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

ASTM E 1886-05 / ASTM E 1996-09
Missile Level "D" (Includes Wind Zone 4)

TEST REPORT SUMMARY

Test Report Issued To:

Fleetwood Windows and Doors
1 Fleetwood Way
Corona, CA 92879

3900-T Side Hinged Doors

Title of Test	Results	
	Specimen 6a 169.00 x 120.00 OXO – Outswing (3800-T Sidelite)	Specimens 6c, 6d, 6e 169.00 x 120.00 OXO – Outswing (Sash Sidelite)
Impact	Pass	Pass
Fatigue Load Cycling	+50.0/- 55.0 psf	+65.0/- 65.0 psf

Reference should be made to Report No. TEL 01991349 for complete test specimen description and data. For corresponding data regarding AAMA/WDMA/CSA 101/I.S./2/A440-08 and A440-11 *(A440S1-09)* reference should be made to Report No. TEL 01991348.

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

TEST RESULTS

IAS Lab Certification Number: TL-299

Report No: TEL 01991349
Test Dates: March 16, 2015 through April 3, 2015
Report Date: June 26, 2015

Issued to:

Fleetwood Windows and Doors
1 Fleetwood Way
Corona, CA 92879

Project Summary: Testing Evaluation Laboratories, Inc. (TEL) was contracted by Fleetwood Windows and Doors to perform tests on the 3900-T Side Hinged Doors at TEL's Plant City, FL test facility.

Test specimen descriptions and results are reported herein.

Test Specifications: **The test specimens were evaluated in accordance with the following:**

ASTM E 1886-05 / ASTM E 1996-09
Missile Level "D" (Includes Wind Zone 4)

Test Specimen Description:

Series / Model:	**3900-T Side Hinged Doors**
Type:	**Aluminum Side Hinged Doors**
Overall Size:	**169.00" x 120.00" – All Specimens – (OXO)**
Daylight Opening:	**35.00" x 108.00" – Door Panel – All Specimens** **57.00" x 117.00" – 3800-T Sidelite– Specimen 6 and 6a** **47.00" x 108.00" – Sash Sidelite – All Specimens**
Glazing Details:	**See attached drawings for glazing details.**
Frame Material:	**Aluminum**
Finish:	**Mill Finish**

For Tested Elevation, Vertical Cross Sections, Horizontal Cross Sections, Components, Frame Anchoring, Glazing Detail and Bill of Materials See Attached Drawing numbers L-7349 and L-7349A.

IMPACT AND CYCLING TESTS

Specimen 6a – 169.00" x 120.00" – Outswing Door with (1) 3800-T Sidelite and (1) Sash Sidelite – OXO

ASTM E1886-05/1996-09 – Large Missile Impact (2 x 4 Southern Yellow Pine)

Cond. Temp Of Specimen	Missile Level	Missile Weight	Missile Length	Muzzle Distance From Specimen
77°F	D	9.0 lbs, 0 oz.	8'-1/4"	17'0"

Impact Location	Results	X - Measurement	Y - Measurement	Speed
1	Pass	31.25 "	60.25 "	50.1 fps
2	Pass	53.50"	8.00"	50.0 fps
3	Pass	61.75"	60.50"	50.1 fps
4	Pass	85.75"	60.00"	50.1 fps
5	Pass	97.25 "	11.50"	50.0 fps

Orientation of Missile at Impact was within +/-5° of horizontal.
None of the impacts penetrated the specimens.
"X" measurement is from the left edge of test specimen.
"Y" measurement is from the bottom edge of test specimen.

ASTM E1886-05/1996-09 – Fatigue Load Cycling **Design Pressure +50.0 psf / - 55.0 psf**

Positive % of Test Load	Positive Pressure Range (psf)	Number Of Cycles	Average Cycle Time (Sec)
20% to 50%	10.0 to 25.0	3500	1.33
0% to 60%	0.0 to 30.0	300	1.95
50% to 80%	25.0 to 40.0	600	1.32
30% to 100%*	15.0 to 50.0	100	1.75

Negative % of Test Load	Negative Pressure Range (psf)	Number Of Cycles	Average Cycle Time (Sec)
30% to 100%*	16.5 to 55.0	50	1.71
50% to 80%	27.5 to 44.0	1050	1.21
0% to 60%	0.0 to 33.0	50	2.13
20% to 50%	11.0 to 27.5	3350	1.17

*Active Panel deflected 1.75" from original plane at 100% Positive load and 2.25" from original plane at 100% Negative load. At the completion of cycles the door panel was operable. There were no tears in the film. In our opinion, the tape and film used to seal for air leakage did not influence the results of the test.

James Hayhurst, Test Technician

IMPACT AND CYCLING TESTS

Specimen 6c – 169.00" x 120.00" – Outswing Door with Sash Sidelites – OXO

ASTM E1886-05/1996-09 – Large Missile Impact (2 x 4 Southern Yellow Pine)

Cond. Temp Of Specimen	Missile Level	Missile Weight	Missile Length	Muzzle Distance From Specimen
77°F	D	9.0 lbs, 1 oz.	8'-1/2"	17'0"

Impact Location	Results	X - Measurement	Y - Measurement	Speed
1	Pass	30.00"	60.00"	50.0 fps
2	Pass	60.25"	61.00"	49.9 fps
3	Pass	84.50"	59.25"	50.1 fps
4	Pass	96.00"	11.50"	50.0 fps
5	Pass	47.50"	11.25"	50.1 fps

Orientation of Missile at Impact was within +/-5° of horizontal.
None of the impacts penetrated the specimens.
"X" measurement is from the left edge of test specimen.
"Y" measurement is from the bottom edge of test specimen.

ASTM E1886-05/1996-09 – Fatigue Load Cycling **Design Pressure +65.0 psf / - 65.0 psf**

Positive % of Test Load	Positive Pressure Range (psf)	Number Of Cycles	Average Cycle Time (Sec)
20% to 50%	13.0 to 32.5	3500	1.99
0% to 60%	0.0 to 39.0	300	1.21
50% to 80%	32.5 to 52.0	600	1.31
30% to 100%*	19.5 to 65.0	100	1.41

Negative % of Test Load	Negative Pressure Range (psf)	Number Of Cycles	Average Cycle Time (Sec)
30% to 100%*	19.5 to 65.0	50	1.65
50% to 80%	32.5 to 52.0	1050	1.63
0% to 60%	0.0 to 39.0	50	1.99
20% to 50%	13.0 to 32.5	3350	2.29

*Active Panel deflected 2.75" from original plane at 100% Positive load and 3.00" from original plane at 100% Negative load. At the completion of cycles the door panel was operable. There were no tears in the film. In our opinion, the tape and film used to seal for air leakage did not influence the results of the test.

James Hayhurst, Test Technician

IMPACT AND CYCLING TESTS

Specimen 6d – 169.00" x 120.00" – Outswing Door with Sash Sidelites – OXO

ASTM E1886-05/1996-09 – Large Missile Impact (2 x 4 Southern Yellow Pine)

Cond. Temp Of Specimen	Missile Level	Missile Weight	Missile Length	Muzzle Distance From Specimen
77°F	D	9.0 lbs, 1 oz.	8'-1/2"	17'0"

Impact Location	Results	X - Measurement	Y - Measurement	Speed
1	Pass	47.25"	11.375"	50.0 fps
2	Pass	95.75"	11.50"	50.0 fps
3	Pass	84.25"	59.50"	50.1 fps
4	Pass	60.25"	60.50"	49.9 fps
5	Pass	30.25"	59.50"	50.0 fps
Orientation of Missile at Impact was within +/-5° of horizontal. None of the impacts penetrated the specimens. "X" measurement is from the left edge of test specimen. "Y" measurement is from the bottom edge of test specimen.				

ASTM E1886-05/1996-09 – Fatigue Load Cycling **Design Pressure +65.0 psf / - 65.0 psf**

Positive % of Test Load	Positive Pressure Range (psf)	Number Of Cycles	Average Cycle Time (Sec)
20% to 50%	13.0 to 32.5	3500	1.99
0% to 60%	0.0 to 39.0	300	2.29
50% to 80%	32.5 to 52.0	600	2.31
30% to 100%*	19.5 to 65.0	100	2.74

Negative % of Test Load	Negative Pressure Range (psf)	Number Of Cycles	Average Cycle Time (Sec)
30% to 100%*	19.5 to 65.0	50	2.99
50% to 80%	32.5 to 52.0	1050	2.25
0% to 60%	0.0 to 39.0	50	1.89
20% to 50%	13.0 to 32.5	3350	1.71
*Active Panel deflected 3.625" from original plane at 100% Positive load and 4.00" from original plane at 100% Negative load. At the completion of cycles the door panel was operable. There were no tears in the film. In our opinion, the tape and film used to seal for air leakage did not influence the results of the test.			

James Hayhurst, Test Technician

IMPACT AND CYCLING TESTS

Specimen 6e – 169.00" x 120.00" – Outswing Door with Sash Sidelites – OXO

ASTM E1886-05/1996-09 – Large Missile Impact (2 x 4 Southern Yellow Pine)

Cond. Temp Of Specimen	Missile Level	Missile Weight	Missile Length	Muzzle Distance From Specimen
77°F	D	9.0 lbs, 1 oz.	8'-1/2"	17'0"

Impact Location	Results	X - Measurement	Y - Measurement	Speed
1	Pass	30.00"	59.75"	49.9 fps
2	Pass	60.38"	60.50"	50.0 fps
3	Pass	84.625"	59.50"	50.0 fps
4	Pass	73.00"	107.50"	50.1 fps
5	Pass	12.50"	107.25"	50.0 fps

Orientation of Missile at Impact was within +/-5° of horizontal.
None of the impacts penetrated the specimens.
"X" measurement is from the left edge of test specimen.
"Y" measurement is from the bottom edge of test specimen.

ASTM E1886-05/1996-09 – Fatigue Load Cycling **Design Pressure +65.0 psf / - 65.0 psf**

Positive % of Test Load	Positive Pressure Range (psf)	Number Of Cycles	Average Cycle Time (Sec)
20% to 50%	13.0 to 32.5	3500	2.01
0% to 60%	0.0 to 39.0	300	2.11
50% to 80%	32.5 to 52.0	600	2.59
30% to 100%*	19.5 to 65.0	100	2.87

Negative % of Test Load	Negative Pressure Range (psf)	Number Of Cycles	Average Cycle Time (Sec)
30% to 100%*	19.5 to 65.0	50	2.91
50% to 80%	32.5 to 52.0	1050	2.53
0% to 60%	0.0 to 39.0	50	2.01
20% to 50%	13.0 to 32.5	3350	1.89

*Active Panel deflected 3.625" from original plane at 100% Positive load and 4.00" from original plane at 100% Negative load. At the completion of cycles the door panel was operable. There were no tears in the film. In our opinion, the tape and film used to seal for air leakage did not influence the results of the test.

James Hayhurst, Test Technician

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, 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 No.	Date	Page(s)	Revision(s)
0	6/26/2015	NA	Original Report Issue

.3

TABLE OF CONTENTS

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6, 6A

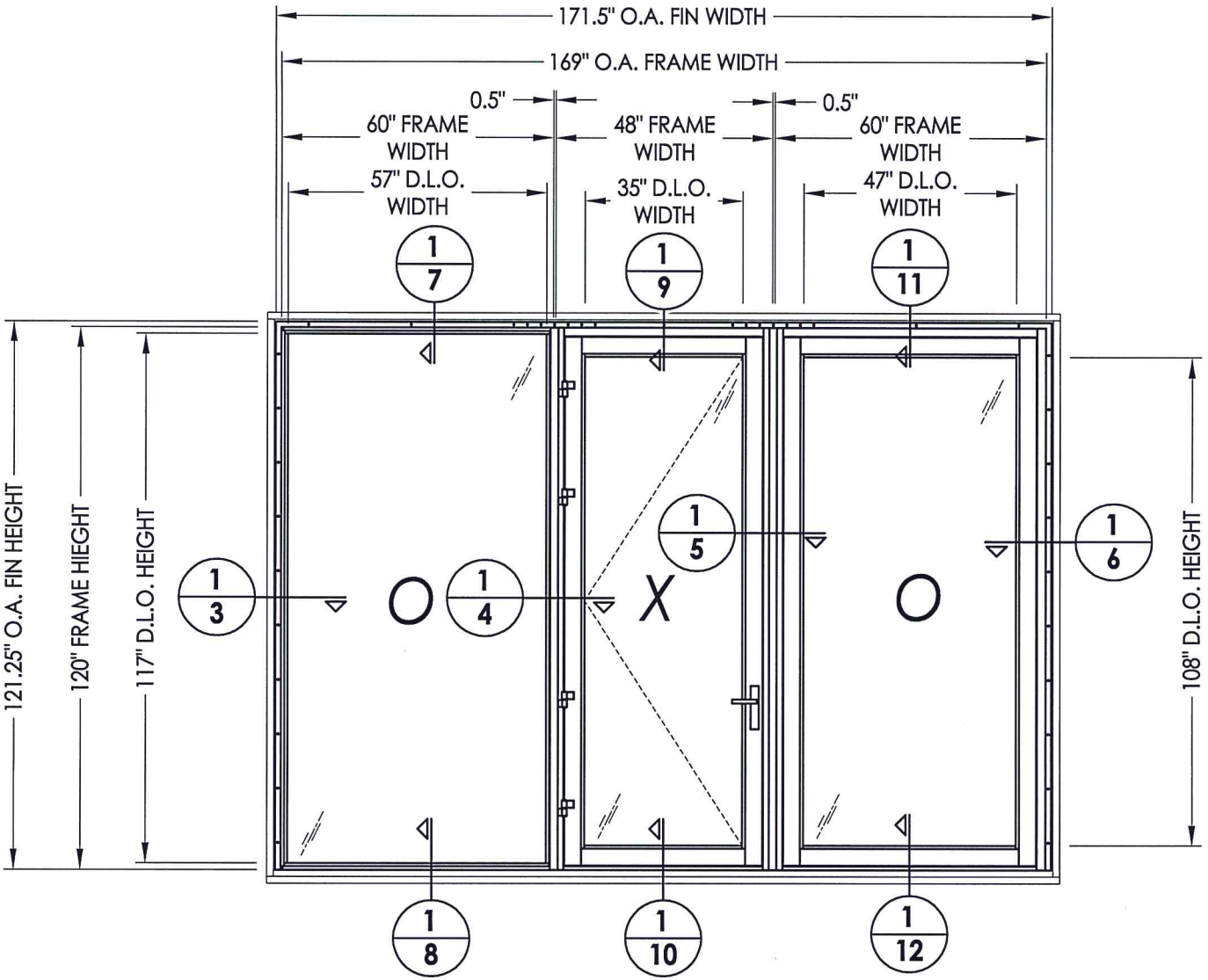
PART OR ASSEMBLY: TABLE OF CONTENTS

NO.	DATE	REVISIONS	BY

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 1 OF 17

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, L-7349



Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6, 6A

PART OR ASSEMBLY: TEST ELEVATIONS

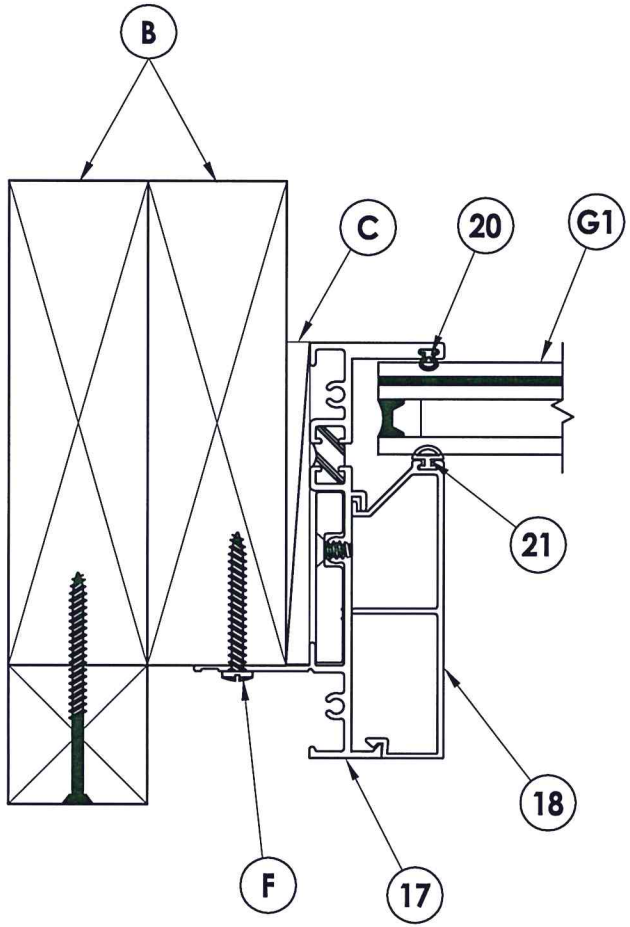
NO.	DATE	BY
REVISIONS		

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 2 OF 17

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 2

INTERIOR



EXTERIOR

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

1/3 **HORIZONTAL CROSS SECTION**

PRODUCT: FLEETWOOD SPEC. 6, 6A

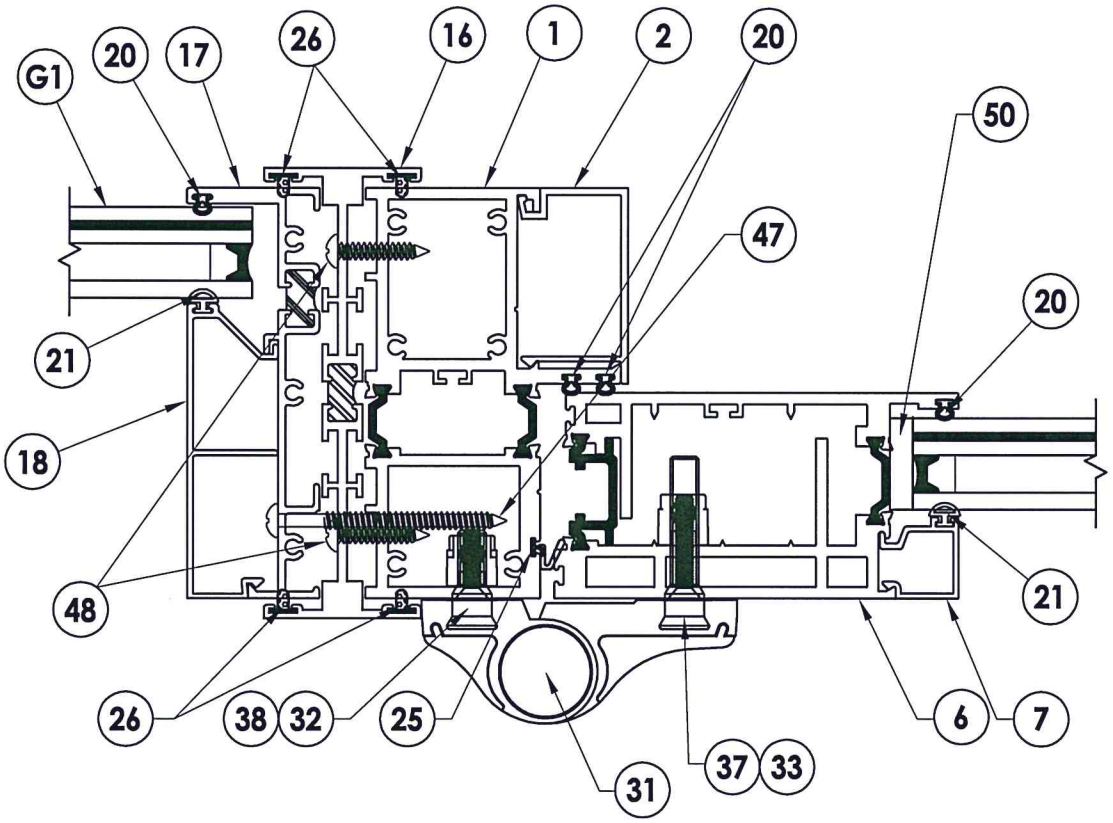
PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 3 OF 17

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 3



Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

1/4 **HORIZONTAL CROSS SECTION**

PRODUCT: FLEETWOOD SPEC. 6, 6A

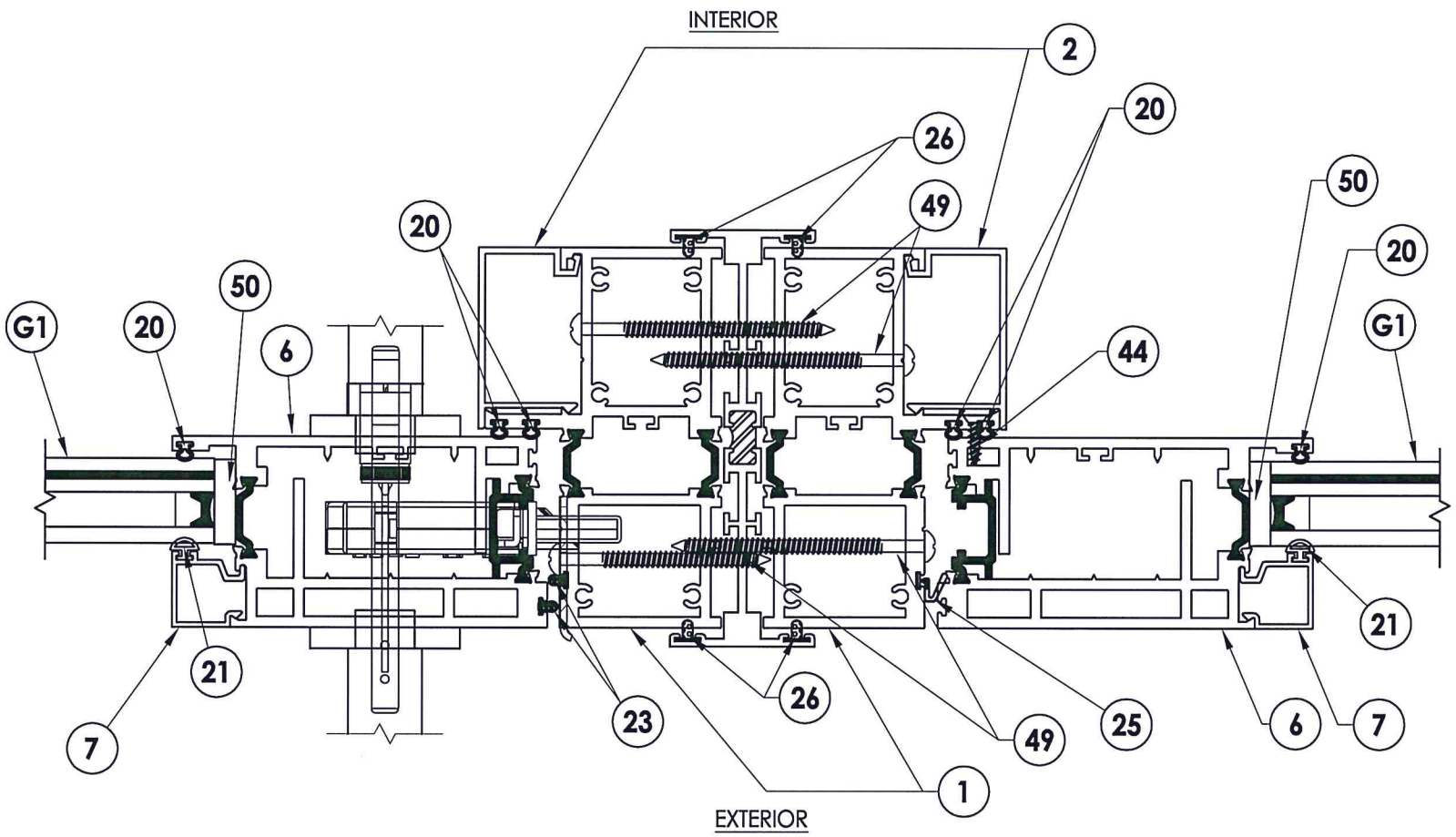
PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 4 OF 17

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 4



1/5 **HORIZONTAL CROSS SECTION**

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6, 6A

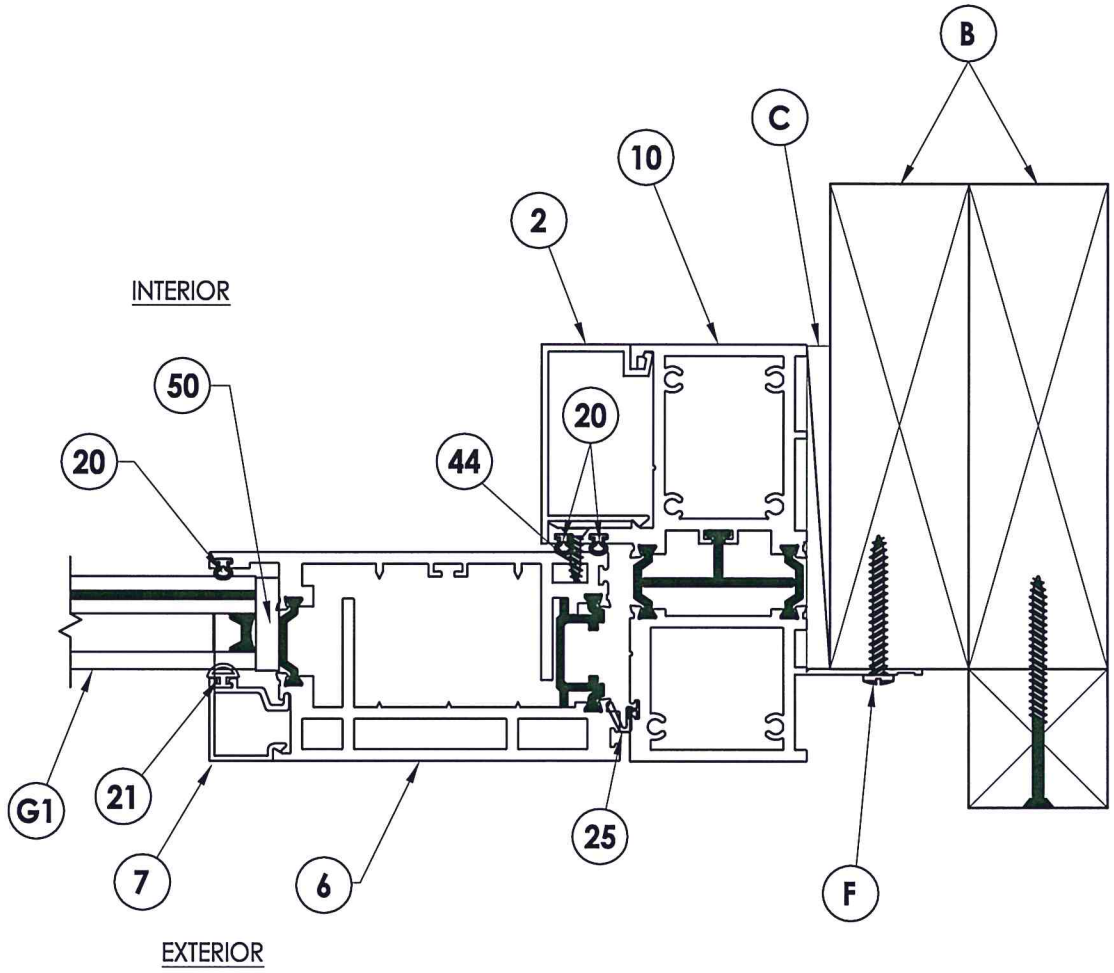
PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 5 OF 17

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 5



1/6 **HORIZONTAL CROSS SECTION**

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6, 6A

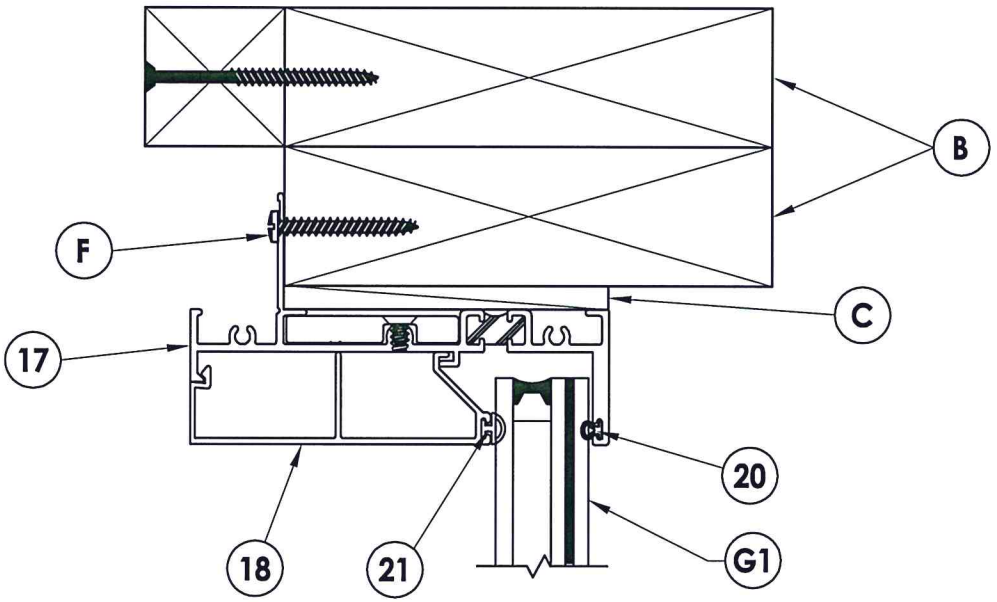
PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

NO.	DATE	BY
REVISIONS		

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 6 OF 17

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 6



EXTERIOR INTERIOR

1/7 **VERTICAL CROSS SECTION**

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6, 6A

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY

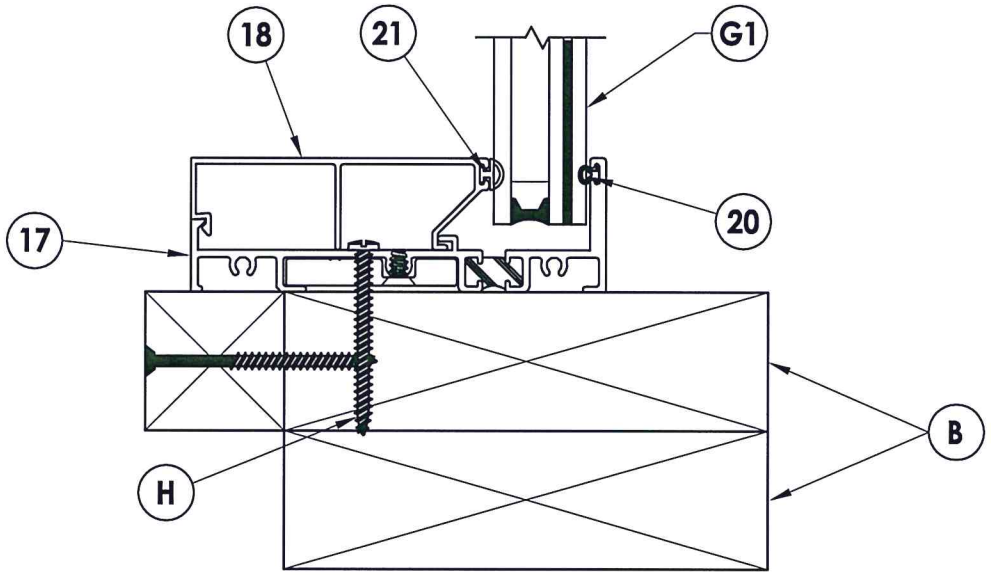
RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 7 OF 17

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 7

EXTERIOR

INTERIOR



1/8 **VERTICAL CROSS SECTION**

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6, 6A

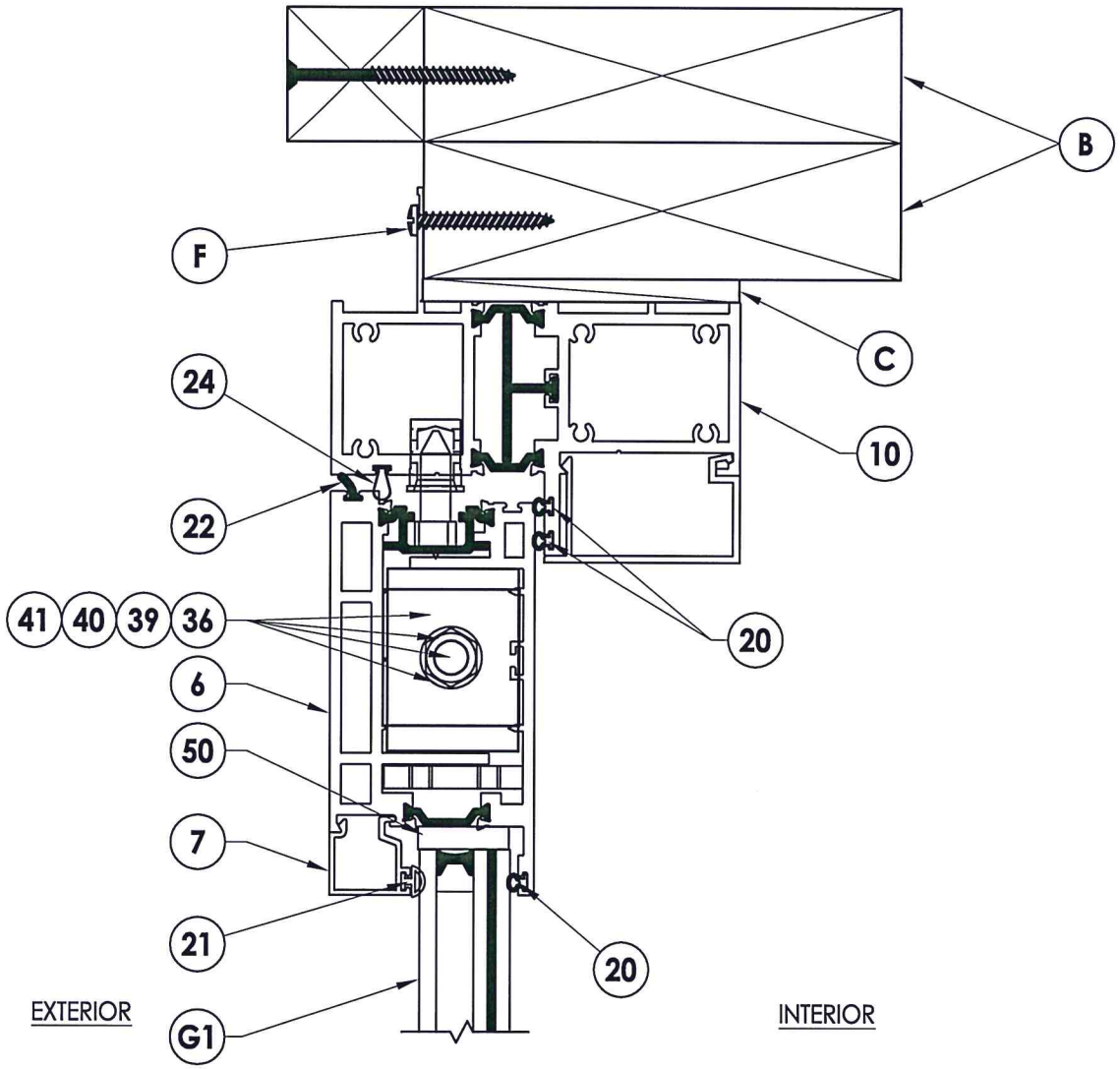
PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 8 OF 17

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 8



1/9 **VERTICAL CROSS SECTION**

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6, 6A

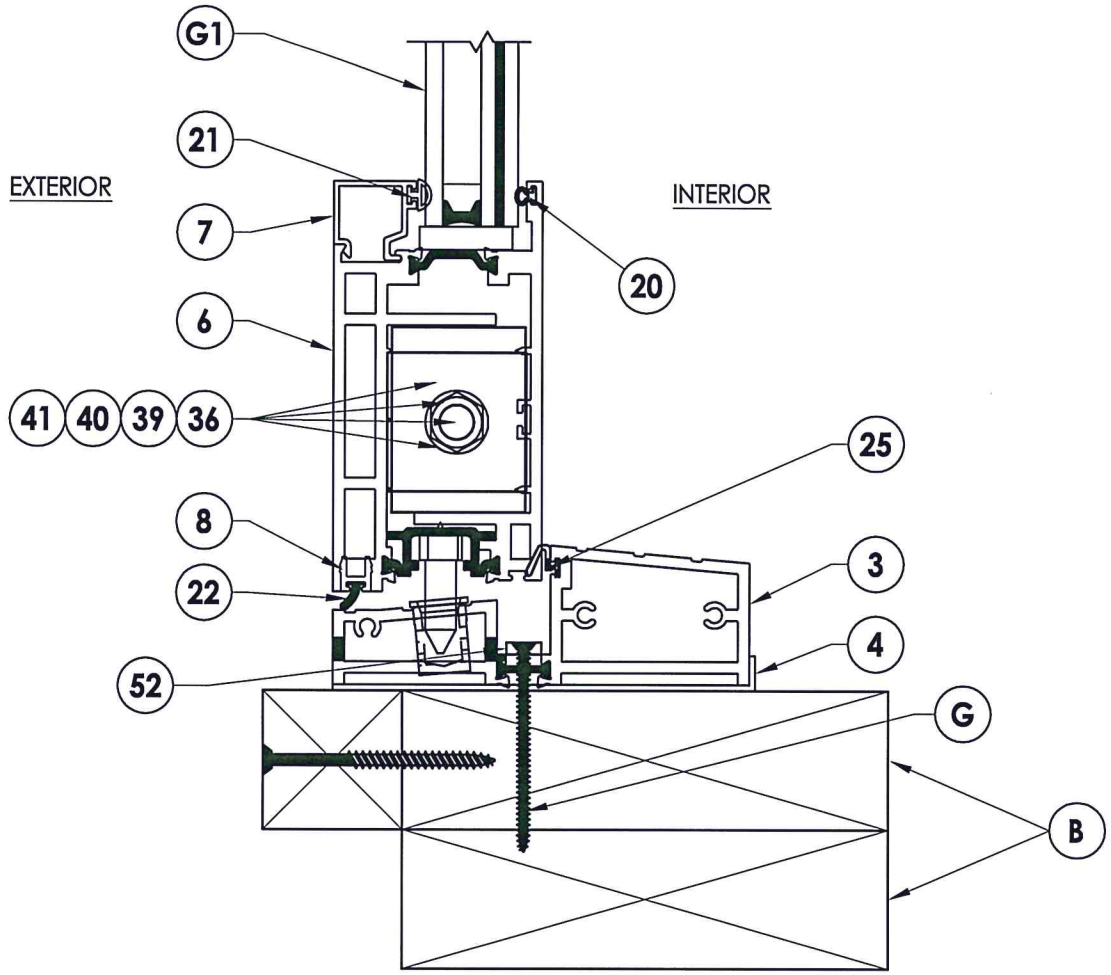
PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	BY
REVISIONS		

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 9 OF 17

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 9



1/10 VERTICAL CROSS SECTION

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6, 6A

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

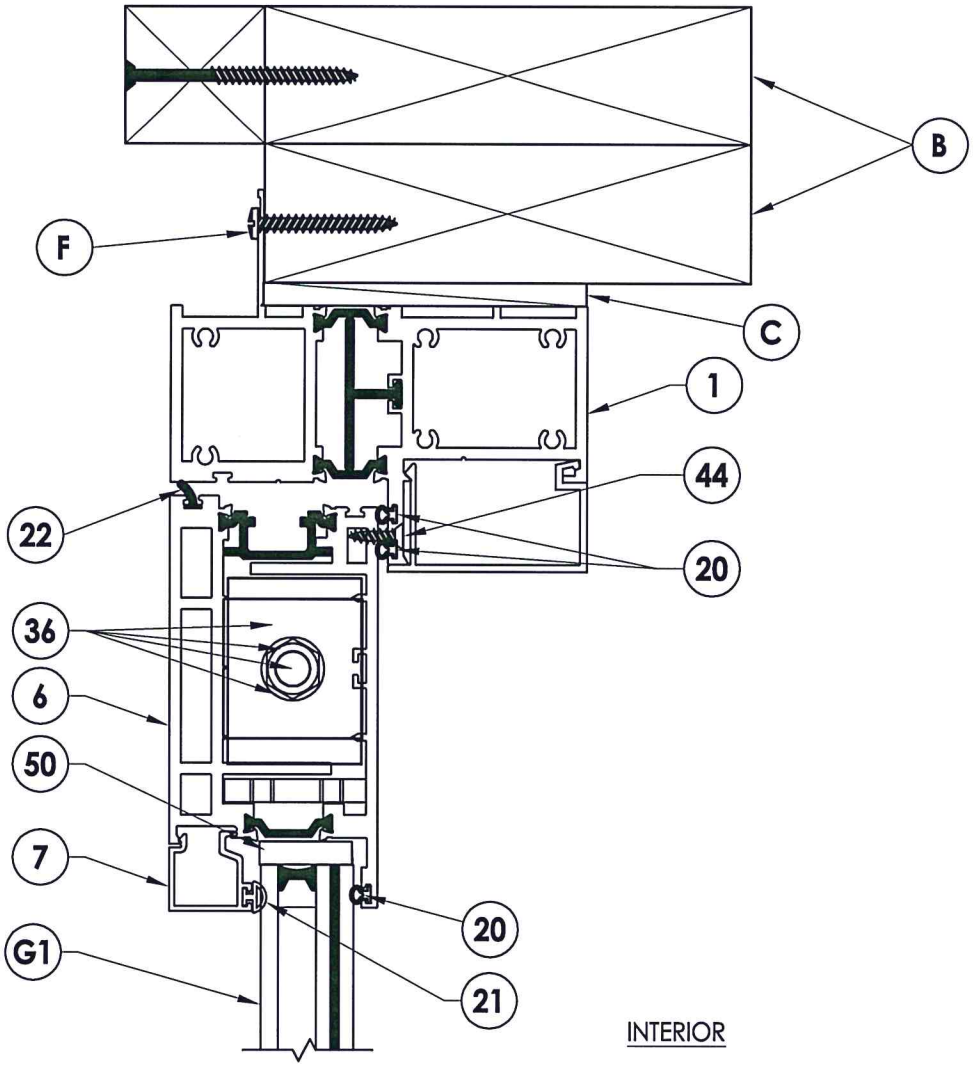
NO.	DATE	BY

REVISIONS

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 10 OF 17

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 10



1/11 **VERTICAL CROSS SECTION**

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6, 6A

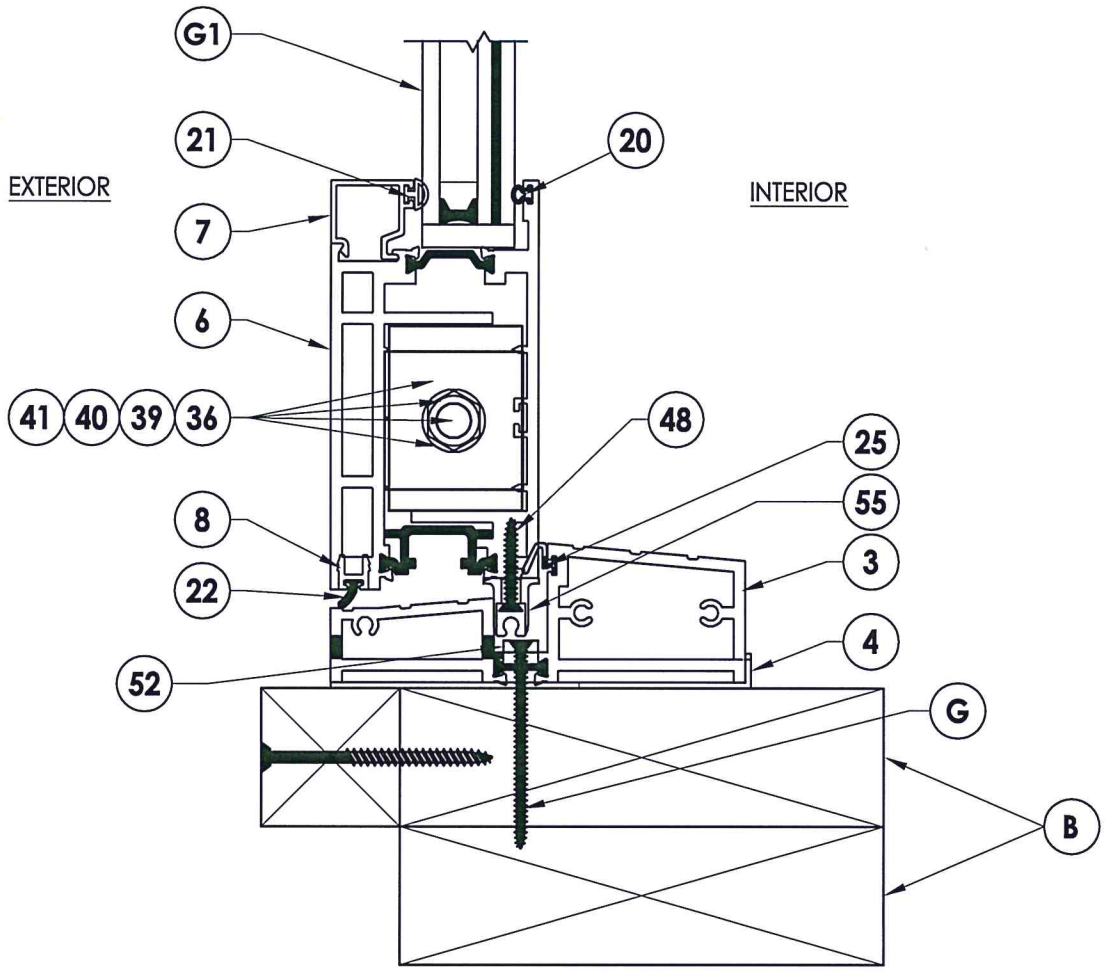
PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 11 OF 17

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 11



1/12 **VERTICAL CROSS SECTION**

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6, 6A

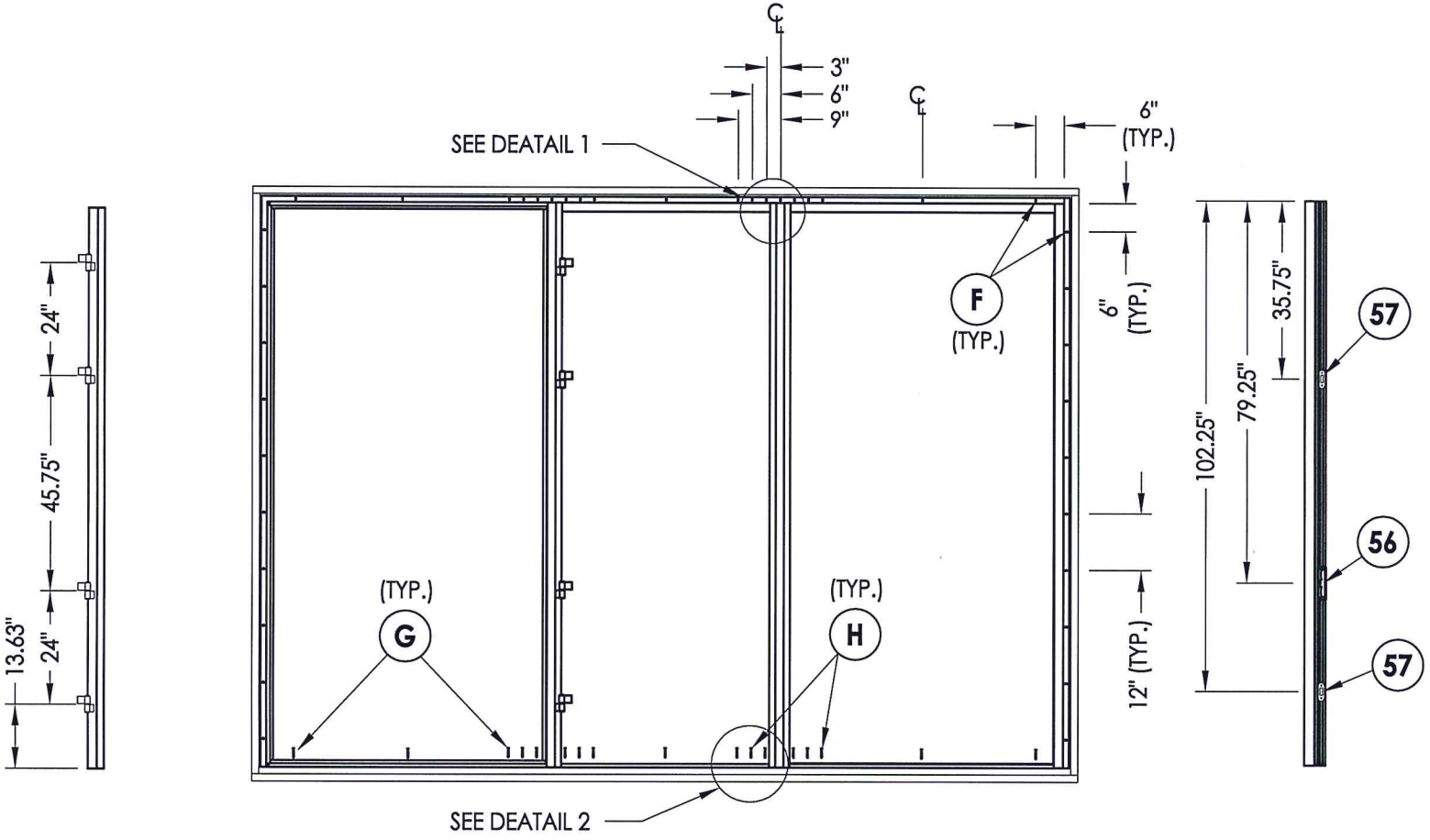
PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 12 OF 17

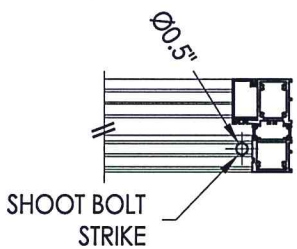
R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 12



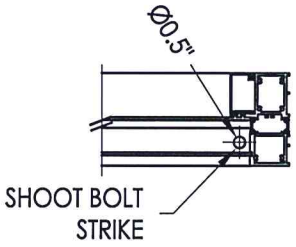
HINGE JAMB

FRAME ANCHORING
(2X buck installation)

STRIKE JAMB



DETAIL 2



DETAIL 1

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6, 6A

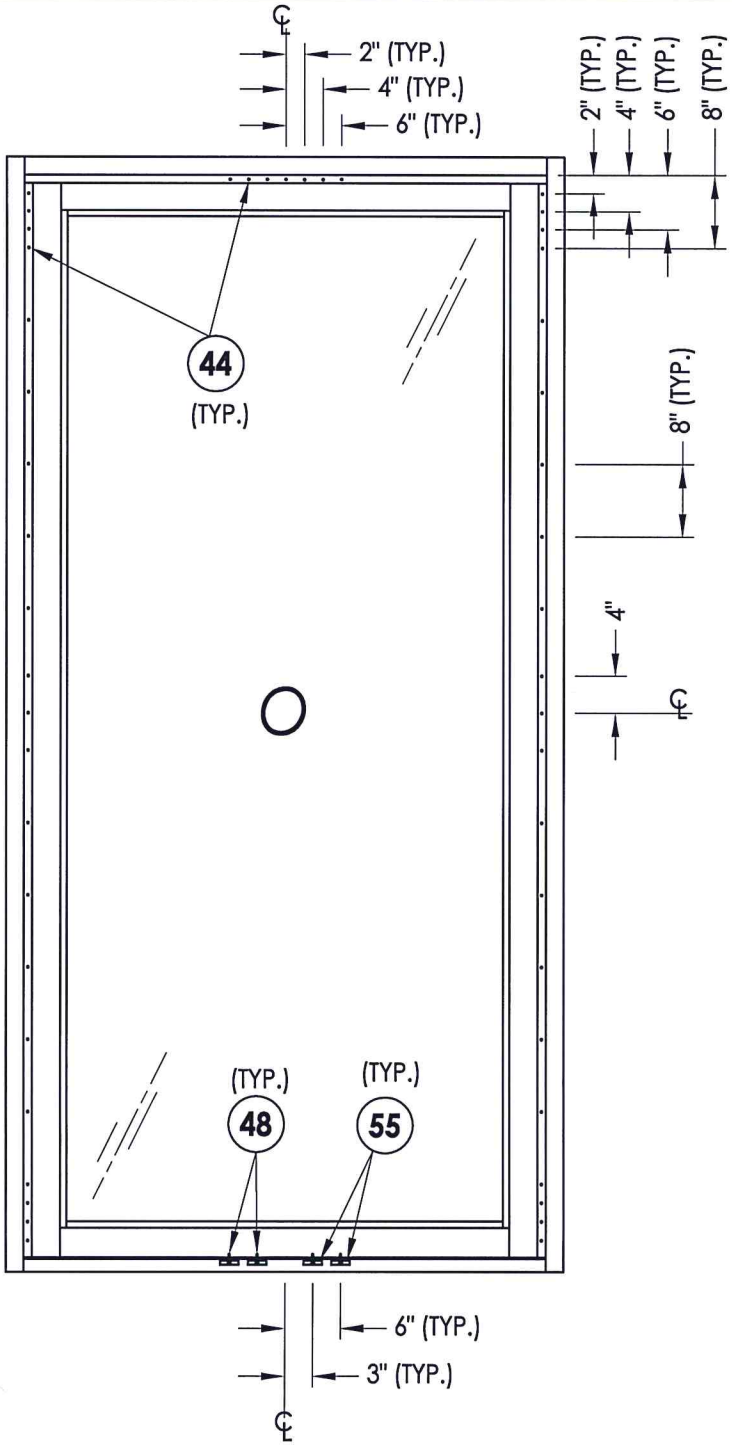
PART OR ASSEMBLY: FRAME ANCHORING

NO.	DATE	BY
REVISIONS		

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 13 OF 17

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 13



Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6, 6A

PART OR ASSEMBLY: SIDELITE PANEL DETAIL

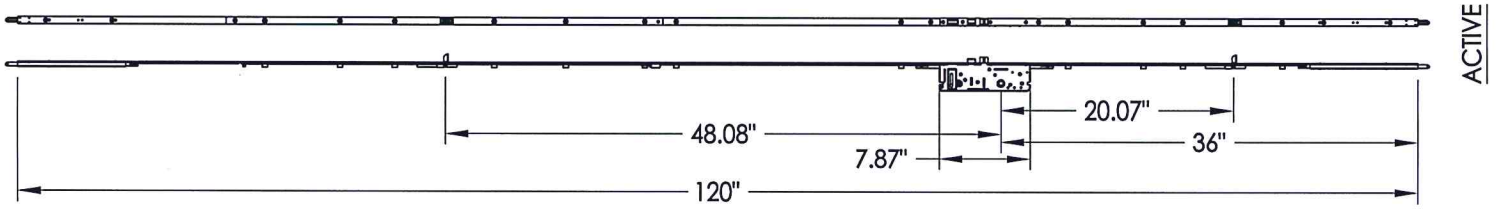
NO.	DATE	BY

REVISIONS

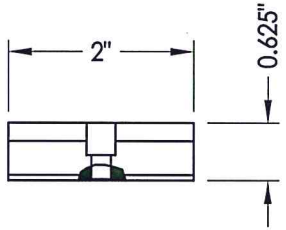
RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 14 OF 17

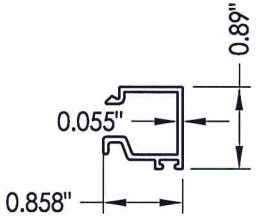
R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 14



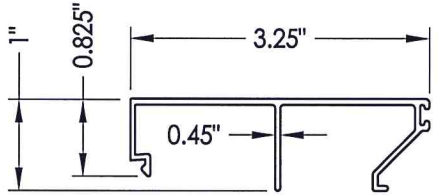
30 MULTI-POINT LOCK
TRUTH



55 FIXED SILL BLOCK

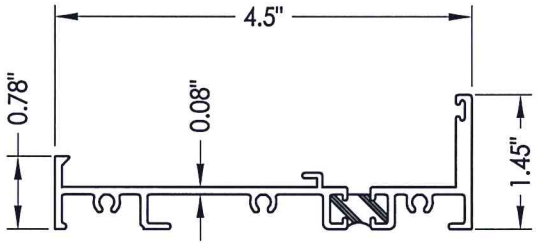


7 1" GLASS STOP

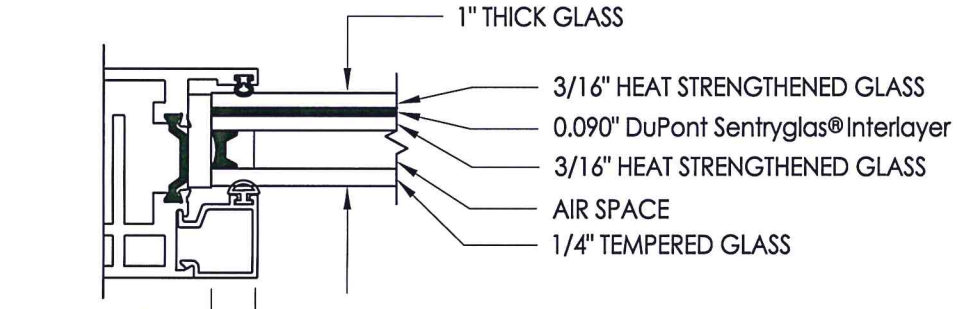


18 KONA 1" GLASS STOP

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by



17 KONA FRAME



G1 GLAZING DETAIL

PRODUCT: FLEETWOOD SPEC. 6, 6A

PART OR ASSEMBLY: COMPONENTS AND GLAZING DETAIL

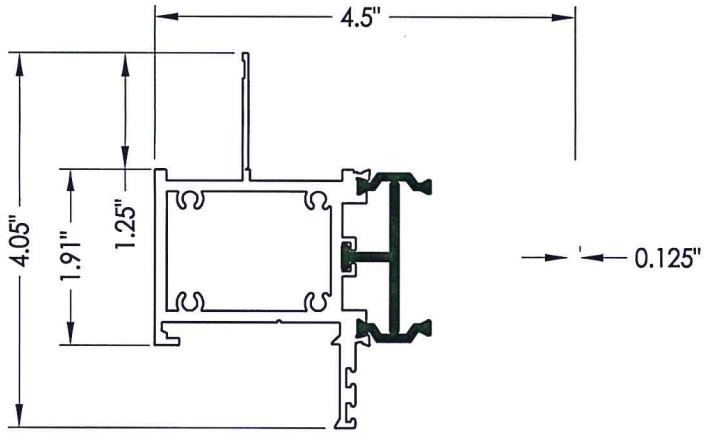
NO.	DATE	BY

REVISIONS

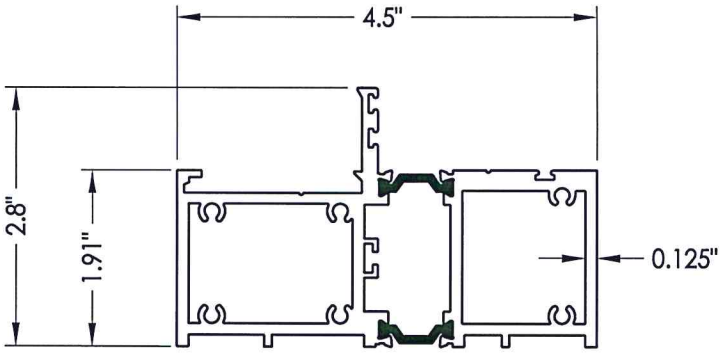
RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 15 OF 17

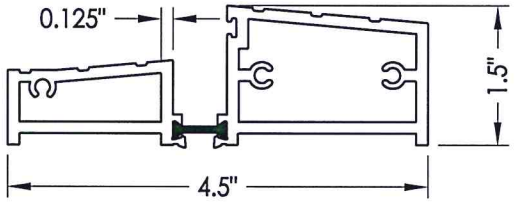
R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 15



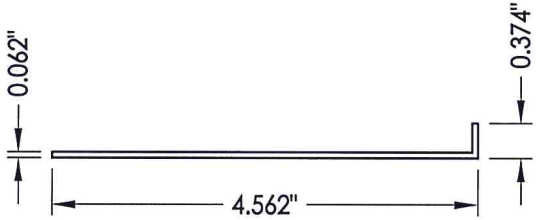
10 **FRAME** (Fin)



1 **FRAME**

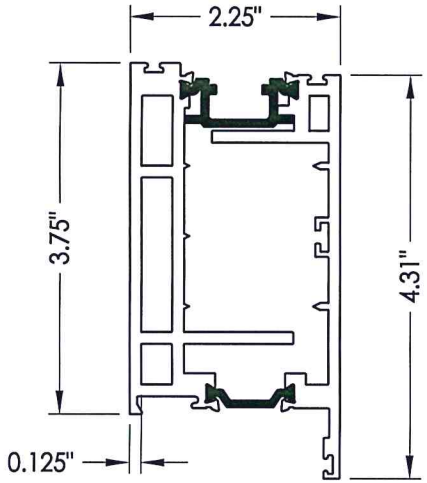


3 **OUTSWING SILL**

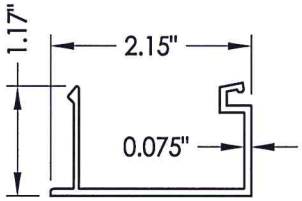


4 **SILL PAN**

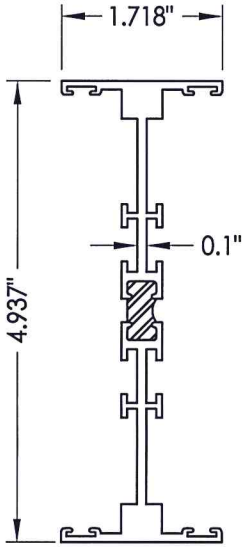
Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by



6 **SASH**



2 **FRAME SNAP-IN**



16 **KONA I-MULLION**

PRODUCT: FLEETWOOD SPEC. 6, 6A

PART OR ASSEMBLY: COMPONENTS

NO.	DATE	BY

REVISIONS

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 16 OF 17

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 16

BILL OF MATERIALS

ITEM #	DESCRIPTION	PART#	MATERIAL
B	2X BUCK SG >= 0.55	-	WOOD
C	1/4" MAX. SHIM SPACE	-	-
F	#10 x 1-1/2" PFH WOOD SCREW	-	STEEL
G	#8 x 2" PFH WOOD 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	OUTSWING SILL	3202	6063-T6 ALUM
4	SILL PAN	-	SHEET METAL (ALUMINUM)
6	SASH	3902	6063-T6 ALUM
7	1" GLASS STOP	3907	6063-T6 ALUM
8	ATLANTIC SEAL CLIP	3916	6063-T6 ALUM
10	FRAME (FIN)	3911	6063-T6 ALUM
16	KONA I-MULLION	3082	6063-T6 ALUM
17	KONA FRAME	3805	6063-T6 ALUM
18	KONA 1" GLASS STOP	3801	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
26	Q-LON FOAM SEAL	19120	SCHLEGEL CORP., # U 5212
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
44	#8 x 1/2" PFH SMS	-	STEEL
47	#10 x 2-1/2" PFH SMS	-	STEEL
48	#8 x 1" PFH SMS	-	STEEL
49	#10 x 3" PFH SMS	-	STEEL
50	4" LONG SETTING BLOCK	18620	-
52	ANCHOR BLOCK	-	6063-T6 ALUM
55	FIXED SILL BLOCK	-	6063-T6 ALUM
56	LATCH AND DEADBOLT STRIKE PLATE	-	-
57	STRIKE PLATE	-	-

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6, 6A

PART OR ASSEMBLY: BILL OF MATERIALS

NO.	DATE	BY	REVISIONS

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349
SHEET 17 OF 17

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349.dwg, 17

TABLE OF CONTENTS	
SHEET #	**DESCRIPTION**
1	Table of contents
2	Test elevation
3	Horizontal cross sections
4	Horizontal cross sections
5	Horizontal cross sections
6	Vertical cross sections
7	Vertical cross sections
8	Vertical cross sections
9	Vertical cross sections
10	Frame anchoring
11	Sidelite panel detail
12	Components and glazing detail
13	Components
14	Bill of materials

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6C, 6D, 6E

PART OR ASSEMBLY: TABLE OF CONTENTS

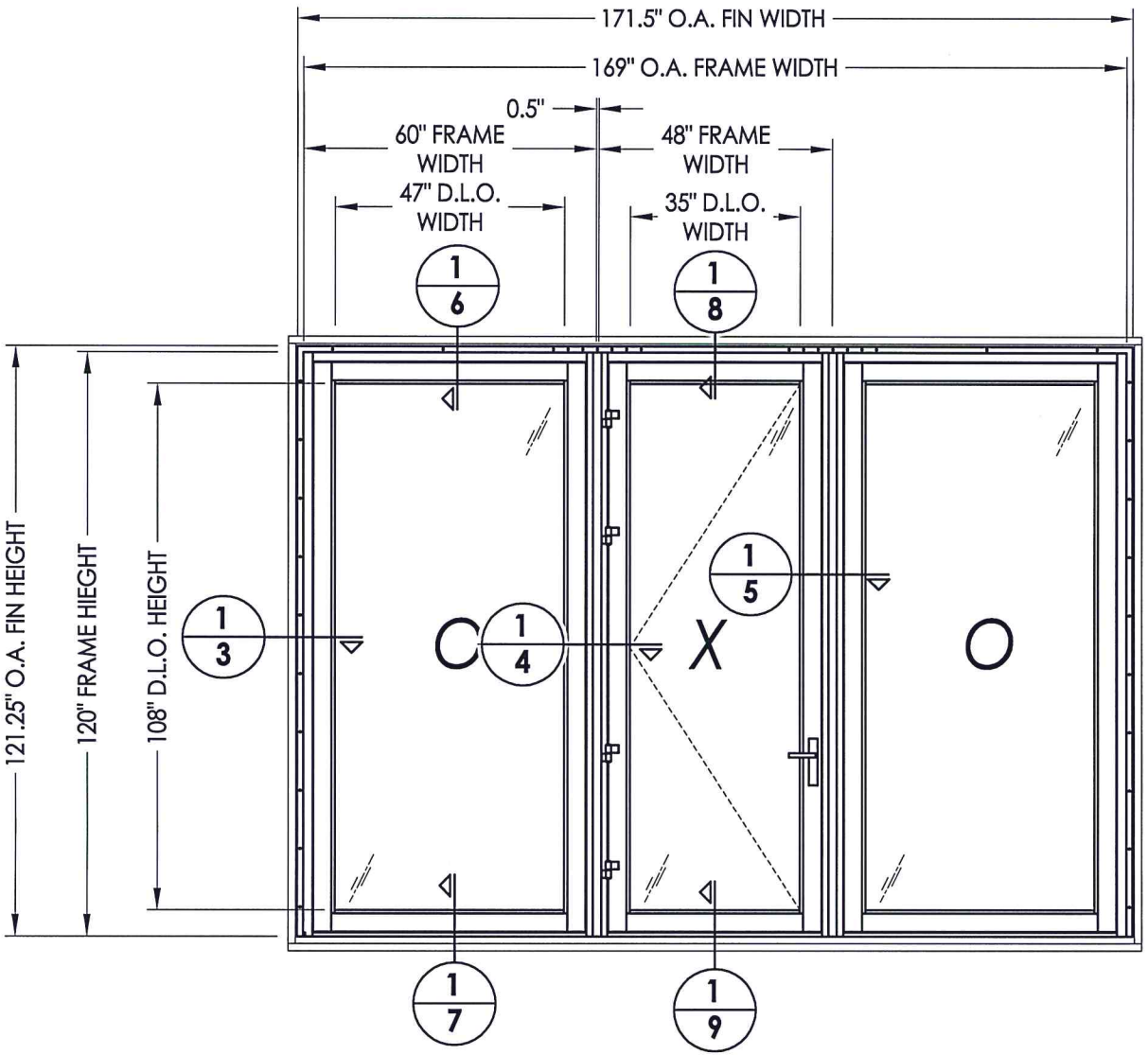
NO.	DATE	BY

REVISIONS

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349A
SHEET 1 OF 14

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349A.dwg, L-7349A



Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6C, 6D, 6E

PART OR ASSEMBLY: TEST ELEVATIONS

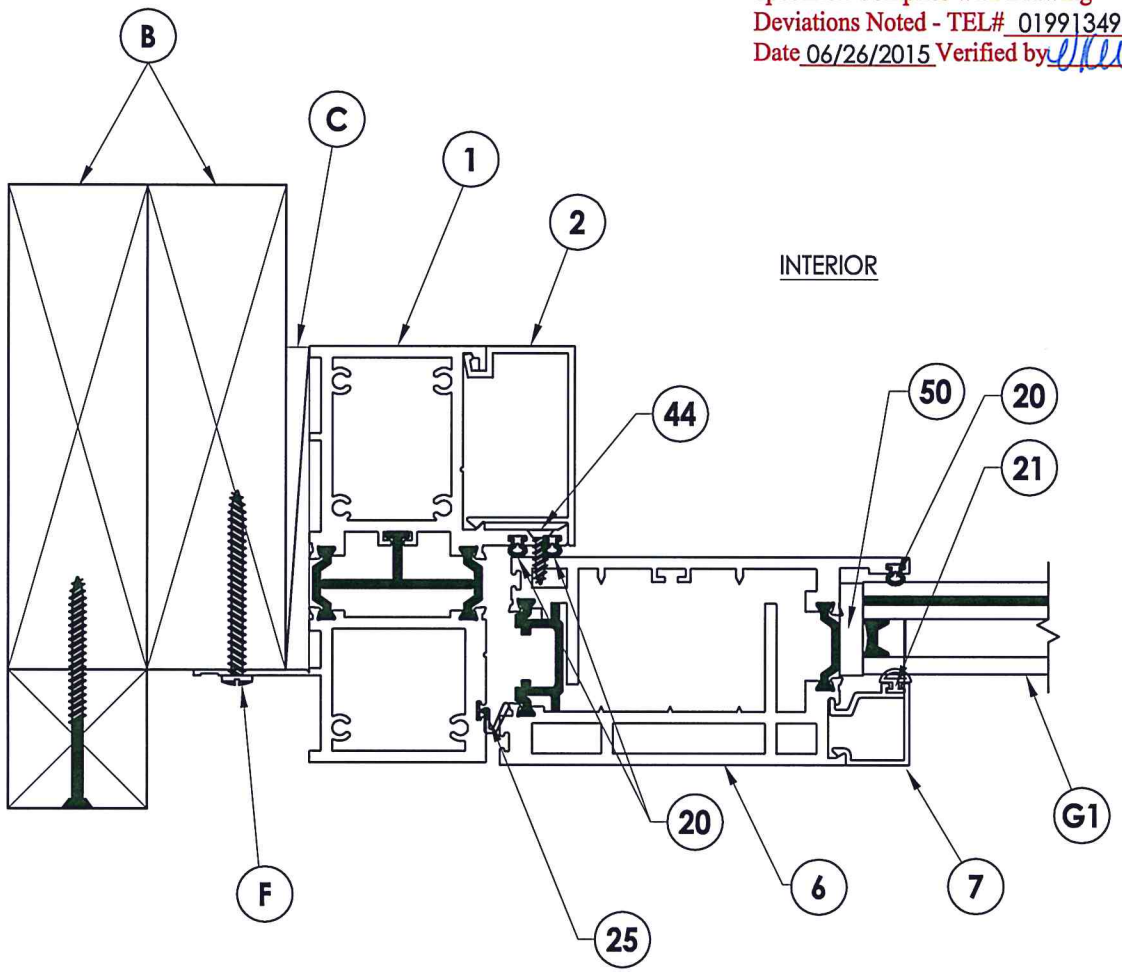
NO.	DATE	BY
REVISIONS		

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349A
SHEET 2 OF 14

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349A.dwg, 2

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by



1/3 **HORIZONTAL CROSS SECTION**

PRODUCT: FLEETWOOD SPEC. 6C, 6D, 6E

PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY

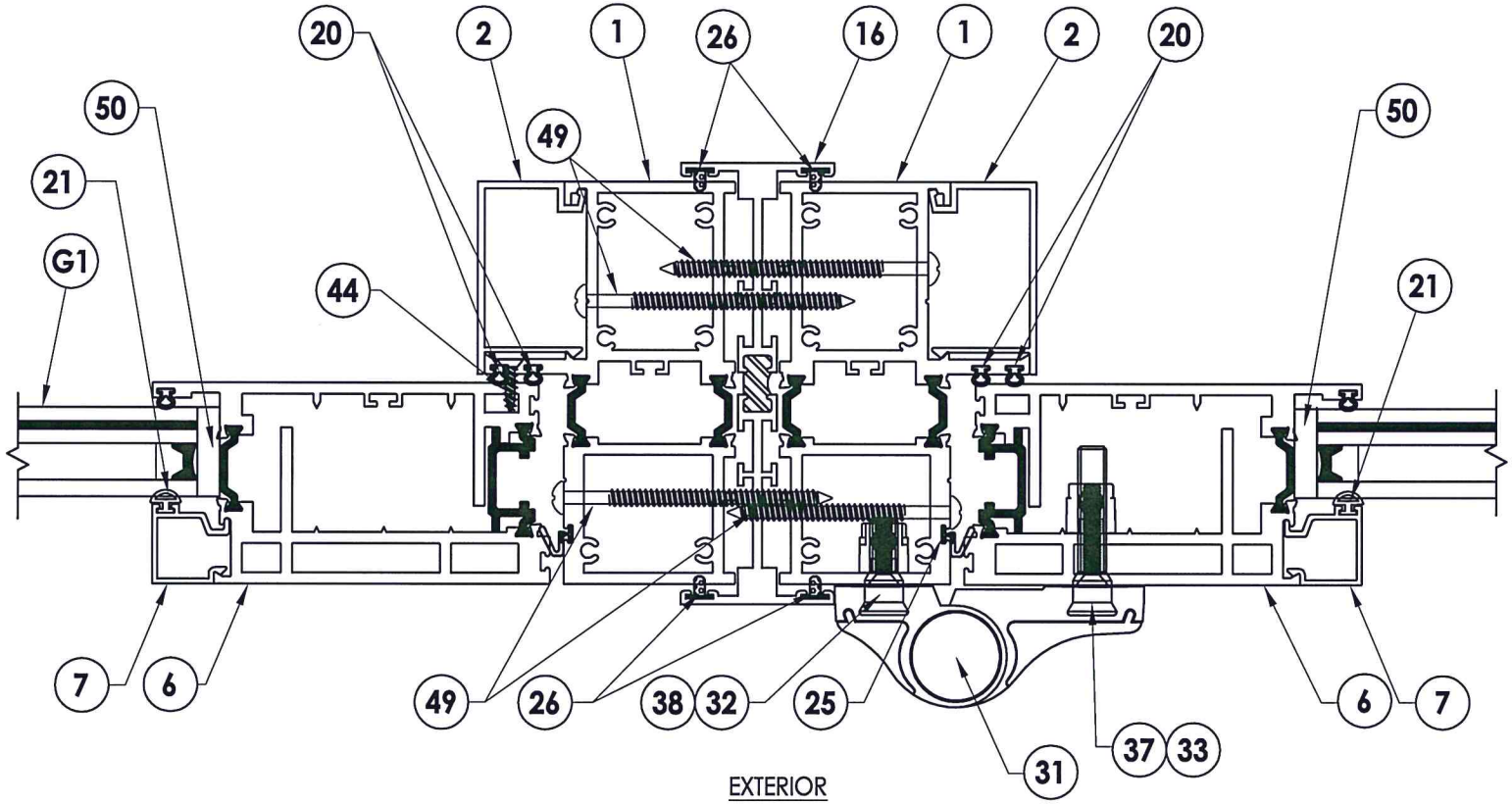
RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349A
SHEET 3 OF 14

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349A.dwg, 3

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

INTERIOR



EXTERIOR

1/4 HORIZONTAL CROSS SECTION

PRODUCT: FLEETWOOD SPEC. 6C, 6D, 6E

PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

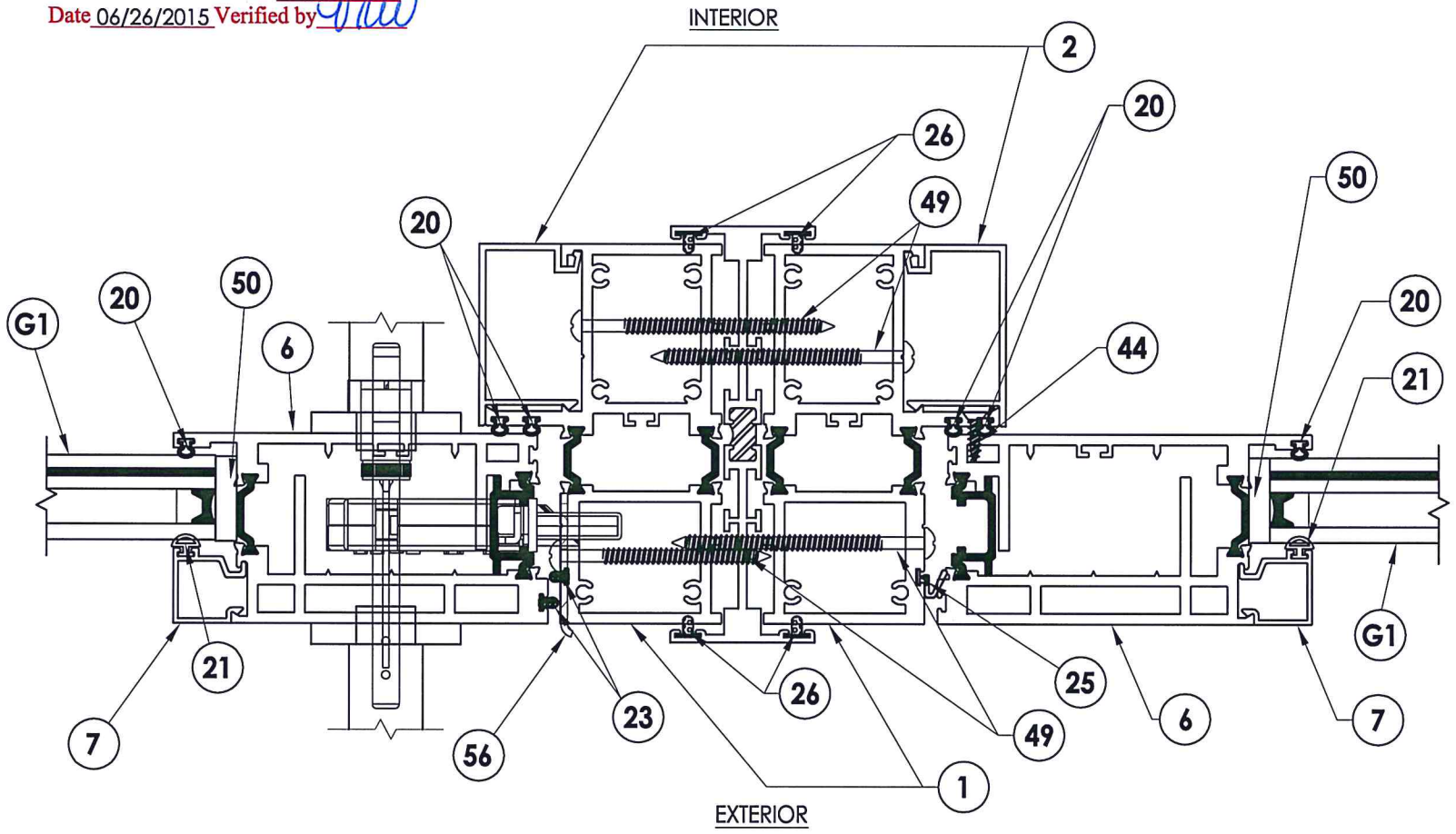
NO.	DATE	REVISIONS	BY

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349A
SHEET 4 OF 14

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349A.dwg, 4

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by



1/5 **HORIZONTAL CROSS SECTION**

PRODUCT: FLEETWOOD SPEC. 6C, 6D, 6E

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

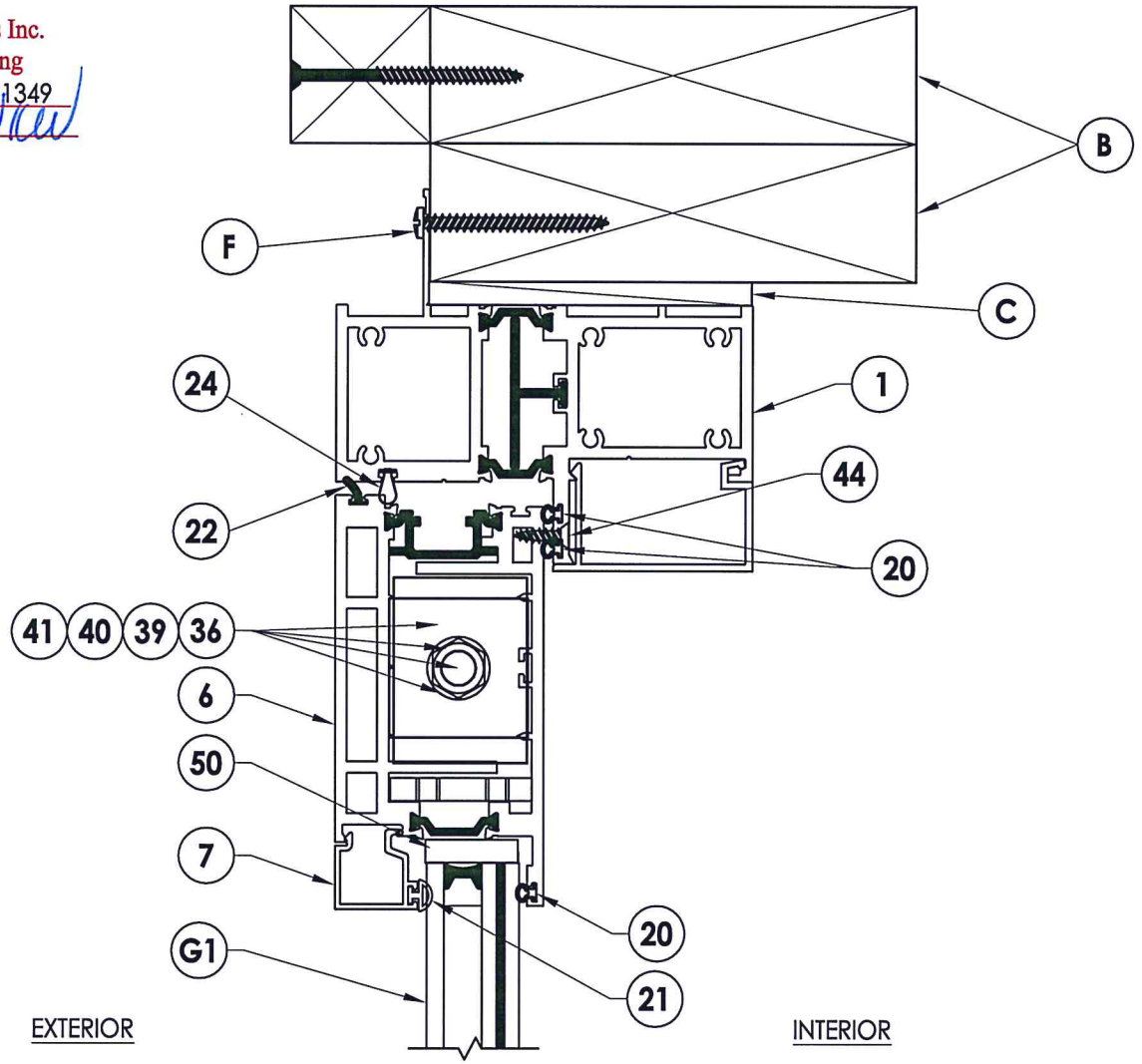
NO.	DATE	REVISIONS	BY

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349A
SHEET 5 OF 14

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349A.dwg, 5

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by



1/6 VERTICAL CROSS SECTION

PRODUCT: FLEETWOOD SPEC. 6C, 6D, 6E

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

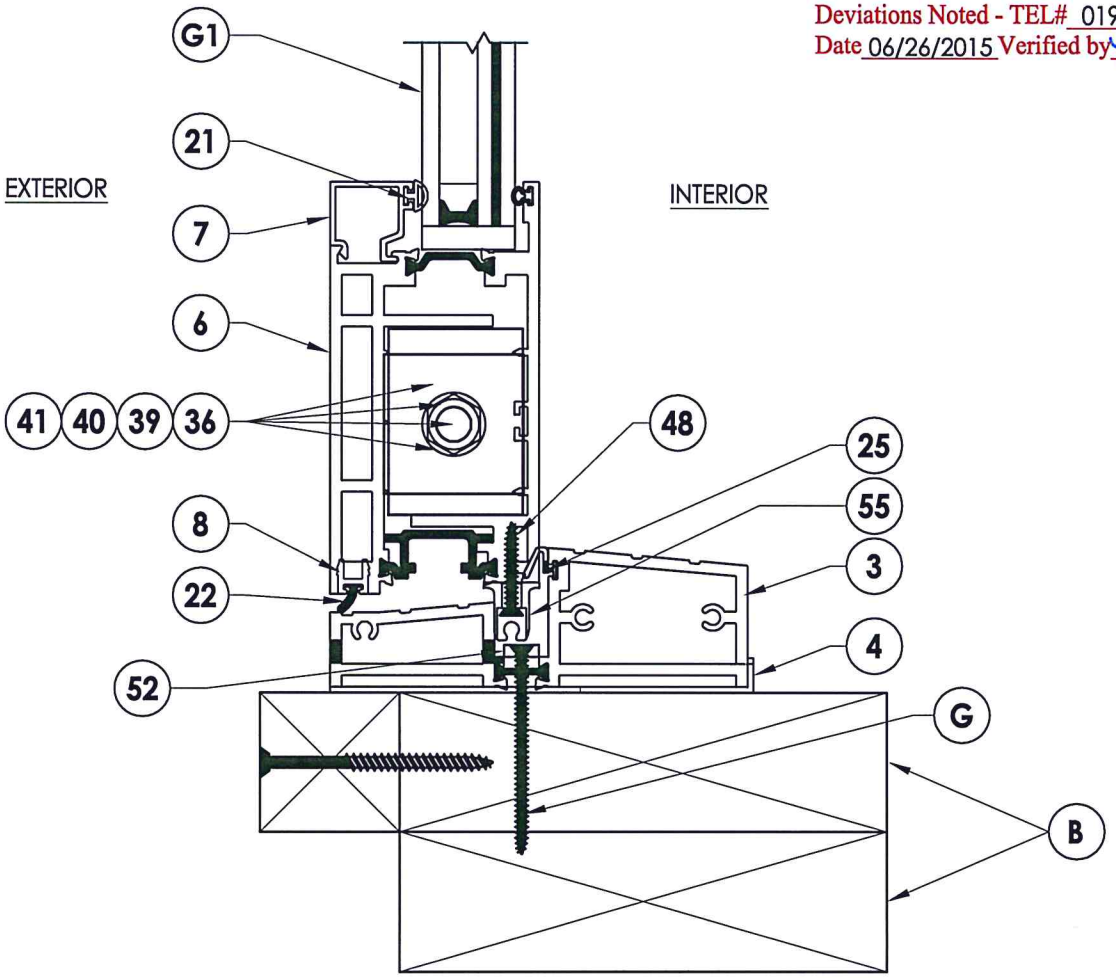
NO.	DATE	BY
	REVISIONS	

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349A
SHEET 6 OF 14

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349A.dwg, 6

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by



1/7 VERTICAL CROSS SECTION

PRODUCT: FLEETWOOD SPEC. 6C, 6D, 6E

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

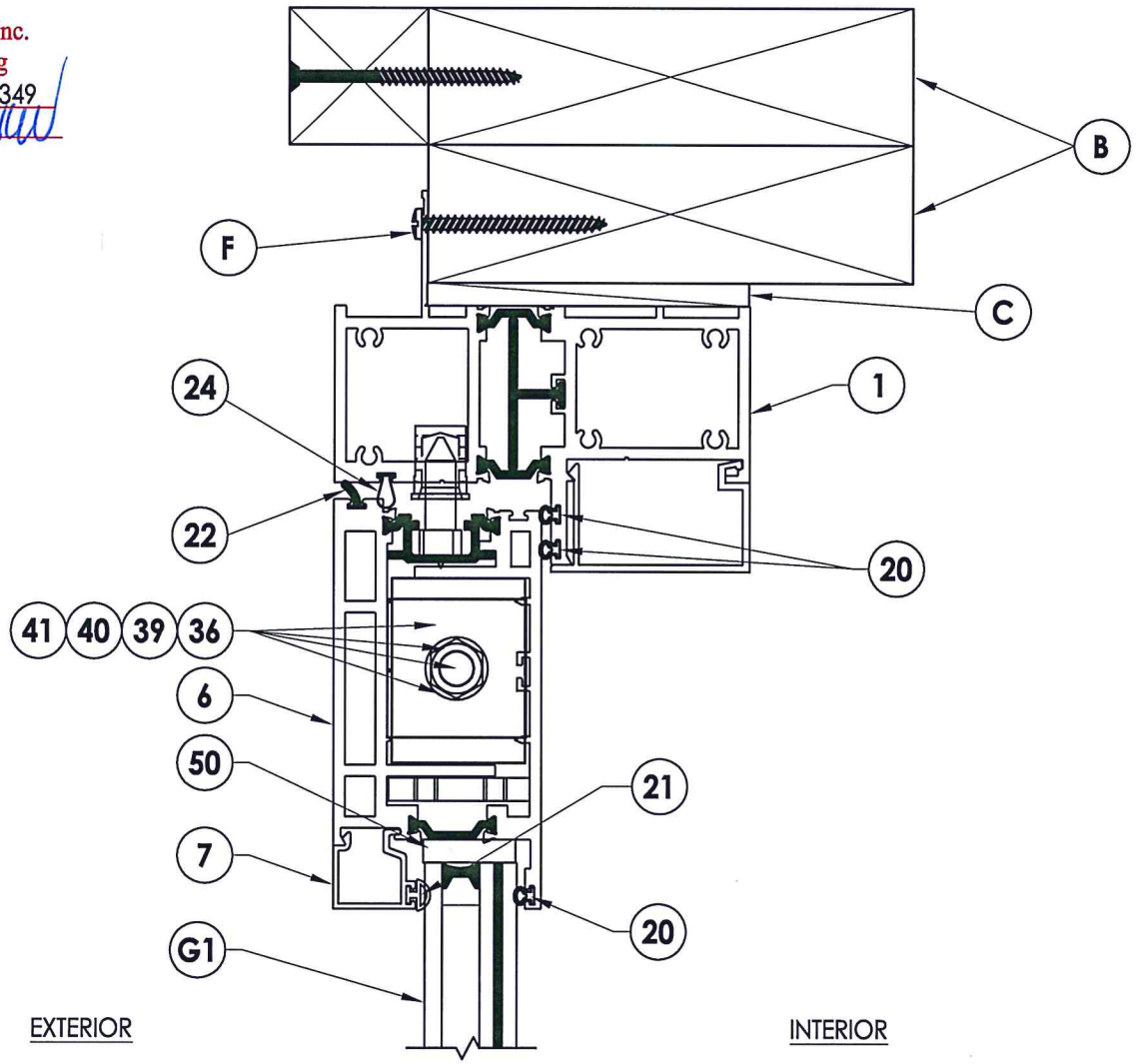
NO.	DATE	REVISIONS	BY

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349A
SHEET 7 OF 14

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349A.dwg, 7

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by:



1/8 **VERTICAL CROSS SECTION**

PRODUCT: FLEETWOOD SPEC. 6C, 6D, 6E

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

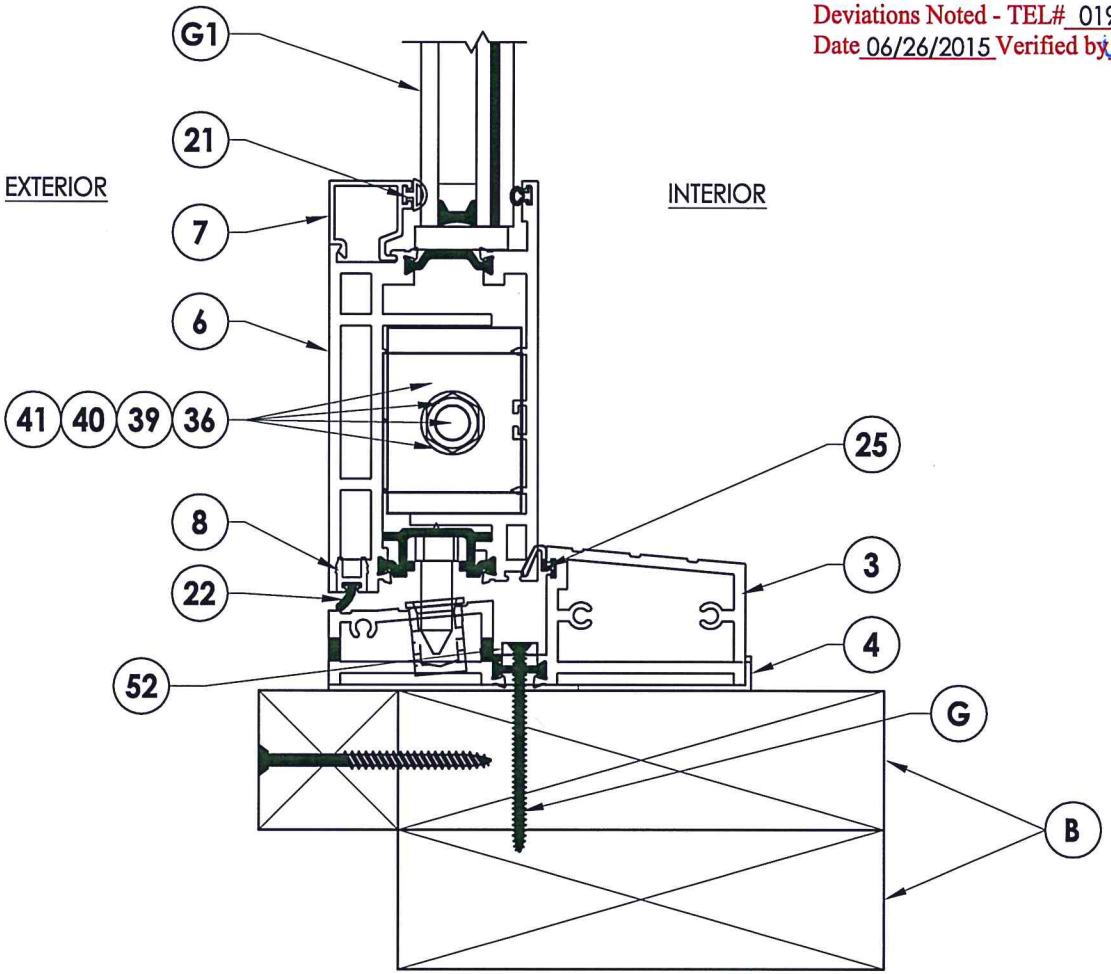
NO.	DATE	BY
REVISIONS		

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349A
SHEET 8 OF 14

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349A.dwg, 8

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by



1/9 VERTICAL CROSS SECTION

PRODUCT: FLEETWOOD SPEC. 6C, 6D, 6E

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

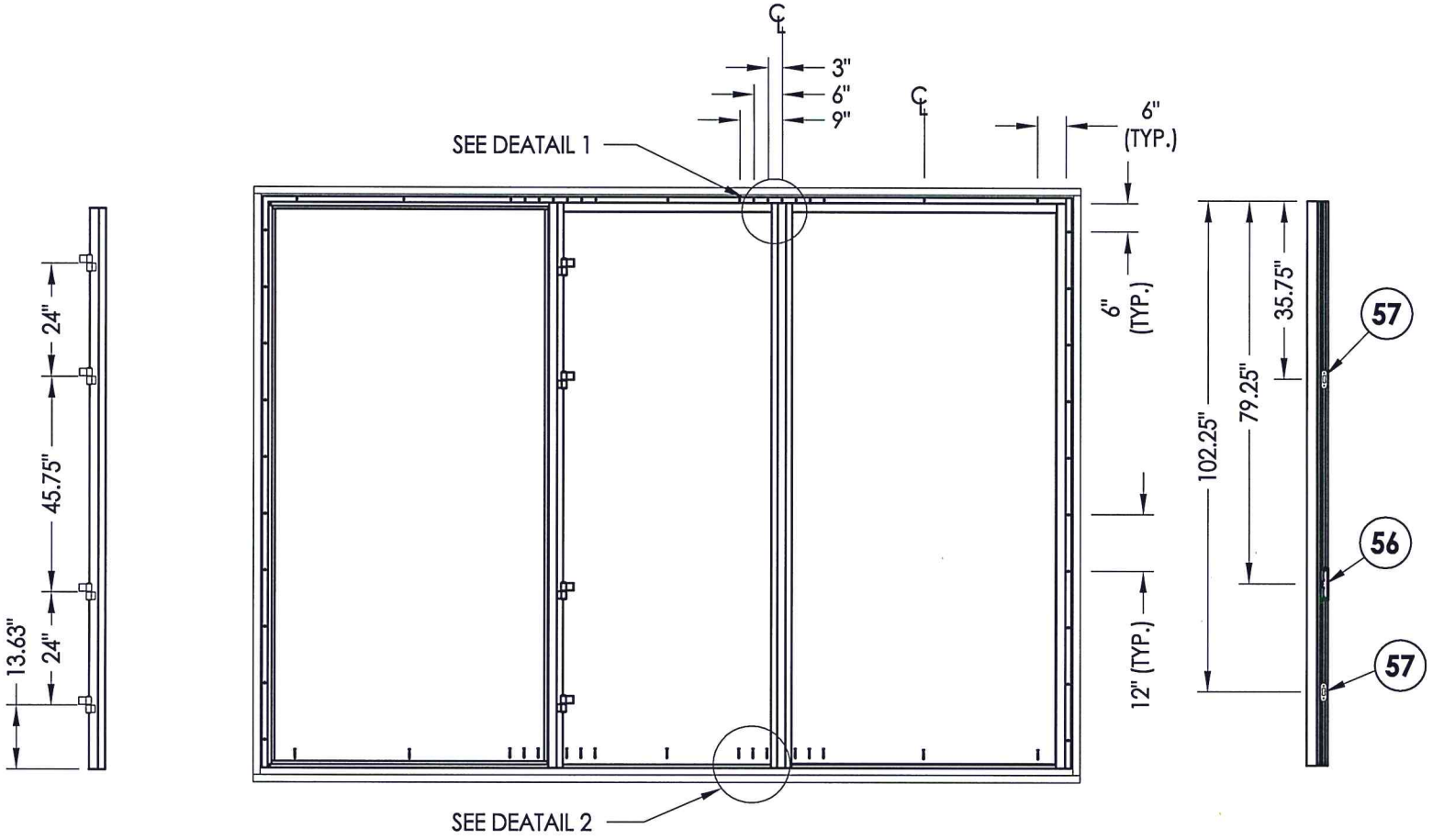
NO.	DATE	BY

REVISIONS

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349A
SHEET 9 OF 14

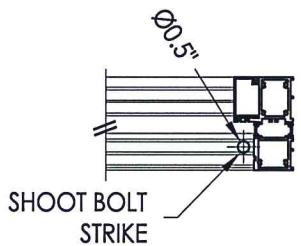
R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349A.dwg, 9



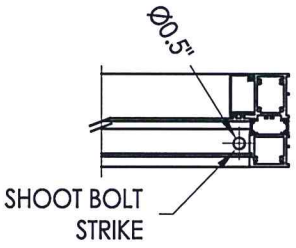
HINGE JAMB

FRAME ANCHORING
(2X buck installation)

STRIKE JAMB



DETAIL 2



DETAIL 1

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6C, 6D, 6E

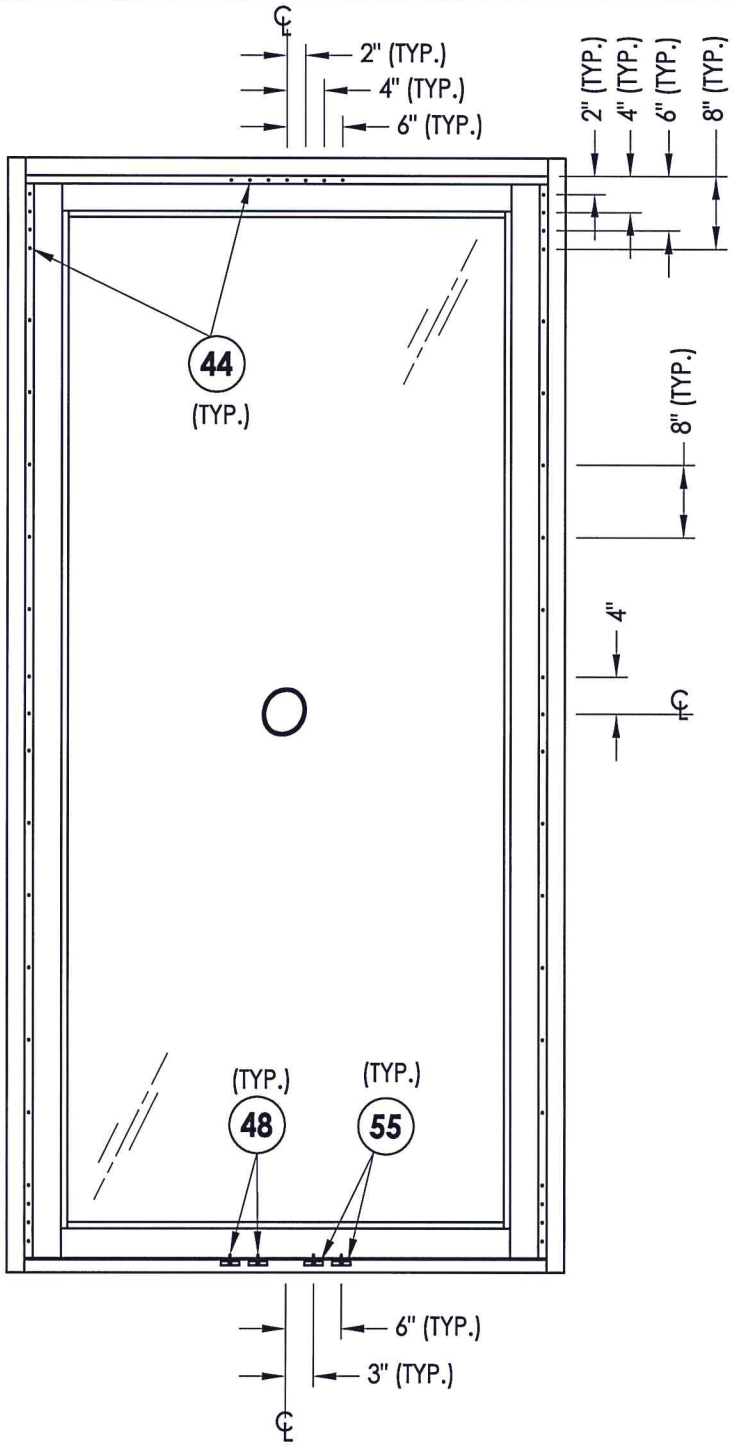
PART OR ASSEMBLY: FRAME ANCHORING

NO.	DATE	BY
REVISIONS		

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349A
SHEET 10 OF 14

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349A.dwg, 10



Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6C, 6D, 6E

PART OR ASSEMBLY: SIDELITE PANEL DETAIL

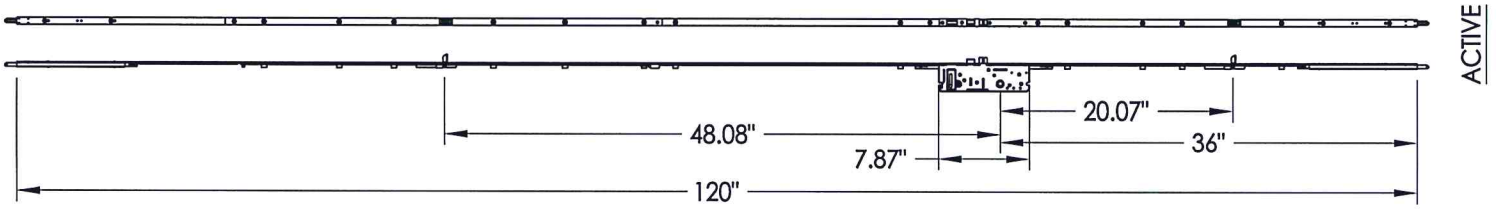
NO.	DATE	BY

REVISIONS

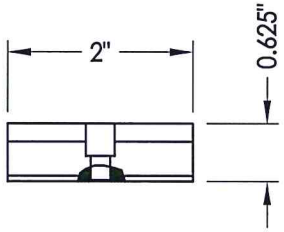
RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349A
SHEET 11 OF 14

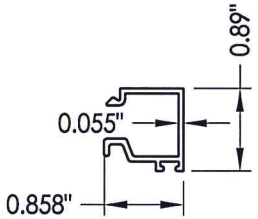
R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349A.dwg, 11



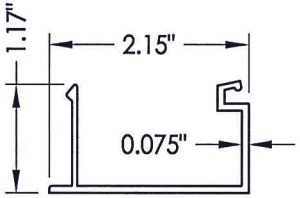
30 MULTI-POINT LOCK
TRUTH



55 FIXED SILL BLOCK

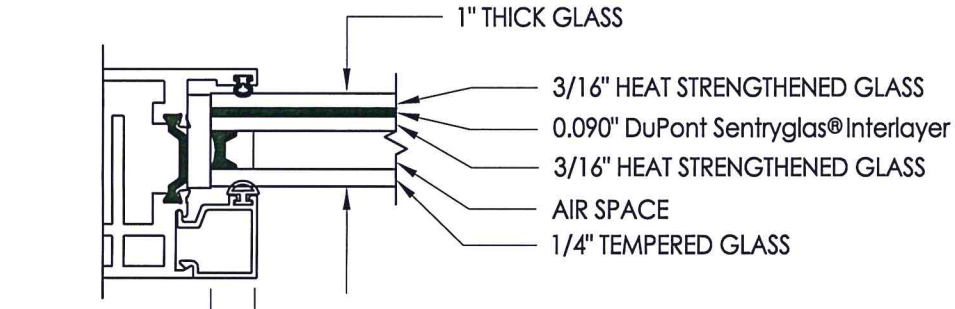


7 1" GLASS STOP



2 FRAME SNAP-IN

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by



G1 GLAZING DETAIL

PRODUCT: FLEETWOOD SPEC. 6C, 6D, 6E

PART OR ASSEMBLY: COMPONENTS AND GLAZING DETAIL

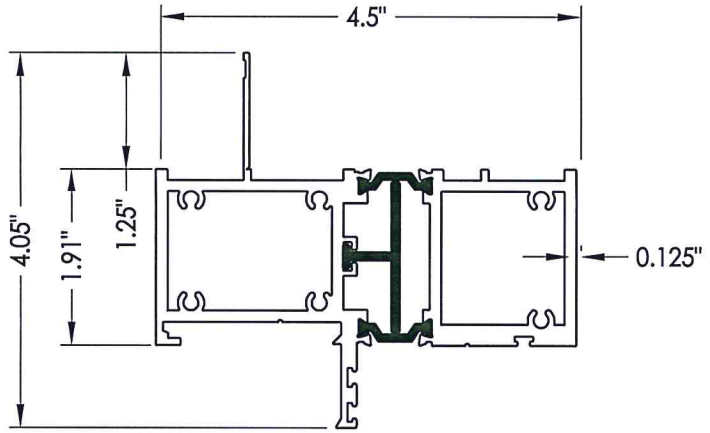
NO.	DATE	BY

REVISIONS

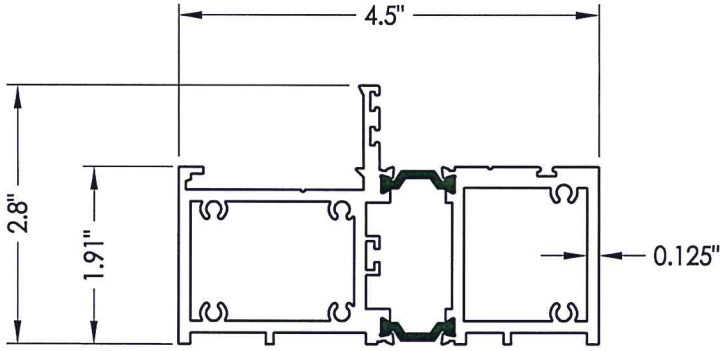
RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349A
SHEET 12 OF 14

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349A.dwg, 12

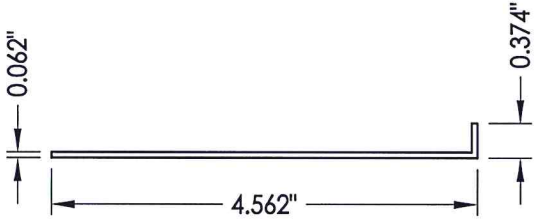


1 **BLOCK HEAD & JAMBS** (Fin)

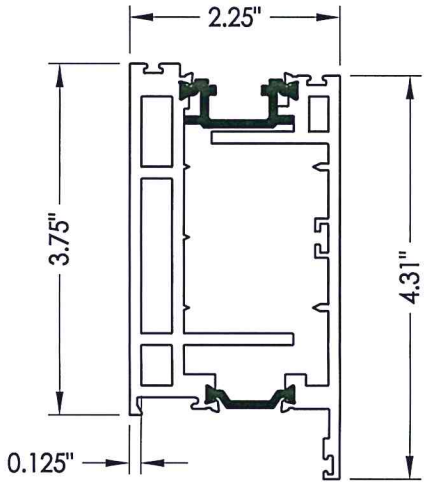


1 **FRAME**

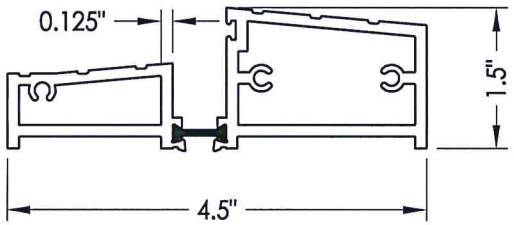
Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by



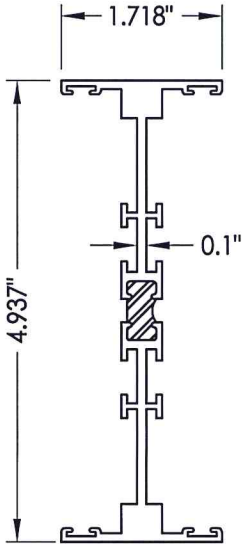
4 **SILL PAN**



6 **SASH**



3 **OUTSWING SILL**



16 **KONA I-MULLION**

PRODUCT: FLEETWOOD SPEC. 6C, 6D, 6E

PART OR ASSEMBLY: COMPONENTS

NO.	DATE	BY
REVISIONS		

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349A
SHEET 13 OF 14

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349A.dwg, 13

BILL OF MATERIALS

ITEM #	DESCRIPTION	PART#	MATERIAL
B	2X BUCK SG >= 0.55	-	WOOD
C	1/4" MAX. SHIM SPACE	-	-
F	#10 x 2" PFH WOOD SCREW	-	STEEL
G	#8 x 2" PFH WOOD SCREW	-	STEEL
1	FRAME	3911	6063-T6 ALUM
2	FRAME SNAP-IN	3912	6063-T6 ALUM
3	OUTSWING SILL	3202	6063-T6 ALUM
4	SILL PAN	-	SHEET METAL (ALUMINUM)
6	SASH	3902	6063-T6 ALUM
7	1" GLASS STOP	3907	6063-T6 ALUM
8	ATLANTIC SEAL CLIP	3916	6063-T6 ALUM
10	FRAME (FIN)	3911	6063-T6 ALUM
16	KONA I-MULLION	3082	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
26	Q-LON FOAM SEAL	19120	SCHLEGEL CORP., # U 5212
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
44	#8 x 1/2" PFH SMS	-	STEEL
48	#8 x 1" PFH SMS	-	STEEL
49	#10 x 3" PFH SMS	-	STEEL
50	4" LONG SETTING BLOCK	18620	-
52	ANCHOR BLOCK	-	6063-T6 ALUM
55	FIXED SILL BLOCK	-	6063-T6 ALUM
56	LATCH AND DEADBOLT STRIKE PLATE	-	-
57	STRIKE PLATE	-	-

Testing Evaluation Laboratories Inc.
Specimen Complies with Drawing
Deviations Noted - TEL# 01991349
Date 06/26/2015 Verified by

PRODUCT: FLEETWOOD SPEC. 6C, 6D, 6E

PART OR ASSEMBLY: BILL OF MATERIALS

NO.	DATE	REVISIONS	BY

RW BUILDING CONSULTANTS, INC.
813.659.9197

DATE: 4/4/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: L-7349A
SHEET 14 OF 14

R:\Clients\Fleetwood PERMANENT\Drawings\Lab Dwgs\L-7349A.dwg, 14