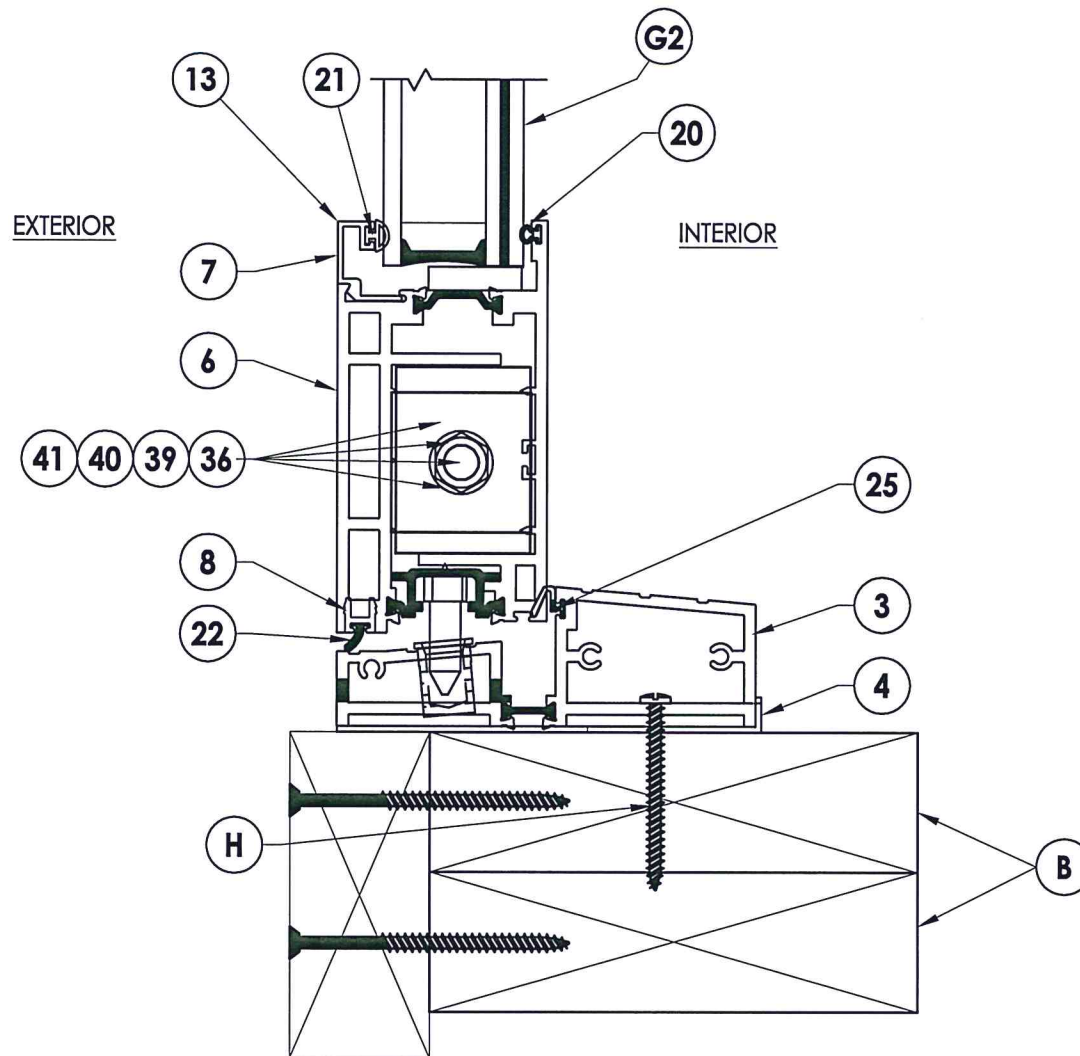
CHK. BY: LFS


DRAWING NO.:
L-7346

SHEET 8 OF 14

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991344
Date 6/26/2015 Verified by 

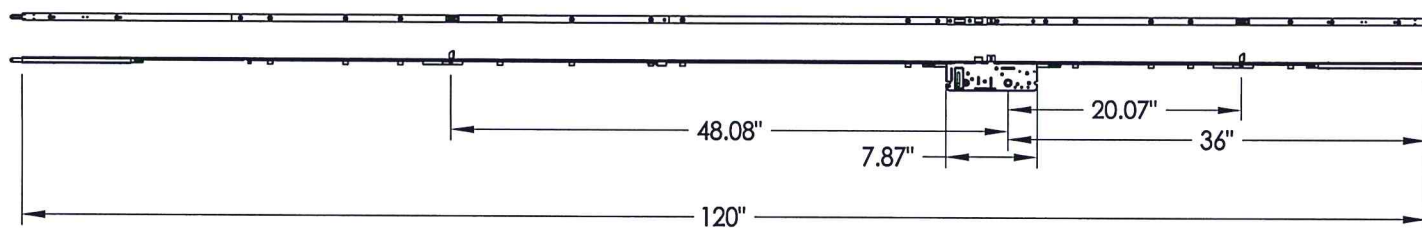
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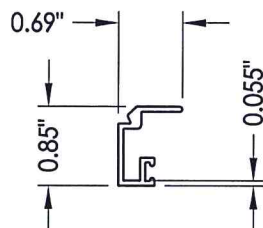
Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991344
Date 6/26/2015 Verified by 

1 **VERTICAL CROSS SECTION**
10

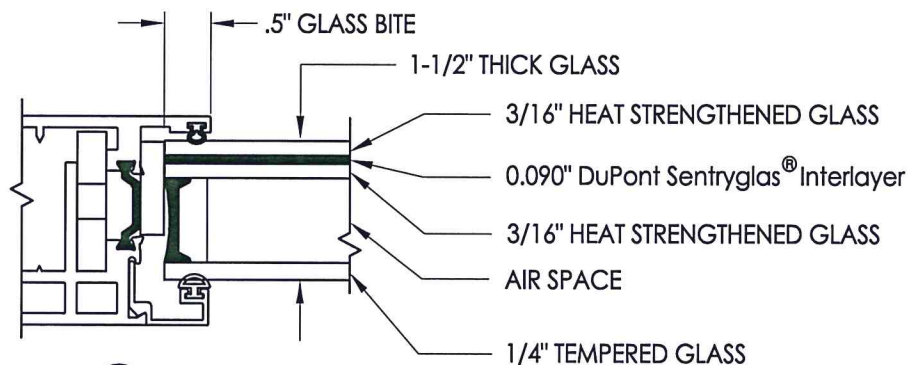
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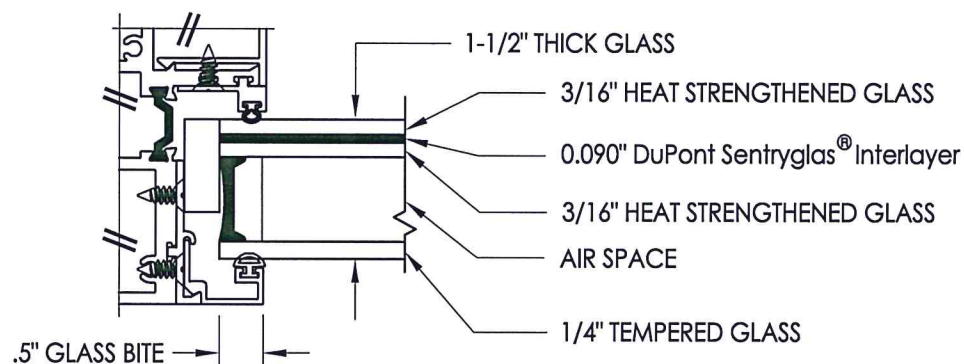
30 MULTI-POINT LOCK
TRUTH



13 1.5" GLASS STOP



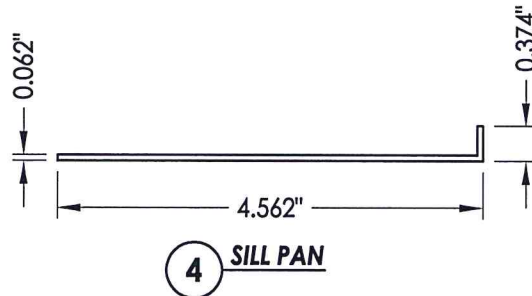
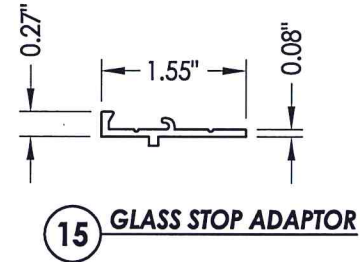
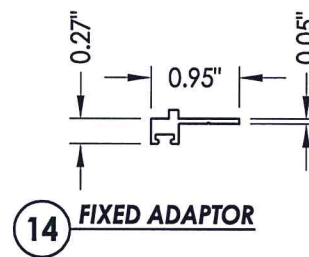
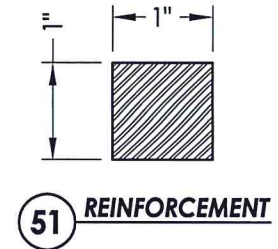
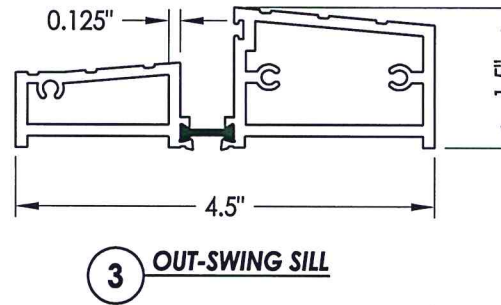
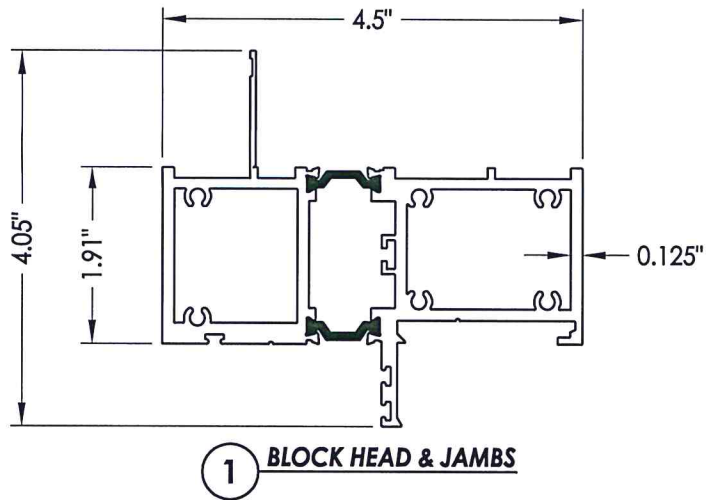
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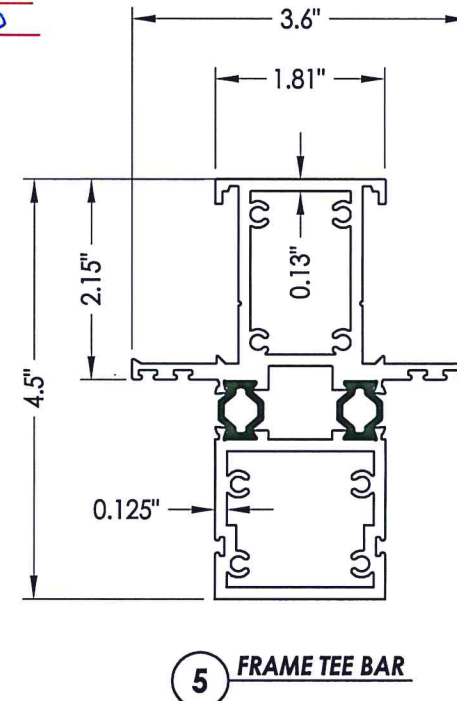
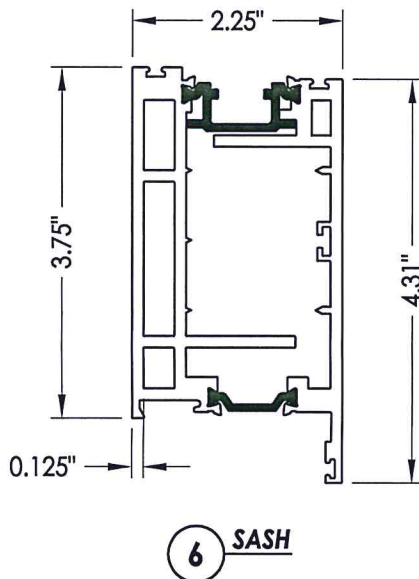
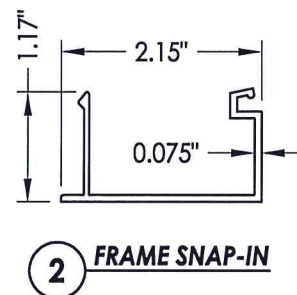
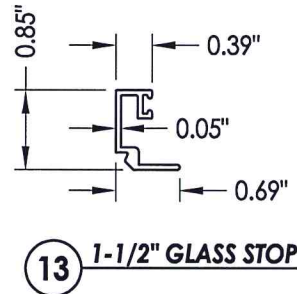
G1 GLAZING DETAIL

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991344
Date 6/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. #9, 9A		PART OR ASSEMBLY:		COMPONENTS AND GLAZING DETAIL	
				BY	
				REVISIONS	
				NO.	
				DATE	
 BUILDING CONSULTANTS, INC. 813.659.9197					
DATE: 3/17/15					
SCALE: N.T.S.					
DWG. BY: JK					
CHK. BY: LFS					
DRAWING NO.: L-7346					
SHEET 12 OF 14					



Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991344
Date 6/26/2015 Verified by *gw*



PRODUCT: **FLEETWOOD
SPEC. #9, 9A**

PART OR ASSEMBLY: **COMPONENTS**

NO.	DATE	REVISIONS	BY

**RW BUILDING
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813.659.9197

DATE: **3/17/15**
SCALE: **N.T.S.**
DWG. BY: **JK**
CHK. BY: **LFS**
DRAWING NO.: **L-7346**
SHEET **13** OF **14**

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