WOLTERS ENGINEERING

ENGINEERING, DRAFTING, CONSULTING

15211 97th Road N West Palm Beach, FL 33412 Ph/Fx: (561) 225-1982

PRODUCT EVALUATION

PRODUCT: WOOD EUROPEAN SERIES GLAZED LIFT AND SLIDE DOOR (MERBAU)

MANUFACTURER: LUXBAUM WINDOWS & DOORS

2400 CENTREPARK WEST DRIVE, SUITE 150

WEST PALM BEACH, FL 33409

To all concerned,

The Luxbaum Wood European Series Glazed Lift and Slide Door, manufactured by Luxbaum Windows & Doors LLC, is a multi-panel glazed wood door set in a wood frame. The door has been tested per TAS 201, 202, and 203 by Architectural Testing, Inc. with results shown in test reports B3811.01-450-18, B3811.04-450.18, and HTL# 0271-0908-10.

Technical Documentation:

- 1. Drawing "LIFT&SLIDE" dated 12/14/17 (Rev. 3), signed and sealed by Scott Wolters, PE.
- 2. Test Reports listed above by Architectural Testing, Inc. signed and sealed by Vinu Abraham, PE.
- 3. Supplemental calculations to support "LIFT&SLIDE" drawings, signed and sealed by Scott Wolters, PE.

I have reviewed this submittal per the requirements of FAC Product Approval Rule Chapter 61G20-3.005 (4). Based on the limitations listed below and those provided in the documents above, this product meets all the requirements of the 6th Edition (2017) Florida Building Code generally, and chapters 10, 11, 16, 23, and 24 specifically, including the HVHZ provisions.

<u>Limitations</u>: This door is approved for use inside and outside of the HVHZ. It is large and small impact

resistant. Shutters are not required.

Overall Dimensions:

Maximum Frame Height: 157 3/4"

Maximum Frame Width: Varies with number of panels

Maximum Panel Width: 68 1/16"

Maximum Design Pressure: +63/-69 psf

(See Design Pressure Table on Sheet 2)

Glass Options:

11/16" Monolithic Laminated

1/4" Heat Strengthened

0.180" SentryGlas Interlayer*

1/4" Heat Strengthened

1 3/8" Insulated Laminated

¼" Heat Strengthened

0.180" SentryGlas Interlayer

¼" Heat Strengthened

7/16" Air Space

¼" Tempered

⁺ I have evaluated the SentryGlas interlayer (NOA# 14-0916.11) referenced above and find that is complies with the requirements of the 6th Edition (2017) Florida Building Code for use in this product.

Locks:

Meeting Stiles:

(6) Siegenia Lock Bolts (Part# PGKB0430)

(2) Siegenia Drop Bolt and Cup (Part# DBSY200NR)

Interlocking Stiles:

(6) Siegenia Interlock Plates (Part# PMZB0150)

If you have any questions or need more information concerning this approval please contact me.

Thank you,

Scott Wolters FL PE# 62354 DEC 15 2017



WOLTERS ENGINEERING

ENGINEERING, DRAFTING, CONSULTING

15211 97th Road N West Palm Beach, FL 33412 Ph/Fx: (561) 225-1982

PRODUCT EVALUATION

PRODUCT: WOOD EUROPEAN SERIES GLAZED LIFT AND SLIDE DOOR (TEAK)

MANUFACTURER: LUXBAUM WINDOWS & DOORS

2400 CENTREPARK WEST DRIVE, SUITE 150

WEST PALM BEACH, FL 33409

To all concerned.

The Luxbaum Wood European Series Glazed Lift and Slide Door, manufactured by Luxbaum Windows & Doors LLC, is a multi-panel glazed wood door set in a wood frame. The door has been tested per TAS 201, 202, and 203 by Intertek, with results shown in test report. H6254.01-450-18 R0.

<u>Technical Documentation:</u>

- 1. Drawing "LIFT&SLIDE-TEAK" dated 12/12/17, signed and sealed by Scott Wolters, PE.
- 2. Intertek test report H6254.01-450-18 R0, signed and sealed by Vinu Abraham, PE.
- 3. Supplemental calculations to support "LIFT&SLIDE-TEAK" drawings, signed and sealed by Scott Wolters, PE.

I have reviewed this submittal per the requirements of FAC Product Approval Rule Chapter 61G20-3.005 (4). Based on the limitations listed below and those provided in the documents above, this product meets all the requirements of the 6th Edition (2017) Florida Building Code generally, and chapters 10, 11, 16, 23, and 24 specifically, including the HVHZ provisions.

<u>Limitations</u>: This door is approved for use inside and outside of the HVHZ. It is large and small impact

resistant. Shutters are not required.

Overall Dimensions:

Maximum Frame Height: 138"

Maximum Frame Width: Varies with number of panels

Maximum Panel Width: 66 9/16"

Maximum Design Pressure: +50/-55 psf

Glass Options:

1 3/8" Insulated Laminated

1/4" Annealed

0.180" SentryGlas Interlayer+

1/4" Annealed 7/16" Air Space 1/4" Tempered

⁺ I have evaluated the SentryGlas interlayer (NOA# 14-0916.11) referenced above and find that is complies with the requirements of the 6th Edition (2017) Florida Building Code for use in this product.

Locks:

Meeting Stiles:

(5) Lock Bolts

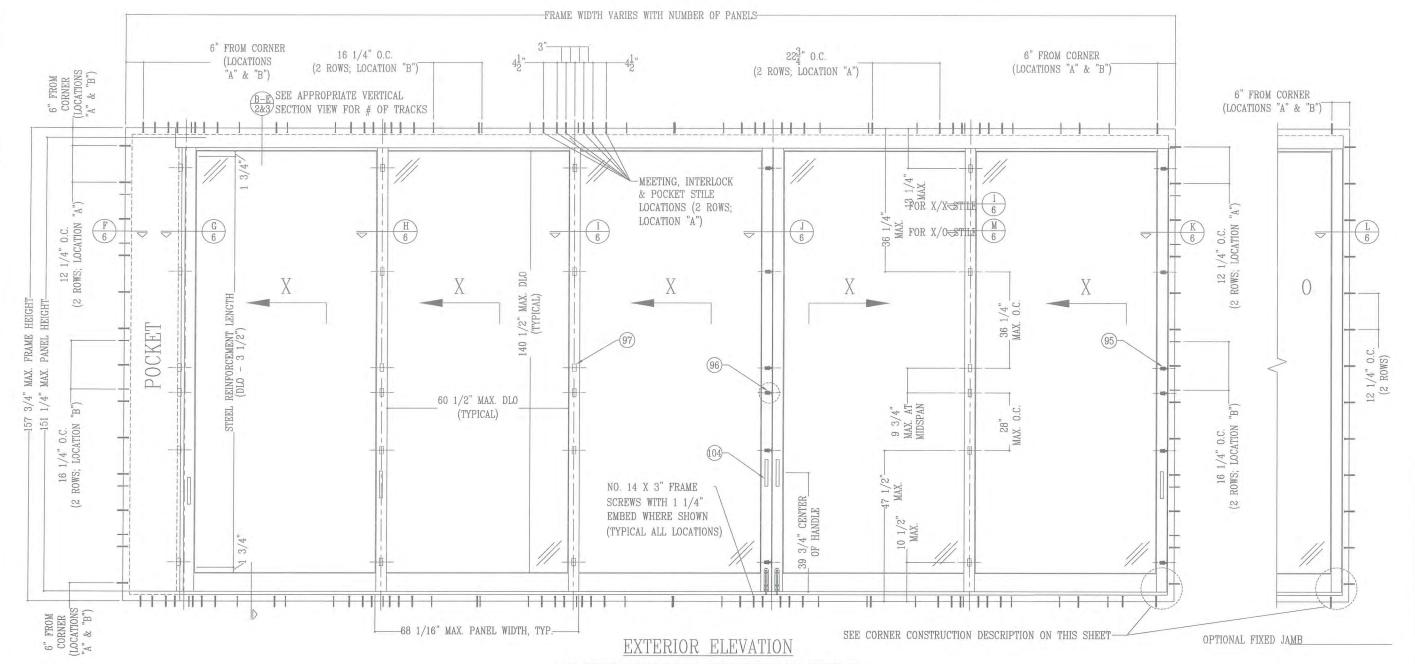
(Functional Fenestration)

If you have any questions or need more information concerning this approval please contact me.

Thank you,

Scott Wolters FL PE# 62354

DEC 15 2017



FOR SECTION CALLOUTS ONLY, CONFIGURATIONS NOT LIMITED TO 5 PANELS. SEE ALLOWABLE CONFIGURATIONS ON SHEET 2

THIS APPROVAL APPLIES TO IMPACT RESISTANT LIFT AND SLIDE DOORS, IN THE CONFIGURATIONS AND CONSTRUCTED AND GLAZED AS INDICATED HEREIN.

ALLOWABLE DESIGN PRESSURES ARE AS INDICATED IN TABLE ON SHEET 2. THE TABLE IS BASED ON INDIVIDUAL PANEL SIZE, DOORS MAY HAVE ANY NUMBER OF PANELS.

B. THESE DOORS HAVE BEEN DESIGNED AND TESTED TO TAS 201, 202 & 203 PROTOCOLS IN ACCORDANCE WITH THE REQUIREMENTS OF THE 6TH EDITION (2017) FLORIDA BUILDING CODE (FBC) INCLUDING THE HIGH 🖄 VELOCITY HURRICANE ZONE (HVHZ) PROVISIONS.

4. THESE DOORS AS SHOWN HEREIN ARE LARGE AND SMALL MISSILE IMPACT RATED, SHUTTERS ARE NOT REQUIRED.
5. WOOD OR MASONRY OPENINGS, BUCKS, AND BUCK FASTENERS, BY OTHERS, SHALL BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.

6. ANCHOR TYPE, SIZE, SPACING, AND EMBEDMENT SHALL BE AS SPECIFIED IN THESE DRAWINGS. ANCHOR EMBEDMENT TO SUBSTRATE SHALL BE BEYOND WALL DRESSING OR STUCCO.

ALL FASTENERS PENETRATING INTO PRESSURE TREATED WOOD SHALL BE CAPABLE OF PREVENTING CORROSION DUE TO REACTION WITH PRESSURE TREATMENT CHEMICALS.

8. DISSIMILAR MATERIALS THAT COME INTO CONTACT SHALL BE PROTECTED TO PREVENT REACTIONS IN ACCORDANCE WITH FBC CHAPTERS 20 AND 23.

9. A WIND LOAD DURATION FACTOR Cd = 1.6 WAS USED FOR THE ANALYSIS OF WOOD SCREWS ONLY.

10. THE MERBAU WINDOWS LISTED IN THIS APPROVAL ARE CONSTRUCTED OF A NATURALLY DURABLE SPECIES (SPECIE SPECIFIC GRAVITY = 0.68) IN COMPLIANCE WITH FBC CHAPTER 23. OTHER NATURALLY DURABLE WOOD SPECIES OF EQUAL OR GREATER STRENGTH MAY BE SUBSTITUTED FOR ALL WOOD COMPONENTS.

11. MEMBERS NOTCHED AS NEEDED TO FIT HARDWARE AS SHOWN HEREIN

12. JAMBS MAY BE OPERABLE, FIXED, OR POCKET ON EITHER SIDE OF DOOR

13. THE GLAZING TYPES 1 AND 2 AS SHOWN IN GLAZING DETAILS ON SHEET 5 MAY BE USED IN ANY DOOR CONFIGURATION.

14. SUBSTRATES SHALL MEET THE MINIMUM STRENGTH REQUIREMENTS AS SHOWN IN INSTALLATION ANCHOR REQUIREMENTS TABLE ON SHEET 7. CONCRETE OR MASONRY SUBSTRATES SHALL NOT BE CRACKED.

15. FOR INSTALLATION TO METAL SUBSTRATES, ANCHORS SHALL BE LONG ENOUGH TO BE FULLY THREADED THROUGH THE METAL THICKNESS WITH AN ADDITIONAL 3/16" MIN. OF THREADS BEYOND.

16. A MINIMUM CENTER-TO-CENTER SPACING OF 3" SHALL BE MAINTAINED BETWEEN ALL CONCRETE OR CMU ANCHORS IN ANY DIRECTION. THE SPACING AS INDICATED IN THE ELEVATION ON THIS SHEET SHALL BE REDUCED AS NEEDED TO ENSURE THAT THE 3" MINIMUM SPACING IS MAINTAINED BETWEEN LOCATION "A" AND LOCATION "B" ANCHORS

DESIGN PRESSURES

SEE TABLE, SHEET 2

CORNER CONSTRUCTION

JAMB CORNERS: MEMBERS ARE OF TONGUE AND GROOVE CONSTRUCTION AND MECHANICALLY FASTENED WITH FOUR(4) NO. 14 X 3" SS WOOD SCREWS PER CORNER, 7/8" FROM EDGE. CORNERS AND TONGUE TO GROOVE LOCATIONS ARE SEALED WITH SIKAFLEX 15 LM POLYURETHANE SEALANT.

TOP RAIL TO STILE CORNERS: TOP RAILS ARE COPED, BUTTED, FULLY GLUED WITH WOOD GLUE (61) AND DOWELED WITH FOUR(4) OPERABLE / SIX(6) FIXED 5/8" DIA. x 3 1/8" LONG MERBAU WOOD DOWELS

BOTTOM RAIL TO STILE CORNERS: BOTTOM RAILS ARE COPED, BUTTED, FULLY GLUED WITH WOOD GLUE (61) AND DOWELED WITH SIX(6) 5/8" DIA. x 3 1/8" LONG MERBAU WOOD DOWELS.

Constitution of the second TT WOLTERS PE# 62354 15211 EST PAI

09/26/2013

DOORS

5

30

MIND

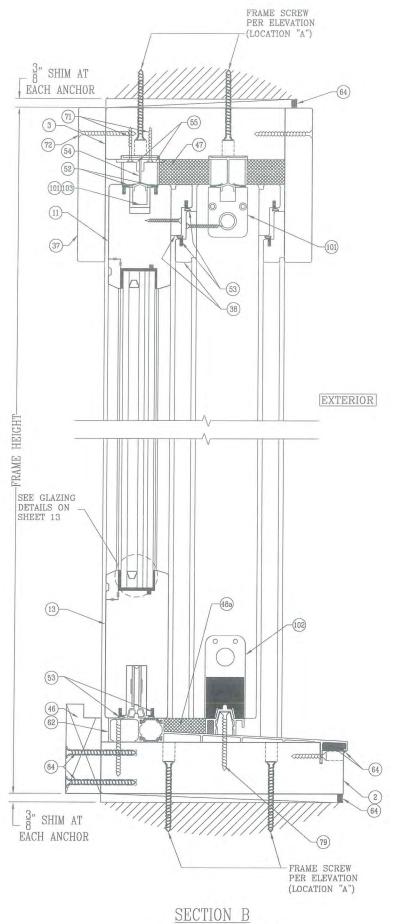
DRAWING NO LIFT&SLIDE

SHEET NO.

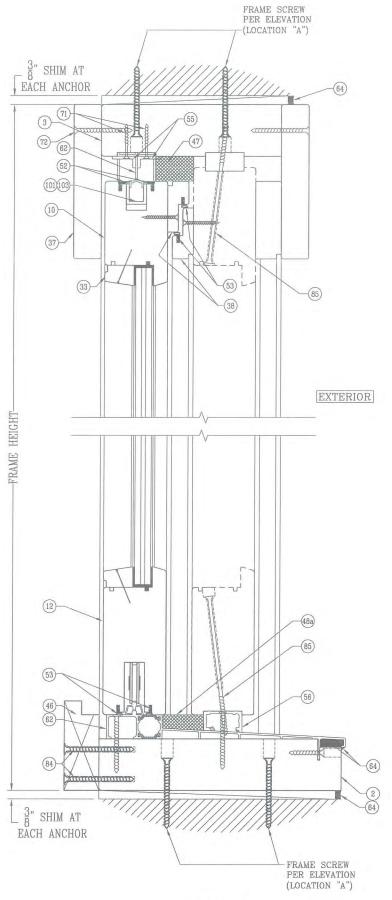
AND SLIDE DOORS

DESIGN PRESSURE TABLE NOTES

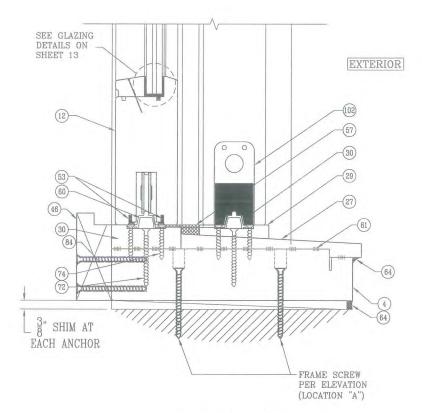
1. THE TABLE IS BASED ON INDIVIDUAL PANEL SIZE, AND IS APPLICABLE TO DOORS WITH ANY NUMBER OF PANELS. 09/26/2013 Design Pressure Table Panel Heights (in.) Reinforcement 84 96 108 120 132 151 5/16 144 2. REINFORCEMENT REQUIREMENTS ARE AS FOLLOWS: Steel/Steel +63.0/-69.0 -63.0/-69.0 +63.0/-89.0 +63.0/-69.0 +63.0/-69.0 REQUIRES THE USE OF 1-1/2"x2"x1/4" STEEL ANGLES (ITEM 98a) IN ALL INTERLOCKS, AND STEEL FIN REINFORCEMENT (SECT. J, SHEET 6) AT MEETING STILES. STEEL/STEEL -36 +63.0/-69.0 +63.0/-69.0 Steel/Merbau +63.0/-69.0 -63.0/-69.0 +83.0/-89.0 +63.0/-89.0 +63.0/-69.0 +63.0/-69.0 STEEL/MERBAU -REQUIRES THE USE OF 1-1/2"x2"x1/4" STEEL ANGLES (ITEM 98a) IN ALL INTERLOCKS, AND Steel/Steel -63.0/-69.0 +63.0/-69.0 +63.0/-69.0 +63.0/-69.0 -63.0/-69.0 -63.0/-69.0 +63.0/-69.0 MERBAU FIN REINFORCEMENT (SECT. J, SHEET 6) AT MEETING STILES. 48 NONE -Steel/Merbau +63.0/-69.0 -63.0/-69.0 +63.0/-69.0 ITEM 98a AT INTERLOCKS AND FIN REINFORCEMENTS AT MEETING STILES ARE NOT REQUIRED. +63.0/-69.0 -63.0/-69.0 +63.0/-69.0 +63.0/-65.6 +63.0/-69.0 +54.0/-59.2 +63.0/-69.0 Steel/Steel Steel/Merbau +63.0/-64.7 -63.0/-64.7 +63.0/-64.7 +63.0/-64.7 +63.0/-64.7 +58.6/-58.6 +55.1/-55.1 +54.0/-59.2 +54.0/-59.2 None +54.0/-59.2 +51.9/-56.8 +45.8/-50.1 X/A N/A Steel/Steel +63.0/-69.0 +63.0/-69.0 +63.0/-69.0 +63.0/-69.0 +63.0/-69.0 +63.0/-69.0 68 1/16 +50.25/-50.25 +50.26/-50.26 +50.25/-50.25 +50.25/-50.25 +50.25/-50.25 Steel/Merbau +50.25/-50.25 +50.25/-50.25 +42.0/-46.0 +42,0/-46.0 +42.0/-46.0 +42.0/-46.0 +42.0/-46.0 2-TRACK CONFIGURATIONS 3-TRACK CONFIGURATIONS ORS 0 WINDOW OD EUROPEAN SER 4-TRACK CONFIGURATIONS DRAWING NO. LIFT&SLIDE SHEET NO. 2 of 12



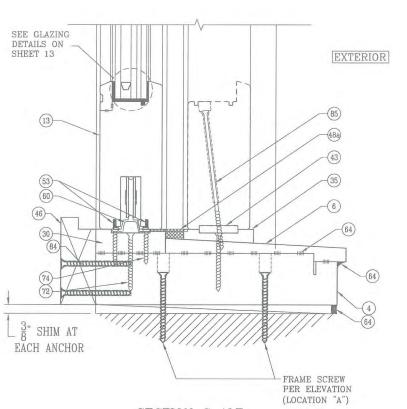
ALUMINUM SILL X/X 2-TRACK



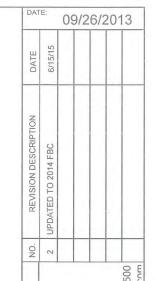
SECTION C ALUMINUM SILL X/O 2-TRACK



SECTION B ALT. WOOD SILL X/X 2-TRACK



SECTION C ALT. WOOD SILL X/O 2-TRACK



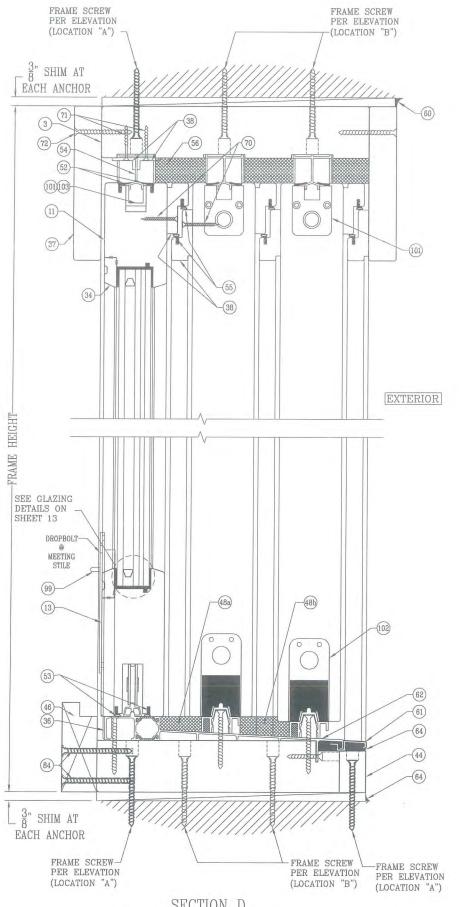
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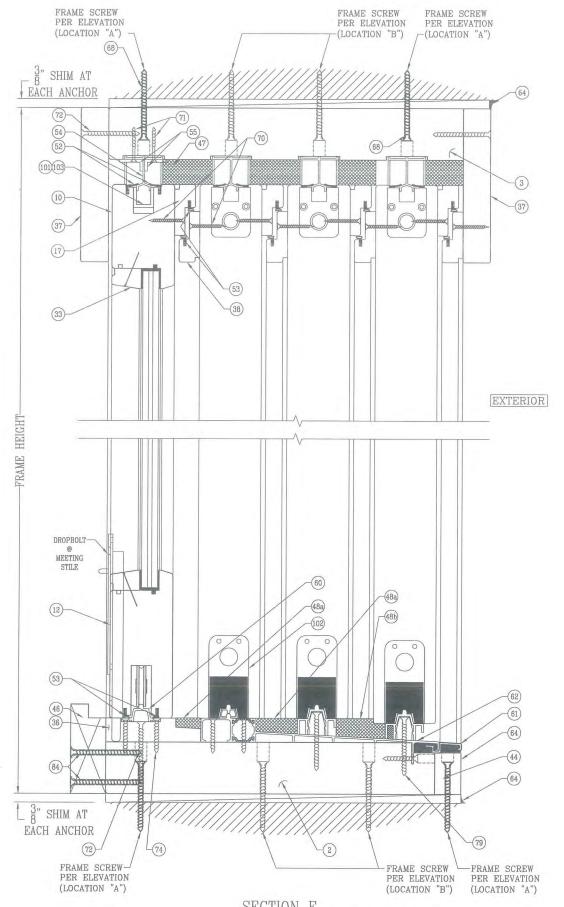


LIFT&SLIDE

SHEET NO.



SECTION D
ALUMINUM & WOOD SILL 3-TRACK



SECTION E
ALUMINUM & WOOD SILL 4-TRACK

VOOD EUROPEAN SERIES GLAZED LIFT AND SLIDE DOORS (MERBAU)

TUXBAUDOWS + DOORS

WINDOWS + DOORS

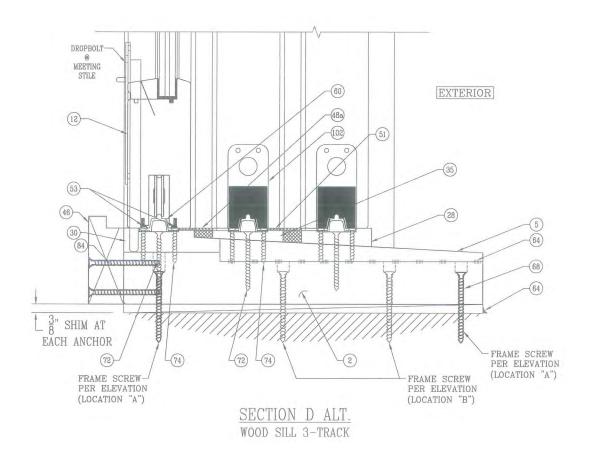
09/26/2013

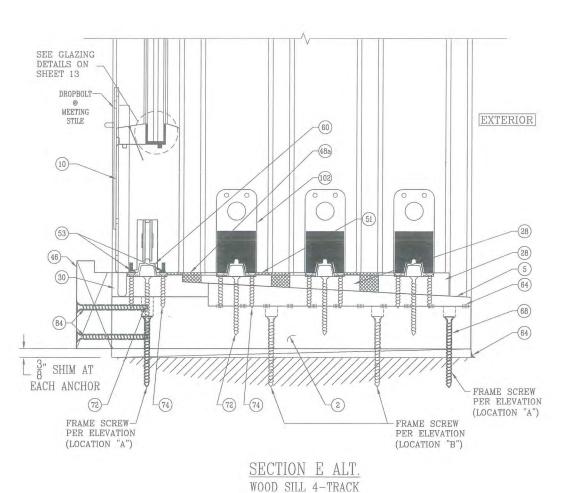
SEAL BEACH, FL 33412 OPEC 15 201

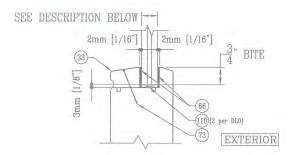
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LIFT&SLIDE

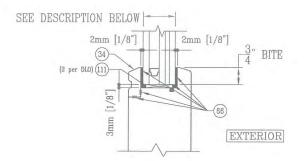
SHEET NO.







TYPICAL MONOLITHIC GLAZING DETAIL GLASS TYPE "A"; 11/16" LAMINATED GLASS (1/4" HT. ST./0.180 SGP/1/4" HT. ST.)



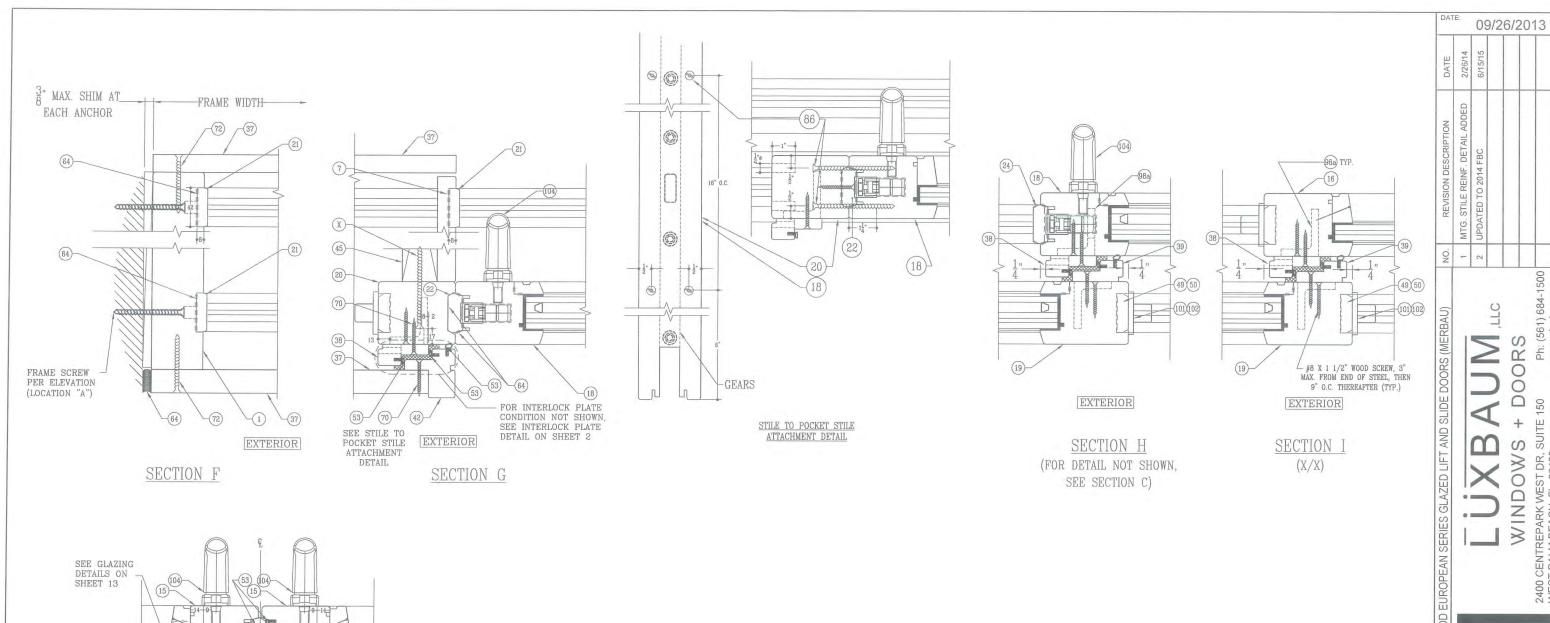
TYPICAL I.G. GLAZING DETAIL
GLASS TYPE "B"; 1 3/8" LAMINATED I.G. WITH
1/4" H.S.-0.180" SGP-1/4" H.S.-7/16" AIR SPACE
W/ALUM. SPACER (BLACK)-1/4" TEMPERED.

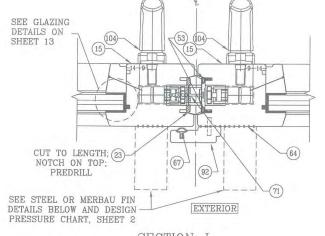




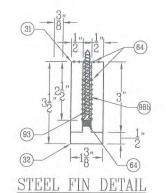
5 of 12

SHEET NO.

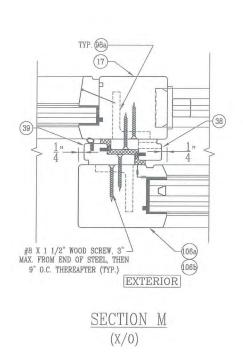


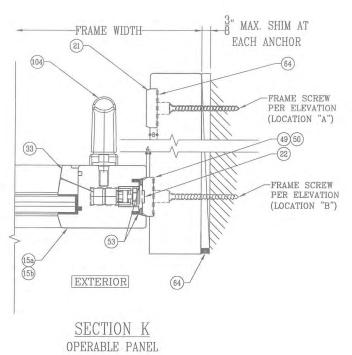


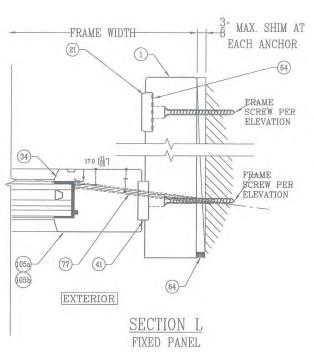
SECTION J













DRAWING NO.

SHEET NO.

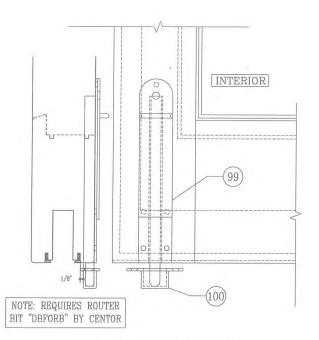
LIFT&SLIDE

INSTALLATION ANCHOR REQUIREMENTS TABLE

ID	SUBSTRATE	ANCHOR	MIN. EMBEDMENT	MIN. EDGE DISTANCE
Α	CONCRETE OR GROUT- FILLED CMU (2850 PSI MIN)	1/4" ELCO COATED CARBON STEEL ULTRACON	1 3/4"	2 1/2"
В	CONCRETE (3000 PSI MIN)	1/4" HILTI COATED CARBON STEEL OR STAINLESS STEEL KWIK-CON II	1"	2 1/2"
С	HOLLOW OR GROUT- FILLED CMU (ASTM C-90)	1/4" HILTI COATED CARBON STEEL OR STAINLESS STEEL KWIK-CON II	1"	2 1/2"
D	2x MIN. SOUTHERN PINE WOOD (G=0.55 MIN)	#14 GRADE 5 WOOD SCREW	1 3/8"	1"
Е	16 GAUGE (0.060") MIN. STEEL STUD 33 KSI YIELD MIN.	1/4-28 ITW TEKS SELF-DRILLING SCREW	SEE NOTE 15, SHEET 1	1/2"
F	1/8" ALUM. 6063-T5 MIN. OR 1/8" STEEL 33 KSI MIN.	#14 or 1/4" GRADE 5 SELF-TAPPING / DRILLING SCREW	SEE NOTE 15, SHEET 1	1/2"

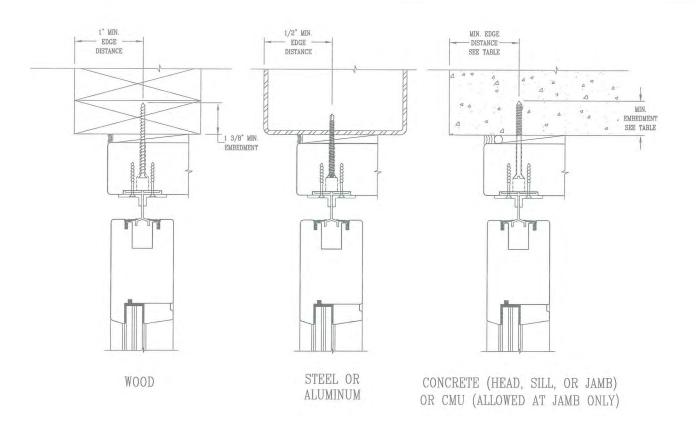
INSTALLATION ANCHOR NOTES:

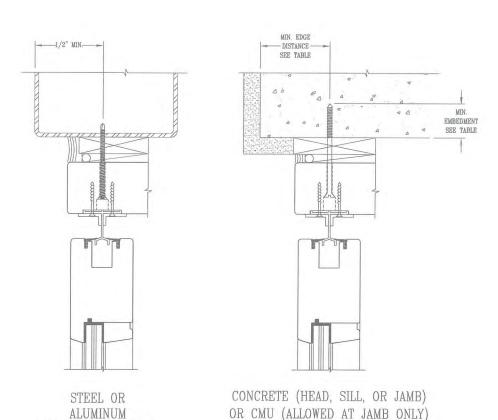
- 1. SEE SHEET 1 FOR ANCHOR LOCATIONS AND SHEETS 3 THRU 5 FOR SECTION VIEWS WITH ADDITIONAL DETAILS CONCERNING LOCATION "A" AND LOCATION "B" REQUIREMENTS.
- 2. A MINIMUM CENTER-TO-CENTER SPACING OF 3" SHALL BE MAINTAINED BETWEEN ALL CONCRETE OR CMU ANCHORS IN ANY DIRECTION. THE SPACING AS INDICATED IN THE ELEVATION ON SHEET 1 SHALL BE REDUCED AS NEEDED TO ENSURE THAT THE 3" MINIMUM SPACING IS MAINTAINED BETWEEN LOCATION "A" AND LOCATION "B" ANCHORS.
- 3. MIN. EDGE DISTANCES ARE SHOWN TO THE EXTERIOR. MIN. EDGE DISTANCES TO THE INTERIOR ARE SIMILAR.



DROPBOLT DETAIL

(MAY BE MORTISED OR SURFACE MOUNTED)





TYPICAL ANCHOR CONDITIONS

WITH 1x WOOD BUCK

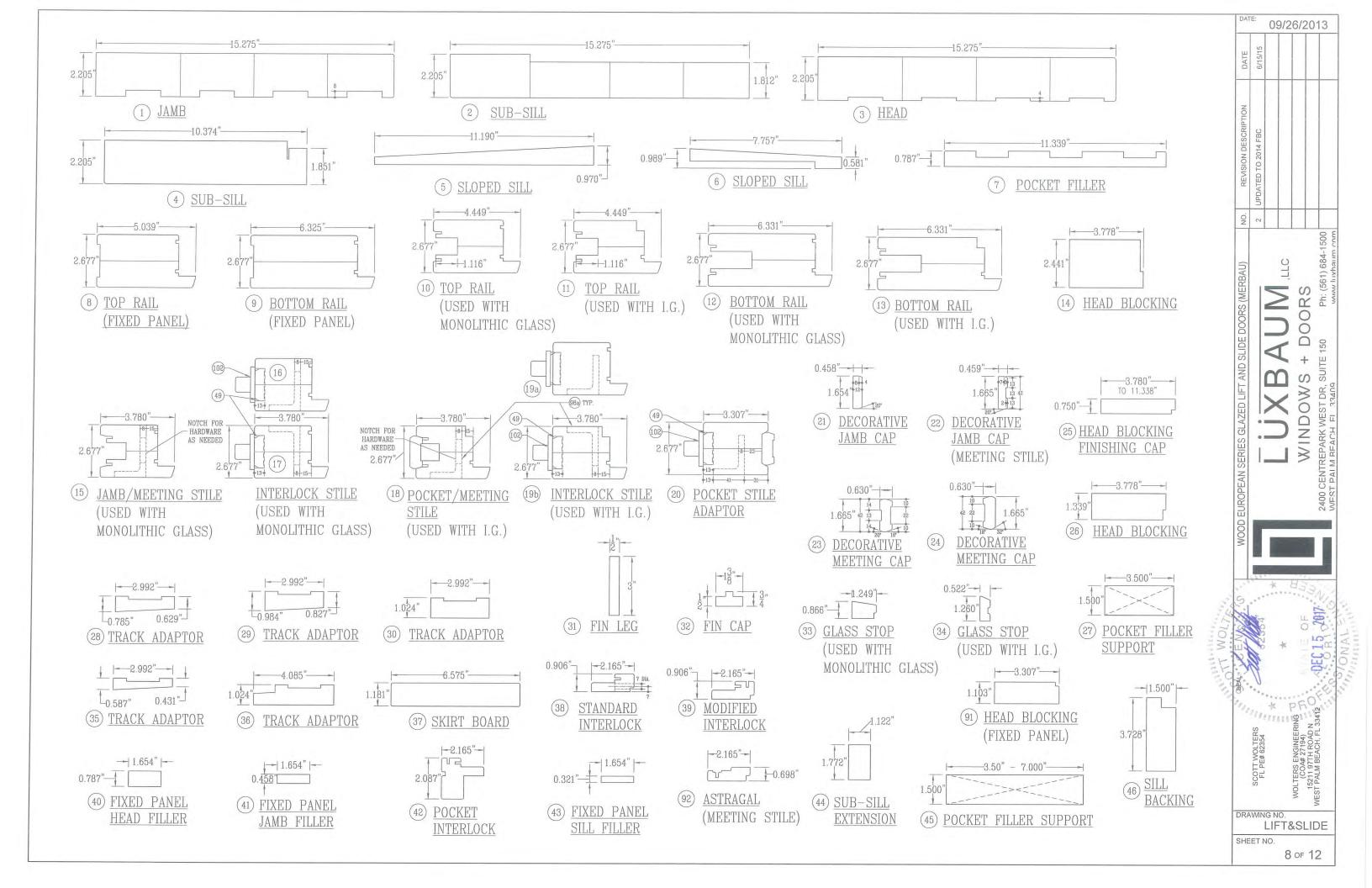
WITH 1x WOOD BUCK

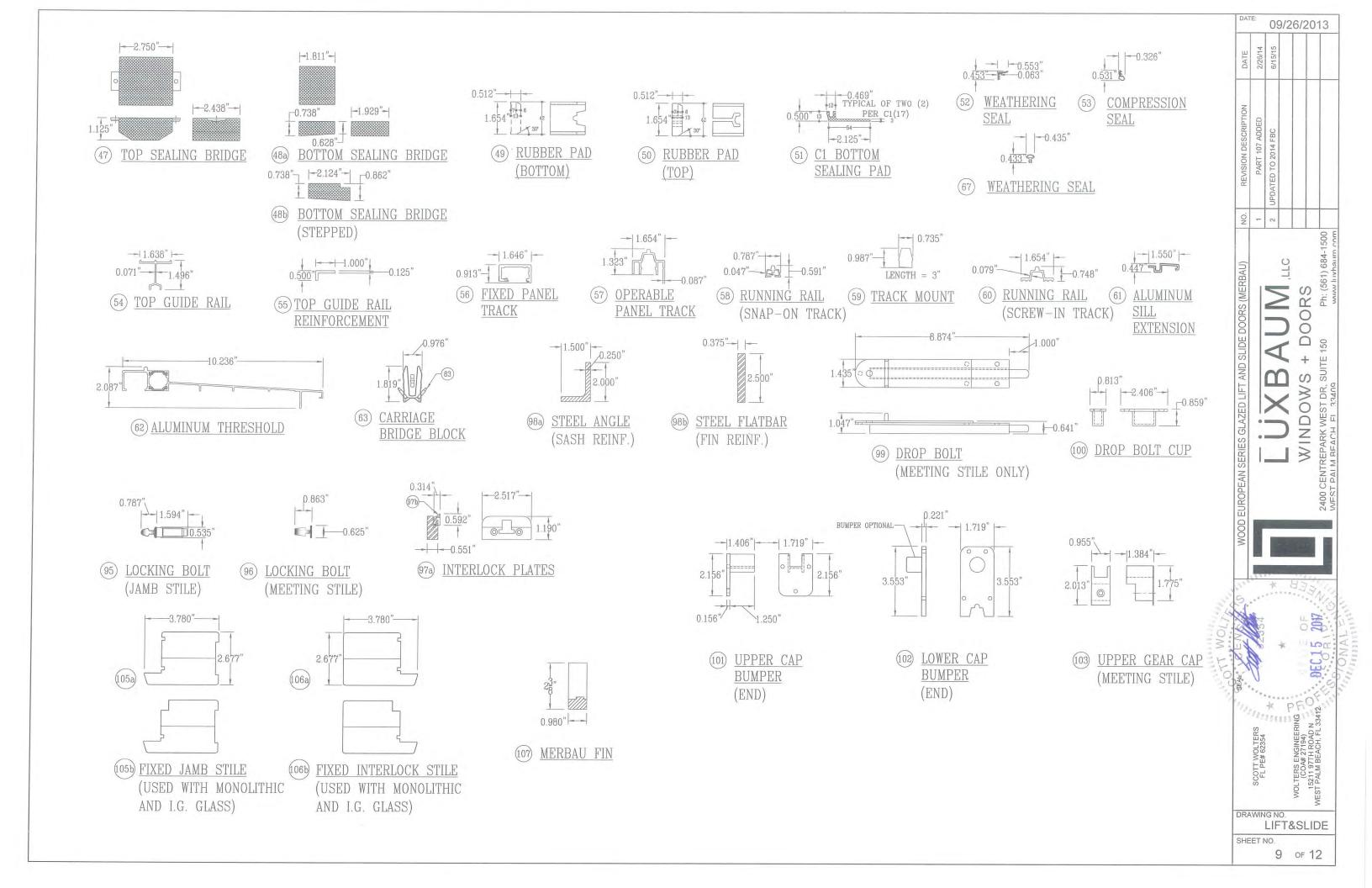
SERIES GLAZED LIFT AND SLIDE DOORS (MERBAU)		NO.	REVISION DESCRIPTION	DATE	DAT
		2	UPDATED TO 2014 FBC	6/15/15	E:
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SOUCH SYNOUNIX	000				6/2
MINDOW + DO	のとつい	Г			20
REPARK WEST DR, SUITE 150	Ph: (561) 684-1500	T			13
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SHEET NO.

LIFT&SLIDE

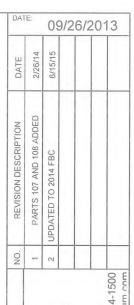




ITEM	ITEM DESCRIPTION	NOTES
	PARTS	
1	JAMB	MERBAU
2	SUB-SILL	MERBAU
3	HEADER	MERBAU
4	SUB-SILL	MERBAU
5	SLOPPED SILL	MERBAU
6	SLOPPED SILL	MERBAU
7	POCKET FILLER	MERBAU
8	TOP RAIL (FIXED PANEL)	MERBAU
9	BOTTOM RAIL (FIXED PANEL)	MERBAU
10	TOP RAIL (MONOLITHIC GLASS)	MERBAU
11	TOP RAIL (I.G. GLASS)	MERBAU
12	BOTTOM RAIL (MONOLITHIC GLASS)	MERBAU
13	BOTTOM RAIL (I.G. GLASS)	MERBAU
14	HEAD BLOCKING	MERBAU
15	JAMB/MEETING STILE	MERBAU
16	INTERLOCK STILE	MERBAU
17	INTERLOCK STILE	MERBAU
18	POCKET MEETING STILE	MERBAU
19	INTERLOCK STILE	MERBAU
20	POCKET STILE	MERBAU
21	DECORATIVE STILE CAP	MERBAU
22	DECORATIVE JAMB CAP	MERBAU
23	DECORATIVE SAME CAP	MERBAU
24	DECORATIVE MEETING CAP	MERBAU
25		
26	HEAD BLOCKING FINISHING CAP	MERBAU
27	HEAD BLOCKING POCKET FILLER SUPPORT	MERBAU
28	TRACK ADAPTOR	WOOD
17.5		MERBAU
30	TRACK ADAPTOR	MERBAU
	TRACK ADAPTOR	MERBAU
31	FIN LEG	MERBAU
32	FIN CAP	MERBAU
33	GLASS STOP (MONOLITHIC GLASS)	MERBAU
34	GLASS STOP (I.G. GLASS)	MERBAU
35	TRACK ADAPTOR	MERBAU
36	TRACK ADAPTOR	MERBAU
37	SKIRT BOARD	MERBAU
-	STANDARD INTERLOCK	MERBAU
39	MODIFIED INTERLOCK	MERBAU
	FIXED PANEL HEAD FILLER	MERBAU
	FIXED PANEL JAMB FILLER	MERBAU
	POCKET INTERLOCK	MERBAU
	FIXED PANEL SILL FILLER	MERBAU
	SUB-SILL EXTENSION	MERBAU
	POCKET FILLER SUPPORT	WOOD
_	SILL BACKING	MERBAU
	HEAD BLOCKING (FIXED PANEL)	MERBAU
_	ASTRAGAL (MEETING STILE)	MERBAU
	FIXED JAMB STILE (MONOLITHIC GLASS)	MERBAU
05b	FIXED JAMB STILE (I.G. GLASS)	MERBAU
06a	FIXED INTERLOCK STILE (MONO. GLASS)	MERBAU
	FIXED INTERLOCK STILE (I.G. GLASS)	

ITEM	ITEM DESCRIPTION	MANUFACTURER/NOTES
	HARDWA	RE
54	TOP GUIDE RAIL	BY: SIEGENIA - PART#: HH0130-03 - 6063-T5 ALUMIN
55	TOP GUIDE RAIL REINFORCEMENT	BY: SIEGENIA - SUPPLIED WITH LIFT/LOCKING HARDWAR
56	FIXED PANEL TRACK	ALUMINUM PART#: HH132-02
57	OPERABLE PANEL TRACK	ALUMINUM PART#: HH0131
58	RUNNING RAIL (SNAP-ON TRACK)	BY: SIEGENIA - PART#: HH0131-04 - 6061-T6 ALUMINU
59	TRACK MOUNT	ALUMINUM PART#: 821442
60	RUNNING RAIL (SCREW-IN TRACK)	BY: SIEGENIA - PART#: HH0131-01 - 6061-T6 ALUMINU
61	ALUMINUM SILL EXTENSION	ALUMINUM PART#: PPVB0060
62	ALUMINUM THRESHOLD	BY: SIEGENIA - 6061 - T6 - ALUMINUM
63	CARRIAGE BRIDGE BLOCK, BETWEEN BOGIES	BY: SIEGENIA - SUPPLIED WITH LIFT/LOCKING HARDWAR
94	LIFT/LOCKING HARDWARE / BOGIES	BY: SIEGENIA - PART#: PGKB0430
95	LOCK BOLT (USED AT JAMB STILE)	BY: SIEGENIA - SUPPLIED WITH LIFT/LOCKING HARDWAR
96	LOCK BOLT (USED AT MEETING STILE)	BY: SIEGENIA - SUPPLIED WITH LIFT/LOCKING HARDWAR
17a/b	INTERLOCK PLATES (SUPPLIED TOGETHER)	BY: SIEGENIA - PART#: PMZB0150-200010
98a	1½" x 2" x ¼" STEEL ANGLE	STEEL ANGLE - GRADE A36 - SEE SHT. 1 FOR LENGTH
98b	3" x 21" STEEL FLATBAR	STEEL FLAT BAR - GRADE A36 - SEE SHT. 1 FOR LENG
99	DROP BOLT	BY: CENTOR - PART#: DBSY200NR
100	DROP BOLT CUP	BY: CENTOR - PART#: DBC
101	UPPER CAP BUMPER (END)	BY: SIEGENIA - PART #
102	LOWER CAP BUMPER (END)	BY: SIEGENIA - PART #
103	UPPER GEAR CAP (MEETING STILE)	BY: SIEGENIA - PART #
104	HANDLE	AS REQUIRED TO OPERATE HARDWARE
	SEALS AND S	EALANTS
47	TOP SEALING BRIDGE	BY: SIEGENIA - PART #PDIB0100 - DUROMETER 10-12
48a	BOTTOM SEALING BRIDGE	BY: SIEGENIA - PART #PDIB0010_2D - DUROMETER 30
48b	BOTTOM SEALING BRIDGE (STEPPED PAD)	BY: SIEGENIA - PART #PDIB0010_2D - DUROMETER 30
49	RUBBER BUMPER (BOTTOM)	BY: SIEGENIA - PART #PDIB0110-023010
50	RUBBER BUMPER (TOP)	BY: SIEGENIA - PART #PDIB0070-0F8010
51	BOTTOM SEALING PAD (C1)	BY: SIEGENIA - PART #PDIB0010-099011
52	WEATHERING SEAL	BY: SIEGENIA - PART #PDPB0100 - DUROMETER 65
53	COMPRESSION SEAL	BY: SIEGENIA - PART #PDPB0030 - DUROMETER 65
64	15 LM POLYURETHANE SEALANT	BY: SIKA
65	WOOD GLUE	BY: GORILLA GLUE
66	DOW 995 (GLAZING BEAD)	BY: DOW CORNING (3 SIDES OF GLAZING POCKET)
67	WEATHERING SEAL	BY: DEVENTER S-6890
110	1/8"x1/2"x4" SETTING BLOCK, 2 per DLO	NEOPRENE (70-90 SHORE A DURAMETER HARDNESS)
111	1/8"x1 1/8"x4" SETTING BLOCK, 2 per DLO	NEOPRENE (70-90 SHORE A DURAMETER HARDNESS)

ITEM	ITEM DESCRIPTION	MANUFACTURER/NOTES
	MISC. 1	FASTENERS
68	NO. 12 X 2 1/2" SS WOOD SCREW	WITHIN 6" OF ENDS & 12" O.C.
69	NO. 14 X 3" SS WOOD SCREW	WITHIN 6" OF ENDS & 16" O.C. (HEAD BLOCKING)
70	4mm X 40mm SS WOOD SCREW	WITHIN 2" OF ENDS & 12" O.C.
71	NO. 6 X 1 1/2" SS WOOD SCREW	WITHIN 6" OF ENDS & 12" O.C. (2 ROWS)
72	NO. 12 X 2 1/2" SS WOOD SCREW	WITHIN 2" OF ENDS & 15 3/4" O.C.
73	23 GAGE BRAD NAIL	2" FROM CORNERS & 8" O.C.
74	NO. 6 X 1 1/2" SS WOOD SCREW	WITHIN 6" OF ENDS & 12" O.C. (2 ROWS)
75	NO. 8 X 2 1/2" SS WOOD SCREW	1 PER LOCK BOLT/GEAR
76	NO. 10 X 1 1/2" SS WOOD SCREW	WITHIN 6" OF ENDS & 16" O.C.
77	NO. 12 X 6" SS WOOD SCREW	WITHIN 6" OF ENDS & 12" O.C.
78	NO. 10 X 1 1/2" SS WOOD SCREW	WITHIN 2" OF ENDS & 12" O.C.
79	NO. 10 X 2 1/2" SS WOOD SCREW	2 PER ITEM #59 / WITHIN 6" OF ENDS & 12" O.C.
80	NO. 18 X 1 1/4" SS WOOD SCREW	WITHIN 6" OF ENDS & 16" O.C.
81	4mm X 40mm SS WOOD SCREW	INSTALL PER DROPBOLT DETAIL SHT. 15
82	4mm X 20mm SS WOOD SCREW	INSTALL PER DROPBOLT DETAIL SHT. 15
83	NO. 6 X 1 1/2" SS WOOD SCREW	2 1/2" O.C. (STAGGERED)
84	NO. 10 X 2 1/2" SS WOOD SCREW	WITHIN 6" OF ENDS & 12" O.C.
85	NO. 12 X 9" SS WOOD SCREW	WITHIN 6" OF ENDS & 12" O.C.
86	NO. 12 X 3 1/2" SS WOOD SCREW	WITHIN 6" OF ENDS & 16" O.C.
87	NO. 14 X 3" SS WOOD SCREW	1 1/2" FROM ENDS (FRAME CORNER FASTENER)
88	1/4"-8 X 6" SS WOOD SCREW	1 1/2" FROM ENDS & 2 1/2" O.C. (4 TOTAL EA. CORNER)
89	NO. 12 X 3 1/2" SS WOOD SCREW	WITHIN 6" OF ENDS & 12" O.C. (STAGGERED)
90	NO. 12 X 3 1/2" SS WOOD SCREW	WITHIN 2" OF ENDS & 12" O.C.
93	NO. 8 X 3" SS SCREW $(\frac{3}{16}" \text{Ø} \text{ HOLE})$ @ FIN	WITHIN 2" OF TOP & BOTTOM & 10" O.C.
108	NO. 12 X 3 1/2" SS SCREW	1" FROM ENDS & 9" O.C.

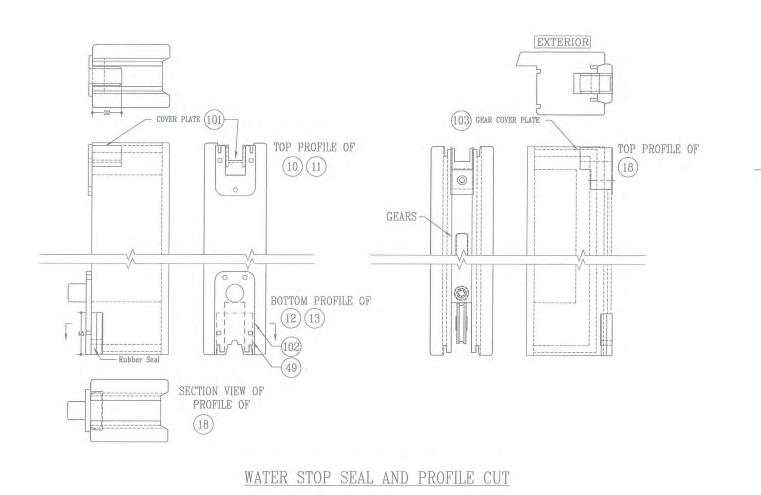


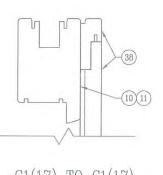
WINDOWS + DOORS
2400 CENTREPARK WEST DR, SUITE 150 Ph: (561) 684-WEST DAIM REACH FI 33409 MANAW LINDHAULT



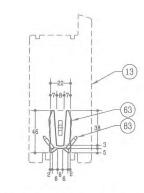
DRAWING NO.

LIFT&SLIDE

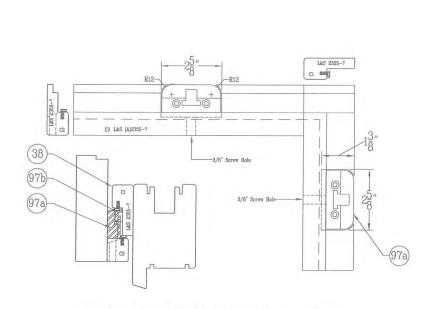




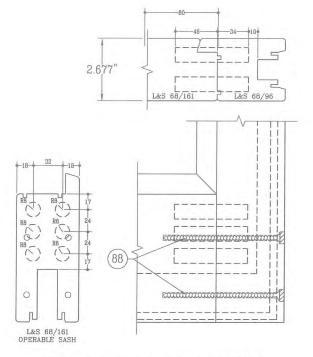
C1(17) TO C1(17) CONNECTION



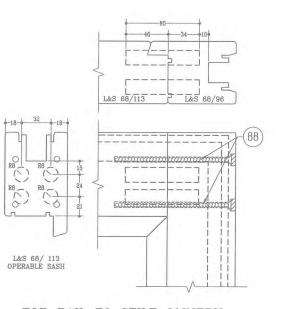
PLASTIC CARRIAGE BRIDGE BLOCK



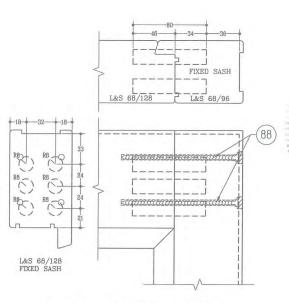
INTERLOCK PLATE CONDITION DETAIL



BOTTOM RAIL TO STILE JOINERY (OPERABLE SASH SHOWN, FIXED SIM.)



TOP RAIL TO STILE JOINERY
OPERABLE SASH



TOP RAIL TO STILE JOINERY
FIXED SASH

10. REVISION DESCRIPTION DATE 1.2 UPDATED TO 2014 FBC 6/15/15
0

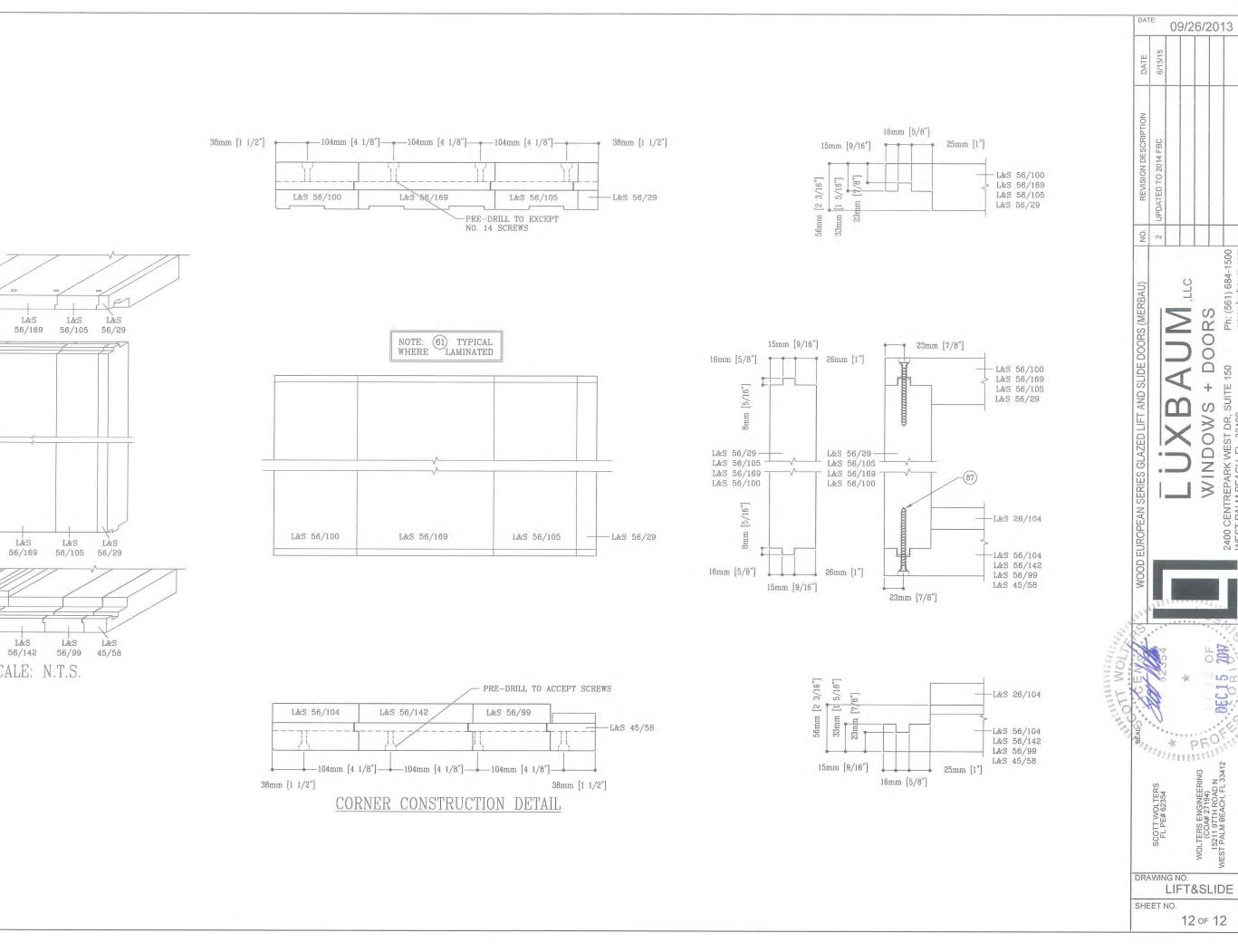
AUM, LLC
- DOORS
- 150 Ph: (561) 684-1500

WINDOWS + DOOR

SEL OF WELL S 2017

WOLTERS ENGINEERING (COA# 27194) 5211 9711 ROAD N EST PALM BEACH, FL 33412

DRAWING NO.
LIFT&SLIDE
SHEET NO.



L&S

56/100

56/100

L&S 56/104

L&S 26/104

L&S

56/169

L&S

56/169

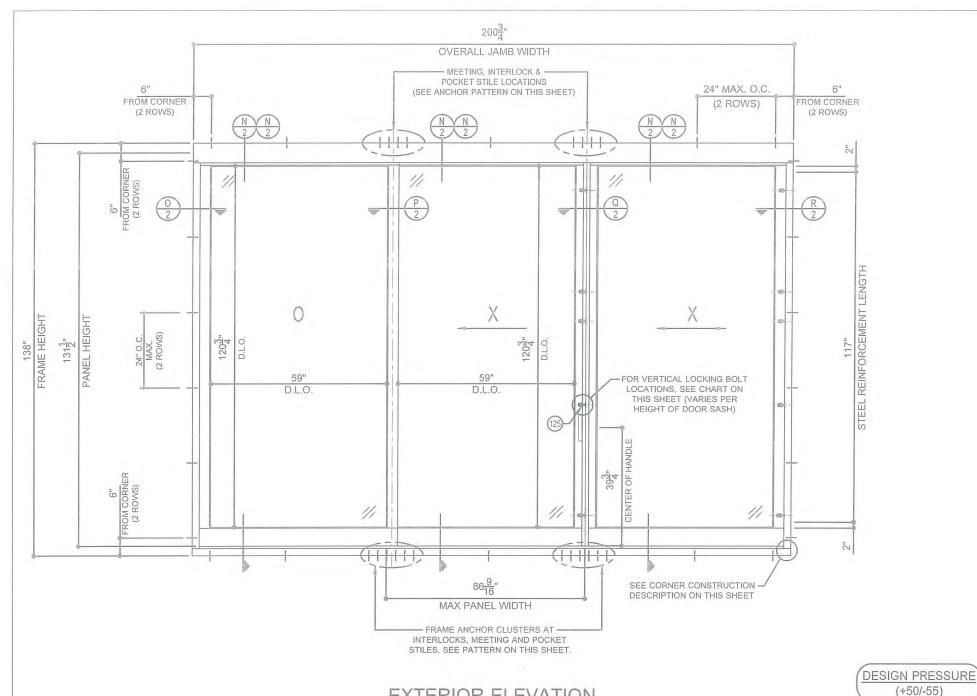
SCALE: N.T.S.

L&S

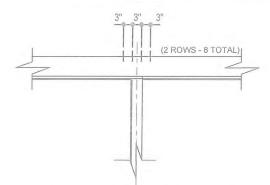
L&S

'S + DOORS, SUITE 150 Ph: (56

WINDOWS

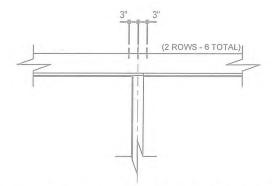


FRAME ANCHOR CLUSTER PATTERNS



WOOD - FASTENER TYPE A

(SEE SHEET 3 FOR FASTENER INFO.)



CONCRETE - FASTENER TYPE B

STEEL/ALUM - FASTENER TYPE C

(SEE SHEET 3 FOR FASTENER INFO.)

LOCKING BOLT REQUIREMENTS SASH HEIGHT LOCKING POINTS 78" - 88 15 89" - 122 15 123" - 131 1/2"

EXTERIOR ELEVATION

(For Section Callouts Only) (Configuration Not Limited To 3-Panel) (Please See Sheet 4 For All Available Configurations)

GENERAL NOTES:

- 1. ALLOWABLE DESIGN PRESSURE: +50/-55 PSF
- 2. ALL GLAZING AS SHOWN IN GLAZING DETAILS ON SHEET 3, AND ALL HARDWARE TYPES IN THE HARDWARE NOTES BELOW MAY BE USED IN ANY DOOR CONFIGURATION.
- 3. THESE DOORS HAVE BEEN DESIGNED AND TESTED TO TAS 201, 202, AND 203 PROTOCOLS IN ACCORDANCE WITH THE REQUIREMENTS OF THE 6TH EDITION 2017 FLORIDA BUILDING CODE (FBC) INCLUDING THE HVHZ PROVISIONS.
- 4. THIS PRODUCT AS SHOWN HEREIN IS LARGE AND SMALL MISSILE IMPACT RATED, SHUTTERS ARE NOT REQUIRED.

 5. WOOD OR MASONRY OPENINGS, BUCKS, AND BUCK FASTENERS, BY OTHERS, SHALL BE PROPERLY DESIGNED AND INSTALLED TO TRANSFER LOADS TO THE STRUCTURE.
- 6. ANCHOR TYPE, SIZE, SPACING, AND EMBEDMENT SHALL BE AS INDICATED IN THIS APPROVAL. ANCHOR EMBEDMENT TO SUBSTRATE SHALL BE BEYOND WALL DRESSING OR STUCCO.
- ALL FASTENERS PENETRATING INTO PRESSURE TREATED WOOD SHALL BE CAPABLE OF PREVENTING CORROSION DUE TO REACTION WITH PRESSURE TREATMENT CHEMICALS.
- 8. DISSIMILAR MATERIALS THAT COME INTO CONTACT SHALL BE PROTECTED TO PREVENT REACTIONS IN ACCORDANCE WITH FBC CHAPTERS 20 AND 23.
 9. A WIND LOAD DURATION FACTOR Cd = 1.6 WAS USED FOR THE ANALYIS OF WOOD SCREWS ONLY.
- 10. THE TEAK DOORS LISTED IN THIS APPROVAL ARE CONSTRUCTED OF A NATURALLY DURABLE SPECIES (SPECIE SPECIFIC GRAVITY = 0.55 E = 1.55 x 106 PSI MIN.). OTHER NATURALLY DURABLE WOOD SPECIES OF EQUAL OR GREATER STRENGTH MAY BE SUBSTITUTED FOR ALL WOOD COMPONENTS.

11. MEMBERS NOTCHED AS NEEDED TO FIT HARDWARE.

CORNER CONSTRUCTION

JAMB CORNERS:

MEMBERS ARE OF TONGUE AND GROOVE CONSTRUCTION AND MECHANICALLY FASTENED WITH (4) NO. 14 x 3" SMS SCREWS PER CORNER, 7/8" FROM EDGE. CORNERS AND TONGU TO GROOVE LOCATIONS ARE SEALED WITH SIKAFLEX 15 LM POLYURETHANE SEALANT.

SASH CORNERS:

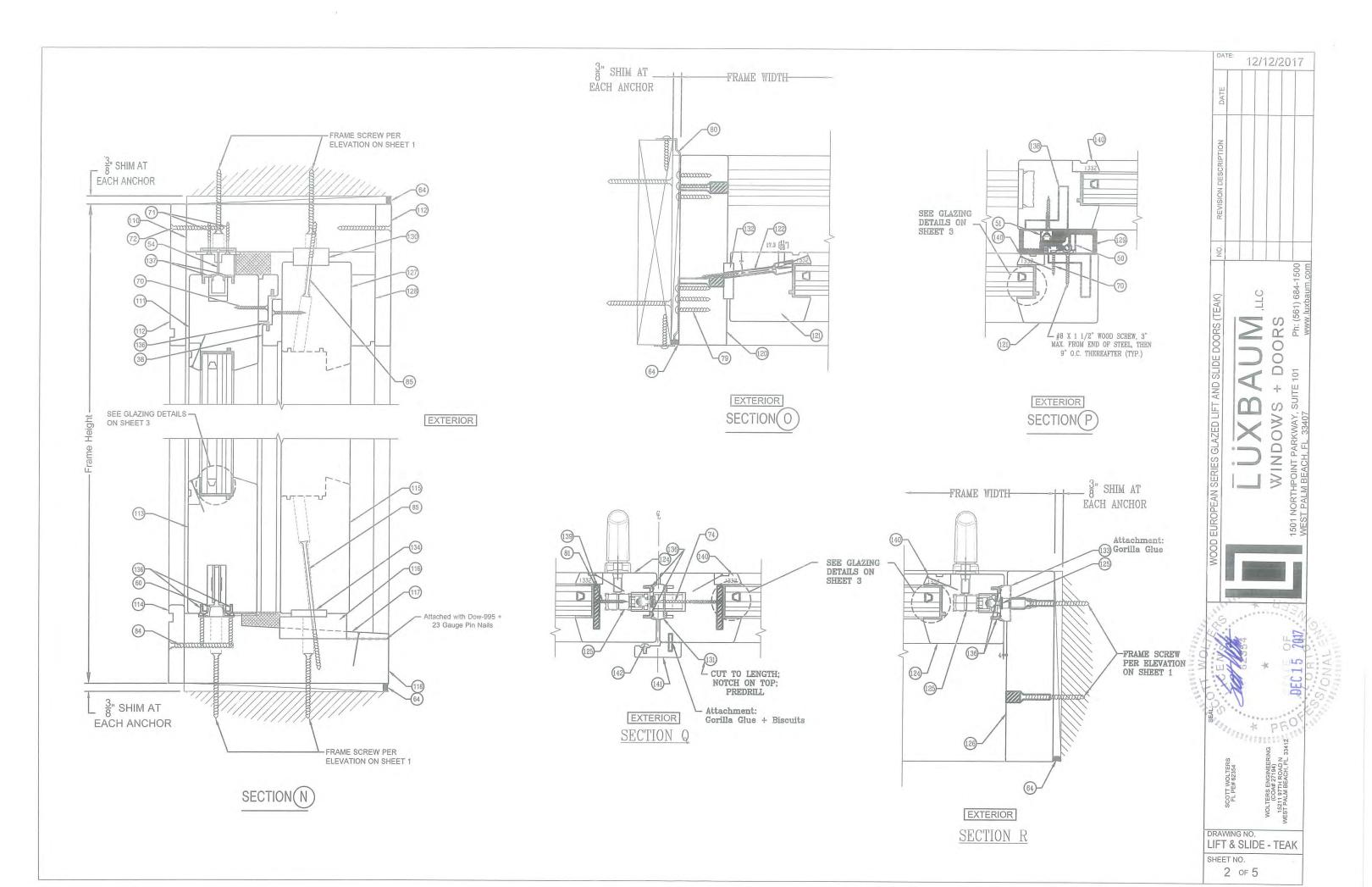
TOP RAIL TO STILE CORNERS:

TOP RAILS ARE COPED, BUTTED, FULLY GLUED WITH WOOD GLUE (61) AND DOWELED WITH (4) 5/8" DIA. x 3 1/8" LONG MERBAU WOOD DOWELS.

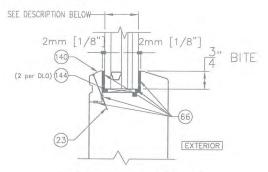
BOTTOM RAIL TO STILE CORNERS:

BOTTOM RAILS ARE COPED, BUTTED, FULLY GLUED WITH WOOD GLUE (61) AND DOWELED WITH (6) 5/8" DIA. x 3 1/8" LONG MERBAU WOOD DOWELS.

	DA [*]	TE:	1:	2/1	2/2	20	17	
	DATE							
	REVISION DESCRIPTION							
	NO.							
WOOD ELIBODEAN OFTITION OF THE STATE OF THE	WOOD EURUPEAN SERIES GLAZED LIFT AND SLIDE DOORS (TEAK)				SACOCI + SYNOCINIX		1501 NORTHPOINT PARKWAY, SUITE 101 Ph. (561) 684-1500 WEST DAI M BEACH EL 22307	weel racin beach, it sayer www.luxbaum.com
SEALST WOLVE	CONTRACTOR	The state of the s	and the same	*	*	18: 30	DEC 15 7017 W	O1HO7.0
9	100	SCOTT WOLTERS FL PE# 62354	Vij	* K	WOLTERS ENGINEERING (COA# 27194)	15211 97TH ROAD N 3T PALM BEACH, FL. 33412	111	
		SCO			WOLTERS (CO)	WEST PALM BEACI		



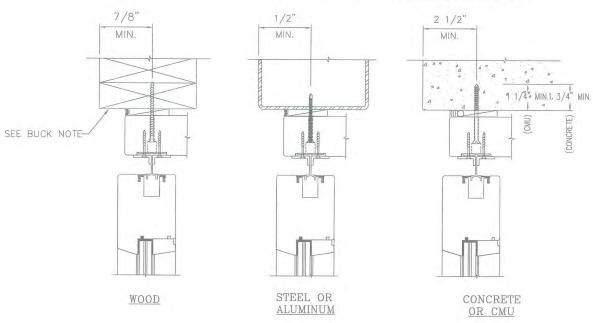
GLAZING DETAILS



TYPICAL I.G. GLAZING DETAIL

GLASS TYPE "B"; 1 3/8" LAMINATED I.G. WITH 1/4" ANNEALED+0.180 SGP+1/4" ANNEALED+7/16" AIR SPACE W/ALUM. SPACER (BLACK)+1/4" TEMPERED.

TYPICAL ANCHOR CONDITIONS



TYPICAL ANCHORS

TYPE A

WOOD - #12 FH WOOD OR SHEET METAL SCREW
(2x6 MIN. TYPICALLY) WITH 1 1/4" MIN. EMBEDMENT AND 7/8" EDGE DISTANCE.

TYPE B

CONCRETE - 1/4" DIA. FH ITW TAPCON OR ELCO ULTRACON
(3000 PSI MIN) WITH 1 3/4" MIN. EMBEDMENT AND 2 1/2" MIN. EDGE DISTANCE.

CMU (ASTM C90 MIN) 1/4" DIA. FH ITW TAPCON OR ELCO ULTRACON WITH 1 1/4" MIN. EMBEDMENT AND 2 1/2" MIN. EDGE DISTANCE.

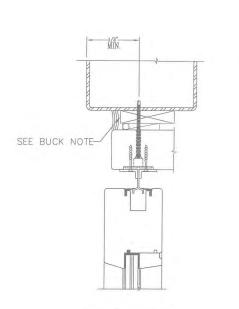
TYPE C

STEEL (16 Ga. 33 KSI MIN)

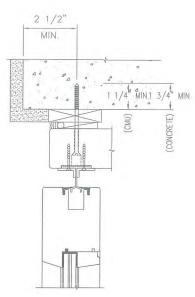
#12 FH F-TYPE (GR. 5) THREAD FORMING SCREW WITH FULL EMBEDMENT AND 1/2" MIN. EDGE DISTANCE.

ALUMINUM (1/8" MIN, 6063-T5) #12 FH F-TYPE (GR.5) THREAD FORMING SCREW WITH FULL EMBEDMENT AND 1/2" MIN. EDGE DISTANCE.

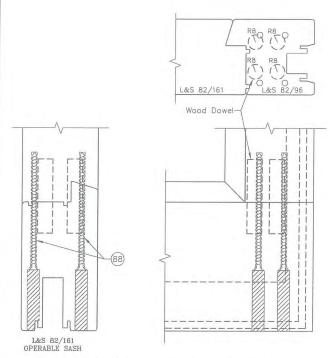
1x OR 2x WOOD BUCKS MUST BE PROPERLY ATTACHED TO SUBSTRATE, AND MUST TRANSFER LOADS IMPOSED BY GLAZING SYSTEM TO THE BUILDING STRUCTURE.



STEEL OR ALUMINUM WITH 1x WOOD BUCK



CONCRETE OR CMU WITH 1x WOOD BUCK



BOTTOM RAIL TO STILE JOINERY

SCOTT WOLTERS
RL PE# 62354

SCOTT WOLTERS ENGINEERING

WOLTERS ENGINEERING

15214 9774 ROAD

WEST PALM BEACH, FL. 33412

PET 5

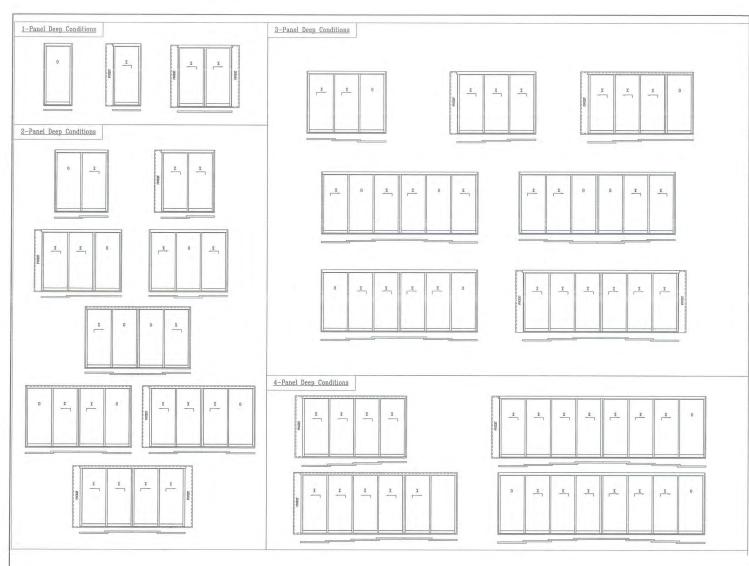
SHEET NO.

* 43:

12/12/2017

OOR

WINDOW



#	ITEM DESCRIPTION	MANUFACTURER/NOTES	DATE:	12/1	12/201
	FAST	PENERS			
	NO. 12 X 2 1/2" SS WOOD SCREW	WITHIN 6" OF ENDS & 12" O.C.	DATE		
	NO. 14 X 3" SS WOOD SCREW	WITHIN 6" OF ENDS & 16" O.C. (HEAD BLOCKING)			
	NO. 6 X 1 1/2" SS WOOD SCREW	WITHIN 6" OF ENDS & 12" O.C. (2 ROWS)			
	NO. 12 X 2 1/2" SS WOOD SCREW	WITHIN 2" OF ENDS & 15 3/4" O.C.	NO NO		
	23 GAGE BRAD NAIL	2" FROM CORNERS & 8" O.C.	ZIPTI		
	NO. 6 X 1 1/2" SS WOOD SCREW	WITHIN 6" OF ENDS & 12" O.C. (2 ROWS)	ESCI		
	NO. 8 X 2 1/2" SS WOOD SCREW	1 PER LOCK BOLT/GEAR	OND		
	NO. 10 X 1 1/2" SS WOOD SCREW	WITHIN 6" OF ENDS & 16" O.C.	REVISION DESCRIPTION		
	NO. 12 X 6" SS WOOD SCREW	WITHIN 6" OF ENDS & 12" O.C.	- BR		
	NO. 10 X 1 1/2" SS WOOD SCREW	WITHIN 2" OF ENDS & 12" O.C.			
	NO. 18 X 1 1/4" SS WOOD SCREW	WITHIN 6" OF ENDS & 16" O.C.	NO.		
	NO. 6 X 1 1/2" SS WOOD SCREW	2 1/2" O.C. (STAGGERED)			
	NO. 10 X 2 1/2" SS WOOD SCREW	WITHIN 6" OF ENDS & 12" O.C.			3 S
	NO. 12 X 6" SS WOOD SCREW	WITHIN 6" OF ENDS & 12" O.C.	2	2	
	NO. 12 X 3 1/2" SS WOOD SCREW	WITHIN 6" OF ENDS & 16" O.C.	TEA		10
	NO. 14 X 3" SS WOOD SCREW	1 1/2" FROM ENDS (FRAME CORNER FASTENER)	38 (\geq	RS
	NO. 14 X 6" SS WOOD SCREW	1 1/2" FROM ENDS & 2 1/2" O.C. (4 TOTAL EA. CORNER	DOORS (TEAK)		0
	NO. 12 X 3 1/2" SS WOOD SCREW	WITHIN 6" OF ENDS & 12" O.C. (STAGGERED)			0
2	NO. 12 X 4" SS WOOD SCREW	WITHIN 6" OF ENDS & 12" O.C.	SLIDE	1	+
	SEALS AND	O SEALANTS	AND	1	+
	POLYURETHANE/SILICONE SEALANT	BY: PROSOCO R-GUARD (FAST FLASH)	F	\mathbf{m}	S
	DOW 995 (GLAZING BEAD)	BY: DOW CORNING (3 SIDES OF GLAZING POCKET)			WINDOW
3	COMPRESSION GASKET	DEVENTER # (S 5469) - Approx. 67 Linear FT.	00	X	0
7	TOP WEATHER SEAL	DEVENTER # (S 2586) - Approx. 23 Linear FT.			
	ASTRAGAL WEATHER SEAL	DEVENTER # (S 6890) - Approx. 11 Linear FT.	AZI		WIN
Į.	1/8" x 1 1/8" x 4" SETTING BLOCK, 2 PER DLO	NEOPRENE (70-90 SHORE A DURAMETER HARDNESS)	SERIES GLAZED WOOD LIFT		3
		AND TRACKS			1
_	TOP TRACK (ALUMINUM)	BY: FUNCTIONAL FENESTRATION INC.	SE		
	BOTTOM TRACK (ALUMINUM)	BY: FUNCTIONAL FENESTRATION INC.	DEAN		
)	OPERATING HARDWARE	BY: FUNCTIONAL FENESTRATION INC.	EUROPE/		
	GORILLA GLUE	BY: GORILLA GLUE			
	NO. 12 x 1 1/2" S.S. WOOD SCREW	WITHIN 2" OF ENDS & 12" O.C.			
	UNI-V INTERLOCK - FEMALE (G02208.40.93)	BY: FUNCTIONAL FENESTRATION INC.	1200	*	HJ.
	UNI-V INTERLOCK - MALE (G02208.40.93)	BY: FUNCTIONAL FENESTRATION INC.	25.		
	NO. 12 x 1 1/2" PH SMS	WITHIN 6" OF END, 25" O.C.	A ST	24	4
	S.S. STRAP	1 5/8" x 5" 18 GA. 316 S.S.		1 w	0
	NO. 8 x 1 1/2" S.S. WOOD SCREW	WITHIN 4" OF END, 16" O.C.	S LLY	100	(c)

WAS THE THE PROPERTY OF THE PR SCOTT WOLTERS FL PE# 62354

DRAWING NO.
LIFT & SLIDE - TEAK

SHEET NO. 4 of 5

