

# 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 <sup>2</sup> (0.136 scfm/ft <sup>2</sup> ) @ 75 Pa (1.57 psf)			
Air Infiltration/Exfiltration (A440S1-09)	Level A2: < 1.50 L/s•m²			
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.

Villant. Whight,

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

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-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>	Title of Test / Test Method	<u>Results</u>	Allowed
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 <sup>2</sup> 0.136 scfm/ft <sup>2</sup>	1.50 L/s/m <sup>2</sup> 0.3 scfm/ft <sup>2</sup>
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 recresults are listed under "Optional Performance".)	quired. Those	
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

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

Cont:

## **Optional Performance**

5.3.4.2	Uniform Load Deflection Test @ Design Pressure ASTM E330
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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>	Allowed
5.3.2.1	Air Leakage Resistance (Exfiltration) ASTM E283	$0.63 \text{ L/s/m}^2$	
	Test conducted @ 75 Pa (1.57 psf)	0.126 scfm/ft <sup>2</sup>	0.3 scfm/ft <sup>2</sup>
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Conditions, Terms, and General Notes Regarding These Tests

The product tested <u>Has Been</u> 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 <u>"Are Equivalent"</u>.

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.

Uman & Whight,

President

## **Revision Log**

Rev Number	<u>Date</u>	<u>Pages</u>	Revision(s)
(4)			
0	6/26/2015	NA	Original Report Issue

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

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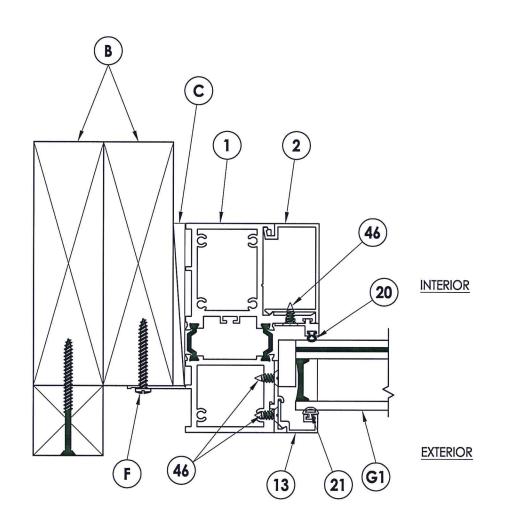
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L-7346

SHEET \_ 1 of 14 111" FIN WIDTH



HORIZONTAL CROSS SECTION

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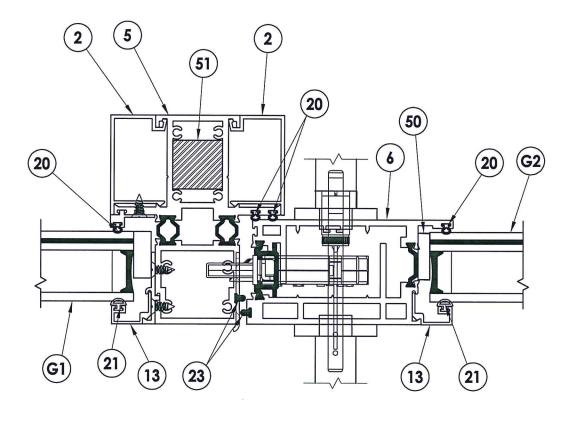
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L-7346

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#### INTERIOR



**EXTERIOR** 

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

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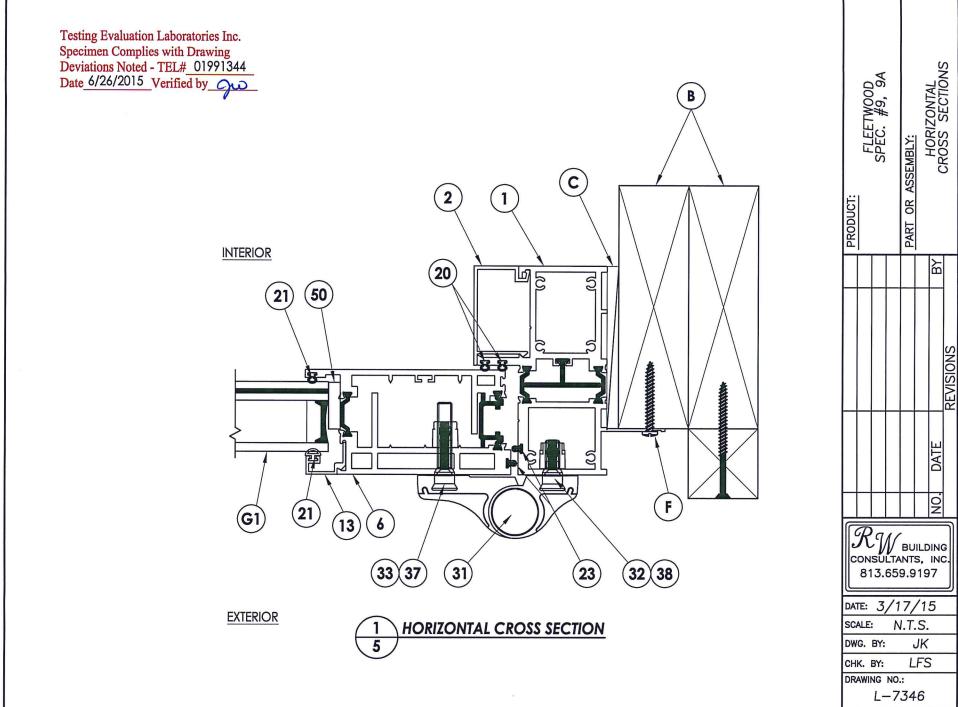
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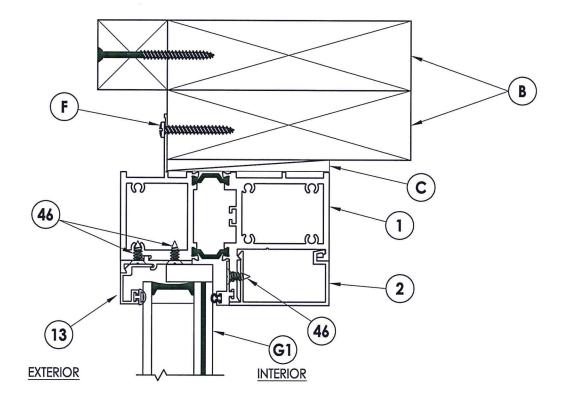
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SHEET <u>5</u> OF <u>14</u>





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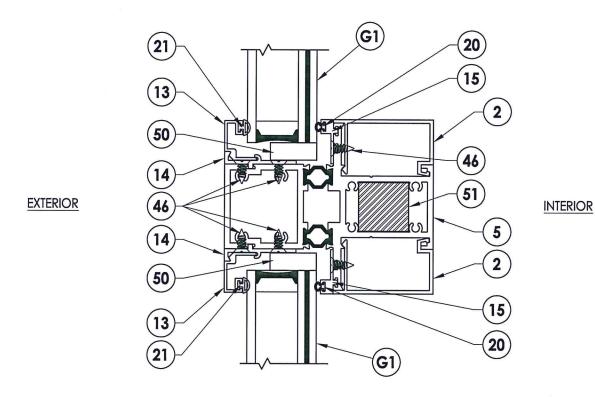
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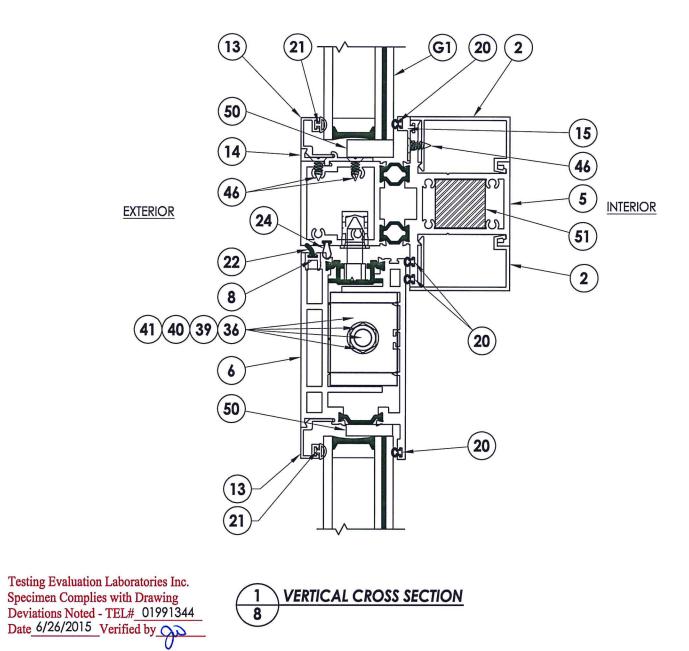
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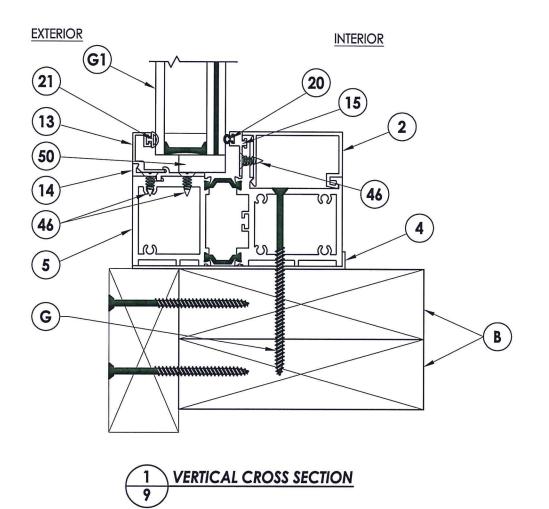
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**VERTICAL CROSS SECTION** 



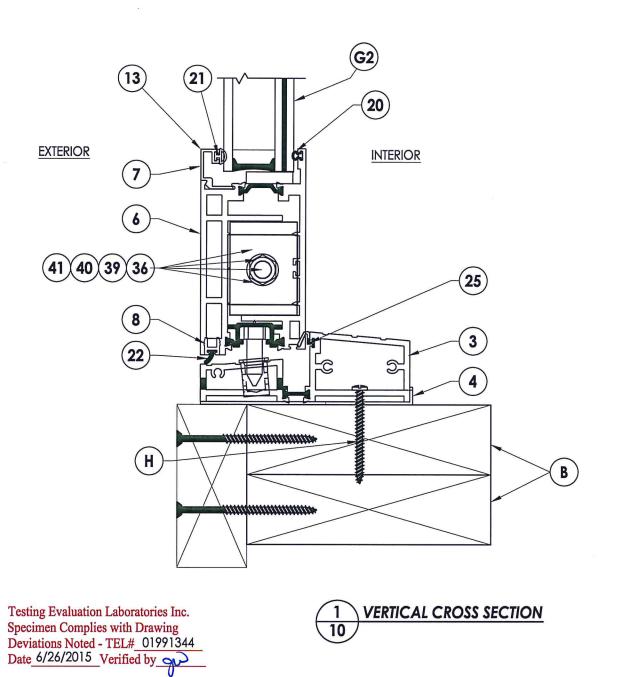
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SHEET 9 OF 14



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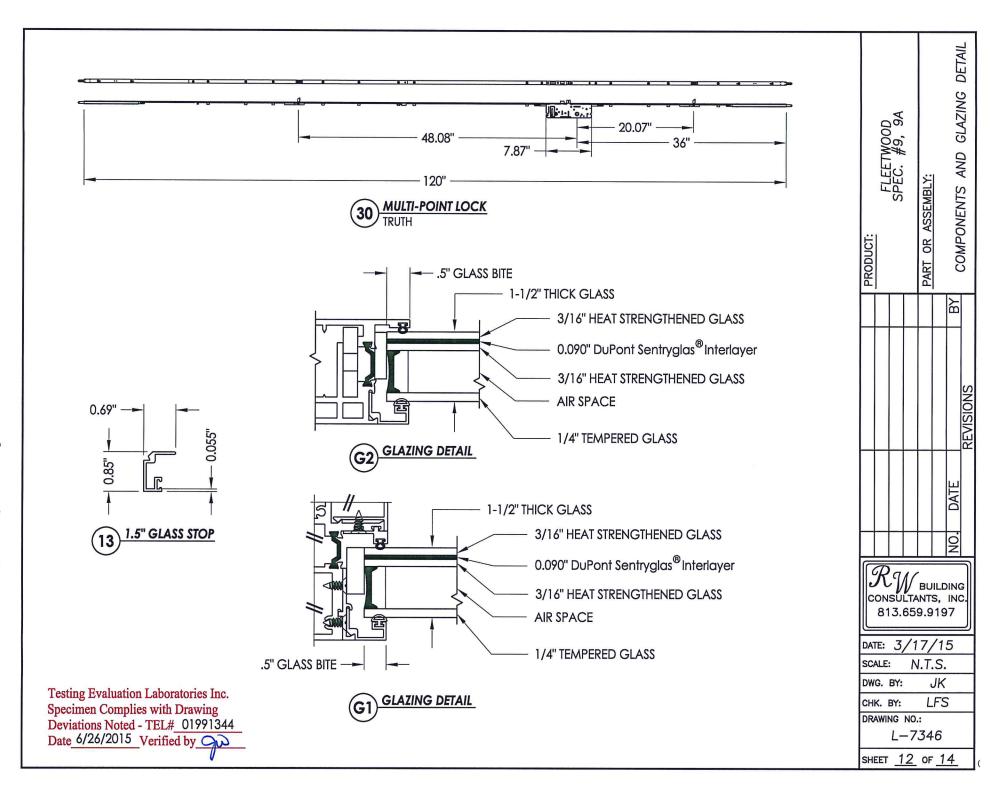
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BILL OF MATERIALS					
ITEM #	DESCRIPTION	PART#	MATERIAL		
В	2X BUCK SG >= 0.55	-	WOOD		
С	1/4" MAX. SHIM SPACE	-	-		
D	#10 x 2-3/4" PFH WOOD SCREW	-	STEEL		
F	#10 x 1-1/2" PFH WOOD SCREW	-	STEEL		
G	1/4" x 4" PPH CONCRETE SCREW	-	STEEL		
Η	#10 x 2" PPH 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		
7	1" GLASS STOP	3907	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		
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	1-1		
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		

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BILL OF MATERIALS

REVISIONS

PRODUCT:

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