



# Testing Evaluation Laboratories, Inc.

2002 Wood Court Suite 1 – Plant City, FL 33563  
Phone: 813-754-9887

## TEST RESULTS

Dade Lab Certification Number: 11-1213.01  
Test Notification Number: TEL 11-021

Report No: TEL 01990465.2  
Test Dates: February 29, 2012  
through March 14, 2012  
and May 14, 2012  
Report Revision Date: October 29, 2012

Issued to:

**Fleetwood Windows and Doors**  
One Fleetwood Way  
Corona, CA 92879

**Project Summary:** Testing Evaluation Laboratories, Inc. (TEL) was contracted by Fleetwood Windows and Doors to perform tests on the Norwood 3070-HI-WG Sliding Glass Door at TEL's Plant City, FL test facility. *Note: This report is being revised to add two additional specimens – Specimens 7 and 8.*

Test specimen descriptions and results are reported herein.

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

*High Velocity Hurricane Zone Protocols TAS 202-94, TAS 201-94 and TAS 203-94*

### Test Specimen Description:

<b>Series / Model:</b>	Norwood 3070-HI-WG Sliding Glass Door
<b>Type:</b>	Aluminum Sliding Glass Doors
<b>Overall Size:</b>	117.00" x 96.00" – Specimens 1 and 4 98.00" x 120.00" – Specimens 2 and 5 117.375" x 100.00" – Specimens 3 and 6 117.0" x 130.00" – Specimens 7 and 8
<b>Daylight Opening:</b>	52.50" x 87.50" – Specimens 1 and 4 (Active and Inactive Panels) 43.00" x 111.50" – Specimens 2 and 5 (Active and Inactive Panels) 52.50" x 91.50" - Specimens 3 and 6 (Active and Inactive Panels) 52.50" x 121.50" - Specimens 7 and 8 (Active and Inactive Panels)
<b>Glazing Detail:</b>	Laminated Monolithic Glass - (Specimens 1, 4, 7 and 8) Insulated Laminated Glass – (Specimens 2, 3, 5 and 6) (See attached drawing for details)
<b>Frame Material:</b>	Aluminum
<b>Finish:</b>	Mill Finish

For Tested Elevation, Vertical Cross Sections, Horizontal Cross Sections, Components, Frame Anchoring, Glazing Detail and Bill of Materials See Attached Drawing #L-4295.

**SEQUENCE OF TESTS PERFORMED:**

**STRUCTURAL TESTS (TAS 202)**

**Specimen 1 – 117.0” x 96.0” Aluminum Sliding Glass Door (OX) – Monolithic Laminated Glazing**

**Design Pressure                      Positive 65.0      Negative 75.0**

Air Infiltration (ASTM E283-04)	Pressure 1.57 PSF	SCFM/Ft <sup>2</sup> 0.104	Result Pass
---------------------------------	----------------------	-------------------------------	----------------

Structural Loads (ASTM E330-02)

<b>Range</b>	<b>Time (sec)</b>	<b>Load (psf)</b>
Half Test Positive	30	32.50
Design Positive	30	65.00
Half Test Negative	30	37.50
Design Negative	30	75.00

Water Infiltration (ASTM E331-00)	Pressure 9.75 PSF	Time 15.0 Min.	Result Pass
-----------------------------------	----------------------	-------------------	----------------

*Note #1: Water Infiltration performed after Positive and Negative half and design loads.*

Structural Loads (ASTM E330-02)

<b>Range</b>	<b>Time (sec)</b>	<b>Load (psf)</b>	<b>Location</b>	<b>Deflection</b>	<b>Set</b>	<b>Allowable (Set)</b>
Half Proof Positive	10	48.75				
Test Positive	30	97.50	1	0.901"	0.020"	0.372"
			2	0.005"	0.001"	0.032"
Half Proof Negative	10	56.25				
Test Negative	30	112.50	1	1.020"	0.021"	0.372"
			2	0.004"	0.001"	0.032"

*Deflection Locations:*

*Location 1 – Center of Meeting Rail*

*Location 2 – Center of Anchors latch Stile*

**Forced Entry**

ASTM F842	Type "A: Assembly	Passed
-----------	-------------------	--------

**Conclusion:** TEL observed no signs of failure in any area of this test specimen during the Uniform Static Load Test. In addition, specimen met the permanent set requirements. Therefore, this specimen satisfies the uniform static load test requirements of TAS 202-94.

Jarrett Wright and James Hayhurst, Test Technicians

## STRUCTURAL TESTS (TAS 202)

Specimen 2 – 98.0” x 120.0” Aluminum Sliding Glass Door (OX) – Insulated Laminated Glazing

Design Pressure            Positive 60.0    Negative 65.0

Air Infiltration (ASTM E283-04)	Pressure 1.57 PSF	SCFM/Ft <sup>2</sup> 0.120	Result Pass
---------------------------------	----------------------	-------------------------------	----------------

Structural Loads (ASTM E330-02)

Range	Time (sec)	Load (psf)
Half Test Positive	30	30.00
Design Positive	30	60.00
Half Test Negative	30	32.50
Design Negative	30	65.00

Water Infiltration (ASTM E331-00)	Pressure 9.75 PSF	Time 15.0 Min.	Result Pass
-----------------------------------	----------------------	-------------------	----------------

*Note #1: Water Infiltration performed after Positive and Negative half and design loads.*

Structural Loads (ASTM E330-02)

Range	Time (sec)	Load (psf)	Location	Deflection	Set	Allowable (Set)
Half Proof Positive Test Positive	10	45.00				
	30	90.00	1	1.992"	0.048"	0.468"
			2	0.006"	0.002"	0.032"
Half Proof Negative Test Negative	10	48.75				
	30	97.50	1	1.686"	0.012"	0.468"
			2	0.007"	0.001"	0.032"

*Deflection Locations:*

*Location 1 – Center of Meeting Rail*

*Location 2 – Center of Anchors latch Stile*

### Forced Entry

ASTM F842	Type "A" Assembly	Passed
-----------	-------------------	--------

**Conclusion:** TEL observed no signs of failure in any area of this test specimen during the Uniform Static Load Test. In addition, specimen met the permanent set requirements. Therefore, this specimen satisfies the uniform static load test requirements of TAS 202-94.

Jarrett Wright and James Hayhurst, Test Technicians

**STRUCTURAL TESTS (TAS 202)**

**Specimen 3 – 117.0” x 100.0” Aluminum Sliding Glass Door (OX) – Insulated Laminated Glazing**

**Design Pressure                  Positive 65.0    Negative 75.0**

Air Infiltration (ASTM E283-04)	Pressure 1.57 PSF	SCFM/Ft <sup>2</sup> 0.078	Result Pass
---------------------------------	----------------------	-------------------------------	----------------

Structural Loads (ASTM E330-02)

<b>Range</b>	<b>Time (sec)</b>	<b>Load (psf)</b>
Half Test Positive	30	32.50
Design Positive	30	65.00
Half Test Negative	30	37.50
Design Negative	30	75.00

Water Infiltration (ASTM E331-00)	Pressure 9.75 PSF	Time 15.0 Min.	Result Pass
-----------------------------------	----------------------	-------------------	----------------

*Note #1: Water Infiltration performed after Positive and Negative half and design loads.*

Structural Loads (ASTM E330-02)

<b>Range</b>	<b>Time (sec)</b>	<b>Load (psf)</b>	<b>Location</b>	<b>Deflection</b>	<b>Set</b>	<b>Allowable (Set)</b>
Half Proof Positive	10	48.75				
Test Positive	30	97.50	1	1.063"	0.015"	0.468"
			2	0.005"	0.002"	0.032"
Half Proof Negative	10	56.25				
Test Negative	30	112.50	1	1.107"	0.019"	0.468"
			2	0.002"	0.001"	0.032"

**Deflection Locations:**

*Location 1 – Center of meeting Rail  
Location 2 – Center of Anchors latch Stile*

**Forced Entry**

ASTM F842	Type "A" Assembly	Passed
-----------	-------------------	--------

**Conclusion:** TEL observed no signs of failure in any area of this test specimen during the Uniform Static Load Test. In addition, specimen met the permanent set requirements. Therefore, this specimen satisfies the uniform static load test requirements of TAS 202-94.

Jarrett Wright and James Hayhurst, Test Technicians

## STRUCTURAL TESTS (TAS 202)

Specimen 7 – 117.0” x 130.0” Aluminum Sliding Glass Door (OX) – Monolithic Laminated Glazing

Design Pressure            Positive 55.0    Negative 60.0

Air Infiltration (ASTM E283-04)	Pressure 1.57 PSF	SCFM/Ft <sup>2</sup> 0.156	Result Pass
---------------------------------	----------------------	-------------------------------	----------------

Structural Loads (ASTM E330-02)

Range	Time (sec)	Load (psf)
Half Test Positive	30	27.50
Design Positive	30	55.00
Half Test Negative	30	30.00
Design Negative	30	60.00

Water Infiltration (ASTM E331-00)	Pressure 9.00 PSF	Time 15.0 Min.	Result Pass
-----------------------------------	----------------------	-------------------	----------------

*Note #1: Water Infiltration performed after Positive and Negative half and design loads.*

Structural Loads (ASTM E330-02)

Range	Time (sec)	Load (psf)	Location	Deflection	Set	Allowable (Set)
Half Proof Positive	10	41.25				
Test Positive	30	82.50	1	2.470"	0.114"	0.509"
			2	0.003"	0.001"	0.032"
Half Proof Negative	10	45.00				
Test Negative	30	90.00	1	2.863"	0.247"	0.509"
			2	0.005"	0.002"	0.032"

*Deflection Locations:*

*Location 1 – Center of meeting Rail  
Location 2 – Center of Anchors latch Stile*

### Forced Entry

ASTM F842	Type "A" Assembly	Passed
-----------	-------------------	--------

**Conclusion:** TEL observed no signs of failure in any area of this test specimen during the Uniform Static Load Test. In addition, specimen met the permanent set requirements. Therefore, this specimen satisfies the uniform static load test requirements of TAS 202-94.

Jarrett Wright and James Hayhurst, Test Technicians

# IMPACT AND CYCLING TESTS (TAS 201/203)

Specimen 4 – 117.0” x 96.0” Aluminum Sliding Glass Door (OX) – Monolithic Laminated Glazing

## TAS 201 and 203 – Large Missile Impact (2 x 4 Southern Yellow Pine)

Cond. Temp Of Specimen	Missile Level	Missile Weight	Missile Length	Muzzle Distance From Specimen
74°F	D	9.0 lbs, 1 oz	8'-0"	17'1"

Impact Location	Results	X - Measurement	Y - Measurement	Speed
1	Pass	86.0"	50.0"	50.0 fps
2	Pass	58.5"	50.25"	49.9 fps
3	Pass	106.0"	12.50"	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.				

## TAS 201 and 203– Fatigue Load Cycling Design Pressure +65.0 psf / -75.0 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	2.26
0% to 60%	0.0 to 39.0	300	2.91
50% to 80%	32.5 to 52.0	600	2.63
30% to 100%*	19.5 to 65.0	100	2.12

Negative % of Test Load	Negative Pressure Range (psf)	Number Of Cycles	Average Cycle Time (Sec)
30% to 100%*	22.5 to 75.0	50	2.31
50% to 80%	37.5 to 60.0	1050	2.96
0% to 60%	0.0 to 45.0	50	1.99
20% to 50%	15.0 to 37.5	3350	2.01

\*Panel deflected 5.25" from original plane at 100% Positive load and 5.75" 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.

Jarrett Wright and James Hayhurst, Test Technicians

Mfg Observers – None

# IMPACT AND CYCLING TESTS (TAS 201/203)

Specimen 5 – 98.0” x 120.0” Aluminum Sliding Glass Door (OX) – Insulated Laminated Glazing

## TAS 201 and 203 – Large Missile Impact (2 x 4 Southern Yellow Pine)

Cond. Temp Of Specimen	Missile Level	Missile Weight	Missile Length	Muzzle Distance From Specimen
74°F	D	9.0 lbs, 1 oz	8'-0"	17'1"

Impact Location	Results	X - Measurement	Y - Measurement	Speed
1	Pass	72.0"	63.0"	49.7 fps
2	Pass	87.0"	13.0"	50.0 fps
3	Pass	49.0"	61.0"	49.8 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.				

## TAS 201 and 203– Fatigue Load Cycling      Design Pressure +60.0 psf / -65.0 psf

Positive % of Test Load	Positive Pressure Range (psf)	Number Of Cycles	Average Cycle Time (Sec)
20% to 50%	12.0 to 30.0	3500	2.26
0% to 60%	0.0 to 36.0	300	2.96
50% to 80%	30.0 to 48.0	600	2.10
30% to 100%*	18.0 to 60.0	100	2.36

Negative % of Test Load	Negative Pressure Range (psf)	Number Of Cycles	Average Cycle Time (Sec)
30% to 100%*	19.5 to 65.0	50	2.36
50% to 80%	32.5 to 52.0	1050	2.69
0% to 60%	0.0 to 39.0	50	2.51
20% to 50%	13.0 to 32.5	3350	2.98
*Panel deflected 4.75" from original plane at 100% Positive load and 5.00" 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.			

Jarrett Wright and James Hayhurst, Test Technicians

Mfg Observers – None

# IMPACT AND CYCLING TESTS (TAS 201/203)

Specimen 6 – 117.375” x 100.0” Aluminum Sliding Glass Door (OX) – Insulated Laminated Glazing

## TAS 201 and 203 – Large Missile Impact (2 x 4 Southern Yellow Pine)

Cond. Temp Of Specimen	Missile Level	Missile Weight	Missile Length	Muzzle Distance From Specimen
74°F	D	9.0 lbs, 1 oz	8'-0"	17'1"

Impact Location	Results	X - Measurement	Y - Measurement	Speed
1	Pass	85.5"	52.0"	50.0 fps
2	Pass	59.0"	50.0"	50.0 fps
3	Pass	106.0"	12.0"	49.9 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.				

## TAS 201 and 203– Fatigue Load Cycling Design Pressure +65.0 psf / -75.0 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	2.21
50% to 80%	32.5 to 52.0	600	2.39
30% to 100%*	19.5 to 65.0	100	2.41

Negative % of Test Load	Negative Pressure Range (psf)	Number Of Cycles	Average Cycle Time (Sec)
30% to 100%*	22.5 to 75.0	50	1.99
50% to 80%	37.5 to 60.0	1050	2.01
0% to 60%	0.0 to 45.0	50	2.32
20% to 50%	15.0 to 37.5	3350	1.97

\*Panel deflected 5.00” from original plane at 100% Positive load and 5.25” 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.

Jarrett Wright and James Hayhurst, Test Technicians

Mfg Observers – None



## IMPACT AND CYCLING TESTS (TAS 201/203)

Specimen 8 – 117.00” x 130.00” Aluminum Sliding Glass Door (OX) – Monolithic Laminated Glazing

### TAS 201 and 203 – 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'-0"	17'1"

Impact Location	Results	X - Measurement	Y - Measurement	Speed
1	Pass	85.5"	66.0"	49.9 fps
2	Pass	106.0"	12.5"	49.9 fps
3	Pass	58.5"	66.0"	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.				

### TAS 201 and 203– Fatigue Load Cycling      Design Pressure +55.0 psf / -60.0 psf

Positive % of Test Load	Positive Pressure Range (psf)	Number Of Cycles	Average Cycle Time (Sec)
20% to 50%	11.0 to 27.5	3500	2.23
0% to 60%	0.0 to 33.0	300	1.97
50% to 80%	27.5 to 44.0	600	2.25
30% to 100%*	16.5 to 55.0	100	1.99

Negative % of Test Load	Negative Pressure Range (psf)	Number Of Cycles	Average Cycle Time (Sec)
30% to 100%*	18.0 to 60.0	50	2.25
50% to 80%	30.0 to 48.0	1050	2.11
0% to 60%	0.0 to 36.0	50	1.98
20% to 50%	12.0 to 30.0	3350	2.31
*Panel deflected 6.00” from original plane at 100% Positive load and 5.75” 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.			

Jarrett Wright and James Hayhurst, Test Technicians

Mfg Observers – None

## 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.

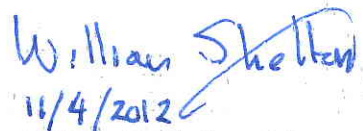
Testing Evaluation Laboratories, Inc.'s letter, reports, its name or insignia or mark are for the exclusive use of the client so named herein and any other use is strictly prohibited. The report, letters and the name of Testing Evaluation Laboratories, Inc., its seal or mark shall not be used in any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

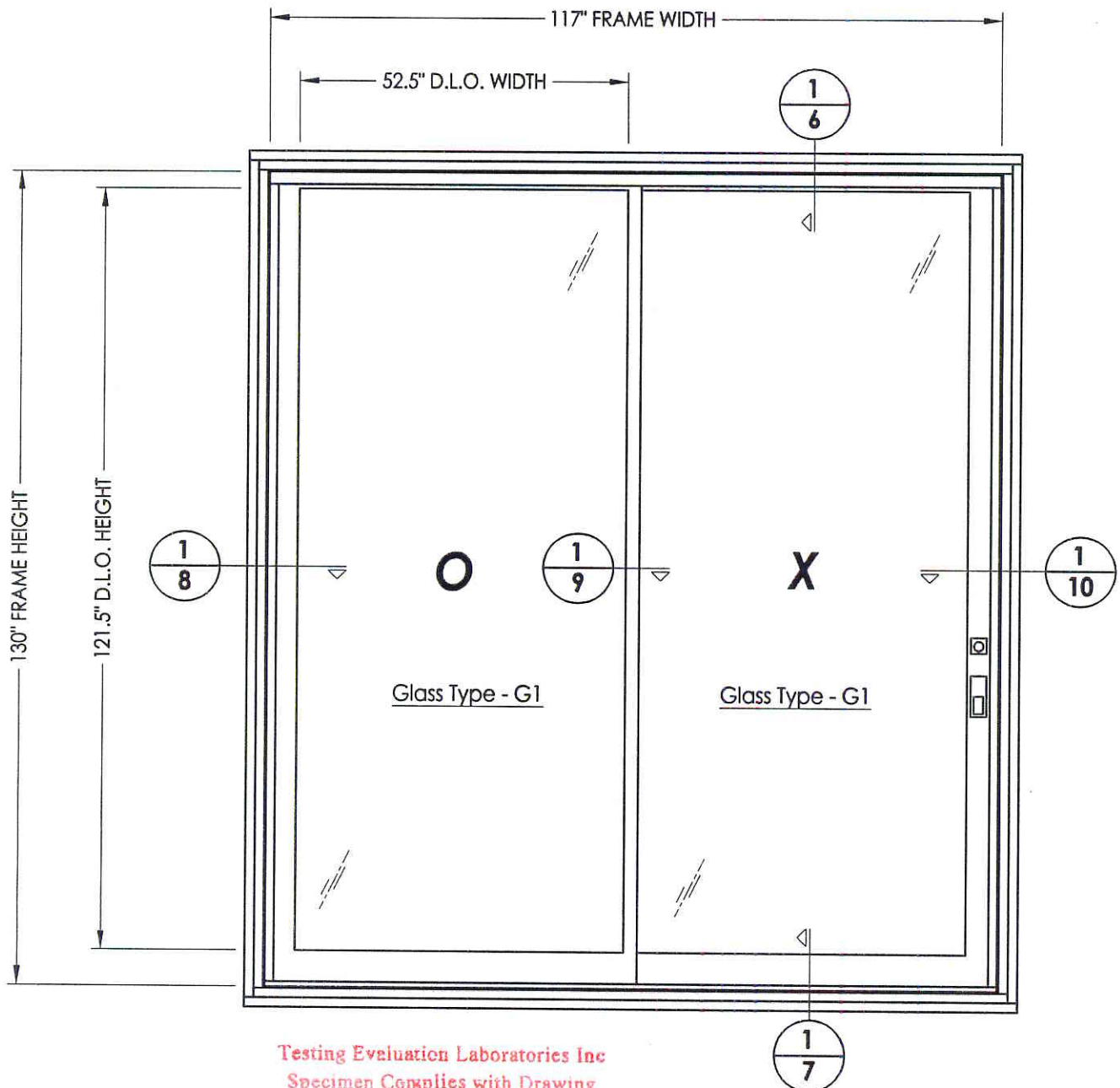


William B. Shelton, P.E.  
Florida P.E. # 26686  
1505 Nance Ave  
Tampa, FL 33606


TABLE OF CONTENTS	
SHEET#	DESCRIPTION
1	Table of contents
2	Test elevation
3	Test elevation
4	Test elevation
5	Test elevation
6	Vertical cross sections
7	Vertical cross sections
8	Horizontal cross section
9	Horizontal cross section
10	Horizontal cross section
11	Frame anchoring
12	Frame anchoring
13	Frame anchoring
14	Frame anchoring
15	Components
16	Glazing details
17	Bill of materials

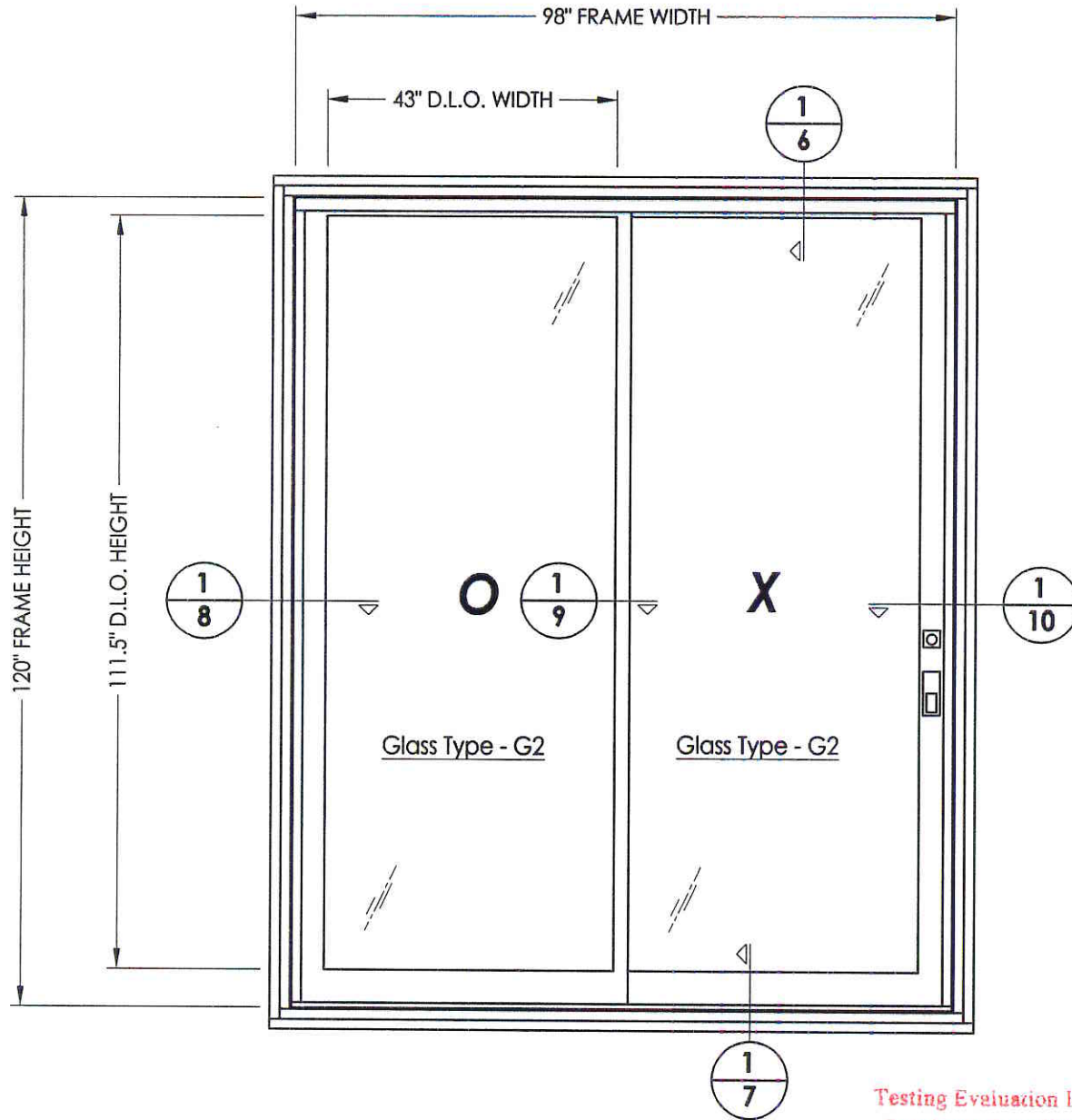
Testing Evaluation Laboratories Inc  
 Specimen Complies with Drawing  
 Deviations Noted - TEL # 01990465.2  
 Date 10-29-12 Verified by gw

PRODUCT:		FLEETWOOD	
PART OR ASSEMBLY:		TABLE OF CONTENTS	
		RW	BY
		REV GLAZING FOR	
		98 X 120 SPEC.	
		ADDED 117 X 130	
		REVISIONS	
		10/29/12	
		05/14/12	
		DATE	
		NO.	
			
DATE: 5/14/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: L-4295			
SHEET 1 OF 17			



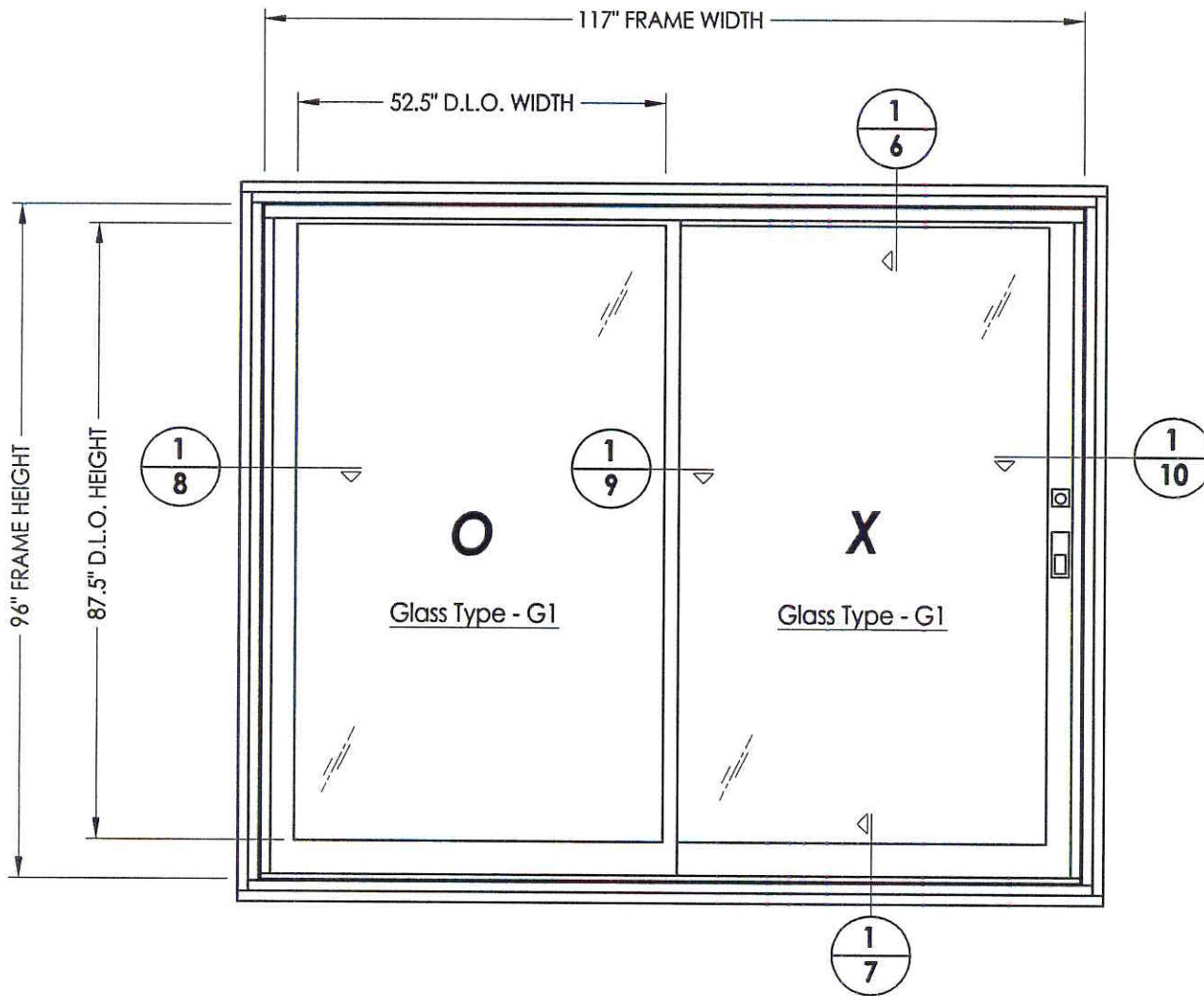
Testing Evaluation Laboratories Inc  
 Specimen Complies with Drawing  
 Deviations Noted - TEL # 01990465-2  
 Date 10-29-12 Verified by JW

PRODUCT:		FLEETWOOD	
PART OR ASSEMBLY:		TEST ELEVATION	
		RW	
	2	10/29/12	REV GLAZING FOR 98 X 120 SPEC.
	1	05/14/12	ADDED 117 X 130
	NO.	DATE	REVISIONS
			
DATE: 5/14/12			
SCALE: N.T.S.			
DWC. BY: JK			
CHK. BY: LFS			
DRAWING NO.: L-4295			
SHEET 2 OF 17			



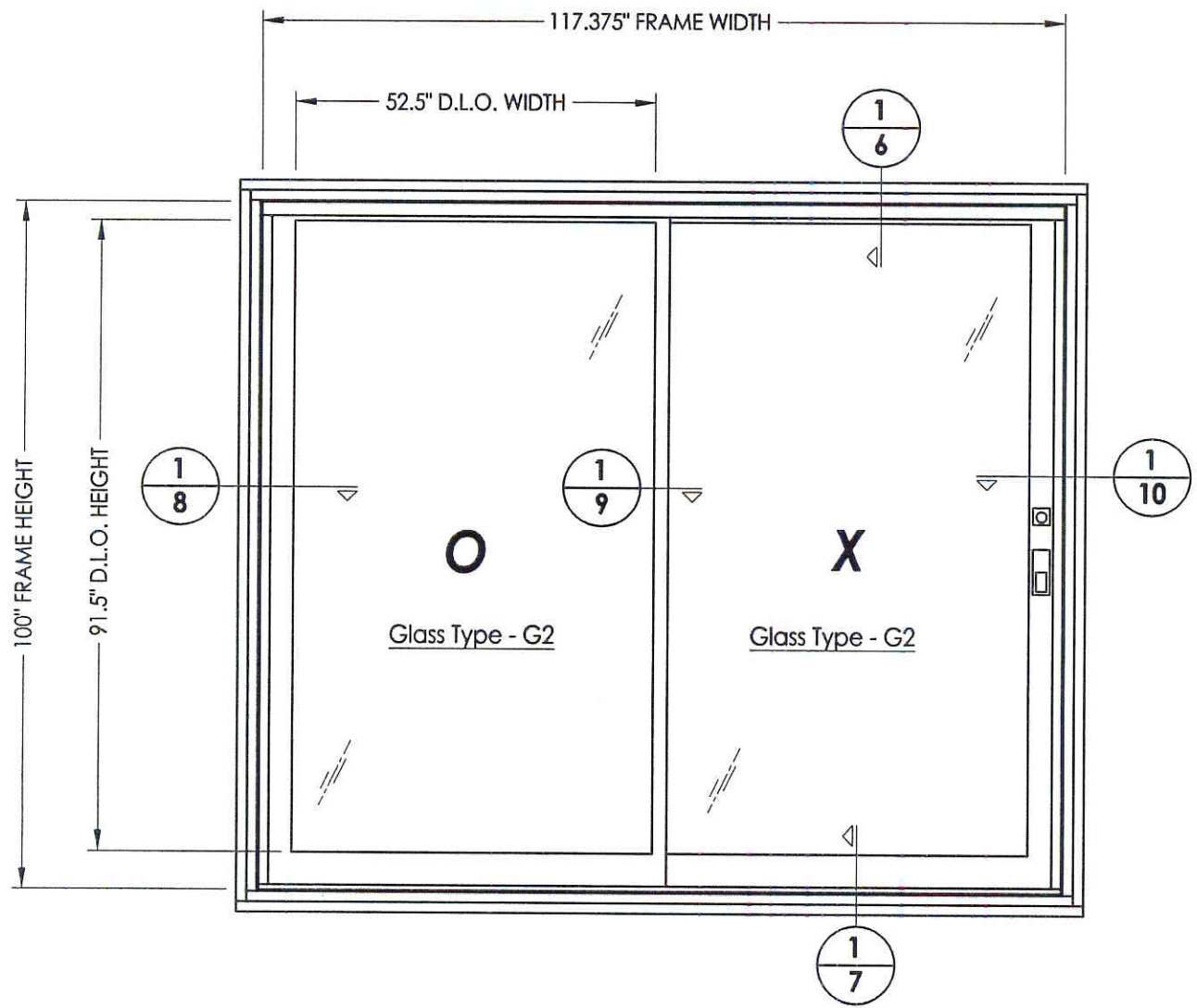
Testing Evaluation Laboratories Inc  
 Specimen Complies with Drawing  
 Deviations Noted - TEL # 01990465.2  
 Date 10-29-12 Verified by gw

FLEETWOOD		PART OR ASSEMBLY:		TEST ELEVATION	
2	10/29/12	REV GLAZING FOR	RW		
		98 X 120 SPEC.			
1	05/14/12	ADDED 117 X 130	RW		
		NO. DATE			
					REVISIONS
 RW BUILDING CONSULTANTS, INC. 813.659.9197					
5/14/12					
SCALE: N.T.S.					
DWG. BY: JK					
CHK. BY: LFS					
DRAWING NO.:					
L-4295					
SHEET 3 OF 17					



Testing Evaluation Laboratories Inc  
 Specimen Complies with Drawing  
 Deviations Noted - TEL # 01990465-2  
 Date 10-29-12 Verified by JW

FLEETWOOD		PART OR ASSEMBLY:	
		TEST ELEVATION	
		RW	BY
2	10/29/12	REV GLAZING FOR 98 X 120 SPEC.	
1	05/14/12	ADDED 117 X 130	
	NO.	DATE	
REVISIONS			
5/14/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.:			
L-4295			
SHEET 4 OF 17			



Glass Type - G2

Glass Type - G2

1/7

1/6

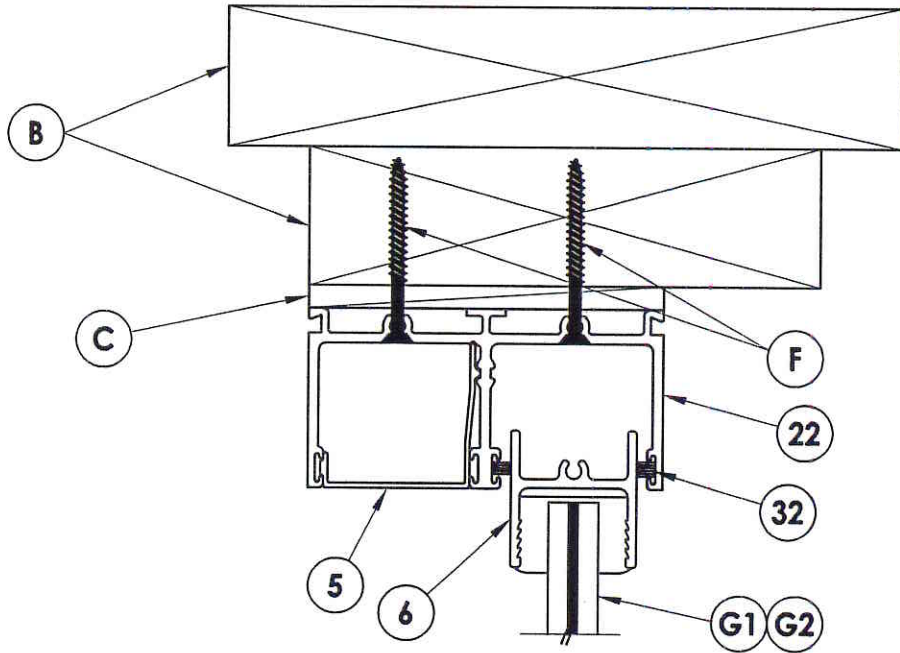
1/8

1/9

1/10

Testing Evaluation Laboratories Inc  
 Specimen Complies with Drawing  
 Deviations Noted - TEL # 01990465.2  
 Date 10-29-12 Verified by *gw*

FLEETWOOD		PART OR ASSEMBLY:		TEST ELEVATION	
		RW		RW	BY
		REV GLAZING FOR		ADDED 117 X 130	
		98 X 120 SPEC.			
		NO.	DATE		REVISIONS
5/14/12					
SCALE: N.T.S.					
DWG. BY: JK					
CHK. BY: LFS					
DRAWING NO.:					
L-4295					
SHEET 5 OF 17					

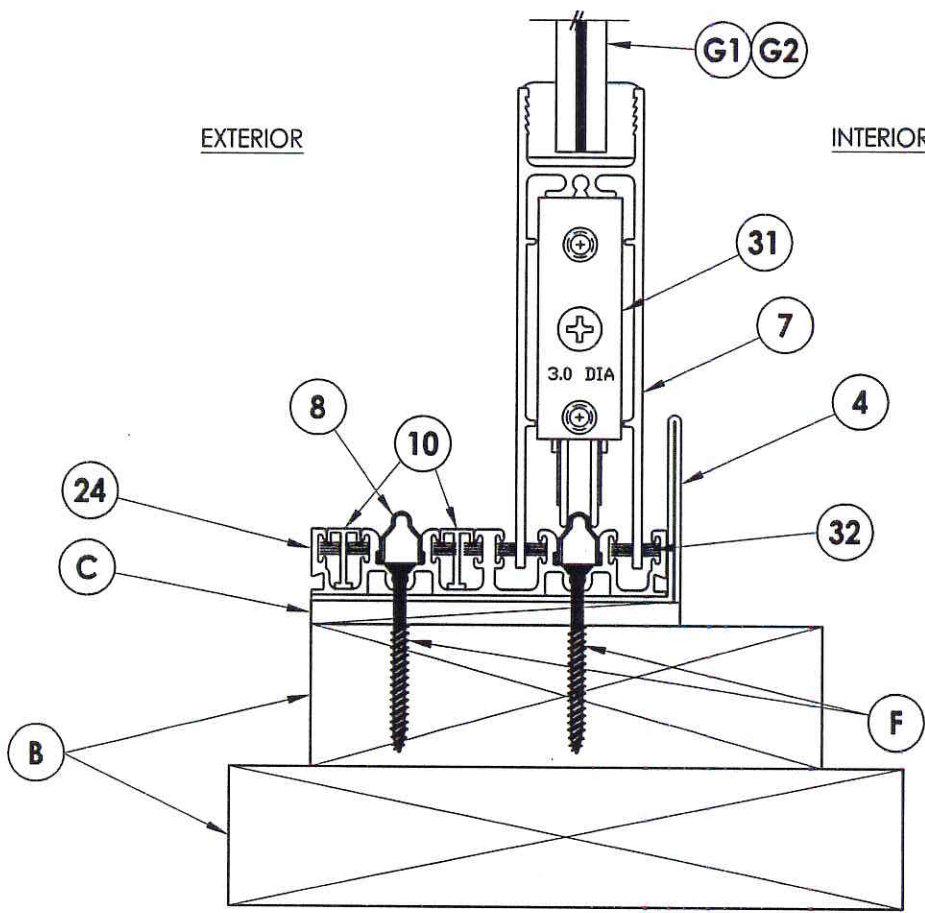


1  
6 **VERTICAL CROSS SECTION**

Testing Evaluation Laboratories Inc  
 Specimen Complies with Drawing  
 Deviations Noted - TEL # 01990465.2  
 Date 10-29-12 Verified by JW

PRODUCT:		FLEETWOOD	
PART OR ASSEMBLY:		VERTICAL CROSS SECTION	
		RW	BY
		REV GLAZING FOR	
		98 X 120 SPEC.	
		ADDED 117 X 130	
		NO.	DATE
			REVISIONS
DATE: 5/14/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: L-4295			
SHEET 6 OF 17			

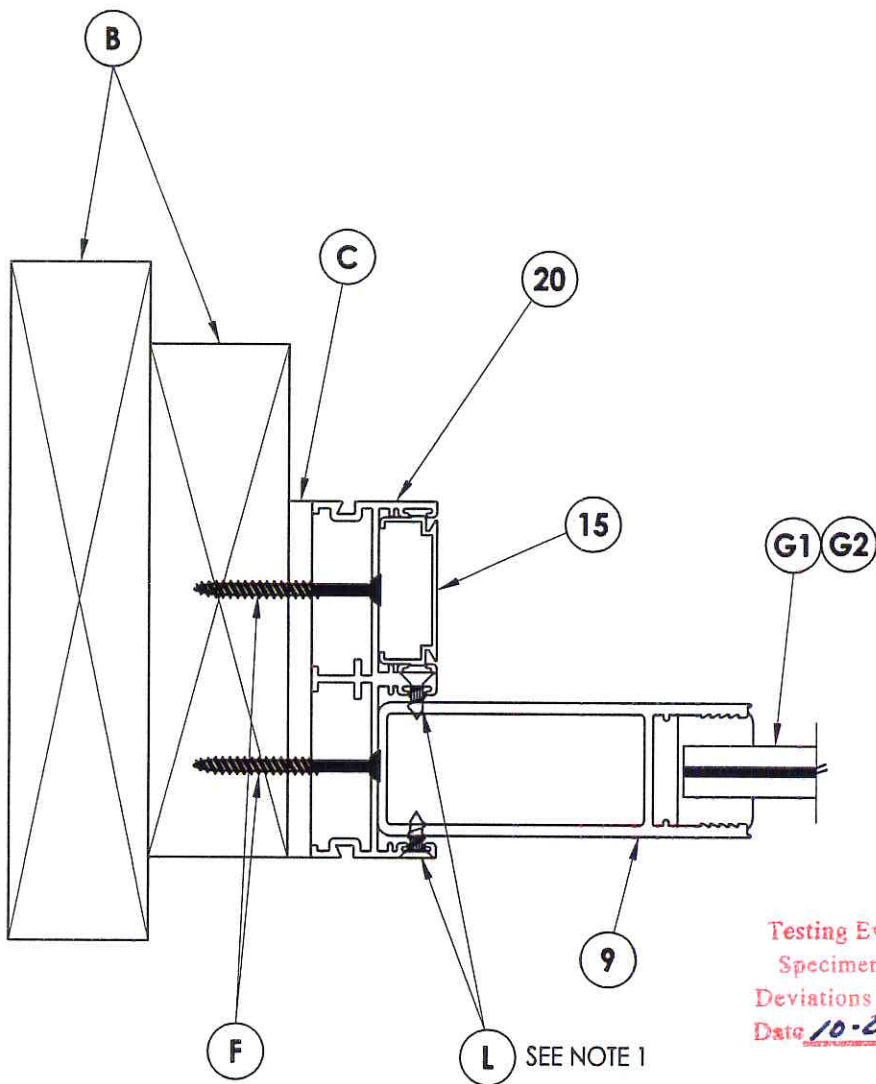




1  
7 VERTICAL CROSS SECTION

Testing Evaluation Laboratories Inc  
 Specimen Complies with Drawing  
 Deviations Noted - TEL # 01990465.2  
 Date 10-29-12/scrified by gw

PRODUCT:		FLEETWOOD	
PART OR ASSEMBLY:		VERTICAL CROSS SECTION	
		RW	BY
2	10/29/12	REV GLAZING FOR 98 X 120 SPEC.	RW
1	05/14/12	ADDED 117 X 130	RW
	NO. DATE		BY
		REVISIONS	
DATE: 5/14/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: L-4295			
SHEET 7 OF 17			



**1** **HORIZONTAL CROSS SECTION**  
**8**

Testing Evaluation Laboratories Inc  
 Specimen Complies with Drawing  
 Deviations Noted - TEL # 01990465.2  
 Date 10-29-12 Verified by gw

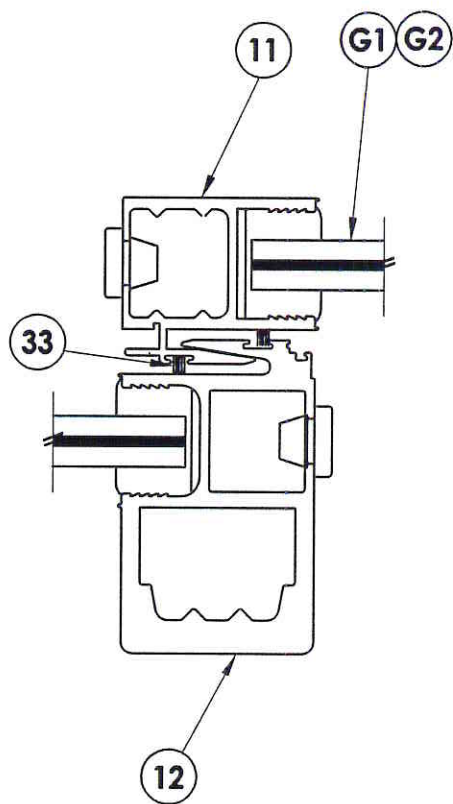
NOTE:  
 1. Fixed panel screws located 39" from each end.

PRODUCT:		FLEETWOOD	
PART OR ASSEMBLY:		HORIZONTAL CROSS SECTION	
NO.	DATE	BY	REVISIONS
2	10/29/12	RW	REV GLAZING FOR 98 X 120 SPEC.
1	05/14/12	RW	ADDED 117 X 130

**RW** BUILDING CONSULTANTS, INC.  
 813.659.9197

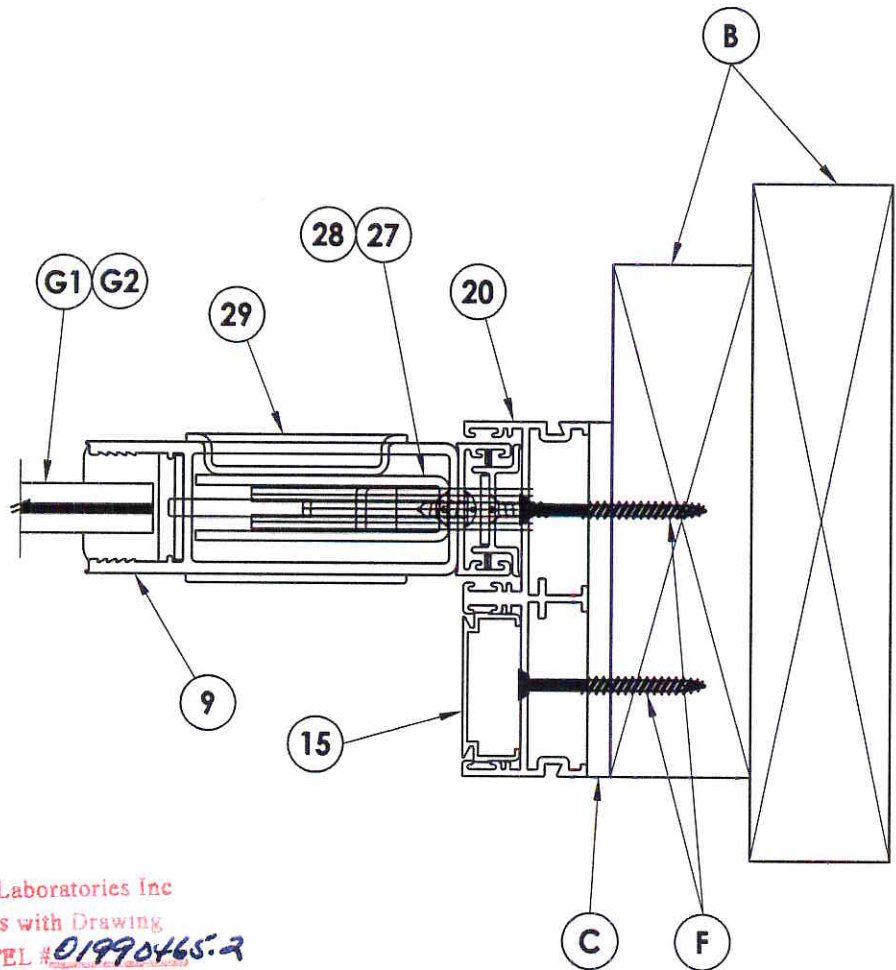
DATE:	5/14/12
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	L-4295
SHEET	8 OF 17

1  
9 **HORIZONTAL CROSS SECTION**



Testing Evaluation Laboratories Inc  
 Specimen Complies with Drawing  
 Deviations Noted - TEL # 0199 0465.2  
 Date 10-29-12 verified by gaw

PRODUCT:		FLEETWOOD	
PART OR ASSEMBLY:		HORIZONTAL CROSS SECTION	
		RW	BY
	10/29/12	REV GLAZING FOR 98 X 120 SPEC.	RW
	05/14/12	ADDED 117 X 130	RW
	NO.	DATE	BY
			REVISIONS
<p><b>RW</b> BUILDING          CONSULTANTS, INC.          813.659.9197</p>			
DATE: 5/14/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: L-4295			
SHEET 9 OF 17			



Testing Evaluation Laboratories Inc  
 Specimen Complies with Drawing  
 Deviations Noted - TEL # 01990465.2  
 Date 10-29-12 Verified by *gw*

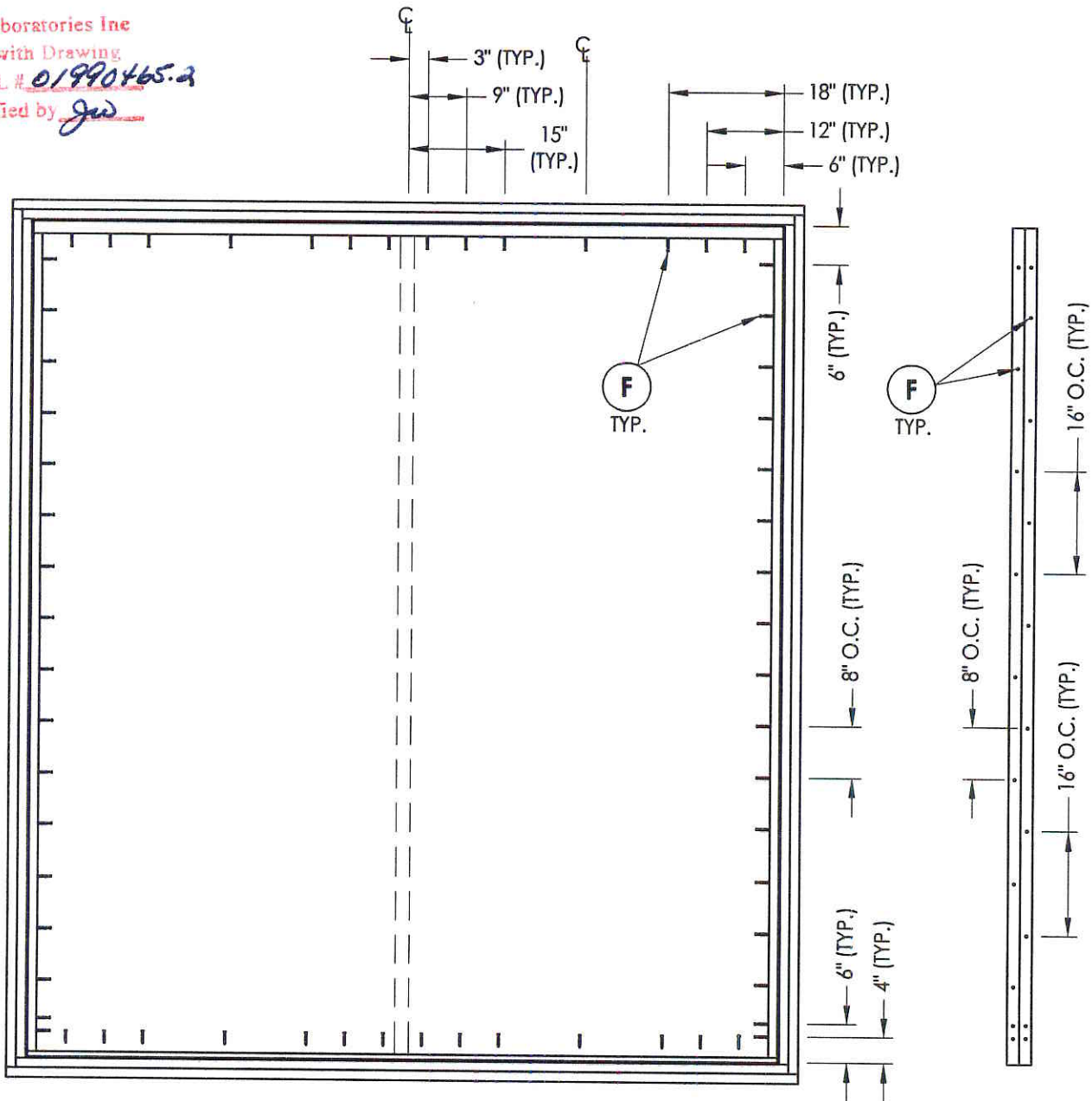
1  
10 HORIZONTAL CROSS SECTION

PRODUCT:		FLEETWOOD	
PART OR ASSEMBLY:		HORIZONTAL CROSS SECTION	
NO.	DATE	BY	REVISIONS
2	10/29/12	RW	REV GLAZING FOR 98 X 120 SPEC.
1	05/14/12	RW	ADDED 117 X 130

**RW** BUILDING CONSULTANTS, INC.  
 813.659.9197


DATE: 5/14/12  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: L-4295  
 SHEET 10 OF 17

Testing Evaluation Laboratories Inc  
 Specimen Complies with Drawing  
 Deviations Noted - TEL # 01990465.2  
 Date 10-29-12 Verified by JW

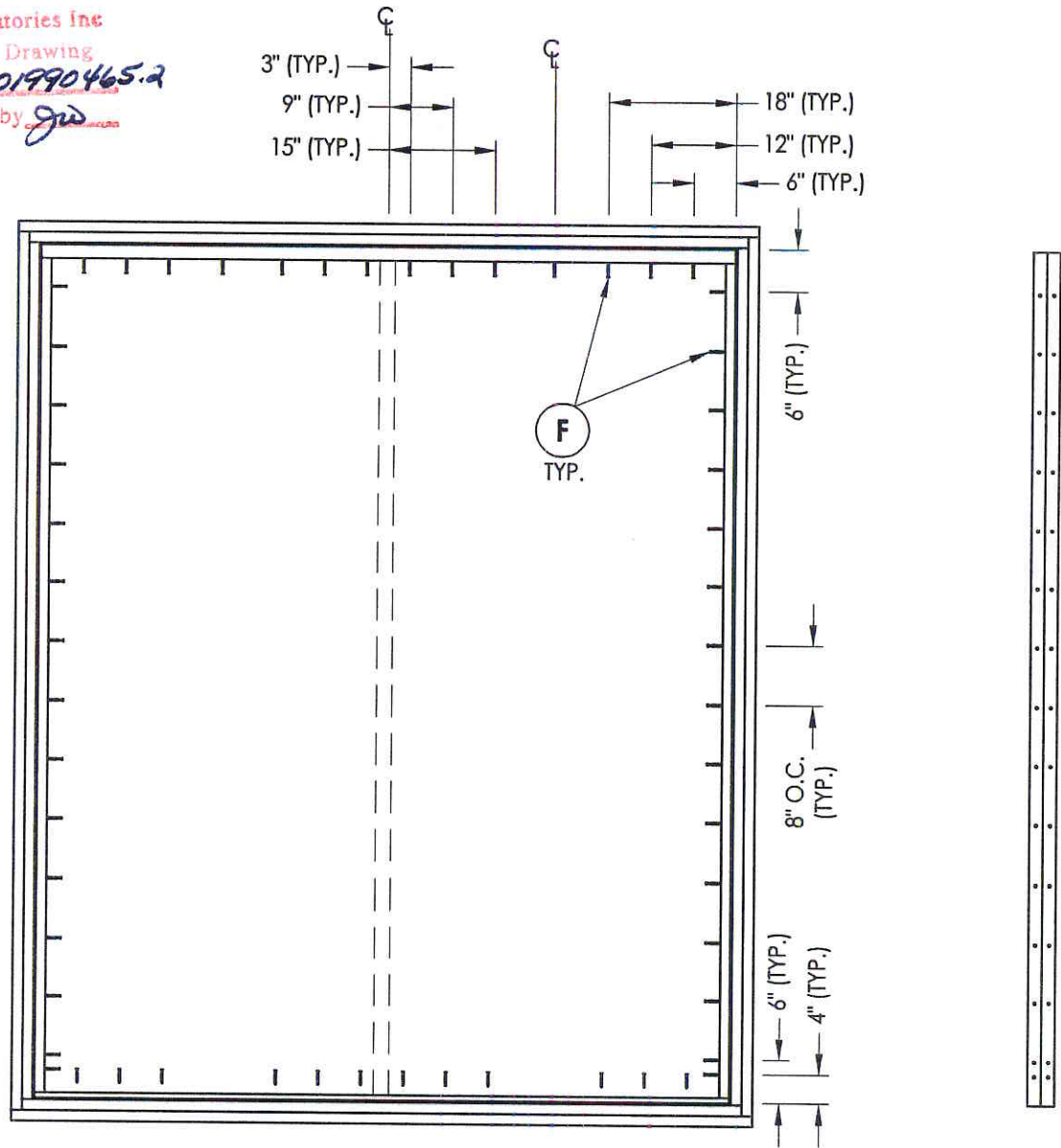


**FRAME ANCHORING**  
 117" X 130" FRAME

**JAMB**

PRODUCT:		FLEETWOOD	
PART OR ASSEMBLY:		FRAME ANCHORING	
NO.	DATE	BY	REVISIONS
2	10/29/12	RW	REV GLAZING FOR 98 X 120 SPEC.
1	05/14/12	RW	ADDED 117 X 130
			
DATE: 5/14/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: L-4295			
SHEET 11 OF 17			

Testing Evaluation Laboratories Inc  
 Specimen Complies with Drawing  
 Deviations Noted - TEL # 01990465.2  
 Date 10-29-12 Verified by *JW*

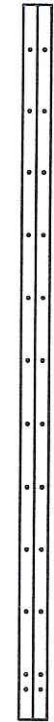
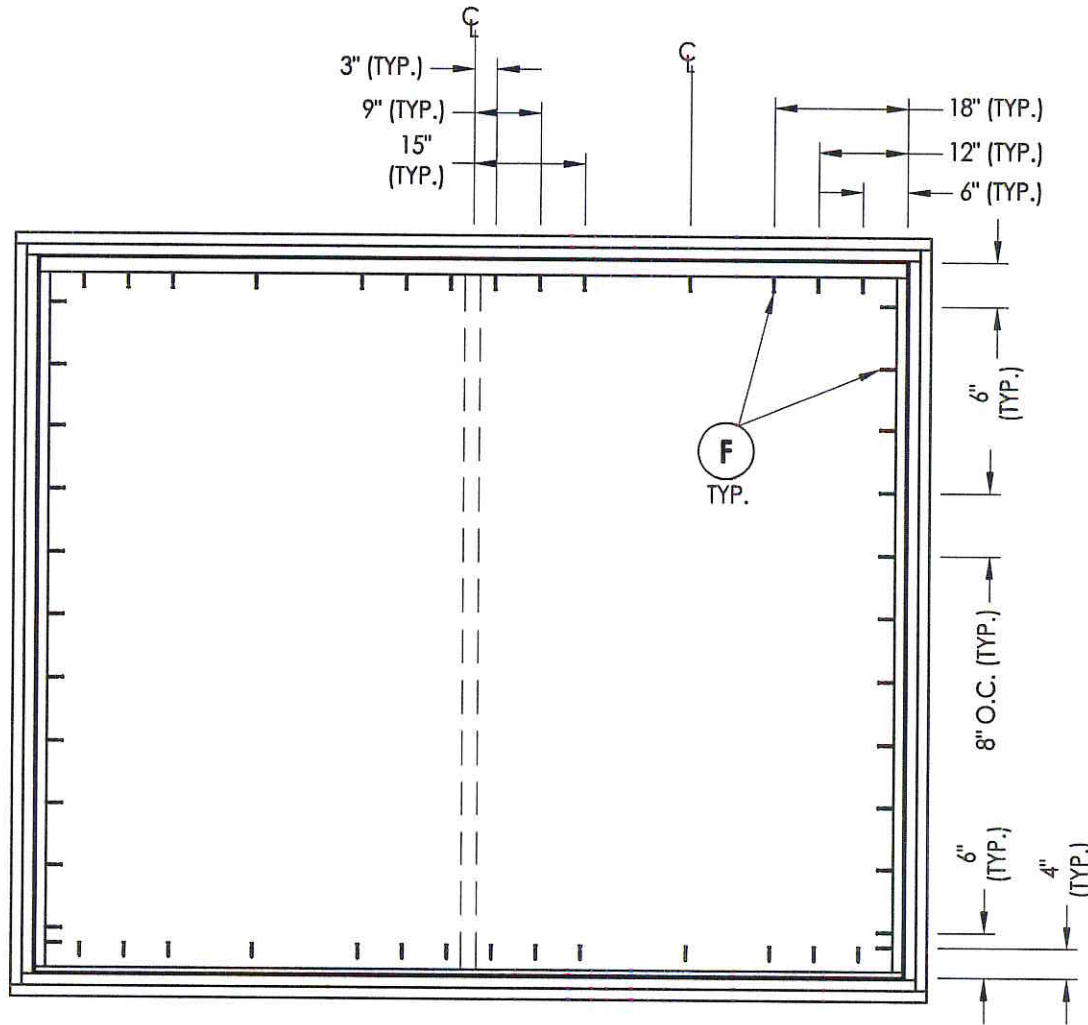


**FRAME ANCHORING**  
 98.25" X 120" FRAME

**JAMB**

PRODUCT:		FLEETWOOD	
PART OR ASSEMBLY:		FRAME ANCHORING	
NO.	DATE	BY	REVISIONS
2	10/29/12	RW	REV GLAZING FOR 98 X 120 SPEC.
1	05/14/12	RW	ADDED 117 X 130
<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>RW</b> BUILDING CONSULTANTS, INC.        813.659.9197     </div>			
DATE: 5/14/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: L-4295			
SHEET 12 OF 17			

Testing Evaluation Laboratories Inc  
 Specimen Complies with Drawing  
 Deviations Noted - TEL #01990465.2  
 Date 10-29-12 Verified by JW

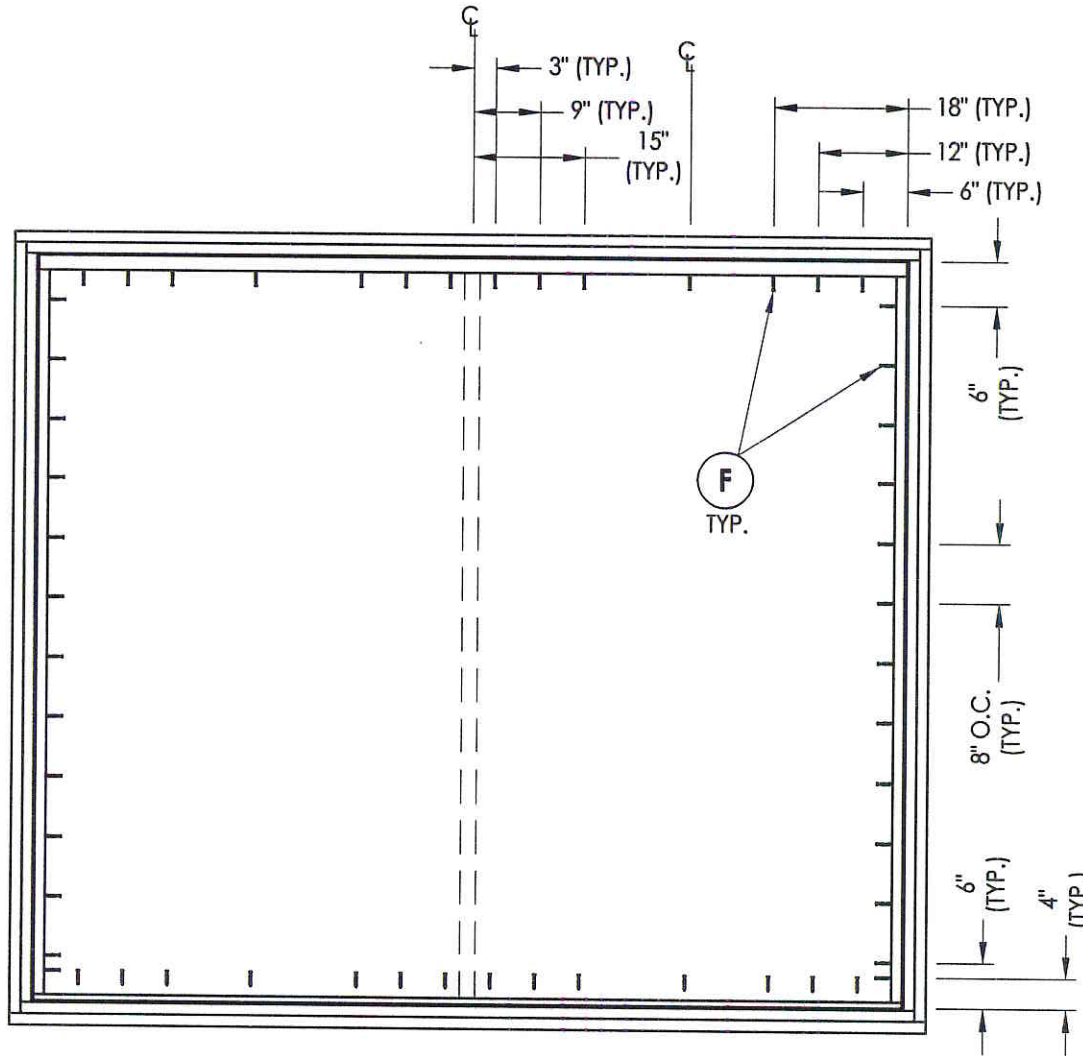


**FRAME ANCHORING**  
 117" X 96" FRAME

**JAMB**

PRODUCT:		FLEETWOOD	
PART OR ASSEMBLY:		FRAME ANCHORING	
NO.	DATE	REV	BY
2	10/29/12	REV GLAZING FOR 98 X 120 SPEC.	RW
1	05/14/12	ADDED 117 X 130	RW
REVISIONS			
DATE: 5/14/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: L-4295			
SHEET 13 OF 17			

Testing Evaluation Laboratories Inc  
 Specimen Complies with Drawing  
 Deviations Noted - TEL # 01990465.2  
 Date 10-29-12 Verified by *gjd*



**FRAME ANCHORING**  
 117" X 100" FRAME

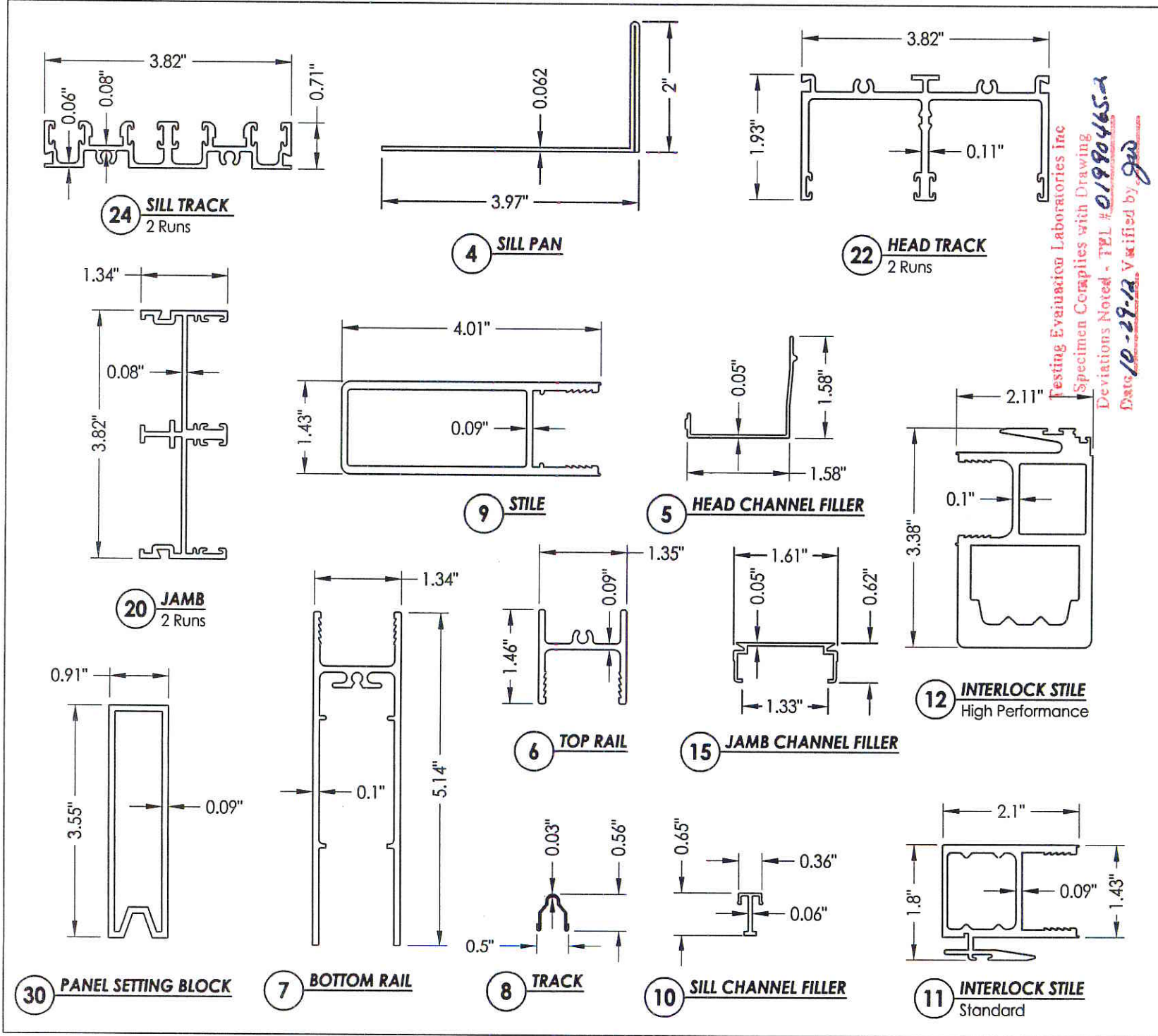
**JAMB**

PRODUCT:		FLEETWOOD	
PART OR ASSEMBLY:		FRAME ANCHORING	
NO.	DATE	REVISIONS	BY
2	10/29/12	REV GLAZING FOR 98 X 120 SPEC.	RW
1	05/14/12	ADDED 117 X 130	RW

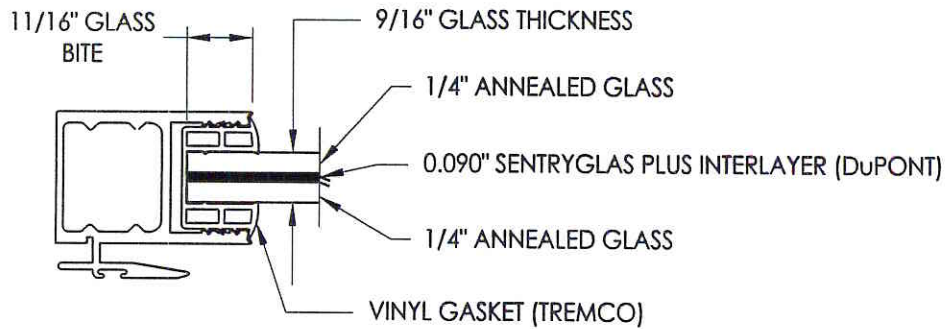
**RW** BUILDING CONSULTANTS, INC.  
 813.659.9197

DATE: 5/14/12  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: L-4295  
 SHEET 14 OF 17

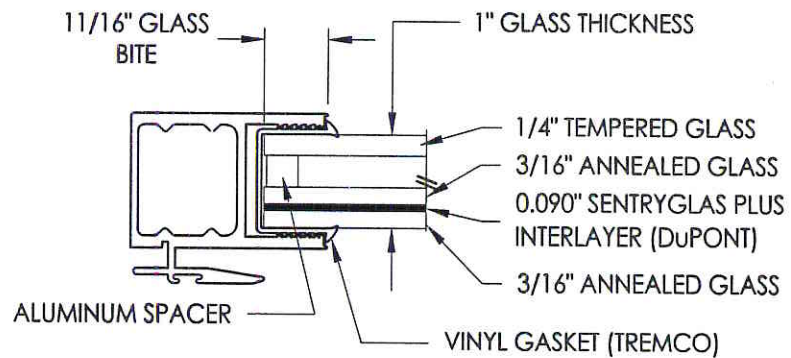




PRODUCT:		FLEETWOOD	
PART OR ASSEMBLY:		COMPONENTS	
REVISONS		REVISONS	
NO.	DATE	BY	
2	10/29/12	RW	REV GLAZING FOR 98 X 120 SPEC.
1	05/14/12	RW	ADDED 117 X 130
DATE: 5/14/12		SCALE: N.T.S.	
DWG. BY: JK		CHK. BY: LFS	
DRAWING NO.: L-4295		SHEET 15 OF 17	



**G1** GLAZING DETAIL  
Dry Seal




**G2** GLAZING DETAIL  
Dry Seal

Testing Evaluation Laboratories Inc  
Specimen Complies with Drawing  
Deviations Noted - TEL # 01990465.2  
Date 10-29-12 Verified by Jed

PRODUCT:		FLEETWOOD	
PART OR ASSEMBLY:		GLAZING DETAILS	
		REV GLAZING FOR	RW
		98 X 120 SPEC.	
		ADDED 117 X 130	RW
		NO. DATE	BY
			REVISIONS
2	10/29/12		
1	05/14/12		
 <b>RW BUILDING CONSULTANTS, INC.</b> 813.659.9197			
DATE: 5/14/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: L-4295			
SHEET 16 OF 17			

BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK SG >= 0.55	WOOD
B	2X BUCK SG >= 0.55	WOOD
C	1/4" MAX. SHIM SPACE	-
F	#10 X 2" PFH SMS	STEEL
L	#8 X 1/2" PFH SMS	STEEL
4	SILL PAN (2 RUNS)	5052 -ALUM
5	HEAD CHANNEL FILLER	6063-T6 ALUM
6	TOP RAIL	6063-T6 ALUM
7	BOTTOM RAIL	6063-T6 ALUM
8	TRACK	S.S.
9	STILE	6063-T6 ALUM
10	SILL CHANNEL FILLER	6063-T6 ALUM
11	STANDARD INTERLOCK STILE	6063-T6 ALUM
12	HIGH PERFORMANCE INTERLOCK STILE	6063-T6 ALUM
15	JAMB CHANNEL FILLER	6063-T6 ALUM
20	JAMB TRACK (2 RUNS)	6063-T6 ALUM
22	HEAD TRACK (2 RUNS)	6063-T6 ALUM
24	SILL TRACK (2 RUNS)	6063-T6 ALUM
26	#8 X 3/4" PPH SMS	STEEL
27	PRIMARY LATCH	-
28	SECONDARY LATCH	-
29	HANDLE SET	-
30	PANEL SETTING BLOCK	6063-T6 ALUM
31	MAMMOTH ROLLER ASSEMBLY	-
32	CENTER-FIN WEATHERSEAL .290 HIGH PILE (AMESBURY 43629-270)	-
33	HEAVY DENSITY WEATHERSEAL .300 HIGH PILE (AMESBURY 413330-270)	-

Testing Evaluation Laboratories inc  
 Specimen Complies with Drawing  
 Deviations Noted - TEL # 01990465.2  
 Date 10-29-12 Verified by gfw

PRODUCT:		FLEETWOOD	
PART OR ASSEMBLY:		BILL OF MATERIALS	
NO.	DATE	REV	BY
2	10/29/12	REV GLAZING FOR 98 X 120 SPEC.	RW
1	05/14/12	ADDED 117 X 130	RW
REVISIONS			
			
DATE: 5/14/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: L-4295			
SHEET 17 OF 17			