

THIS PRODUCT HAS BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S)".

2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.

3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & SHALL NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WELD FINISH OR STUCCO.

4. THIS PRODUCT HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ) & IS LARGE MISSILE IMPACT RATED.

5. IMPACT SHUTTERS ARE NOT REQUIRED WITH THIS PRODUCT.

6. ALL ANCHORS SECURING PRODUCT FRAMES TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.

7. DETERMINE THE POSITIVE & NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, A DIRECTIONALITY FACTOR OF $K_d = 0.85$ MAY BE APPLIED FOR THE ASCE-7 STANDARD.

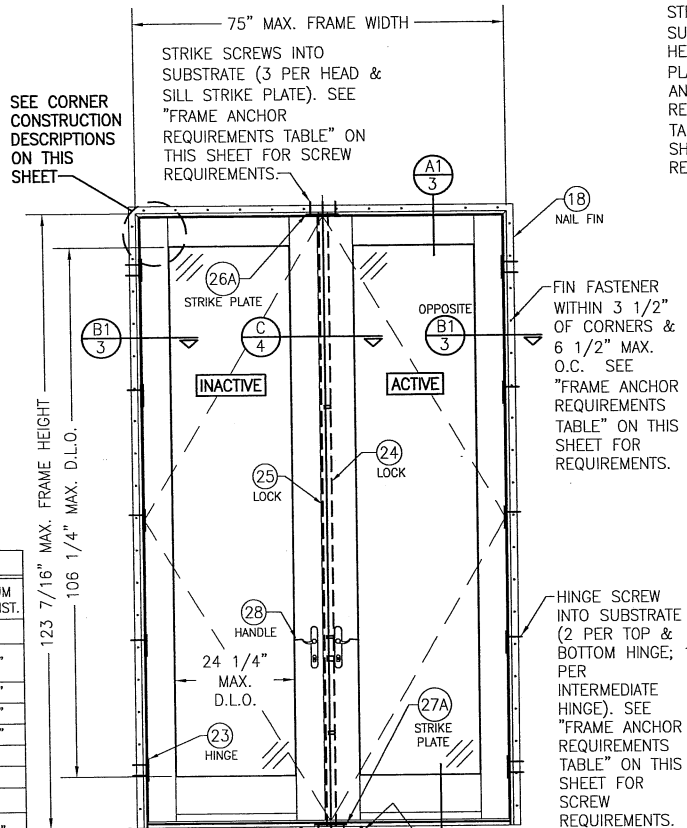
8. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE.

9. TO THE BEST OF OUR KNOWLEDGE, THE PRODUCT SHOWN HEREIN IS QUALITY ASSURED BY A FLORIDA STATE APPROVED CERTIFICATION/QA ENTITY & SHALL BE LABELED IN ACCORDANCE WITH THE FBC AND THE FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION SPECIFICATIONS. THESE DRAWINGS SHOW ALL APPLICABLE ELEVATION, COMBINATION, INSTALLATION & COMPARATIVE ANALYSIS CONDITIONS AS DETERMINED THROUGH TESTING & ENGINEERING RATIONAL ANALYSIS. PRODUCT ASSEMBLY SHALL BE IN ACCORDANCE WITH THESE DRAWINGS, THE MANUFACTURER'S QUALITY ASSURANCE SPECIFICATIONS & TESTING REPORTS.

10. CERTIFICATION OF THIS PRODUCT SHALL BE CONSIDERED VOID IF IT IS INSTALLED WITHOUT A BUILDING PERMIT FROM THE APPLICABLE LOCAL BUILDING DEPARTMENT OR IF IT IS INSTALLED BY ANYONE OTHER THAN A LICENSED CONTRACTOR EXPERIENCED WITH INSTALLATIONS OF THIS TYPE OF PRODUCT.

11. ALL WOOD MEMBERS OF THIS PRODUCT THAT MAY POSSIBLY COME INTO CONTACT WITH MASONRY OR CONCRETE SUBSTRATES, ARE SUBJECT TO MOISTURE &/OR ARE SUBJECT TO THE OUTSIDE ENVIRONMENT SHALL BE OF AN APPROVED DURABLE SPECIES OR BE TREATED IN AN APPROVED MANNER WITH AN APPROVED PRESERVATIVE PER FBC REQUIREMENTS.

FRAME ANCHOR REQUIREMENTS TABLE			
OPENING TYPE (SUBSTRATE)	FRAME/FIN/BRICK TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
FRAME SCREWS			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 10 SMS OR WOOD SCREW	1 1/4"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	NO. 10 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	NO. 10 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 10 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
C-90 CMU	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/2"	2"
HEAD & SILL STRIKE SCREWS			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 10 SMS OR WOOD SCREW	1 1/4"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	NO. 10 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	NO. 10 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 10 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
2500 PSI CONCRETE	(1) 3/16" CONCRETE SCREW	1 1/2"	2"
HINGE SCREWS			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 12 SMS OR WOOD SCREW	1 1/4"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
C-90 CMU	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/2"	2"
NAILING FIN & BRICK MOLD FASTENERS			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 SMS SCREW	1 3/8"	1/2"
MIN. 1/8" THK A36 STEEL	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
(1) CONCRETE SCREWS SHALL BE ELCO ULTRACONS, ELCO CRETE-FLEX, ITW RAMSET/RED HEAD TAPCONS OR HILTI KWIK-CON II (HARDENED STEEL OR S.S.).			



SET SILL IN A
BED OF
SEALANT PER
SECTION A1/3

EXTERIOR ELEVATION:
DOUBLE RECTANGULAR DOOR

SCALE: $1/2" = 1'-0"$

(NAIL FIN MOUNT CONDITION)

CORNER CONSTRUCTION:

FRAME. MEMBERS ARCOPEO, BUTTED AND JOINED WITH (2)TWO 16GA. X 7/16" X 2' STAPLES & (2)TWO NO. 8 X 2 1/2" WOOD SCREWS THROUGH THE VERTICAL FRAME MEMBERS INTO THE HORIZONTAL MEMBER & (2)TWO NO. 8 X 2 1/2" WOOD SCREWS THROUGH THE HORIZONTAL MEMBER INTO THE HEAD MEMBER & (1)ONE NO. 8 X 2 1/2" WOOD SCREW THROUGH THE HORIZONTAL MEMBER INTO THE SILL MEMBER. CORNERS ARE SEALED WITH POLYURETHANE SEALANT.

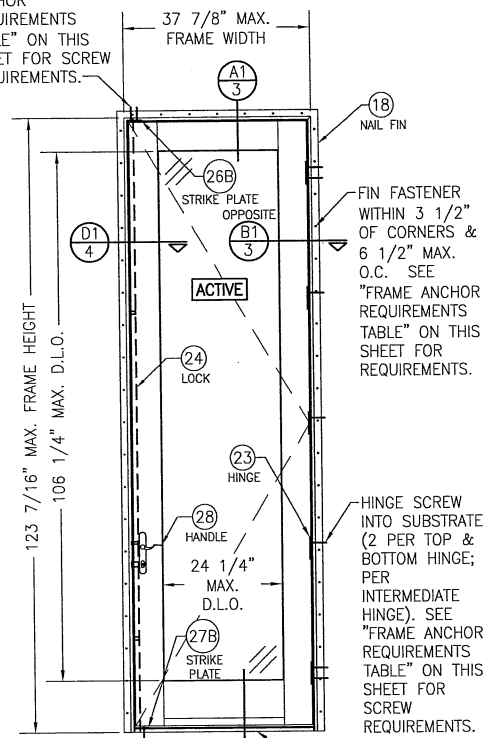
TOP RAIL TO STILE: MEMBERS ARE SQUARE CUT, BUTTED AND JOINED WITH (2)TWO 5/8" X 6" DOWELS. CORNERS ARE SEALED WITH POLYURETHANE SEALANT.

BOTTOM RAIL TO STILE: MEMBERS ARE SQUARE CUT, BUTTED AND JOINED WITH (4)FOUR 5/8" X 6" DOWELS. CORNERS ARE SEALED WITH POLYURETHANE SEALANT.

TOP FRAME CLAD: MEMBERS ARE MITERED TOGETHER & JOINED VIA A CORNER KEEPER (ITEM #21) & WITH (1)ONE NO. 6 X 1 1/2" WOOD SCREW PER CORNER. CORNERS ARE SEALED WITH A CLOURED MELLOR DOW GASKET & POLYURETHANE SEALANT.

WINDOW CLAD: MEMBERS ARE MITERED TOGETHER & SEALED TO THE SASH. CORNERS ARE SEALED WITH POLYURETHANE SEALANT.

STRIKE SCREWS INTO SUBSTRATE (2 PER HEAD & SILL STRIKE PLATE). SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON THIS SHEET FOR SCREW REQUIREMENTS.



— SET SILL IN A
BED OF
SEALANT PER
SECTION A1/3

EXTERIOR ELEVATION:
SINGLE RECTANGULAR DOOR

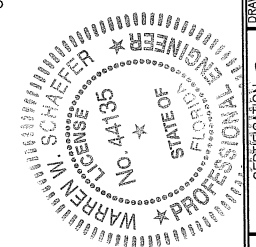
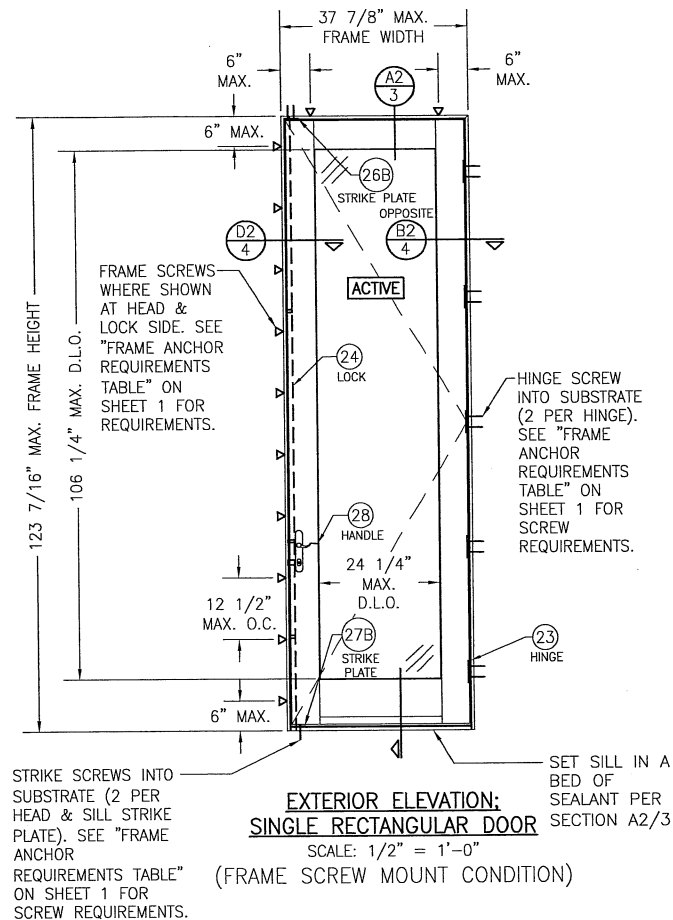
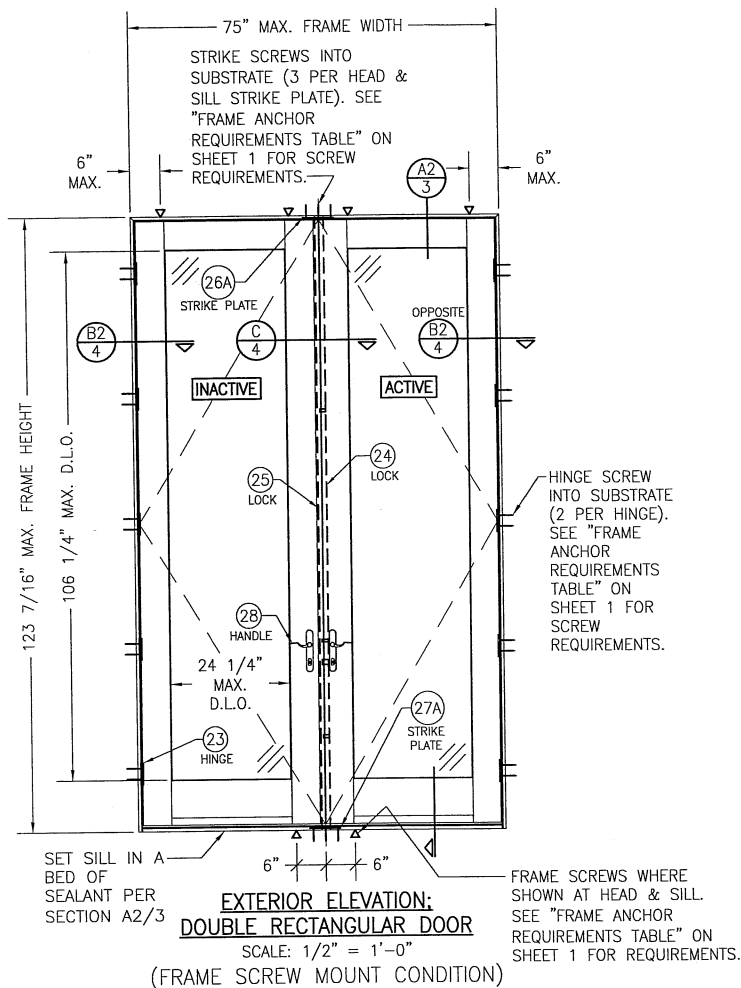
SCALE: $1/2'' = 1'-0''$

(NAIL FIN MOUNT CONDITION)

HINGE REQUIREMENTS	
MAX. FRAME HEIGHT	QUANTITY PER PANEL
OVER 94 1/2	5
94 1/2	4

THESE DRAWINGS ARE APPLICABLE ONLY TO THE PRODUCT SPECIFIED. THEY MAY NOT BE USED FOR THE ASSEMBLY AND/OR INSTALLATION OF ANY OTHER PRODUCT NOR MAY THEY BE USED FOR NATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS.

DRAWING NO.	SHEET NO.	DATE	BY	NO.	REVISION DESCRIPTION	PLOT:	DRAWN BY:	CHECKED BY:																				
									1641	1 OF 6	09/17/11	W.S.	W.S.															
ALUMINUM CLAD WOOD 10FT. OUT-SWING DOOR CONSULTANTS: W. W. SCHAFFER ENGINEERING & CONSULTING, P.A. 7490 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 MANUFACTURER: C.P. LOEVEN ENTERPRISES 77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-328-6446																												
REVISIONS: <table><tr><th>NO.</th><th>REVISION DESCRIPTION</th><th>DATE</th><th>BY</th></tr><tr><td>A1</td><td>UPDATE TO CURRENT STANDARDS</td><td>09/17/11</td><td>W.S.</td></tr><tr><td>B1</td><td>UPDATE TO CURRENT STANDARDS</td><td>01/09/15</td><td>W.S.</td></tr><tr><td>C1</td><td>CHANGED FRAME CLAD</td><td>09/28/15</td><td>W.S.</td></tr><tr><td>D1</td><td>CHANGED MATERIAL IN PART #B</td><td>09/16/17</td><td>W.S.</td></tr></table>									NO.	REVISION DESCRIPTION	DATE	BY	A1	UPDATE TO CURRENT STANDARDS	09/17/11	W.S.	B1	UPDATE TO CURRENT STANDARDS	01/09/15	W.S.	C1	CHANGED FRAME CLAD	09/28/15	W.S.	D1	CHANGED MATERIAL IN PART #B	09/16/17	W.S.
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C1	CHANGED FRAME CLAD	09/28/15	W.S.																									
D1	CHANGED MATERIAL IN PART #B	09/16/17	W.S.																									



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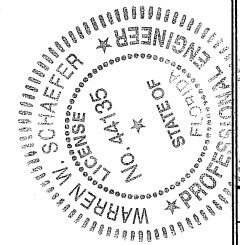
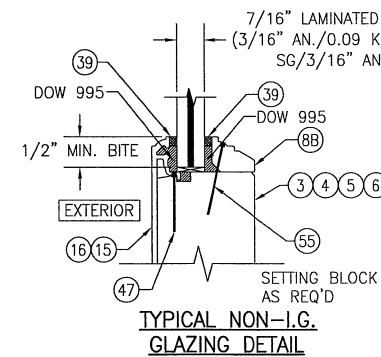
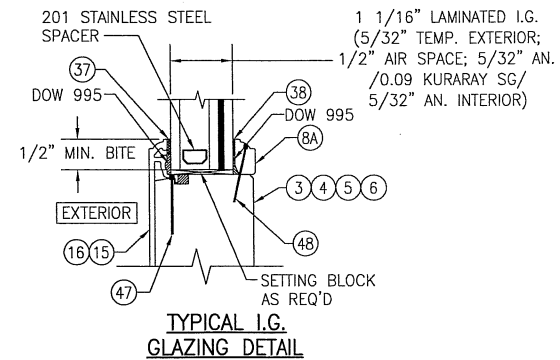
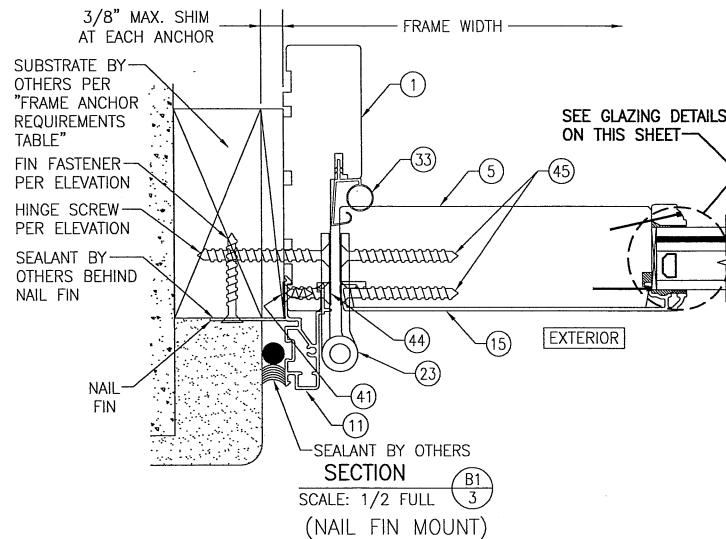
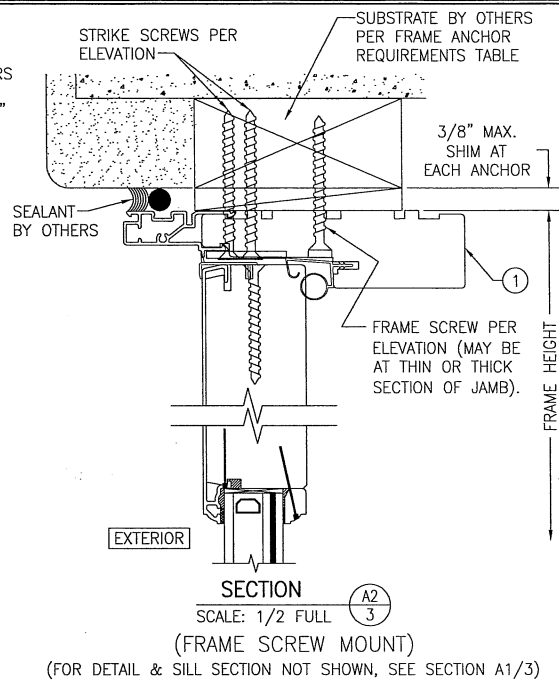
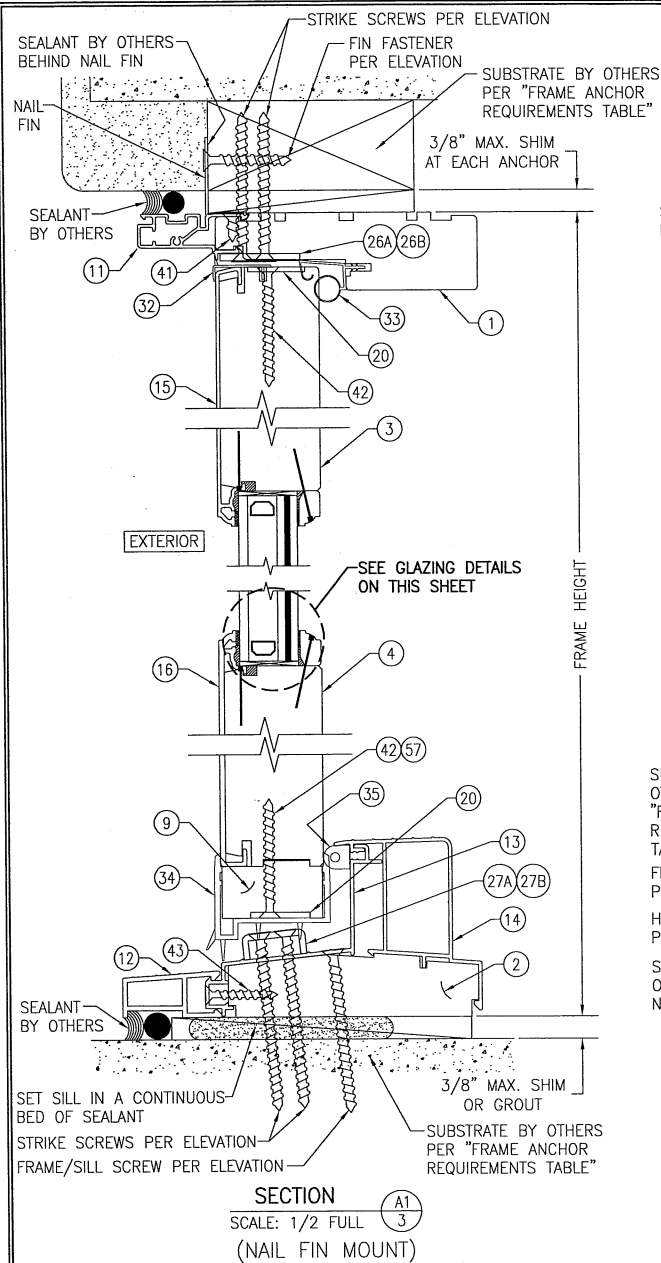
DRAWING TITLE: ALUMINUM CLAD WOOD 10FT. OUT-SWING DOOR

MANUFACTURER: C.P. LOEWEN ENTERPRISES
77 HWY 52 WEST
STEINBACH, MB, CANADA R5G 1B2
204-326-6446

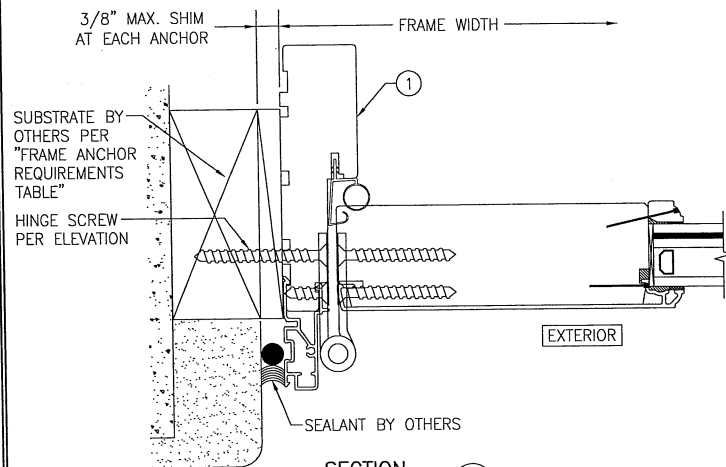
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
7480 150TH COURT NORTH, S3418
PALM BEACH GARDENS, FL 33418
PHONE: 561-744-3424

CERTIFICATION: SEP 18 2017

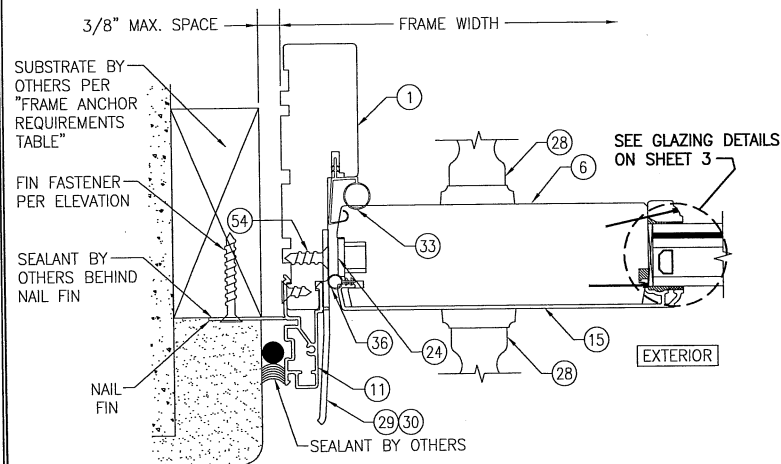
DRAWING NO. 1641
SHEET NO. 2 OF 6



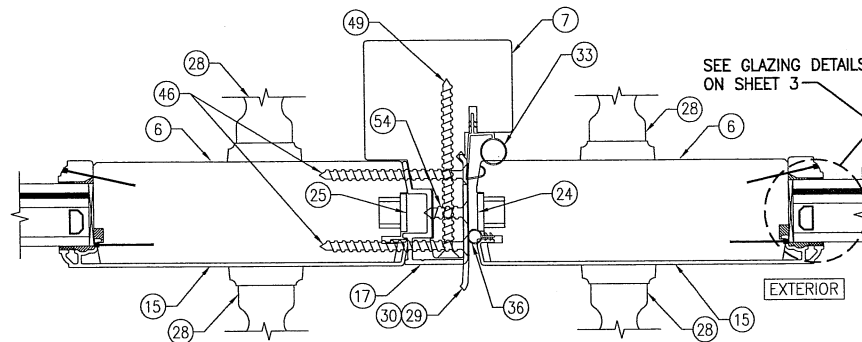
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PLOT: 1-2	DATE: 01/19/11
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REVISION DESCRIPTION	
NO.	
DRAWING TITLE ALUMINUM CLAD WOOD 10FT. OUT-SWING DOOR	MANUFACTURER C.P. LOWEN ENTERPRISES 77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-328-6446
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 7480 150TH COURT NORTH, 3418 PALM BEACH GARDENS, FL 33418 PHONE: 561-744-5464	REV. D
CERTIFICATION WARREN W. SCHAEFER, P.E. P.E. NO. 44135	DRAWING NO. 1641
	SHEET NO. 3 OF 6



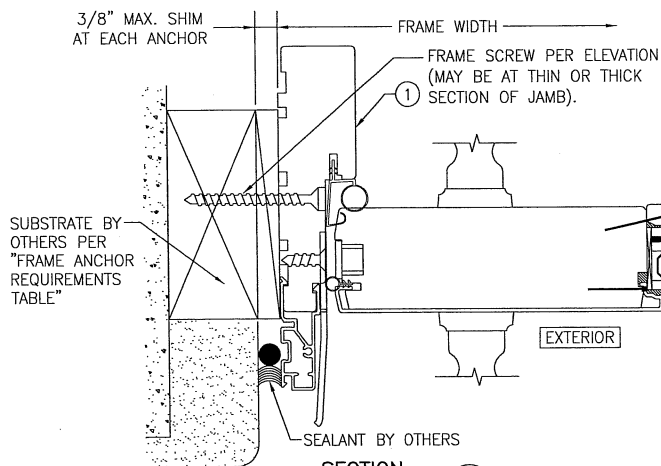
SECTION B2
SCALE: 1/2 FULL
(FRAME SCREW MOUNT)
(FOR DETAIL NOT SHOWN, SEE SECTION B1/3)



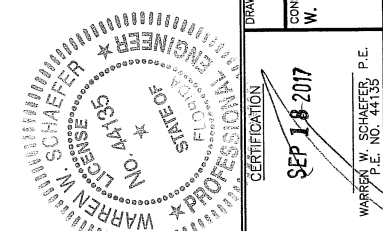
SECTION D1
SCALE: 1/2 FULL
(NAIL FIN MOUNT)



SECTION C
SCALE: 1/2 FULL

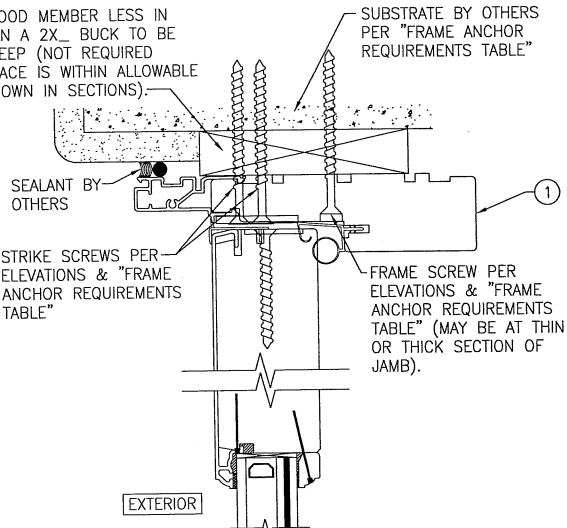


SECTION D2
SCALE: 1/2 FULL
(FRAME SCREW MOUNT)
(FOR DETAIL NOT SHOWN, SEE SECTION D1/4)



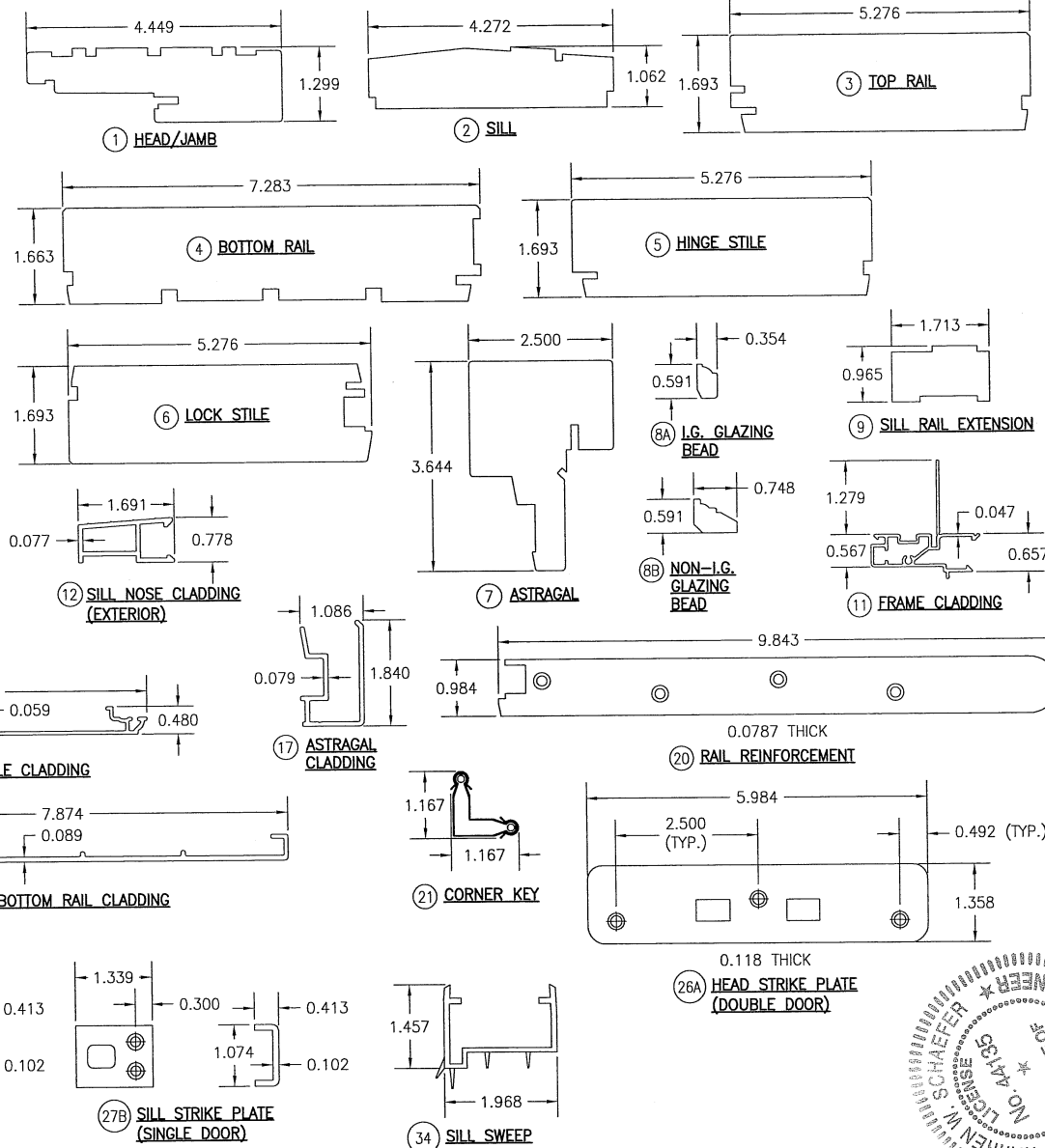
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REVISION DESCRIPTION	
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DRAWING TITLE ALUMINUM CLAD WOOD 10FT. OUT-SWING DOOR	MANUFACTURER C.P. LOEWEN ENTERPRISES 77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-326-6446
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-5624	WARREN W. SCHAEFER, P.E. P.E. NO. 44135
CERTIFICATION SEP 18 2017	
DRAWING NO. 1641	REV. D
SHEET NO. 4	OF 6

CONTINUOUS WOOD MEMBER LESS IN THICKNESS THAN A 2X BUCK TO BE MIN. 3 1/2" DEEP (NOT REQUIRED WHEN SHIM SPACE IS WITHIN ALLOWABLE DIMENSIONS SHOWN IN SECTIONS).



OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER

(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME WITH ALL ANCHORS RUNNING THROUGH THE SPACER INTO THE SUBSTRATE)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



DRAWN BY:	W.R.M.	CHECKED BY:	W.M.S.
PLOT:	1=2	DATE:	01/19/11
DATE:			
BY:			
REVISION DESCRIPTION:			
NO.			
DRAWING TITLE: ALUMINUM CLAD WOOD 10FT. OUT-SWING DOOR			
MANUFACTURER: C.P. LOEWEN ENTERPRISES			
CONSULTANTS: W. SCHAEFER ENGINEERING & CONSULTING, P.A.			
7480 150TH COURT NORTH, PALM BEACH GARDENS, FL 33418			
PHONE: 561-744-3424			
STEINBACH, MB, CANADA R5G 1B2			
204-326-6446			
CERTIFICATION: SEP 18 2017			
WARREN W. SCHAEFER, P.E.			
P.E. NO. 44135			
DRAWING NO.	1641	REV.	D
SHEET NO.	5	OF	6

NOTE: WOOD USED IN TESTING WAS DOUGLAS FIR WITH A SPECIFIC GRAVITY OF $G = 0.49$ AND A MODULUS OF ELASTICITY OF $E = 1,600,000$ PSI. OTHER WOOD SPECIES APPLICABLE FOR USE WITH THIS PRODUCT ARE THOSE WITH A SPECIFIC GRAVITY OF 0.49 AND MODULUS OF ELASTICITY OF 1,600,000 PSI OR GREATER. ALL WOOD IS MINIMUM GRADE 2 MILLED BY C.P. LOEWEN ENTERPRISES TO SELECT.

WARREN W. SCHAEFER
STATE OF ILLINOIS
LICENSE NO. 41735
MECHANICAL ENGINEER

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